

GUYANA’S Intended NATIONALLY DETERMINED CONTRIBUTION

Introduction

In accordance with the Warsaw COP Decision 1/CP.19 and Lima 1/CP.20, Guyana is pleased to submit its draft intended Nationally Determined Contribution to the UNFCCC.

Planning process

Guyana has employed a consultative process that involves all key stakeholders. An inter-Agency Task force has been established by Cabinet decision. This Task Force oversees the entire process. A small technical team led by Guyana’s Lead negotiator made the first draft. The Task reviewed this draft and produced a second draft. This then was presented to a national stakeholder consultation, and informed a third draft. The final draft was submitted to Cabinet which approved it in its final form. .

Type of commitment

It is recognized that contributions from developed countries may be absolute economy wide emission reduction targets relative to a base year; and that contributions from developing countries may be policies, measures and actions that deviate from business as usual. As a developing country, a coastal lowlying state within SIDS, and being among the lowest emitters in the world, Guyana proposes policies, measures and actions, both conditional and conditional.

Coverage

Coverage is at the national level for the sectors covered in this iNDC.

Gases

The greenhouse gas taken into account in this iNDC is: Carbon dioxide

Sectors covered

The sectors covered are: Forestry and Energy

It is acknowledged that agriculture is a source of methane and nitrous oxide emissions, and should be part of mitigation. However, for us, (and for SIDS, LDC’s and the African Group) – agriculture is regarded as food production, food security, and rural livelihoods, and it is under threat from the adverse effects of climate change such as floods and droughts. With this in mind, and in consideration of the fact that we have little emissions to reduce under mitigation, we will treat agriculture as an adaptation issue in this iNDC, leaving the possibility that in future cycles we can review our position.

Timeframe

The time frame associated with Guyana’s iNDC is for the period up to 2025.

Methodology/Metric

Methodologies and metrics are consistent with IPCC guidance.

Use of land use and forestry sector

Guyana will utilize its forests, in particular, conservation and sustainable management of forests, in its fight against climate change.

Use of markets

With the current state of carbon markets, Guyana does not foresee using this source at this time, but the door is open to use carbon markets in the future, subject to robust MRV systems to ensure environmental integrity.

Contributions

The major overarching contribution that Guyana intends to make is to pursue a path to a Green economy using a low emission strategy pathway. Guyana has already formulated a LCDS and with limited financial resources, has begun implementation. With additional and adequate resources, Guyana can build on this and embark on a comprehensive path to a low emission and green economy.

More specifically, with the provision of adequate resources, Guyana can provide up to 52Mt Co2 equivalent to global mitigation effort, and can increase its share of renewable energy by 20 percent of its total energy usage, by 2025.

Forestry

Unconditional contributions

Guyana is willing to continue making the following contributions unconditionally:

On-going work in sustainable forest management. This includes the implementation of the scope of the recently revised Forest Act as well as the National Forest Plan 2011. This legislative framework is supported by various Codes of Practice that governs forestry activities which will also be continually implemented using local resources.

Forest monitoring and maintaining a high level of forest legality in Guyana are also areas that will continue, and which will see the GFC committing approximately 50 per cent of its total staff complement to field monitoring through its 54 forest monitoring stations countrywide. These will result in a maintained low rate of illegal logging which has been established to be less than 2 per cent of total production annually, and a maintained low rate of deforestation and forest degradation.

Guyana is prepared to finalize and implement the Voluntary Partnership Agreement under EU-FLEGT. Finalization is expected to be completed in 2016 and can provide independent accreditation of forest legality and management practices in Guyana's forest sector.

Conditional Contributions

Guyana can achieve emissions reductions through an Emissions Reductions Programme (ERP). The ERP in Forestry will include:

- Expand Reduced Impact Logging (RIL). Reducing the incidental and collateral damage during tree felling by about 10% and the damage from skid trails by about 35% (avoiding mid-size trees during skidding), could reduce the annual emissions by about 13.5% each year. This translates to a reduction of about 430 thousand t CO₂ per year and can target more predominantly the smaller concession category.

This will result in a reduction from the annual emissions from forestry moving from 3.5M tCO₂ to 2.3M tCO₂, a 20% reduction from historic levels for this driver, and an 11% reduction in the overall historic level. .

In Collaboration with Mining, the ERP will include:

- Land reclamation within the extractive sectors. This will provide an effective and replicable solution for increasing forest biomass and carbon stocks, while ensuring sustainable resource consumption.
- Mineral mapping and exploration.

These initiatives will result in a reduction from the annual emissions from mining moving from 5.5M tCO₂ to 3.4M tCO₂, a 30% reduction from historic levels for this driver, and a 17% reduction in overall historic level.

FLEGT

With the provision of resources, Guyana is prepared to build on its FLEGT initiative by further strengthening its implementation effort, and building EU FLEGT as a multilateral cooperation undertaking that creates synergies with the UK, EU, US, and other partners, and the various programmes that these partners have in place such as Procurement Rules, Lacey Act, FCS and certification processes, etc.

MRVS

A comprehensive and robust MRV system is being developed under the GFC. Guyana is willing to complete and maintain its MRVS if adequate financial resources are provided.

Avoided Deforestation

Guyana's proposal for a Reference Level for REDD+ is based on the Combined Reference Level approach, in which a global forest carbon emissions loss of 0.44%, as concluded by Baccini et. al. 2012 is used, along with Guyana's historic emissions level for the period 2001 to 2012, as established in this Proposal.

Using a total carbon stock of forests in aboveground and belowground biomass of 19,197,411,268 t CO₂, Guyana's Proposed Reference Level for its REDD+ Programme is 48.7M t CO₂. Through this approach, Guyana can continue to avoid emissions in the amount of 48.7 Mt annually if adequate incentives are provided over the long term.

In summary, the Forest sector, in collaboration with mining initiatives in the forest estate, and including avoided emissions, can contribute a total of 52Mt Co2 to the global mitigation effort.

Implementation cost

The cost of implementation of these initiatives in the Forest sector is estimated at US600M.

Energy

Unconditional Contributions

Guyana will continue to examine all sources of renewable energy – fossil fuels, wind, solar, bagasse and, of course, hydropower. Guyana will seek to construct and/or promote the construction of small hydro systems at suitable locations across the country. Government also plans to construct and/or promote the construction of small hydro systems in areas such as Moco Moco, Kato and Tumatumari, and will power all of the new townships, starting with Bartica, using alternative energy sources. Independent power producers and suppliers will be encouraged to construct energy farms and sell energy to the national grid.

Energy efficient and renewable energy cook stoves have been demonstrated to provide sustainable energy solutions where appropriate. The Agencies will work closely with small farmers to encourage the use of small bio-digesters to reduce waste and produce biogas.

Legislation has been amended to remove import duty and tax barriers for the importation of renewable energy equipment, compact fluorescent lamps and LED lamps to incentivize and motivate energy efficient behaviour.

Guyana will continue to conduct energy assessments/audits and replace inefficient lighting at public, school, residential and commercial buildings with the objective of reducing energy consumption and attaining higher levels of energy efficiency.

Public education and awareness programmes will continue to play a major role in providing consumers with information and tools for energy efficiency and reducing energy consumption and expenditure for energy.

These unconditional contributions represent about one percent of the current energy mix.

Conditional Contributions

Feasibility studies for a large hydropower development in the Mazaruni region will be pursued with collaboration from the Government of Brazil. A 300MW hydropower plant to cater for Guyana's current and future energy needs should therefore cost between US\$315 million to US\$2,295 million.

Options for interconnecting renewable energy generators to the grid will be reviewed and explored towards the implementation of grid-tied systems and net-metering platform. Once proven beneficial to all parties, grid-tie options can be encouraged as a means of reducing investment in fossil-based generators and meeting incremental demand from renewable energy sources.

For supplying Hinterland communities, Guyana is interested in piloting small scale fermentation and distillation techniques for the production of ethanol and bio-fuels.

If these conditional Contributions are fully funded and implemented, they can represent approximately 20 percent of Guyana's total energy mix.

Estimated cost

Implementation of Guyana's conditional contributions in energy is estimated at US\$315M - \$2,295M.

Assumptions and Risks

It is assumed that the Green Climate Fund will be fully operationalized and begin disbursing from 2016. It is also assumed that SIDS, and in particular coastal lowlying countries such as Guyana, will received preferential access and special consideration in access to financing. Sectorally, it is also assumed that iNDC's for REDD Plus and renewable energy will receive adequate financing in a timely manner.

Fairness, equity and ambition

Guyana is a highly vulnerable developing country within the SIDS grouping. Guyana's aggregate emissions in 2004 were 0.004617GtCO₂eq. Compared with global emissions in 2004, this represents a .0001 (one hundredth of one per cent) share of the world total. Given the very low historical share we have contributed to the global emissions, our proposed contributions to the fight against climate change is therefore more than fair and equitable and also ambitious.

Adaptation

See Annex 1

Means of Implementation

Implementation of Guyana's iNDC is estimated at US\$4.49B which comprises 0.6B for Forestry, 2.29B for energy and 1.6B for adaptation, shown in the Annex.

ANNEX 1 - ADAPTATION

Contributions

Unconditional contributions

With its limited resources, Guyana will continue basic work on water management infrastructure including through conservancy and canal construction rehabilitation and upgrade; sea defences rehabilitation and upgrade including restoration of mangroves; improving water supply and sanitation; introduction of new agricultural techniques such as hydroponics and fertigation; and inclusion of climate change considerations in sectoral planning documents.

The GoG is currently in the process of preparing a Climate Resilience Strategy and Action Plan (CRSAP) which is expected to provide a comprehensive framework for adaptation and resilience building in Guyana. Guyana will continue and finalize its work on the CRSAP, but will require significant resources to implement it.

Conditional contributions

Given the requisite support, Guyana will undertake actions in the following areas:

- Implementation of the CRSAP.
- Upgrading infrastructure and assets to protect against flooding.
- Mangrove restoration.
- Hinterland Adaptation Measures.
- Development and implementation of Early Warning Systems.
- Enhanced weather forecasting including microclimate studies and localized forecasting.
- Development and introduction of crop varieties which are:
 - flood resistant,
 - drought tolerant,
 - disease resistant.
- Addressing systematic and behavioural concerns.
- Developing innovative financial risk management and insurance measures.

Means of Implementation

In order to implement its conditional adaptation actions, including infrastructural development works, Guyana will require an estimated US\$ 1.6 Billion in the period to 2025.