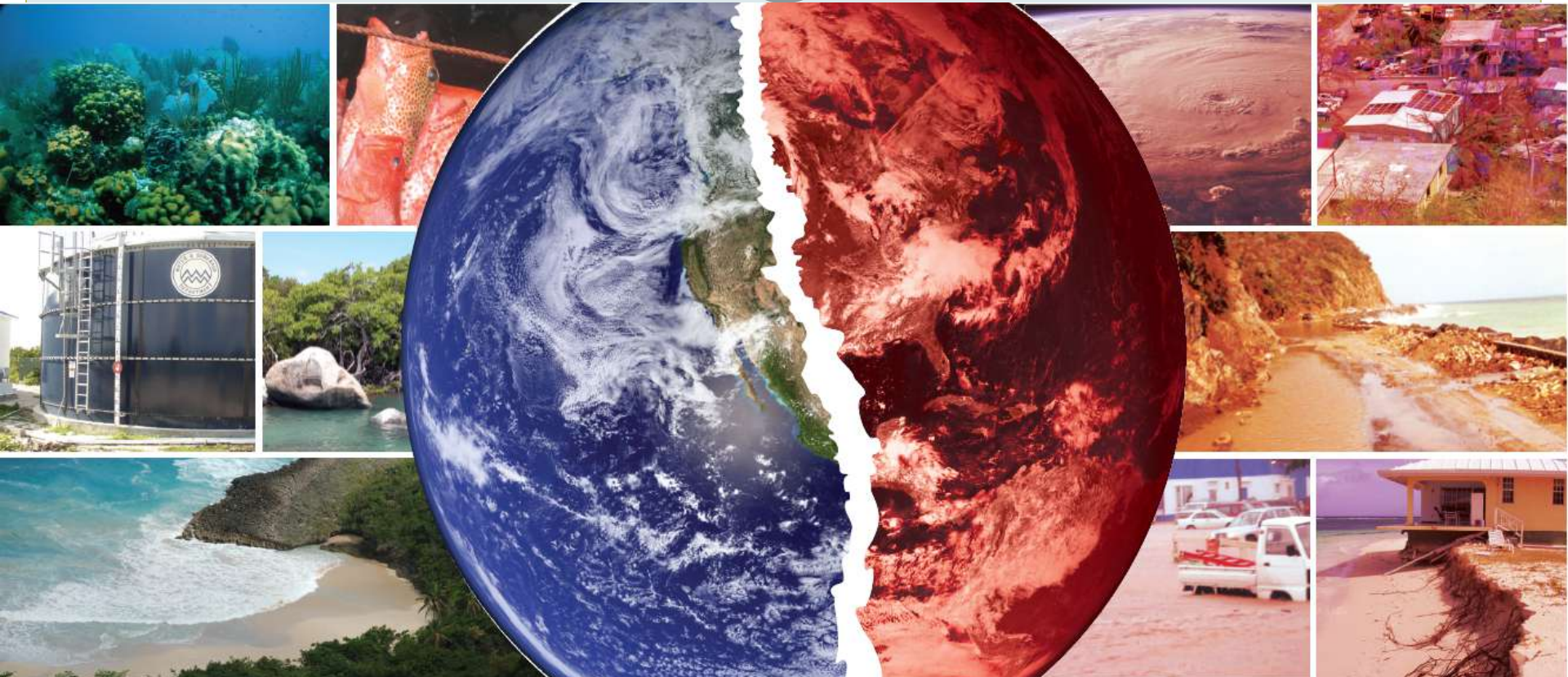


Achieving Low-Carbon Climate-Resilient Development

The Virgin Islands *Climate Change Adaptation Policy*



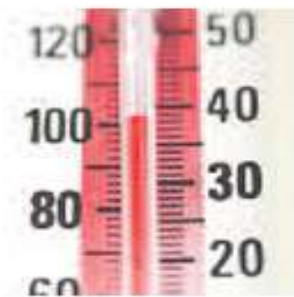
Key Features



1. Comprehensive
2. Based on stakeholder consensus, science, best practices
3. “No regrets” measures
4. Presents opportunities
5. Tied to funding scheme
6. 4 years for priority actions



Participants at the first Public Climate Change Stakeholder Consultation, January 2009



Rising temperatures

1°C - 5°C (1.8°F – 9°F) warmer by the 2080s under the Medium-High Carbon Emissions Scenario (Taylor et al., 2007);



Changing rainfall patterns

Up to 25% drier by the 2080s under the Medium-High Carbon Emissions scenario, accompanied by a *change in rainfall patterns such that more, heavier rain events and thus floods are likely* (Taylor et al., 2007);



Stronger, more persistent and devastating hurricanes

A greater likelihood of category 4 and 5 hurricanes as is already being observed (Mimura et.al, 2007).



Rising sea level

0.19 – 0.58 metres (0.6 – 1.9 feet) higher sea level by 2100 as a result of warmer ocean temperatures and melting polar glaciers (Mimura et.al, 2007).



Water Resources & Hydrological Characteristics

Beach & Shoreline Stability

Coastal & Marine Ecosystems



Tourism

Critical Infrastructure



Human Health

Climate Change Impact Areas

Human Settlements



Insurance & Banking

Agriculture



Forestry & Biodiversity

Energy Security



Fisheries



Adaptation Measures - Environment



ENHANCING ENVIRONMENTAL LEGISLATION

- ***Environmental Management and Conservation of Biodiversity Bill and regulations;***
- Update the ***Fisheries Act 1997***
- Revise and expand the Beach Protection Ordinance 1985

ENHANCING ENVIRONMENTAL MANAGEMENT

- Declare and transfer all of the areas in the approved ***British Virgin Islands Protected Areas System Plan 2007-2017*** at the earliest date possible;
- Expand and enhance the mooring buoy system;
- Approve and enforce a National Beach Management Policy and specific beach management plans for priority beaches; and

Policy highlights - Environment



Goal: to enhance the resilience and natural adaptive capacity of our natural resources, including terrestrial, coastal and marine ecosystems as well as the fishery resource base

- Comprehensive environmental legislation
- Beach management policy
- Expanded Protected Areas and enhance management 
- Expand mooring buoy system 

Adaptation Measures – Tourism



ENHANCING TOURISM MANAGEMENT

National Sustainable Tourism Development Policy and Master Plan including:

- Base standards for design, construction, environmental management, water and energy conservation and efficiency in the tourism sector that moves the Territory towards “green” tourism;
- Carrying capacities and management plans for individual tourism attractions;
- Desired/allowed type, style and density of tourism developments

DIVERSIFYING THE TOURISM PRODUCT

- Developing and promoting less vulnerable land-based attractions and activities (e.g. national parks, historical sites, museums, cultural events and hiking). Specifically:

“GREENING” THE TOURISM SECTOR

- Enact energy and water conservation and efficiency standards, create incentives for the use of renewable energies in tourism properties and engage in regional projects to move The Virgin Islands tourism sector towards being carbon neutral within in the next 20years (2032);
- Encourage industry certification in environmental good practice

REDUCING DISASTER RISK

- Risk management and business continuity plans, adequate insurance coverage , drainage plans , Increase coastal setback and elevation requirements, national risk mapping exercise

Policy highlights - Tourism




Goal: to create and maintain a better managed, more resilient, diverse and environmentally responsible sector

- National Sustainable Tourism Development Policy and Master Plan (standards, carrying capacities, management plans, etc.) 
- Diversify base of the tourism industry (e.g historical, cultural) 
- Green certification (energy, water, waste – pump out facilities) 
- Carbon neutral within in the next 20 years 
- Disaster and Climate Change risk management and business continuity plans for tourism facilities.

Policy highlights – Insurance & Banking



Goal: to minimise the vulnerability of insured and mortgaged properties to Climate Change impacts

- Alternative insurance models, e.g. micro insurance schemes and mutual/cooperative schemes 
- Climate Change risk management protocols

Policy highlights – Agriculture



Goal: to strengthen food security by expanding local agricultural production and increasing its resilience to climate hazards/changes

- Update and approve 2006 Draft National Agricultural Policy to expand and modernize production;
- Deliver a low interest, small loans scheme/programme to help persons invest in agricultural production; 
- Develop outdoor research, training and development facility to support mainstreaming of best practices to increase resilience; 
- Study to determine appropriate insurance/crop recovery approach for producers; 
- Promote the integration of intensive/semi-intensive production systems; 
- Enhance infrastructure for water capture and storage for agricultural purposes. 

Policy highlights – Human Health






Goal: to enhance the capacity of the health care sector and the public to deal with climate related health impacts, such as increased incidence of dengue fever, ciguatera and childhood asthma

- Adopt an integrated approach to vector borne diseases;
- Enhance the emergency response capacity of the health care system during natural disasters and epidemics;
- Fully implement the Port Health Programme;
- Conduct vulnerability assessments of existing clinics and proposed polyclinics to natural hazards, in terms of building design and location. Relocate and retrofit clinics where necessary;
- Improve garbage collection and disposal system to reduce and control rodent populations.

Policy highlights – Critical infrastructure/ settlements








Goal: to enhance the resilience of existing critical infrastructure and settlements to Climate Change impacts, while avoiding the construction of new infrastructure/settlements in areas or with materials prone to climate hazards.

- Improve building standards - update the Building Ordinance and Regulations;
- Enhance planning process - pass regulations for the Physical Planning Act 2004, approve a National Physical Development Plan and Local Area Plans;
- Enhance road design and construction; 
- Incentive schemes for climate resilient building materials; 
- Capacity building in engineering disciplines 

Policy highlights – Water Resources






Goal: to promote water conservation and efficiency while increasing resilience to flood events and drought

- Conduct flood risk mapping and modeling exercise; 
- Develop National and Local Area Drainage Plans and Flood Action Plans;
- Protect/restore natural drainage areas (e.g. CGB ponds);
- Minimise impervious surfaces creation (e.g. permeable pavers); 
- Explore options for the capture, treatment and reuse of stormwater for cooling, irrigation, flushing toilets etc.; 
- Implement a programme and provide the necessary resources to regularly maintain and clean identified priority ghuts. 


Policy highlights – Water Resources



Goal: to promote water conservation and efficiency while increasing resilience to flood events and drought

- Implement strict water conservation and efficiency programmes (including through incentive programmes); 
- Develop a Sustainable Freshwater, Watershed and Coastal Waters Management and Pollution Prevention Plan
- Fully repair and expand public infrastructure for water capture, storage and delivery within the next 10 years. 
- Continue and expand the leak and theft detection programme for the water distribution system with the goal of reducing unaccounted for water to 20 percent within the next 15 years (2027); 
- Improve methods of household capture, storage and use of rainwater

Policy highlights - Energy



Goal: to promote energy conservation and efficiency and encourage use of renewable energy to reduce our national energy bill , carbon emissions and increase our energy security.

- Establish National Energy Committee;
- Develop adaptive energy conservation and efficiency standards;
- Conduct a National Renewable Energy Feasibility Study;
- Develop Comprehensive National Energy Policy;
- Provide incentives schemes and/or loan options to encourage renewable energies;
- Encourage short and long-term programmes for active research, development and training in renewable energy technologies and designs;
- Climate-proof existing/planned fuel terminals and electricity generation /distribution systems to reduce vulnerability to climate threats;
- Bury electrical lines where it is determined to be strategic.

