

# GENERATING ENVIRONMENT, CLIMATE CHANGE AND DISASTERS INDICATORS FOR USE IN POLICY DECISION-MAKING IN GRENADA.

1

NATIONAL WORKSHOP, 17 – 19 OCTOBER 2022

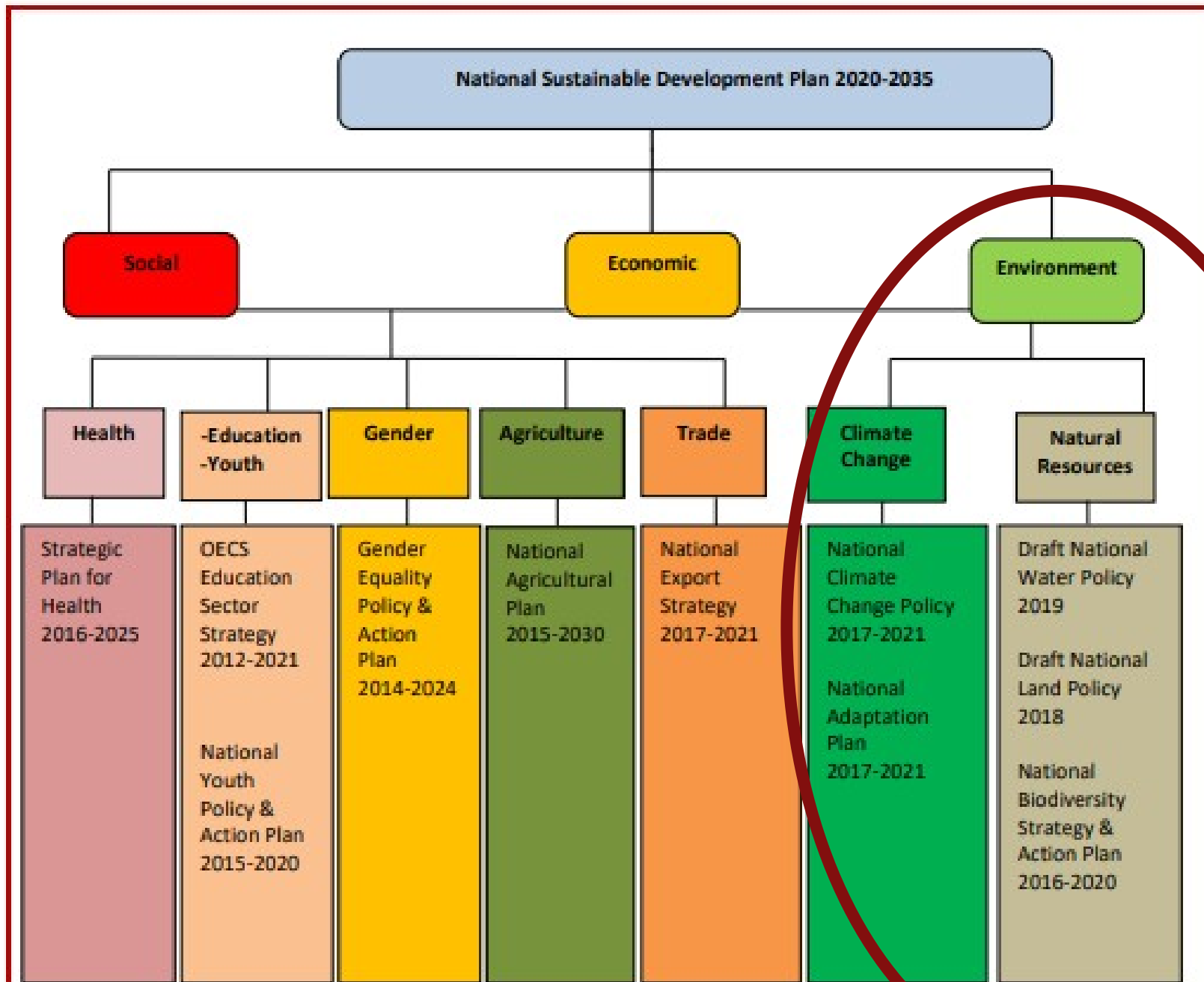
## Environment, climate change indicators for Grenada – needs and priorities



*“Loose the reef – loose the beach” Soubise, Grenada*

Prepared by Aria St.Louis,  
Ministry of Climate Resilience, the Environment  
and Renewable Energy,  
Government of Grenada  
environment.sec@gmail.com

**FIGURE 5.2: MAPPING OF SECTOR STRATEGIES TO THE NSDP 2020-2035**



## Introduction & Context

+ Focus on environment and within that, focus on climate change and biodiversity

+NSDP 2035 document reference

+indicators and alignment with national and international agreements (SDG's, Rio Conventions etc.)

## Introduction & Context

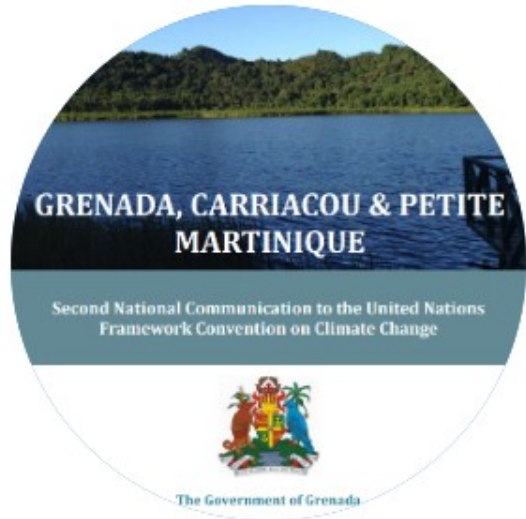
+Steps in NSDP 2035 Monitoring and Evaluation Framework

+ Arrow (  ) indicates areas where emphasis is needed through a coordinated and integrated approach.





National Climate Change Policy



Grenada's Second National Communication to the UNFCCC



National Energy Policy of Grenada



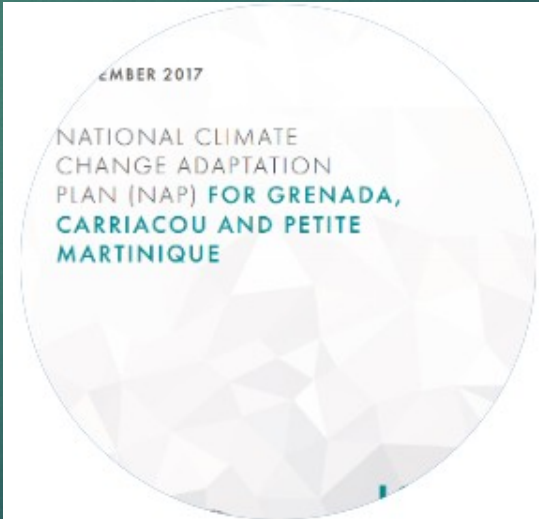
Roadmap on Building A Green Economy for Sustainable Development in Carriacou and Petite Martinique, Grenada



Grenada's Nationally Determined Contributions



National Water Policy



National Adaptation Plan



**National Climate Change Policy  
for Grenada, Carriacou and Petite  
Martinique (2017-2021)**

November 2017



## Monitoring, evaluation and reporting —

Monitoring, evaluating and reporting is a critical component of Grenada's climate change policy as it will enable Grenada to: track the delivery of agreed measures; establish its effectiveness in reducing vulnerability and GHG emissions; create an opportunity for learning and adaptive management; and fulfil reporting requirements with the UNFCCC and reporting requests from the Caribbean Community Climate Change Centre (CCCCC). This component aligns with Article 7 of the UNFCCC Paris Agreement, which states that each Party should monitor, evaluate and learn from adaptation policies, plans, programmes and actions, and with UNFCCC reporting requirements on GHG inventories. It is also consistent with Grenada's agreement to report on the Implementation Plan for 'Regional Framework for Achieving Development Resilient to Climate Change'.

Monitoring and evaluation (M&E) of adaptation measures will be undertaken as part of the NAP process. The NAP details goals and indicators of overarching strategic importance to the adaptation process which align with indicators already agreed for reporting to the CCCCC. M&E of mitigation measures will be undertaken as part of Grenada's UNFCCC reporting requirements, which include preparing, communicating and maintaining successive NDCs (Paris Agreement Article 4, paragraph 2), national communications and biennial update reports.

Every two years, a progress report on the policy, NAP and NDC process will be developed and submitted to Cabinet, which will be discussed at the Sustainable

# Nationally Determined Contribution

indicators, targets, means of verification

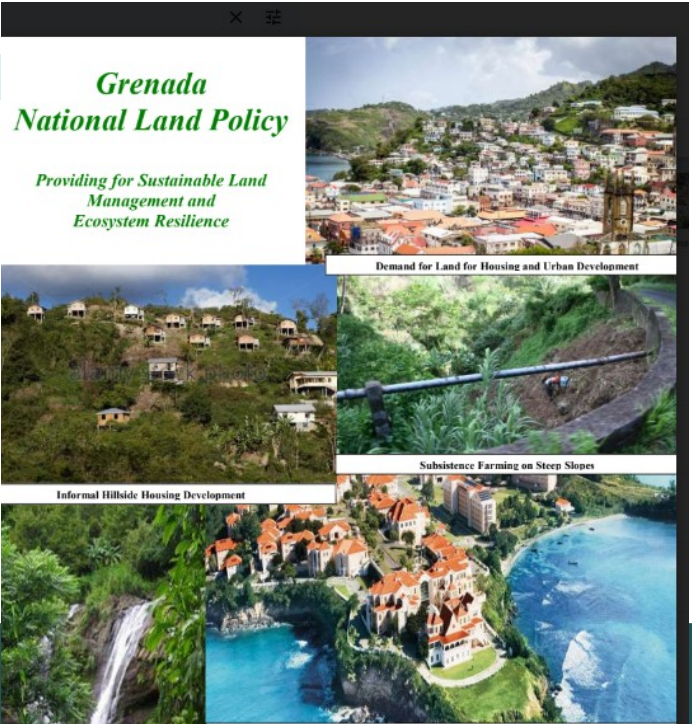
Outcome	Output	Key Performance Indicators (KPIs)	Baseline	Baseline Year	Milestones	Targets	Target year	Government Agency	Estimated Cost (USD)	Focus area	Value Chain	Sectors	Type of lead domestic agency	Implementation Progress	Specified Gaps in Support
1. Energy:	Renewable energy and energy efficiency legislation developed and efficiency standards implemented (see NDC Partnership Plan for full info).	% emission reduction from renewable energy and efficiency measures in selected locations relative to 2010 levels	No specific renewable energy efficiency legislation exist	2019	Outcome of pre-feasibility study and feasibility study developed; Renewable energy and efficiency legislation and	[target needed] <i>Would NYU be able to provide information / suggestions based on their analysis?</i>	2030	Ministry of Climate Resilience, the Environment; Ministry of Infrastructure Development et al.	TBD	Mitigation	1. Policy, Strategy & Legislation	Cross-Cutting	Sectoral		Support for implementation, details on funding gap based on cost estimate; potential human resources support/capacity
	<b>1.8 Comprehensive Data</b>	1.8.1 Data collection and management	MRV Needs assessment	2021	Pilot phase of MRV system completed	Data collection and management	2026	Ministry of Climate Resilience et al.	400,000 (Estimate TBD)	Mitigation	3. Monitoring & Evaluation	Energy	Environment or Climate Change		Financing for Data Collection and Management System



**NATIONAL ENVIRONMENTAL POLICY  
AND  
MANAGEMENT STRATEGY  
FOR GRENADA**

*FINAL DRAFT – FOR PRESENTATION  
TO THE CABINET OF MINISTERS*

*December 2004*



# GRENADA

## National Biodiversity Strategy and Action Plan 2016-2020



Page 1 / 64



# Post 2020 Global Biodiversity Framework





"Retain and restore freshwater, marine and terrestrial ecosystems, increasing by at least [50%] the land and sea area under comprehensive spatial planning addressing land/sea use change, achieving by 2030 a net increase in area, connectivity and integrity and retaining existing intact areas and wilderness."

# Environment, climate change indicators for Grenada: Needs and priorities

10



- **Habitat Conversion in hectares (annually)**
  - Natural area converted by development
  - Number of native floral and faunal species
  - Number of endemic floral and faunal species
  - Number of threatened ecosystem and endangered floral and faunal species
  - Number and size of terrestrial and marine protected areas.
- **Agro Chemical Usage (annually)**
  - Pesticide importation and usage
  - Fertilizer importation and usage
  - Effluent discharge
- **National Expenditure (annually)**
  - National budget allocation
  - National expenditure on plan implementation broken down by sectors, habitats, initiatives and species
- **Public Education, Awareness, and Outreach (annually)**
  - Number of media events, school initiatives, community initiatives, consultations and other outreach activities
- **Mainstreaming**
  - Number of legislation revised and updated
  - Number of ecological survey and management plans of major ecosystem completed
  - Number of training initiatives completed
  - Number of valuation of key ecosystems completed
  - Number of ratification, accessing, signing of biodiversity related conventions
  - Number of policy, legislative and fiscal and operational initiatives completed
  - Number of private sector and civil society groups actively involved in biodiversity conservation
  - Number of Aichi Targets completed



# Integrated Coastal Zone Management Policy for Grenada, Carriacou and Petite Martinique

November 2015



## MONITORING AND EVALUATION OF THE ICZM POLICY

This ICZM Policy details a series of objectives and strategies to guide ICZM in Grenada. Successful implementation of the Policy requires that an implementation plan be developed that would include a strategy for monitoring and evaluation. In this regard, this ICZM Policy should be independently reviewed every five (5) years. **The review should comprise the following:**

1. **Compliance review** – assess decisions taken during the implementation period that matched or did not match the policy objectives: has Grenada taken the policy into account in decision making?
2. **Implementation review** – assess the overall progress towards achieving goals and objectives: has Grenada done what was required by the policy?
3. **Performance review** – has implementation of the policy resulted in improved ICZM and consequently, a healthier coastal zone, a more educated citizenry, etc.; was the policy wrong to begin with (gaps, wrong concepts, right concepts but wrong recommendations, etc.)?

The outcome of the policy review will be a revised policy that takes account of past achievements and plans for future challenges in managing the coasts of Grenada. It is further recommended that policy implementation and monitoring and evaluation, be initially combined with the process of implementing the Preliminary Roadmap for ICZM, as the two (2) are intended to be closely integrated until an ICZM Plan is completed.

Cluster approach to data gathering to support reporting obligations e.g. Biodiversity “cluster” and Chemical “cluster” of conventions.

+ Integrated approach to data collection in order to meet reporting obligations to various MEAs e.g. Forest Forum, RAMSAR, CBD

## Key Conventions that necessitate a database for monitoring, reporting and verification (non-exhaustive)

- ▶ Escazu Agreement
- ▶ Nagoya Protocol on Access and Benefit Sharing
- ▶ Cartagena Biosafety Protocol
- ▶ International Treaty on Plant Genetic Resources for Food and Agriculture (TPGR/ Plant Treaty)
- ▶ UNFCCC Climate Change Convention
- ▶ Montreal Protocol
- ▶ Chemical Conventions: Basel, Rotterdam, Stockholm

## SELECT RESULTS INDICATORS FOR S.D.G.'s used by UNEP

<p>Sustainable Development Goal indicators linked to the three strategic objectives.</p> <p>Recognizing that all 17 Sustainable Development Goals are interconnected, UNEP focuses on contributing to the implementation of a number of Sustainable Development Goal Targets through its global influence in the generation and dissemination of advocacy, campaigns and normative work.</p>	1.1.1	Proportion of the population living below the international poverty line by sex, age, employment status and geographic location (urban/rural)
	2.4.1	Proportion of agricultural area under productive and sustainable agriculture
	3.6.1	Death rate due to road traffic injuries
	3.9.1	Mortality rate attributed to household and ambient air pollution
	3.9.3	Mortality rate attributed to unintentional poisoning
	4.7.1	Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment
	5.1.1	Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex
	6.3.1	Proportion of domestic and industrial wastewater flows safely treated
	6.3.2	Proportion of bodies of water with good ambient water quality
	6.4.2	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources
	6.5.1	Degree of integrated water resources management
	6.5.2	Proportion of transboundary basin area with an operational arrangement for water cooperation
	6.6.1	Change in the extent of water-related ecosystems over time
	7.2.1	Renewable energy share in the total final energy consumption
	7.3.1	Energy intensity measured in terms of primary energy and GDP
	8.4.1	Material footprint, material footprint per capita, and material footprint per GDP
	9.4.1	CO <sub>2</sub> emission per unit of value added
	11.6.1	Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities
	11.6.2	Annual mean levels of fine particulate matter (e.g., PM <sub>2.5</sub> and PM <sub>10</sub> ) in cities (population weighted)
	12.2.1	Material footprint, material footprint per capita, and material footprint per GDP
	12.2.2	Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP
	12.3.1	(a) Food loss index and (b) food waste index
	12.4.2	(a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment
	12.5.1	National recycling rate, tons of material recycled
	12.6.1	Number of companies publishing sustainability reports
	12.8.1	Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment
12.e.1	Amount of fossil-fuel subsidies per unit of GDP (production and consumption)	

▶ SELECT RESULTS INDICATORS FOR S.D.G.'s used by UNEP

Planetary sustainability for people, prosperity and equity		
→	14.1.1	(a) Index of coastal eutrophication; and (b) plastic debris density
→	14.2.1	Number of countries using ecosystem-based approaches to managing marine areas
→	14.3.1	Average marine acidity (pH) measured at agreed suite of representative sampling stations
→	15.1.1	Forest area as a proportion of total land area
	15.3.1	Proportion of land that is degraded over total land area
	15.4.2	Mountain Green Cover Index
→	15.b.1 (b)	Revenue generated and finance mobilized from biodiversity-relevant economic instruments
→	17.2.1	Net official development assistance, total and to least developed countries, as a proportion of the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee donors' gross national income (GNI)
	17.18.1	Statistical capacity indicator for Sustainable Development Goal monitoring

# Thank you!

15



Bathway cliff's , Grenada

**Aria St.Louis**  
Environmental Specialist,  
HOD Environment Division,  
Ministry of Climate Resilience, the  
Environment & Renewable Energy,  
Government of Grenada  
[environment.sec@gmail.com](mailto:environment.sec@gmail.com)