

Transforming to a Climate-Resilient, Energy Efficient and Low Carbon Economy- Anguilla's *Climate Change Policy (DRAFT)*

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January 31, 2011



Technical Report 5C/ECACC-11-01-1
Published by the Caribbean Community Climate Change Centre
Digital Edition (2011)
<http://www.caribbeanclimate.bz>

Message from the Minister of Environment

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I. BACKGROUND

This draft *Climate Change Policy* is the product of national consultations conducted from 2008 to 2010 funded by the United Kingdom Department for International Development (DFID) and managed by the Caribbean Community Climate Change Centre (CCCCC) under the three year regional *Enhancing Capacity for Adaptation to Climate Change in the Caribbean UK Overseas Territories* (ECACC) Project. As a cross-territorial project involving Anguilla, the British Virgin Islands, the Cayman Islands, Montserrat and the Turks and Caicos Islands, the ECACC project has provided funding for monitoring, conducting vulnerability and capacity assessments, developing adaptation strategies, and carrying out public education programs as it relates to climate change. The overarching goal of this project is to build local capacity in the planning and implementation of climate adaptation and mitigation measures, within the context of national development planning processes. A key outcome of this project is the development a *Climate Change Policy* for Anguilla.

This draft *Climate Change Policy* will be subject to public review and finalised during final national consultative workshop to be held in April 2011. It is hoped that this draft *Climate Change Policy* will generate informed discussion about viable options to transform Anguilla to a climate resilient, energy efficient and low carbon economy, which is a key pillar of national efforts to achieve sustainable development. This draft *Climate Change Policy* is complementary to and supportive of the Anguilla Energy Policy which was approved by the Government of Anguilla (GOA)/ Executive Council in December 2009. This draft *Climate Change Policy*, which is supported by the technical and scientific analysis within the ECACC project vulnerability and capacity assessment, will be submitted to House of Assembly in May 2011 for consideration and approval.

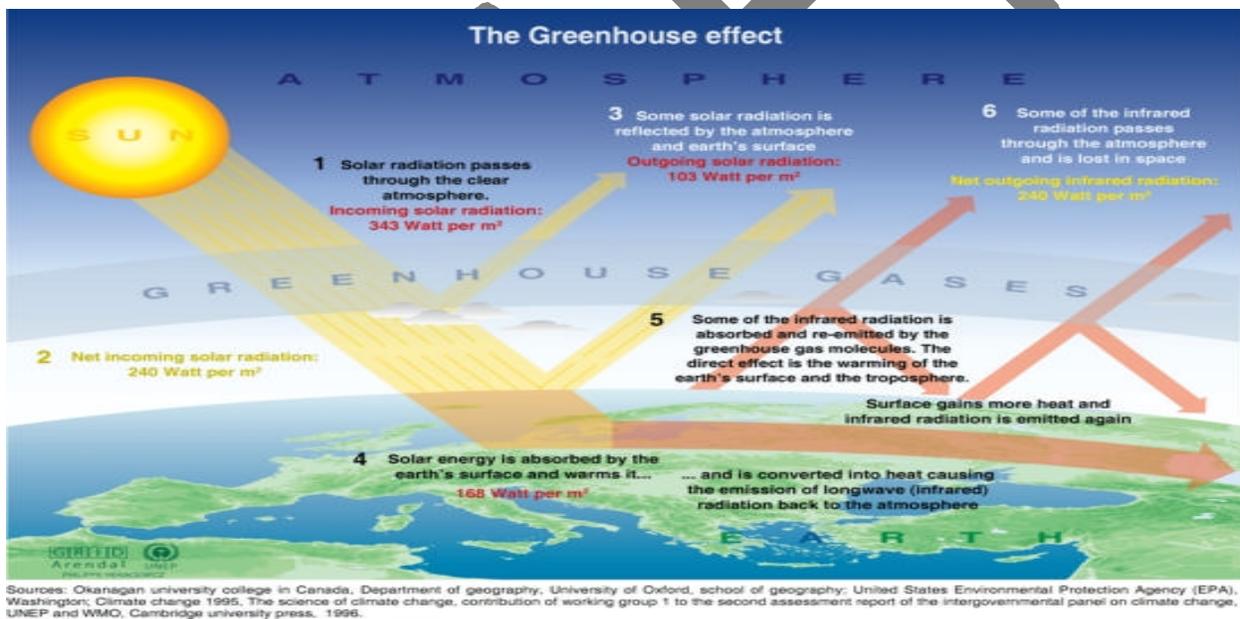
II. CONTEXT

The Earth has warmed on average by 0.74°C over the last hundred years, with 0.4°C of this warming occurring since 1970. The past decade is the warmest on record since the beginning of instrumental climate records in 1850, according to data sources compiled by the World Meteorological Organization (WMO). Globally the rate of warming averaged over the last 50 years is nearly twice that for the last 100 years. The Intergovernmental Panel on Climate Change (IPCC)¹ has determined that 90% of the warming effect can be attributed to human activities

¹ The IPCC is an intergovernmental body open to all member Countries of the United Nations (UN) and the World Meteorological Organization (WMO) with a mandate to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-

since the onset of the industrial revolution such as burning of fossil fuels for power generation, transport, industrial processes and housing. Global temperature increases are cause for concern worldwide. The IPCC, in periodic reports summarizing the extensive review of scientific literature, has determined that the impacts of this warming is already changing the world's climate and causing an increase in extreme events (floods, droughts, storms), a progressive rise in sea level, and will result in an increase in hurricane intensity. The world's natural environment and biodiversity, together with human health and livelihoods, and the economies and sustainable development aspirations of most nations are affected by global climate change.

Emissions of Greenhouse Gases (GHGs), which are the cause of global warming and associated climate change, continue to rise. Most developed countries and rapidly developing nations share the common view that global average temperatures should not rise more than 2°C above pre-industrial levels before 2100. Limiting warming to 2°C by 2100 will mean capping the current concentration of greenhouse gases of 430 ppm at 550 ppm, or reducing global emissions by 50% on 1990 levels by 2050. The cost of action to reduce GHG emissions and stabilize atmospheric concentrations to 500-550 ppm has been quantified by Sir Nicholas Stern in *The Economics of Climate Change* (2007) to be in the order of 1% of gross global GDP, with delayed action escalating damage costs to as much as 20% of global GDP taking into account the higher losses in most developing countries.



While Caribbean countries contributes less than 0.1% to global greenhouse gas (GHG) emissions they will be amongst the earliest and worst adversely affected by climate change. Their small size relative isolation, concentration of communities and infrastructure in coastal areas, narrow

economic impacts. The IPCC is a scientific body. It reviews and assesses the most recent scientific, technical and socio-economic information produced worldwide relevant to the understanding of climate change. It does not conduct any research nor does it monitor climate related data or parameters. Thousands of scientists from all over the world contribute to the work of the IPCC on a voluntary basis. Review is an essential part of the IPCC process, to ensure an objective and complete assessment of current information. IPCC aims to reflect a range of views and expertise. The Secretariat coordinates all the IPCC work and liaises with Governments.

economic base, dependence on natural resources, susceptibility to external shocks and limited financial, technical and institutional capacity are inherent vulnerabilities of small island developing states (SIDS). Exposure to current weather-related hazards and other climate variability compound these vulnerabilities which are often linked to inappropriate development paradigms. Changing weather patterns associated with climate change is expected to exacerbate the vulnerabilities and impacts currently experienced in the region. Heavier rainfall events are already challenging the capacity of some nations to cope, leading to more frequent flooding of settlements and infrastructure, and raising human health concerns. Longer dry spells are resulting in more frequent droughts affecting water resources needed for agriculture and human consumption. These weather extremes are likely to be accompanied by stronger hurricanes bringing the potential for increased damage and larger financial losses, greater pressure on national budgets and lengthier recovery times. Direct and indirect losses from weather-related events over the last three decades have cost the Caribbean between US\$700 million and US\$3.3 billion. In 2007 alone the region suffered US\$10 billion in economic losses representing over 13% of GDP⁶. With rising sea levels, higher storm surges associated with these events will exacerbate losses from coastal erosion and flooding that impact tourism activities and the wider national economy, temporarily disrupting port operations and food security as well as access along essential roads and isolating or displacing settlements and businesses. Sea-level rise further threatens freshwater aquifers from intrusion of salt water which could impact agricultural production and quality to drinking water.

III. WHAT MAKES ANGUILLA VULNERABLE TO CLIMATE CHANGE?

Changes of the magnitude projected by the Intergovernmental Panel on Climate Change (IPCC) for the current century will have significant impacts on Anguilla. Small Island Developing States like Anguilla share many of the human systems and physical processes of larger or continental developing states. However, vulnerability to global climate change is aggravated by common parameters shared by many small island developing States (SIDS) namely:

- Reliance on primary imports;
- Socio-economic extremes (small economy, with high dependence on external market forces – thus creating high sensitivity to external market shocks);
- Limited physical and social infrastructure;
- Ad hoc land use planning;
- Limitations in governance and public administration.



This renders places like Anguilla vulnerable to natural hazards. In addition, there are also inherent problems that impact on vulnerability. These are:

- **Small Size:** Limited natural resource base, high competition between land use, intensity of land use immediacy and interdependence in human and biophysical environmental systems, spatial concentration of productive assets.
- **Remoteness:** Time delays and high costs in accessing imports, geopolitical dependence.
- **Environmental Factors :** Small exposed interiors, large coastal zones.
- **Disaster Mitigation Capacity:** Limited hazard forecasting ability.
- **Demography:** Small population, limited human capital, single urban centre, high per capita cost for infrastructure and services due to diseconomies of scale.
- **Economy:** Small economy, highly dependent on external finance, small internal market, extremely dependent on natural resources, little or no production capacity.

IV. POTENTIAL IMPACTS OF CLIMATE CHANGE ON ANGUILLA

From regional studies that have been undertaken, the possible climate change effects and their general impacts on Caribbean Islands and consequently the island of Anguilla are:

Increase in sea surface and atmospheric temperature

- Coral bleaching and destruction of coral reefs
- Biodiversity loss – temperature sensitive organisms (aquatic and land based)
- Warmer temperatures
- Increased air and water pollution
- Resurgence of vectors and vector borne diseases
- Risk of wildfires



Changes in rainfall frequency and intensity

- Droughts or floods
- Decreased fresh water availability
- Change in water levels due to the decline in rainfall.

Changes in storm activity

- More intense hurricanes and tropical storms
- Changes in storm paths
- Disruption/demolition of sanitation and sewage disposal systems as well as storm water drainage
- Loss of important coastline defences and coastal ecosystems – mangroves, sand dunes, coral reefs, sea grass beds

Sea level rise

- Saline intrusion into freshwater aquifers
- Coastal flooding and erosion
- Loss of coastal ecosystems (habitat, species, mangroves)
- Larger sea swells
- Increase in storm surge
- Damage to coastal communities and road networks

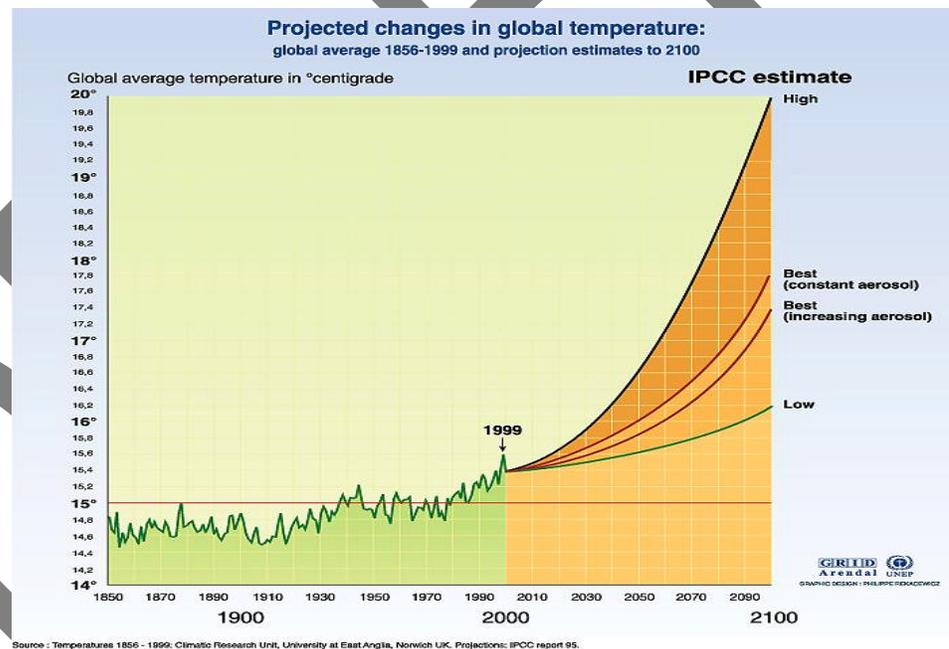


Different sectors would have differing vulnerabilities, which are a function of the nature of climate change, the sensitivity of the sector and its adaptive capacity.

The UNDP *Human Development Report 2007/2008* considers warming of 2°C as the threshold above which dangerous climate change will occur such that irremediable effects on human development and irreversible ecological damage will become unavoidable. This threshold is expected to be particularly detrimental to small islands, coastal communities and the poor and vulnerable worldwide. The business-as-usual (BAU) scenario or current course of action could see global

temperatures rise to 3°C to 4°C which will most surely spell disaster for many small islands, especially those like Anguilla fringed by temperature-sensitive coral reefs upon which their present tourism economies depend and future GDP growth relies, and which provide natural storm buffering to coastal communities from

the ravages of the ocean. For this reason, SIDS worldwide and the CARICOM countries have rallied together to defend a global target of stabilizing atmospheric concentration of CO₂ at 350 ppm to limit temperature well below 1.5°C which is expected to avoid the worst impacts of 21st century climate change.



V. POLICY STATEMENT

Climate Change presents an immediate and urgent threat to the sustainable development and sound socio-economic growth of Anguilla, therefore this policy will ensure that by addressing gaps and deficiencies in existing legislation, policy and institutional arrangements and by facilitating functional co-operation and awareness through an integrated and holistic approach among government, private sector and other members of civil society, resilience is built to insure that the island is sufficiently able to manage the impacts and risks from Climate Change while transforming to climate resilient, energy efficient low carbon economy for present and future generations.



VI. GUIDING PRINCIPLES

The transition to a climate resilient, energy efficient, low carbon economy - which is essential to sustain economic growth in Anguilla - shall be guided by the following principles:

- Society, at all levels and in all sectors, must be adequately informed on the risks and opportunities afforded by climate change;
- Stakeholders shall collectively endeavour to facilitate the transition to a climate-resilient, energy efficient, low-carbon economy, and that such involvement and participation shall occur on a coordinated basis which minimises duplication of effort and conflict and which ensures efficient use of resources and the creation of positive synergies;
- Addressing climate change in a sustainable manner requires the creation of an institutional, administrative and legislative environment supported by sustainable climate change financing;
- Transfer of appropriate technologies and practices will be required to address the causes and effects of climate change;
- Maintenance of food security together with the resilience of people, infrastructure and the natural environment is key to coping with climate change risks;
- Economic resilience is key to coping with climate change and the development of a strong and diversified economy is essential to sustain climate-resilient, energy efficient, low-carbon development;
- Transition to a climate-resilient, energy efficient, low-carbon economy is necessary to implement viable adaptation & mitigation measures in accordance with commitments

under the *United Nations Framework Convention on Climate Change (UNFCCC)*, the *United Kingdom Climate Change Programme*, and the *St. Georges Declaration* and will contribute towards the achievement of Anguilla's sustainable development aspirations.

VII. POLICY GOALS AND OBJECTIVES

This policy will facilitate the transfer to a climate resilient, energy efficient and low carbon economy by implementing measures that will:

1. Educate key stake holders concerning climate change risk to coastal marine resources and to protect and enhance the reliance of these resources;
2. Facilitate the transition to sustainable tourism in Anguilla, while addressing climate change and increasing energy demand and cost affecting the sector;
3. Conserve and protect national biodiversity and national heritage while enhancing the resilience of natural ecosystems to climate change impacts;
4. Enhance agricultural productivity, resilience and food security;
5. Discuss climate change impacts on health, wellbeing and quality of life while promoting sustainable development and sound economic growth;
6. Address climate change threats to the finance sector, insurance industry and property owners;
7. Educate key stakeholder and to conserve and ensure a sustainable supply of fresh water while addressing climate change risk/threats to resilience of water resources;
8. Achieve energy independence and the ability of Anguilla to meet its vital energy needs with reliable, affordable and renewable energy resources, through the pursuit of a balanced and advantageous transition toward control of our energy future, built upon a solid and ever growing foundation of our own free, abundant, clean, and renewable energy resources - (the wind and the sun);
9. Sustain viable communities that will ensure maintenance of livelihoods social wellbeing and the protection of social capital while enhancing the resilience of existing critical infrastructure to climate change impacts, and avoiding the construction of new infrastructure in areas or with materials prone to climate hazards;
10. Create a more competitive and environmentally responsible private sector by implementing “no regrets” measures that will protect the environment, promote low carbon energy efficient development while enhancing the resilience of natural ecosystems to climate change impacts.

VIII. APPLICATION

This policy shall guide the work of all Governmental, statutory, private sector, non-governmental and civic entities, supporting the transition to climate-resilient, energy efficient and low-carbon development in Anguilla.

IX. POLICY DIRECTIVES

The following interventions will be implemented within 5 years of the adoption of this policy in order to facilitate the transition to a climate resilient, energy efficient and low carbon economy in Anguilla -

Coastal and Marine Resources

Climate change will cause considerable impacts on Anguilla's coastal and marine resources including:

- ✓ Destruction of coral reefs as a result of bleaching from higher sea surface temperatures.
- ✓ Disappearance or increase in wetland water levels due to drought.
- ✓ Loss of mangroves and wetlands in areas where coastal topography, mangrove systems, and coastal infrastructure do not allow sedimentation to keep pace with rising sea levels.
- ✓ Changes in coastal topography and loss of sea grass bed and sand dunes.
- ✓ Increased coastal erosion, including the loss of beaches.
- ✓ Increased costs of sea defense mechanisms.
- ✓ Run off and pollution from land based sources as a result of a changing precipitation patterns.
- ✓ Increased demand and competition for coastal lands as a result of land lost to sea level rise.
- ✓ Decrease in near shore fish stocks, due to loss of important nourishing systems like sea grass beds, mangroves and coral reefs.
- ✓ Decrease in deep water fish stocks as a result of changes in sea temperature



Reef Colony at Sandy Island, Anguilla (Photo: Stuart Wynne)



In order to educate key stakeholders concerning climate change risks to coastal marine resources and to protect and enhance the reliance of these resources, the Government of Anguilla will over the next five years:

1. Develop and implement sustainable fisheries management policy and supportive legal framework
2. Enact and enforce the *draft Environmental Protection Act* and the *Environmental Health Act*
3. Develop and implement a public education and awareness programme to raise awareness on climate change risks and measures that should be implemented to address these risk
4. Revise and enact the *draft Physical Planning Act* to address the land base pollution issues.
5. Support the Department of Fisheries and Marine Resources, Department of Environment, Department of Physical Planning to jointly develop and implement a coastal zone management plan.
6. Mobilise resources needed to enforce existing resource management policies and laws
7. Provide guidance to developers to ensure that climate change is integrated into project design and environmental impact assessment processes.
8. Legislate the requirements that climate change risk assessment and management be a precondition for any development of construction permits, loans or mortgages.
9. Adopt and enforce international health and environmental regulations as they relate to the transport of people and goods, and waste and pollution from ships, fishing vessels and yachts

Tourism Sector

Climate change will cause considerable impacts on the tourism sector including:

- ✓ Direct damage to tourism plant and natural resource from sea level rise, increase in sea-surface temperatures, ocean acidification, storm surge and hurricanes.
- ✓ Increased inland flooding.
- ✓ Loss of attractiveness of Anguilla as a tourist destination.
- ✓ Increased insurance costs or no insurance coverage for properties in vulnerable areas.
- ✓ Buildings used as part of the tourism plant will become unsafe and lives will be threatened.
- ✓ Less water available for consumption and irrigation.
- ✓ Increased costs and environmental impacts of sea defense mechanisms and beach replenishment.
- ✓ Increased costs and reduced availability of insurance coverage for property.



- ✓ Change in tourism arrival patterns/numbers due to milder weather in areas where tourist populations reside impacting livelihoods, employment and the economy.



In order to facilitate the transition to sustainable tourism in Anguilla, while addressing climate change and increasing energy demand and cost affecting the sector, the government of Anguilla and the tourism sector will over the next five years:

1. Finalize, approve and implement the industry's sustainable tourism master plan 2010-2020, which should ensure that climate change risks are adequately addressed
2. Establish a tourism facility licensing system that would address climate change and environmental risks.
3. Diversify the tourism product to promote low carbon, energy efficient and environmentally friendly development
4. Require tourism facilities to develop, implement and test disaster & climate change risk management and business continuity plans – attached to licensing of business
5. Develop a financing mechanism to facilitate the transition to low carbon, energy efficient and environmentally friendly development
6. Legislate the requirements that climate change risk assessment and management be a precondition for any tourism type development or tourism construction permits, loans or mortgages.
7. Legislate that every tourism type facility has rainwater harvesting and storage capacity, and ensure that tourism type facilities be required to separate grey water in watering their grounds and golf courses.
8. Enact and enforce the *draft Environmental Protection Act* so as to enhance the resilience of marine and coastal resources.



Terrestrial Resources and Biodiversity

Climate change will cause considerable impacts on Anguilla's terrestrial resources and biodiversity including:

- ✓ Impact on endemic species (the Sombrero Black Lizard (*ameiva corvina*), the Little Scrub Ground Lizard (*ameiva corax*) and *Rondeletia anguillensis* (plant species)) which are likely to become threatened or extinct.
- ✓ Threatened and endangered species could be under greater threat – especially the regionally important bird nesting habitat on Anguilla's offshore quays.
- ✓ Increase stress on and loss of soil and vegetation due to hurricanes flood and drought.
- ✓ Increase occurrence of invasive and pest species
- ✓ Higher rates of bacterial and fungal growth is likely to hasten the erosion of rock.
- ✓ The deterioration of Big Spring, Katouche Cave, Pitch Apple Hole and the Fountain Cavern and other coastal Amerindian caves.



In order to conserve and protect national biodiversity and national heritage while enhancing the resilience of natural ecosystems to climate change impacts the Government of Anguilla will over the next five years:

1. Approve and implement the *National Biodiversity Strategy and Action Plan 2008*
2. Adopt and implement the draft *Environmental Protection Act*
3. Finalise the drafting of the regulations for the enacted *Biodiversity and Heritage Conservation Act 2009*
4. Approve and Implement the *Invasive Species Strategy and Action Plan*
5. Endorse the development of a native nursery for propagation of native plants
6. Approve and enforce the *Physical Planning Act* and regulations
7. Secure financing for effective implementation and management all strategies
8. Promote awareness amongst the police, prosecutors and the judiciary about all policies



Agriculture and Food Security

Climate change will cause considerable impacts on Anguilla's agricultural sector and food security including:

- ✓ Change in the incidence of crop pests.
- ✓ Decline in crop yields.
- ✓ Stress on livestock.
- ✓ Diminished waterway levels for irrigation.
- ✓ An increase to the already over dependence on imported food supplies.
- ✓ A scarcity of food crops and fish due to the adverse effects on sectors such as agriculture and fisheries.
- ✓ Imported food supplies could become more expensive with lowered availability.



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In order to enhance agricultural productivity, resilience and food security, the Government of Anguilla will over the next five years:

1. Develop, adopt and implement an Agricultural productivity and Food security policy that addresses amongst other things climate change risks.
2. Conserve and protect agricultural lands and water sources for agricultural production
3. Provide incentives and financial support for farmers to diversify their produce/crops.



Human Health, Wellbeing, Quality of Life and Economic Growth

Climate change will cause considerable impacts on human health, wellbeing, quality of life and economic growth for Anguilla including:

- ✓ Loss of revenue due to climate change impacts on Anguilla's productive sector (Tourism, Fishing, Agriculture)
- ✓ Increase operational and capital cost associated with more frequent instances of extreme events (floods, droughts), increase in hurricane intensity and changing weather patterns); and associated impact on Gross Domestic Product, attractiveness for investment, and increased stress on the national budget
- ✓ Increase in poverty and inability to provide for basic needs.
- ✓ Increase in illness especially those due to airborne pollutants such as asthma and other respiratory diseases.
- ✓ Vulnerability for the contaminated of water supplies.
- ✓ Increased demand placed on current levels of medical services, facilities and infrastructure.
- ✓ Insurgence or resurgence in diseases such as cholera, dysentery, malaria, dengue, and other strains not common to Anguilla - thus creating a need for specialised treatment to be administered.
- ✓ Thermal stress particularly for outdoor workers.
- ✓ Water borne diseases from eating fish and engaging in recreational activities in a warmer sea.
- ✓ Increased atmospheric temperature likely to cause heat stress and respiratory issues.
- ✓ Increase in sea surface temperature causes an increase in food poisoning (ciguatera).
- ✓ Anguilla wellbeing impacted as measured by job security, employment, social stability, social capital and poverty levels.
- ✓ Climate related migration issues.
- ✓ Loss of livelihoods.
- ✓ Loss of lives.



In order to address climate change impacts on health, wellbeing and quality of life while promoting sustainable development and sound economic growth, the Government of Anguilla will over the next five years:

1. Enact and implement the *draft Environmental Health and Food Safety Act* and regulations particularly focusing on food safety standards
2. Enact and implement the *draft Environmental Protection Act* and regulations to address sources/points of pollution
3. Expand the public awareness and preventative health care programmes to incorporate climate change risk.

4. Adopt and enforce international health and environmental regulations as it related to the transport of people and goods, and waste and pollution from aircraft and ships.
5. Formally incorporate climate change risks into the national budgeting processes
6. Complete a cost benefit analysis of costs of inaction versus costs of action for climate change risk impacts, and present this annually in the budget and represent this information to rationalize investments in social capital/social safety net, public health and wellbeing.

Finance and Insurance Sector

Climate change will cause considerable impacts on Anguilla's finance and insurance sector including:

- ✓ Increase insurance and mortgage cost to cover risk
- ✓ Inability of home owner to access financing for homes in vulnerable areas.



In order to address climate change threats to the finance sector, insurance industry and property owners the Government of Anguilla will over the next five years will:

1. Legislate the requirements that climate change risk assessment and management be a precondition for any development or construction permits, loans or mortgages.
2. Update and legislated the building codes to address climate change risks;
3. Establish and legislate climate change risks management protocols for finance sector
4. Identify government assets located in climate change risk-prone areas, and undertake measures to reduce the vulnerability of such assets;
5. Collaborate with the insurance and financial services sector to establish economic incentives for owners to climate proof existing and new buildings.



Water Resources

Climate change will cause considerable impacts on Anguilla's water resources including:

- ✓ Decreased fresh water availability.
- ✓ Increased salinity in fresh water supply.
- ✓ Contamination of fresh water supplies by flooded or malfunctioning sewerage systems.
- ✓ Increase cost for water

In order to educate key stakeholder and to conserve and ensure an equitable and sustainable supply of fresh water while addressing climate change risk/threats to resilience of water resources the Government of Anguilla over the next five years:

1. Establish and promote an educational and awareness programme on water conservation
2. Encourage water conservation devices to be installed in large users of the resource
3. Ensure that the main water Reservoir is fixed
4. Encourage the use of grey water for gardening etc
5. Undertake an inventory of underground and surface water resources, and an assessment of water use and demand by sector in order to determine the water balance; review the water policy to ensure that climate change issues are addressed (Increased rain water capture and storage, water conservation and water recycling and reuse)
6. Strengthen the institutional capacity of the water regulatory agency within the MICUH. (innovative financing to support work of agency)
7. Establish by legislation measures to conserve and monitor water in large commercial users.
8. Revise the building codes to stipulate the minimum cistern/tank size (10,000 Gals) for rain water harvesting and storage. (To be decided by the size of house and or family.)
9. Limit the number of golf courses to be constructed.
10. Pass and enforce the *draft Environmental Protection Act* to address contamination issues
11. Work in collaboration with tourism sector to develop voluntary guidelines for best practices that should be used for golf courses, operations, landscaping and construction in order to address water conservation, the control of pest and disease, the in-situ conservation, propagation and use of native flora, pollution and climate change issues.
12. Promote the use of renewable energy sources to produce and reduce the cost of water.



Energy Security

Climate change will cause considerable impacts on Anguilla's energy security including:

- ✓ Increased energy cost
- ✓ Disruption of fuel supplies as a result of storm events and closure of ports
- ✓ Disruption of energy supplies during an extreme weather event (hurricane etc)
- ✓ An increase in demand for energy to keep homes and businesses cool and satisfy increasing water demand
- ✓ The continued and growing demand for fossil fuels increase the likelihood of marine and terrestrial spillage and pollution.



In order to achieve energy independence and the ability of Anguilla to meet its vital energy needs with reliable, affordable and renewable energy resources, through the pursuit of a balanced and advantageous transition toward control of our energy future, built upon a solid and ever growing foundation of our own free, abundant, clean, and renewable energy resources---(the wind and the sun) the government of Anguilla over the next five years will:



1. Facilitate the transition to a low carbon energy efficient development path by implementing the energy policy
2. Climate proof the bulk fuel port and fuel storage facilities
3. Conduct a cost-benefit analysis and technical evaluation of viable option to bury all utilities (Electrical, Phone, Cable, data etc).
4. Legislate in viable areas the requirement for new development to bury the over head utility lines underground.
5. Promote and Implement the recommendations of the energy policy to meet new energy demands using renewable energy sources.
6. Enact and enforce the *draft Environmental Protection Act* to control risk of oil spills and terrestrial and marine pollutants.

Vulnerable Communities and Critical Infrastructure

Climate change will cause considerable impacts on Anguilla's vulnerable communities and critical infrastructure including;

- ✓ Loss of houses, infrastructure, and other investment from extreme events and hurricane activity.
- ✓ Flooding of low-lying areas from storm run-off and storm surge.
- ✓ Displacement of communities especially in low lying areas like Sandy Ground, East End and the Valley (Bottom) as well as those in coastal areas e.g. Island Harbour.
- ✓ A shift in port development and infrastructure as a result of sea level rise - this will include higher maintenance costs and increased dredging.
- ✓ Damage to electrical infrastructure
- ✓ Damage to roads
- ✓ Communications service damage and disruptions
- ✓ Damage to schools and hospitals
- ✓ Damage to ports (Air and Sea)
- ✓ Contamination of household water supply (cisterns)



In order to sustain viable communities that will ensure maintenance of livelihoods social wellbeing and the protection of social capital while enhancing the resilience of existing critical infrastructure to climate change impacts, and avoiding the construction of new infrastructure in areas or with materials prone to climate hazards the government of Anguilla will in the next five years:

1. Legislate and enforce the building code and coastal set back policies to make sure that they address climate change risks.
2. Educate and inform communities, developers and decision makers about the need to enforce coastal set back not just for commercial construction but for residential and economic purposes
3. Enact and implement the *draft Environmental Protection Act* and ensure that the Environmental Impact Assessment process requires that local knowledge and climate change risk are considered in the approval process.
4. Climate proof critical infrastructure and structures of national importance including schools hospitals, all utility plant and infrastructure, the bulk fuel port, fuel storage facilities, all ports, fuel stations, homes for the elderly, emergency shelters, communication facilities, law and order, all government buildings, emergency operations centre, emergency response buildings, health care facilities (private/public), banking facilities, land fill site, heritage sites, tourism facilities, food storage, roads, groceries.
5. Undertake a cost-benefit analysis and technical evaluation of viable option to bury all utilities (electrical, phone, cable, data etc).

6. Legislate in viable areas the requirement for new development to bury the over head utility lines underground
7. Promote community empowerment through community based vulnerability mapping and establish community climate change and disaster response plans to address flooding, hurricanes and extreme events
8. Undertake vulnerability mapping to determine high risk areas from climate change impacts and designate vulnerable zones requiring climate change risk management plans and appropriate engineering design for construction.

Private Sector

Climate change will cause considerable impacts on Anguilla private sector including;

- ✓ Assets and services are at risk from climate change impacts
- ✓ Increased capital and operational cost
- ✓ Decreased productivity

In order to create a more competitive and environmentally responsible private sector by implementing “no regrets” measures that will protect the environment, promote low carbon energy efficient development while enhancing the resilience of natural ecosystems to climate change impacts, the government of Anguilla over the next five years will:

1. Work with the Anguilla Chamber of Commerce and Industry (ACOCI) to facilitate a climate change risk and capacity assessment for the private sector and advise an appropriate response plan to address risk and gaps in capacity.
2. Require private sector facilities at risk from climate change to develop, implement and test disaster & climate change risk management and business continuity plans – attached to licensing of business;
3. Require climate change risk assessment as part of any private sector inspection & licensing;
4. Implement recommendations of the Energy Policy by promoting services in the area of energy/Green House Gases audits, carbon offsetting, carbon trading, greenhouse gas emission control, the deployment of renewable energy technologies,
5. Collaborating with the Anguilla Chamber of Commerce and Industry (ACOCI) to promote education and awareness in the private sector regarding climate change risk and business opportunities.



X. ACCOUNTABILITY

Responsibility for the timely and coordinated implementation of this *Climate Change Policy* is vested with the *Climate Change Council* which will be established and chaired by the Chief Minister. The *Climate Change Council* shall have representation from the Governor's Office, all government ministries, members of the opposition, civil society, the private sector, academia, the National Youth Council, non-governmental organisations, statutory authorities, and utilities. The *Climate Change Council* shall establish Technical Subcommittees to support and assist the work of the Council.

The Department of Environment and the Ministry of Finance, Economic Development, Investment, Commerce and Tourism (MFEDICT) shall provide technical and administrative support to assist the work of Council.

XI. ESTABLISHMENT OF TRUST FUND

Anguilla will establish a *Climate Change Trust Fund* which is external to the consolidated fund revenue stream. The monies for the *Climate Change Trust Fund* should be raised from carbon levies, carbon offsets, Clean Development Mechanism (CDM), energy audits, Certificate of Environmental Clearance and Climate Change Risks Approval, that will be used to implement this policy. A *Climate Change Trust Fund* Board will be established and be responsible for mobilizing funds and ensuring the sound management and disbursement of funds in support of this policy. The *Climate Change Trust Fund* Board should be established with representation from the financial services sector. The *Climate Change Trust Funds* should be accessible by GOA, public and private sector, communities and other members of Civil Society Organisations to implement measures under this policy.

XII. MONITORING

The implementation of this *Climate Change Policy* shall be monitored by the *Climate Change Council* or its successor body. Government shall review the Mandate, Terms of Reference and composition of this entity with a view to better equipping it to fulfill its mandate.

The Council shall report to the House of Assembly through the Chief Minister's Office on a semi-annual basis, as well as at any other time deemed necessary. The Climate Change Council shall keep this policy under regular review, and shall monitor implementation of the directives of this policy.

The *Climate Change Council* shall present to the House of Assembly an annual report on measures that have been undertaken to implement this policy. This report is to be tabled in the Legislative Assembly.

Beginning no later than the fifth anniversary of the date of this policy, the *Climate Change Council* shall conduct a public review of this policy to determine its effectiveness in achieving its goals and objectives, and update the policy based on the findings of the review and best practices

at the time. The report of this review is to be presented to the House of Assembly within one year of the beginning of the review.

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