GUYANA

NATIONALLY DETERMINED CONTRIBUTIONS

2025-2035

SUBMITTED TO THE UNFCCC

Introduction

In the Paris Accord of 2015, Parties agreed to submit Nationally Determined Contributions (NDCs) to the UNFCCC. These NDCs set out Parties' commitments to help to mitigate global warming and climate change.

Although all countries share in the responsibility for mitigating climate change, the UNFCCC embeds a recognition that these responsibilities are differentiated. Developed countries with the historical responsibility for global warming must submit hard targets for quantified reduction in emissions, while vulnerable developing countries (i) undertake policies, strategies and actions themselves through *unconditional* commitments coupled with (ii) more ambitious mitigation and adaptation action through *conditional* commitments that rely on the creation of new financial incentives.

Guyana prepared an intended NDC in 2015, and submitted its first NDC to the UNFCCC in early 2016. This Nationally Determined Contribution represents a progression beyond Guyana's previous NDC and reflects the country's **highest possible ambition**, consistent with Article 4 of the Paris Agreement. This new NDC increases ambitions in focal areas of forestry, agriculture and land, energy and adaptation and includes provisions that are grounded in national strategy and policy as documented in Guyana's Low Carbon Development Strategy (LCDS) 2030. In this new NDC, Guyana increases ambition by including additional sectors, adding more activities within these sectors, and enhances monitoring by developing quantifiable targets for main Policies and Measures (PAMS). Guyana further increases ambition through the continued protection of its nationally significant forest carbon sink, implementation of one of the world's most comprehensive jurisdictional forest monitoring systems, accelerated deployment of renewable energy and lower-emission electricity generation, and enhanced adaptation investments designed to increase resilience across vulnerable sectors. The level of ambition reflected in this NDC is dependent upon the availability of international support, including climate finance, technology transfer and capacity-building, consistent with the Paris Agreement. The NDC builds on the successful completion of the country's first Biennial Transparency Report that completes reporting up to year 2022 on NDC targets. Guyana was the first developing country in the world and one of the first countries, to submit such reporting.

Guyana considers this Nationally Determined Contribution to be **fair and equitable** in light of its national circumstances and the principles of equity and common but differentiated responsibilities and respective capabilities (CBDR-RC), as set out in the United Nations Framework Convention on Climate Change and the Paris Agreement.

Guyana contributes only a very small proportion of global greenhouse gas emissions while maintaining one of the world's largest remaining intact tropical forest ecosystems, covering approximately 85 percent of the national territory. These forests store more than 21 billion tonnes of carbon dioxide equivalent and continue to remove approximately 68 million tonnes of carbon dioxide from the atmosphere annually, providing a global climate regulation service that extends far beyond Guyana's national boundaries.

At the same time, Guyana faces significant climate vulnerabilities. The majority of the population, economic activity, and agricultural production are concentrated along a low-lying coastal plain that is highly exposed to sea-level rise, flooding, saline intrusion, droughts, and extreme weather events. The costs of adapting to these impacts are substantial relative to national resources.

This NDC therefore reflects a balanced contribution to global climate action by maintaining one of the world's lowest rates of deforestation, accelerating the transition to a lower-emission energy system, strengthening national climate resilience, and contributing internationally through high-

integrity forest-based mitigation, while recognising the country's legitimate need for economic growth, poverty reduction, energy security, and sustainable development.

Guyana's updated Nationally Determined Contribution (NDC) places strong emphasis on social aspects of development by explicitly integrating youth, women, and Indigenous Peoples into both climate mitigation and adaptation actions. For youth, the NDC supports expanded access to low carbon jobs, skills development in renewable energy, sustainable forestry, and climate-smart agriculture, recognizing young people as key drivers of innovation and long-term climate resilience. For women, it prioritizes gender-responsive planning, improved access to climate finance, and targeted support for women-led enterprises in sustainable livelihoods, particularly in rural and hinterland communities. Indigenous Peoples and local communities (IPLCs) are central to Guyana's climate strategy, with the NDC reinforcing land tenure security, the protection of traditional knowledge systems, and the expansion of community-led forest management and conservation initiatives. Across all three groups, the approach is grounded in participatory governance, ensuring meaningful involvement in decision-making processes and equitable access to the benefits of climate action, in line with Guyana's broader low-carbon development pathway.

Implementation of this Nationally Determined Contribution is fully integrated with Guyana's national development priorities as articulated in the Low Carbon Development Strategy 2030. Climate action is viewed not as a constraint to development, but as a foundation for achieving long-term economic prosperity, environmental sustainability, and social inclusion. The implementation of this NDC contributes directly to the achievement of multiple **Sustainable Development Goals** (SDGs), including climate action (SDG 13), affordable and clean energy (SDG 7), decent work and economic growth (SDG 8), industry, innovation and infrastructure (SDG 9), sustainable cities and communities (SDG 11), responsible consumption and production (SDG 12), life below water (SDG 14), life on land (SDG 15), gender equality (SDG 5), clean water and sanitation (SDG 6), and partnerships for the goals (SDG 17). The NDC also supports improved livelihoods, enhanced food and water security, biodiversity conservation, strengthened Indigenous and local community participation, and greater resilience to climate change.

Country Profile

Guyana has a population of a little over three-quarters of a million people, living on 215,000 square kilometers of land, giving it a relatively low population density. It has a narrow coastal plain with 430 kilometers of Atlantic coastline, on which about 90 percent of its population live. The country has about 18.5 million hectares of pristine rainforest, accounting for 85 percent of its land area.

The name of the country derives from an indigenous word meaning land of many waters. Indeed, Guyana boasts hundreds of rivers and creeks and many dozens of waterfalls, many of which have good hydropower potential.

Guyana has prioritised climate mitigation for more than fifteen years through implementation of its Low Carbon Development Strategy (LCDS), first launched in 2009, making Guyana among the first developing countries to adopt a national low carbon development strategy.

In the years immediately after 2009, Guyana's main focus was on the forestry sector. As a result of its sustainable forest management policies, coupled with international financial incentives since 2009 – especially access to jurisdictional carbon markets for mitigation achieved since 2016 - Guyana has been able to maintain some of the lowest rates of deforestation in the world. In 2022, the country's deforestation rate was 0.036 percent, the forest stores over 21.65 Giga tons of CO2e and removes a further 68 million tons from the atmosphere per annum.

Subsequently, Guyana's focus has expanded to include more in-depth planning on both the energy sector and adaptation needs. On energy - since 2021, Guyana has advanced the development of natural gas and renewable-based alternatives to the existing source of almost 100% HFO and diesel.

Guyana in general is impacted by the effects of climate change. The coastal area has fertile Class 1 soils, with an abundance of freshwater rivers and creeks that support its agriculture system, the historical backbone of the economy. With land that is over 1m below sea level in some areas, Guyana's coast is constantly under threat of inundation and saline intrusion, requiring sea defense protection, utilising both hard (concrete) and soft (green/ecosystem-based) methods. The very flat relief of this coastal area, together with its negative elevation, also presents a major problem with drainage. Rising sea levels and high intensity rainfall from extreme weather events are therefore severe threats facing the country's people and economy.

As such, the objectives of this NDC are three-fold:

- Guyana's first NDC objective is to maintain one of the world's most intact tropical forest systems while enabling sustainable development for its people. This objective reflects the global climate value of Guyana's forests, the national importance of forest-based livelihoods, and the role of high-integrity finance in sustaining long-term forest stewardship.
- Guyana's new NDC objective is to decouple rapid economic growth from growth in energy-related emissions. Guyana intends to expand access to affordable, reliable energy while transitioning away from near-total dependence on heavy fuel oil and diesel toward a cleaner energy mix, including renewable energy, natural gas as a transition fuel, improved grid infrastructure, and energy efficiency.
- Guyana's third NDC objective is to strengthen national resilience to climate impacts, particularly the effects associated with extreme weather events, including sea-level rise, coastal flooding, saline intrusion, excessive dry periods/ droughts, fires, extreme rainfall, and risks to agriculture and water systems. This objective is central to Guyana's development because most of the population, economic activity, and food production are concentrated on a low-lying coastal plain below sea level.

NDC Process

The revision of Guyana's 2015 NDC followed a deliberate sequence of steps.

i. **STEP ONE:** A desk review was conducted – covering all relevant data, information and reports pertaining to NDC's in general, the post 2015 period in particular, and developments in Guyana from 2015 to the current time.

ii. **STEP TWO:** Guyana's Low Carbon Development Strategy (LCDS) 2030 was launched in October 2021 for public consultation. LCDS 2030 built from Guyana's original LCDS (from 2009) and encapsulates the priority programmes and targets for low carbon development in the forestry, energy and adaptation sectors. The sectors covered in this NDC were integrated into the draft LCDS 2030 for national consultation.

iii. **STEP THREE:** Public Consultation on LCDS 2030 was conducted over the period October 2021 to June 2022. As documented in the finalized LCDS 2030, the National Consultation consisted of:

(i) national level engagements;

a. 77 stakeholder groups were engaged in presentations and discussions; follow-up bi-laterals were held if requested

(ii) thematic engagements;
   a. 5 sessions addressing themes – 2 regarding women and 1 for regional leaders

(iii) community based consultations;
   a. At least one in each region, 16 total attended by representatives of over 200 Indigenous Villages and forest based communities

(iv) Specific written feedback from stakeholders;

(v) Direct feedback through the LCDS website;

(vi) An active public engagement programme consisting of;
   a. Radio and television programmes, including public service announcements (PSAs), interviews with key individuals and stakeholder groups
   b. Literature: brochures, flyers, posters, newspaper articles, press releases
   c. Public events (including Government officials & Multi-Stakeholder Steering Committee (MSSC) members)
   d. Virtual meetings (Zoom and other platforms)
   e. Social media platforms (YouTube, Facebook, Instagram, Twitter, and other online sites)

A full report on all LCDS Communication and Consultation activities was also prepared and published on the LCDS Website.

iv. **STEP FOUR:** Feedback from Public Consultations led to revisions in the LCDS, including in all NDC sector priorities which benefited from discussions through the public consultation process. The finalized LCDS 2030 was released in July 2022. A Report on Stakeholder Feedback and Summary of how each comment was considered was published on the LCDS 2030 website.[1] The Final LCDS 2030[2] was endorsed by the national body that represents Indigenous Villages in Guyana (the National Toshaos' Council on 15th July, 2022[3], approved by the Multi Stakeholder Steering Committee that oversees the Strategy Process on18th July, 2022[4], and was passed by Guyana's National Assembly on 8th August, 2022[5].

v. **STEP FIVE:** Based on the conclusion of this process and informed by the revised LCDS 2030, this revised NDC was drafted.

[1] https://lcds.gov.gy/summary-of-feedback/
[2] https://lcds.gov.gy/wp-content/uploads/2022/08/Guyanas-Low-Carbon-Development-Strategy-2030.pdf

[3] https://lcds.gov.gy/endorsement-of-lcds-2030-by-the-national-toshaos-council/

[4] https://lcds.gov.gy/mssc-approves-finalisation-of-ldcs-2030/

[5] https://lcds.gov.gy/parliamentary-resolution-lcds-2030/

Information to Facilitate Clarity, Transparency and Understanding (Article 4)

Coverage

Coverage is at the national level.

Greenhouse gas

Carbon dioxide.

Sectors covered

Sectors covered are the Land Use, Land Use Change and Forest (LULUCF), energy, and adaptation sectors.

Time frame

The time frame of Guyana's new NDC covers the period 2025-2035

Methodology/Metrics

Methodologies and metrics are consistent with IPCC guidance.

This NDC includes both unconditional and conditional contributions.

Unconditional contributions represent actions that Guyana intends to implement using domestic resources together with existing and secured sources of international support.

Conditional contributions require additional and predictable international finance, technology transfer and capacity building.

Contributions

In keeping with Article 4.6 of the Paris Agreement of December 2015, and in order to further the three NDC objectives described above, Guyana's main contributions to the global fight against climate change will be in the form of policies, strategies and actions across forestry, energy and adaptation.

NDC Objective 1: Forestry

Unconditional contributions

- Maintain and further expand sustainable forest management practices.
- Ensure compliance with the various Codes of Practice that govern the timber industry using local resources.
- Maintain a low rate of illegal logging. Forest monitoring will maintain a high level of timber legality, with the GFC committing 50% of its staff to field monitoring from its 34 forest monitoring stations countrywide.

- Move towards implementation of the Voluntary Partnership Agreement (VPA) under EU- FLEGT.
- Advance programme on national forest certification.
- Encourage added- value activities locally to assist in creating a higher potential for carbon storage in long-use wood products.
- Strengthen support for indigenous communities as they maintain the stewardship of their lands.
- Invest revenues generated from carbon markets into the low carbon development priorities set out in the LCDS 2030
- Expand dedicated benefit-sharing mechanisms for Indigenous communities with a focus on women-led projects.
- Expand youth engagement in forest monitoring, MRV systems, and digital forestry tools.
- Continue capacity-building programmes targeted at Indigenous youth and women in forestry governance.
- Advance work on the Leaders Pledge for Nature, and move towards increasing its current percentage of areas under conservation
- Maintain a comprehensive and robust MRV system, one of the most advanced of its kind, which has been developed under Guyana's REDD+ programme. The development of this system has contributed considerably to the global understanding of how small forested tropical countries can reliably and cost-effectively measure and report on its forest carbon emissions. Guyana is willing to build on the lessons learned thus far to complete and maintain its MRVS if adequate financial resources are provided to do so.

Conditional Contributions

Guyana can generate internationally transferred mitigation outcomes (ITMO's) and participate in high-integrity carbon markets in accordance with UNFCCC guidance. If adequate financial incentives are available, whether through carbon markets or elsewhere, Guyana can contribute up to **32,695,707** tCO2e[6] annually to global mitigation efforts through emissions credits from its forests.

Success in delivering this contribution will be dependent on the continuation of stable, high-integrity jurisdictional carbon markets - with carbon prices at a level that is commensurate with the value created by Guyana's forest-based mitigation.

In the interests of building stable, conservative, high-integrity jurisdictional carbon markets that are aligned with the UNFCCC definition of REDD+ and Article 6, Guyana will limit its issuance of market-facing credits to those permitted under the rules of ART-TREES. ART-TREES is Guyana's chosen market standard and includes several measures to ensure highly conservative limits to the issuance of credits. Due to the highly conservative nature of ART-TREES, its reference level is considerably below Guyana's UNFCCC reference level – therefore, non-market based mechanisms may be pursued for the remainder of the potential ITMOs.

Figure 1 illustrates this approach.

[6] https://redd.unfccc.int/files/guyana_proposal_for_reference_level_for_redd_.pdf (Page 5)

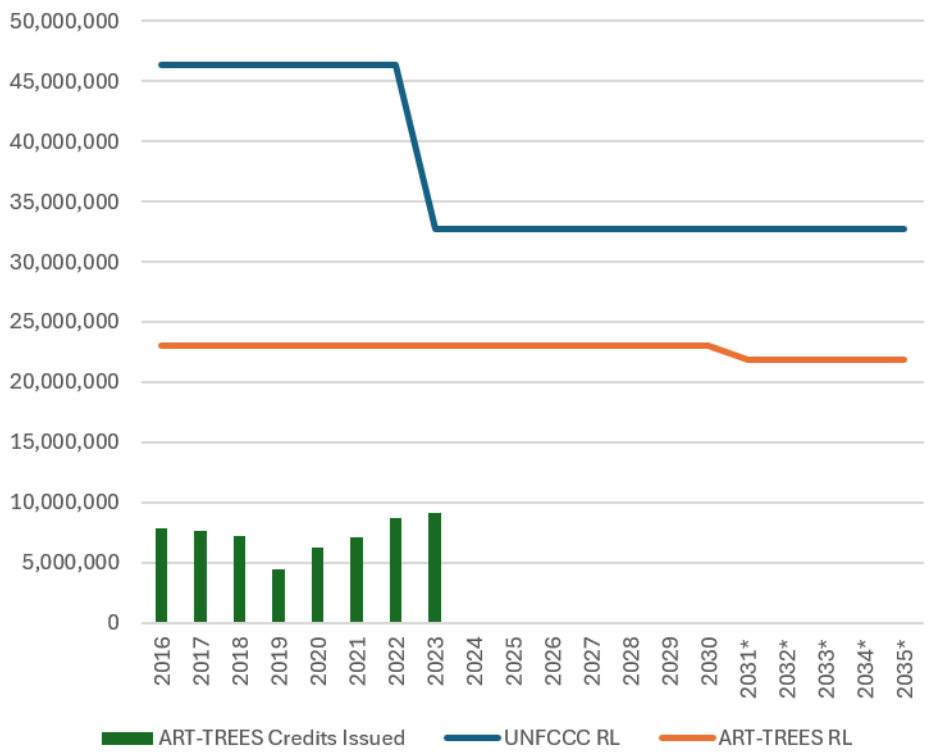

Figure 1: UNFCCC Reference Levels, Market Reference Levels, Actual Credits Issued

If adequate financial incentives are available, whether through carbon markets or other mechanisms, Guyana will:

- Invest in the next wave of low carbon priorities set out in Guyana's LCDS, including a minimum of 15% allocated for direct access by IPLCs.
- Enhance the implementation of Reduced Impact Logging (RIL) to continue expanding capacities in the forest sector in sustainable forest management practices.
- Advance EU-FLEGT. Guyana has signed on to EU-FLEGT. Additional resources are required to build institutional and private sector capacity to meet other trade and supply conditions and to fully support EU-FLEGT.
- Support the implementation of the Programme for the Endorsement of Forest Certification (PEFC).
- Develop programmes and projects to advance work on protection of biodiversity and Guyana's expression of commitment to the Leaders Pledge for Nature that seeks to expand the protected areas.
- Expand mangrove restoration along the vulnerable coastline and riverain areas, including conservation of mangrove ecosystems.
- Promote programmes for reforestation and land reclamation in mined out areas, including watershed management guidelines, to protect areas of high value biodiversity.
- Improve mineral mapping in mining areas to identify economically exploitable deposits. This will significantly reduce deforestation by avoiding clearing of forest cover from lands which contain only marginal mineral deposits.

NDC Objective 2: Energy

Guyana's overall objective is to develop and provide households and businesses an affordable, stable, clean, and reliable power supply. Towards this objective, Guyana intends to support the tripling of GDP growth and a tripling of energy supply by 2030 relative to 2021– while energy-related emissions will stay essentially flat.

This would be one of the most ambitious decoupling of economic growth and greenhouse gas emissions in the world – and will require a rapid energy transition to move from today's situation where almost 100% of national power supply comes from Heavy Fuel Oil and diesel.

Towards achieving this objective, Guyana will transition from dependence on imported HFO and Diesel for electricity generation to an energy mix that includes hydropower, solar, wind and natural gas, demanding approximately 475 MW of power by 2030 with the majority percentage of energy generated from clean (lower emission) and renewable sources; and demanding approximately 568 MW of power by 2035 with 99% generated from clean and renewable energy sources as outlined below.

Year	Peak Load (MW)	Heavy Fuel Oil Share (%)	Natural Gas Share (%)	Renewable Energy Share (%)
2021	173	99	0	1
2030	475	1	64	35
2035	568	1	58	41

Unconditional Contributions

Guyana is undertaking the following unconditionally:

- Regional electrification.
    - Promote/develop small hydro systems. Projects at Moco, Kumu and Kato are already being implemented.
    - Install regional grids with solar PV. Eight regional grids have Solar PV projects ongoing.
    - Replace the electricity in the regional grids which is currently generated with diesel. Government will continue the deployment of Solar PV hybrid solution for all the isolated grids. Four of the current isolated grids will be interconnected to the DBIS Linden, Leguan, Wakenaam and Anna Regina.

- Rural Electrification.
    - Install 10 mini grids in the short term. In 200 villages currently without grid supply, mini grids with solar PV will be gradually implemented.

- Encourage the use of solar dryers and solar-powered freezers in the Hinterland and rural communities.
- Energy Efficiency.

    - Continue the program for incentivizing the replacement to LED lighting and gradually replace inefficient streetlights.

    - Support policies to encourage energy efficiency, particularly in cooling technologies:
        - Develop/adopt building standards to reduce cooling demand.
        - Incentivize energy efficiency in cooling appliances.
        - Phase down hydrofluorocarbons (HFCs), with a view to aligning with the Kigali Amendment to the Montreal Protocol upon Guyana's accession
    - Encourage Energy Efficiency standards in the building sector:
        - Incentives for the use more local material (like timber) for construction.
        - Incentives for the local private community to develop building material industry.

Conditional Contributions

With adequate financial incentives, including from carbon markets, Guyana can:

- Replace heavy fuels and diesel with natural gas for power generation, reducing emissions from this sector by approximately half. Natural gas is intended as a transitional fuel that enables the rapid displacement of heavy fuel oil and diesel while renewable generation capacity and grid stability are expanded.
- Build solar farms to generate up to 100 MW of renewable power
- Continue with the development the Amaila Falls hydropower project, with potential for providing approximately 165MW of power.
- Construct and maintain a small hydro system at Kumu.
- Improve and upgrade the national grid (transmission and distribution).
- Employ energy efficiency measures including prioritized appliance change out programmes, replacement of 4-feet fluorescent tubes, incandescent bulbs and compact fluorescent lamps with LED technology, replacement of high-pressure sodium streetlights with LED technology, installation of energy efficient air-conditioners by 2030.

NDC Objective 3: Adaptation

Unconditional contributions

Guyana will:

i. Using revenues from carbon markets in the period 2016-2025, Guyana is investing in climate adaptation investments that will sustainably irrigate 100,000 acres of land making it suitable for agriculture and contributing to Guyana and the Caribbean's food security alongside climate security. In so doing, Guyana will increase the climate resilience of

drainage and irrigation systems supporting approximately 100,000 acres of agricultural land.

ii. Continue basic work on integrated water management infrastructure
iii. Continue basic maintenance of conservancies, canals and sea defenses
iv. Encourage new agricultural techniques such as shade house planting, hydroponics and fertigation.
v. Mainstream climate change considerations in all sectors of national development.
vi. Finalize Guyana's National Adaptation Plan

Conditional contributions

Given adequate finance, including from carbon markets, Guyana can undertake the following actions:

- Sea defence enhancement and maintenance.
- Strengthening drainage and irrigation systems.
- Mangrove restoration and ecosystem protection.
- Implement adaptation measures and build resilience in hinterland areas.
- Development and implementation early warning systems.
- Enhanced weather forecasting, including microclimate studies and localized forecasting.
- Building climate resilient agricultural systems through water resource management, a diversified and integrated approach to agri-business, sustainable farm management systems, and capacity building.
- Development and introduction of crop varieties which are:
    - Flood resistant,
    - Drought tolerant,
    - Disease resistant.
- Development of environmental and climate change awareness programmes at all levels.
- Development of innovative financial risk management and insurance measures.

Risks and Assumptions

vii. Guyana's conditional contributions are made on the assumption that adequate external finance will be accessible for implementation, including through effective and stable carbon markets.

Means of Implementation

Successful implementation of Guyana's Nationally Determined Contribution will require sustained domestic efforts complemented by enhanced international cooperation, consistent with Articles 9, 10 and 11 of the Paris Agreement.

Finance: Guyana will continue to mobilise domestic public investment alongside international climate finance to support implementation of this NDC. International support remains essential for delivering the conditional components of this NDC, particularly in relation to forest conservation, renewable energy deployment, climate adaptation, resilient infrastructure, biodiversity conservation, and sustainable livelihoods. Guyana will continue to pursue innovative sources of climate finance, including jurisdictional carbon markets and other results-based payment mechanisms, while expanding access to multilateral, bilateral and private sector financing. Guyana will ensure corresponding adjustments are applied where required under Article 6 guidance for authorised ITMOs. Guyana will account for implementation of this NDC in accordance with Article 4.13 of the Paris Agreement, applying guidance adopted by the CMA to promote environmental integrity, transparency, accuracy, completeness, comparability and consistency, and avoid double counting in all circumstances, including when internationally transferred mitigation outcomes are authorised.

Technology Development and Transfer: Implementation of this NDC will require access to appropriate technologies that support low-carbon development and climate resilience. Priority technologies include renewable energy generation, electricity transmission and storage, smart grid systems, climate-smart agriculture, sustainable forest monitoring, remote sensing, digital Measurement, Reporting and Verification (MRV) systems, hydrometeorological observation systems, flood forecasting, coastal protection technologies, water resource management, and climate-resilient infrastructure. Guyana will continue to promote technology cooperation and partnerships to facilitate the transfer and deployment of these technologies.

Capacity Building: Strengthening institutional, technical and human capacity remains fundamental to successful implementation of this NDC. Guyana will continue to build national capacities for greenhouse gas inventory preparation, transparency reporting, forest monitoring, climate risk assessment, adaptation planning, project development, climate finance management, renewable energy deployment, and implementation of Article 6 mechanisms. Capacity-building efforts will continue to prioritise government institutions, Indigenous Peoples and local communities, women, youth, academia, civil society, and the private sector to ensure broad participation in achieving Guyana's climate objectives.

Guyana will continue to implement this NDC through coordinated action across Government ministries, agencies, Indigenous institutions, civil society, academia and the private sector, with overall coordination supported through the national climate governance framework established under the LCDS 2030.

NDC Tracking - Targets for Monitoring

Guyana's NDC is informed by a suite of national policy and technical frameworks, in particular the Low Carbon Development Strategy 2030.

In this context, Guyana has submitted key reports under the UNFCCC transparency framework that are directly relevant to the development and refinement of its NDC targets. These include the Biennial Transparency Report submitted in 2024, together with its annexes on NDC information and REDD+ results, as well as the Common Reporting Tables for the National Greenhouse Gas Inventory and the Forest Reference Emission Level covering the 2023–2030 period.

These reports under the transparency framework will continue to support the monitoring of progress under the NDC. They include the following quantifiable indicators.

NDC Objective One: Forestry

Indicator	***Link to NDC Contribution***	***Baseline (2016)***	***Target 2030***	***Target 2035***
1. Emission Level from LULUCF Sectors	Forests absorb carbon dioxide (CO2) from the atmosphere, acting as carbon sinks. By maintaining or increasing the area of forested land, GHG emissions can be reduced, contributing to climate change mitigation efforts. In Guyana, forest is defined as "Land exceeding 1 hectare with trees exceeding 5m in height and 30% crown cover but not classified as agriculture, infrastructure or settlements". An area is deemed deforested once the cover falls and remains below the elected crown cover threshold of 30%, which is guided by the GOFC-GOLD, 2010 definition of "the long-term or permanent conversion of land from forest use to other non-forest uses."	Annual Absolute targets	These targets will be absolute emission targets not relative to a baseline. Annual Indicator/Target for Monitoring: Emission in LULUCF: 32,695,707 tCO2e Market-Based Finance Target (ART TREES/Forest Sector): 23,042,163 tCO2e Other Finance-Dependent Target: 9,653,544 tCo2e	These targets will be absolute emission targets not relative to a baseline. Annual Indicator/Target for Monitoring: Emission in LULUCF: 32,695,707 tCO2e Market-Based Finance Target (ART TREES/Forest Sector): 23,042,163 tCO2e Other Finance-Based Target: 9,653,544 tCo2e
2. Number of staff dedicated to field monitoring	This indicator (number of staff) complements the previous indicator to evaluate the overall dedication of Guyana to monitoring of sustainable practices in forest management. It tracks the number of staff assigned specifically to monitor and enforce sustainable forest management practices, which include compliance with national and international standards and agreements, including legal timber extraction, sustainable practices, and carbon storage potential.	172	200	230

3. Percentage of staff dedicated to field monitoring	The indicator measures the percentage of forestry staff actively involved in field monitoring activities related to sustainable forest management out of the total relevant workforce. This includes overseeing compliance with national and international standards and agreements, including legal timber extraction, sustainable practices, and carbon storage potential. It assumes that the percentage of staff actively involved in monitoring activities is a reliable proxy for overall forest management effectiveness where an increase in the percentage of staff dedicated to field monitoring directly improves the effectiveness of sustainable forest management practices.	50	60	65
4. Number of Indigenous villages and communities benefiting from carbon credits revenue	Indigenous villages benefit from climate finance from carbon credits, for resourcing of sustainable livelihood activities helps to reduce pressure from forest resources thereby reducing emissions. Target expressed as a percentage of all Indigenous Villages.	0	80%	100%

NDC Objective Two: Energy

Indicator	***Link to NDC Contribution***	***Baseline (2016)***	***Target 2030***	***Target 2035***
5. Energy supply from clean and renewable sources	Renewable energy sources produce less CO2 compared to fossil fuels, and increasing their proportion in the national energy supply supports climate change mitigation efforts in Guyana. The indicator includes the renewable energy sources specified in the NDC (wind, solar, biomass, hydropower), but Guyana does not restrict itself to only these sources. The indicator is expressed in percentage of energy supply to national grid.	1%	64% Natural Gas 35% Renewable Energy	58% Natural Gas 41% Renewable Energy
6. Energy consumption from fossil sources per unit of GDP	It measures the amount of energy derived from fossil sources consumed to produce a unit economic output (GDP). This reflects the energy efficiency of an economy in utilising fossil sources. When less fossil sources are used to produce a given amount of economic output this can indicate more efficient use of energy. Reported in TJ/Million USD annually.	2016: 7.39 2021: 5.08	2	2
7. Energy supply from renewable sources	Renewable energy sources produce less CO2 compared to fossil fuels, and increasing their proportion in the national energy supply supports climate change mitigation efforts in Guyana. The indicator includes the renewable energy sources specified in the NDC (wind, solar, biomass, hydropower), but Guyana does not restrict itself to only these sources. The indicator is expressed in terajoules (TJ).	2016: 7,062 2021: 4,439	8,591	10,287

NDC Objective Three: Cross-Cutting Indicators (Social Sectors)

Indicator	*Link to NDC Contribution*	*Baseline (2016)*	*Target 2030*	*Target 2035*
8. Youth employment in low carbon sectors	Youth inclusion is a priority in Guyana's NDC under the United Nations Framework Convention on Climate Change because young people are essential for long-term climate resilience, innovation, and the transition to a low-carbon economy. Their participation strengthens decision-making, implementation, and community-level action while ensuring intergenerational equity in climate policy. Target expressed a total number of youth on an annual basis.	250	At least 500 annually	At least 1,000 annually
9. Women's participation in community management and climate programmes at national and community levels	Enhancing women's participation in climate and community initiatives is part of Guyana's NDC under the United Nations Framework Convention on Climate Change because women are key contributors to resilience, sustainable livelihoods, and local adaptation. Greater inclusion of women in leadership, decision-making, and low carbon economic opportunities strengthens the effectiveness, equity, and long-term sustainability of climate action. Target expressed as a percentage of total participation.	30 (approximated)	50%	60%
10.Percentage of projects with Gender-disaggregated and community-disaggregated resource management components	Gender- and community-disaggregated resource management projects. This enables better targeting of interventions, improves fairness in access to resources and benefits, and strengthens the effectiveness and inclusiveness of climate and natural resource governance. Target expressed as a percentage of climate related projects.	30	50	60

Guyana's revised FRLs include all five components of REDD+ as set out in the Warsaw Framework and incorporate the key contributions Guyana's forests make to REDD+ and global climate action based on increased capacity and improved data since the original FRL was determined in 2014:

- **Conservation**: The estimated forest biomass carbon stocks across all pools is 272.3 t C/ha without soil carbon and 331 t C/ha with soil carbon. At the end of 2022, Guyana's forest is estimated to be **approximately 18 million hectares**, with a storage capacity of **21,653,431,243 tCO_2,** including soil carbon.

- **Emissions from Deforestation and forest Degradation:** Guyana's average emissions from 2018 to 2022 were estimated at **11,042,276 tons of CO_2**, 0.05% of total carbon stocks, with a maximum of 14,556,286 t CO_2 in 2019 and a minimum of 8,207,062 t CO_2 in 2022. These emissions are very low by global standards, because Guyana's approach to sustainable management of forests has resulted in the long-term historical deforestation being very low over the whole country – and is one of the lowest in the world.

- **Removals:** Guyana's GHG emissions are strongly influenced by the sustainable management of its extensive national forest cover and the consequent absorption of CO_2 from the atmosphere. Over the reference period of this FRL, Guyana has maintained a net carbon sink, with a negative emission level, surpassing -68 Mt of CO_2-eq per annum for the entire period from 1990 to 2022. To calculate removals from forests remaining forests, country-specific annual increments over 20 years were utilized (1993 to 2013). Country-specific growth increments were referenced from Roopsind et al., 2018: Trade-offs between carbon stocks and timber recovery in tropical forests are mediated by logging intensity, 2017[7]. Roopsind et al. underscore the importance of accurately accounting for these baselines to ensure fair estimation of removals and to incentivize sustainable forest management practices, by incorporating baseline data on deforestation and degradation rates as setting Guyana's reference level summarized below.

[7] Roopsind A, Caughlin TT, van der Hout P, Arets E, Putz FE. ***Trade-offs between carbon stocks and timber recovery in tropical forests are mediated by logging intensity***. Glob Chang Biol. 2018 Jul;24(7):2862-2874. doi: 10.1111/gcb.14155. Epub 2018 May 22. PMID: 29603495. (Available at: https://pubmed.ncbi.nlm.nih.gov/29603495/)

Guyana's sectoral quantified targets in the LULUCF sectors will utilise Guyana's Reference Level[8] is as summarised in the following table:

The FRL is computed as two parts: Emissions Reductions and Removals.

Combining this data with UNFCCC guidance and international precedence, Guyana's Reference Level is therefore summarised in the following table:

Element of REDD+	Calculation (Annual)	Contribution to RL for Generation of Results (Annual) in tCO2e
Baseline Deforestation and Forest Degradation	Historical Baseline	11,042,276 tCO2e (Historical Baseline)
Annual Emissions Reductions from sustainable management of forests and conservation	0.1% of Forest Carbon Stock, based on the adjustment proposed by the FCPF methodological framework	21,653,431 tCO2e
Total Emissions Reductions FRL	**Baseline + Adjustment**	**32,695,707 tCO2e**
Annual Removals from sustainable management of forests and conservation	From National Specific 20-year Study	68,113,829 tCO2e
Total Removals FRL	**Annual Removals Level**	**- 68,113,829 tCO2e**

Therefore, utilising this basis for Guyana's NDC to maintain consistency across UNFCCC Report, to increase ambition and broaden the scope of report to the LULUCF sectors, as well as the establish a baseline for monitoring, the following is proposed:

Annual Indicator/Target for Monitoring: Emission in LULUCF: **32,695,707 tCO2e**

Conditional Target (ART TREES/Forest Sector): 23,042,163 tCO2e

Unconditional Target: 9,653,544 tCo2e

These targets will be absolute emission targets not relative to a baseline.

[8] *https://redd.unfccc.int/media/guyana_submission_2024-12-18.pdf*