St Helena Government

A Climate Change Policy for St Helena

Our Island. Our Environment. Our Responsibility.



Environmental Management Division

St Helena Government

June 2019

Environmental Management Division,
Saint Helena Government,
Environmental Management Division,
Environment and Natural Resources Directorate,
Scotland,
Island of Saint Helena,
South Atlantic Ocean,
STHL 1ZZ
Tel: (+290) 24724
www.sainthelena.gov.sh

This document has been issued and amended as follows;

Rev	Date	Description	Prepared by	Checked by	Approved by
00	24-04-14	First Draft (A) for review	IMC	BS	BS
00	17-09-14	Second Draft (B) for review	CDS	-	BS
00	05-04-16	Draft D	DP	-	DH
00	14-04-16	Draft E	DP	-	DH
00	08-06-16	Draft F	DP	DH	ENRC
00	13-12-16	Draft G	MD	DH	-
00	30-01-19	Draft H	MD	DH	CPA
00	19-06-19	Draft I	MD	DD	ExCo

By the following;

Initials	Name	Position
BS	Ben Sansom	Former Head of Environmental Management Division
CDS	Ceri Sansom	Former Climate Change and Pollution Officer
CPA		Chair Persons Assembly
DD	Darren Duncan	Acting Director of Environment, Natural Resources & Planning
DH	Derek Henry	Director of Environment and Natural Resources
DP	Debby Parkinson	Former Climate Change and Pollution Officer
ENRC		Environment and Natural Resource Committee
ExCo		Executive Council
IMC		IMC Worldwide
MD	Mike Durnford	Environmental Risk Manager

Contents

Foreword

One of the biggest uncertainties the world faces is Climate Change. We will not escape its impacts as they manifest themselves in the future. Consequently, we must be prepared for the changes that are likely and mitigate whenever we can against its negative effects.

We acknowledge the evidence prepared by international bodies that indicates human activity contributes to climate change. As an Island nation we are committed to fostering a culture of environmental responsibility, which inevitably must include the climate that affects us. Therefore, we need to work together to reduce the predicted impacts on our environment and to ensure sustainability in the lifestyles we lead now and those we may adopt in the future.

This Climate Change Policy is needed and timely for St Helena. It describes a role for the leaders in St Helena, in government, in the public service, in commerce and in our society, to agree and define how we can all better prepare the island. That is why they should use this policy as a starting point to engage wholeheartedly to review the work of public and private activities. This will be the most inclusive approach to ensure the way they operate now, and in the future, is beneficial to the Earth's climate. In practice we all need to consider how our homes, buildings, wastes, transport, energy generation and personal use of resources can have less of a toll on the environment and ultimately the climate.

St Helena has a chance to show leadership in a global sense. Following investment in infrastructure and staff skills, we have already developed a credible, environmentally responsible waste management service. One where waste is managed to reduce potential risks of contamination to the land, air and ocean.
St Helena has also made a commitment to run the island on 100% renewable energy by 2022.
By so doing, we are demonstrating our commitment to tackling the risks from climate change and, even though we are a small island in the middle of the South Atlantic, we can become an environmental beacon for others around the world to learn and follow.
Dr Philip Rushbrook
Governor of St Helena
June 2019

St Helena can join the growing global movement of islands and cities demonstrating that they, on a small scale, are capable of achieving positive impacts in reducing the effect of climate change.

Introduction

St Helena is distinctive for its unique and isolated position in the South Atlantic. It has many characteristic environmental features but a limited supply of natural resources, leaving it more vulnerable to Climate Change than larger countries. St Helena Government (SHG) acknowledge the need to create a Climate Change policy with a view to planning for short, medium and long term environmental changes that are likely to impact on the quality of island life if left unmanaged.

The key driver for anticipated external environmental alteration is climate change. Globally it continues to be a major scientific issue and challenge for national governments. The latest report by the Intergovernmental Panel on Climate Change was designed to define the impacts of global warming reaching 1.5 degrees Celsius. It also highlighted the increased impact of a further warming to 2C above pre-industrial levels. However, maybe the most telling comment of the report is that the ambitions stated by worldwide governments in the Paris Accord of 2015 are no longer enough to limit global warming to 1.5C.

The world's climate changed during the 20th century. Global average surface temperature increased by about 0.6°C; snow cover and ice extent decreased; the temperature and acidity of oceans changed; and sea levels around the world increased between 10 cm and 20 cm. Seasonal patterns, including rainfall, have also changed the world over. The 1990s were the hottest decade and 1998 the warmest year on record, since temperature recording began some 150 years ago. And, while it is true that there have been natural and cyclical variations in the Earth's climate in the past, it is also true that the current rate of change is faster than anything the planet has experienced before.

There is an increased global appetite for action on Climate Change, which provides an opportunity for St Helena, as a small and isolated territory, to show global leadership in planting climate action at the heart of economic development on the Island.

St Helena's airport and continued import dependence adds a significant carbon footprint to a number of sectors in St Helena whilst also draining much needed financial resources from the island. Overreliance on the import of fossil fuels, food and construction materials are areas in particular that impact both on the island's climate footprint and contribute to significant outflows of revenue. St Helena has the potential to become a test-bed for up-scaling new climate-impact-limiting economic development that can inspire action in larger nations across the globe.

The challenge is complex and to achieve the objectives on adaptation and mitigation requires a coordinated, robust national policy that supports development. We need to adjust our approach to energy production, emissions management, and our economy to meet these changing expectations. It is about long-term sustainability of our environment and economy.

The opportunities for significant progress, due to the small size of the Island, are also significant. Other islands such as the Marshall Islands, Samso, Isle of Wight and Gotland are already showing significant leadership in this area.

Environmental resources could be globally prized as a tourist product, but they are also essential as they are integral to the functioning of the island and the health and well-being of its people.

This Policy is the planning instrument that defines a long-term vision while guiding planning frameworks through a path that sets priorities for action.

Climate Change Reports for St Helena

Several reports have been written about Climate Change in the UK Overseas Territories, including Saint Helena and all support the need for an effective Climate Change Policy in the territories and St Helena.

- Brown, N. 2008. *Climate Change in the UK Overseas Territories: An overview of the science, policy and you. Peterborough, UK: Joint Nature Conservation Committee.*
- IMC Worldwide Ltd. 2012. *Addressing Climate Change by promoting low carbon-climate resilient development in UK Overseas Territories. East Kilbride: DFID*.
- IMC Worldwide Ltd. 2014. *Climate Change Factsheet: Climate data and requirements for St Helena. St Helena: Environment and Natural Resources Directorate.*
- Wade, S et al. 2015. *Assessing Climate Change and its likely impact on selected UK Overseas Territories: Inception report. UK: Met Office.*

National Goals

The Climate Change Policy supports the National Goal; *Altogether Greener* in the St Helena Island 10-Year Plan 2017 – 2027 and ENRD Strategic Priority: *Protect the natural environment by conserving biodiversity, preventing, minimizing or mitigating against any negative activity and/or impact, to conserve and enhance the Island's natural capital*

The St Helena Approach – Principles on which to guide the Policy development and implementation

The St Helena approach is to raise general awareness and gain commitment to monitor, manage and adapt to the challenges of Climate Change for the benefit of the people of St Helena. This will be achieved by;

- Embedding sustainability in the exploitation or use of our ecosystems and natural resources, as a driver for economic development
- Establishing coordination and leadership for effective decision making and action at all levels to ensure the Climate Change Policy is mainstreamed throughout the Island
- Ensuring we have the information and knowledge needed to effectively participate in mitigating and adapting to Climate Change
- Ensuring we work collaboratively with the international and local community, to share the responsibility of delivering the Climate Change solution, for present and future generations

Example: The endemic plants that form the green heartland is at the centre of our surface water catchment and essential for retaining rainfall, soil and ensuring the slopes are stabilised. Without the endemic green heartland we would not be able to guarantee secure drinking water supplies to meet demand, there would be an increase in soil erosion and rock fall and agricultural production would be affected.

Aims and Objectives of the Climate Change Policy

The Climate Change Policy aims to reduce the quantity of greenhouse gas emissions created on Island by making better use of natural resources, reducing the risks from weather-related hazards, ensuring that the protection and enhancement of the Island's natural and cultural heritage is at the heart of economic development, in order to maintain a good quality of life for residents now and in the future. The Policy identifies Climate Change as an opportunity to develop the ecology, infrastructure and economy of St Helena, and also an opportunity to strengthen the branding of the sustainable island.

The Policy objectives are to;

- Identify and prioritize measures to reduce and minimize GHG emissions.
- To become 100% self-sufficient on the national grid, through renewable energy by 1st April 2022 (*SHG Energy Strategy, 2016*).
- Ensure energy and water use per capita is maintained at baseline levels or better.
- Identifying and prioritizing current and future risks to St Helena from weather related hazards, through consultation and regular environmental monitoring.
- Deliver Climate Change Action Plans for key sectors of island life.

Climate Change Action Plans

Climate Change Action Plans will be developed and this work will be led by the Environment and Natural Resources Directorate with input from other Directorates and territorial and international stakeholders as appropriate.

Climate Change Action Plans development will comprise two elements; the first being an empirical review of reports of environmentally triggered events, the second being accelerating island-wide programs and educational campaigns to deliver climate change mitigation and adaptation for key sectors of island life including (but not limited to);

- Sustainable homes
- Sustainable buildings
- Sustainable energy generation
- Sustainable waste management
- Sustainable transport system
- Sustainable low carbon economy
- Low carbon lifestyles
- Sustainable planning, agriculture and land use

Implementing the Policy and Policy distribution

This Policy will be owned by the Environment and Natural Resources Directorate and is approved by Executive Council.

This Policy will be issued to all SHG Directorates and made available along with supporting documents online on the SHG website. Copies are available upon request from EMD.

Policy Definitions

Adaptation
Adjustment in natural or human systems to a new or changing environment. Adaptation to Climate Change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. Various types of adaptation can be distinguished, including anticipatory and reactive adaptation, private and public adaptation, and autonomous and planned adaptation.

Capacity building
In the context of Climate Change, capacity building is the process of developing the technical skills and institutional capability in developing countries and economies in transition to enable them to address effectively the causes and results of Climate Change.

Climate
Climate in a narrow sense is usually defined as the "average weather" or more rigorously as the statistical description in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands or millions of years. The classical period is 30 years, as defined by the World Meteorological Organization (WMO). These relevant quantities are most often surface variables such as temperature, precipitation, and wind. Climate in a wider sense is the state, including a statistical description, of the climate system.

Climate Change
Climate Change refers to a statistically significant variation in either the mean state of the climate or in its variability, persisting for an extended period (typically decades or longer). Climate Change may be due to natural internal processes or external forcing's, or to persistent anthropogenic changes in the composition of the atmosphere or in land use. Note that the United Nations Framework Convention on Climate Change (UNFCCC), in its Article 1, defines "Climate Change" as: "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods." The UNFCCC thus makes a distinction between "Climate Change" attributable to human activities altering the atmospheric composition, and "Climate Variability" attributable to natural causes. See also Climate Variability.

Climate Variability
Generally refers to natural changes in weather patterns, such as precipitation patterns.

Emissions
In the Climate Change context, emissions refer to the release of greenhouse gases and/or their precursors and aerosols into the atmosphere over a specified area and period of time.

Greenhouse Gas (GHG)
Greenhouse Gases are the atmospheric gases responsible for causing global warming and Climate Change, both natural and anthropogenic. They absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere, and clouds. This property causes the greenhouse effect. Water vapor (H_2O), carbon dioxide (CO_2), nitrous oxide (N_2O) and methane (CH_4) are the primary greenhouse gases in the Earth's atmosphere. There are a number of entirely human-made greenhouse gases in the atmosphere, such as sulfur hexafluoride (SF_6), hydro-fluorocarbons (HFCs), and per-fluorocarbons (PFCs).

Hazard: see Risk

(Climate / Weather-Related) Impacts
Consequences of Climate Change on natural and human systems. Depending on the consideration of adaptation, one can distinguish between potential impacts and residual impacts. Potential impacts: All impacts that may occur given a projected change in climate, without considering adaptation. Residual impacts: The impacts of climate change that would occur after adaptation.

Mitigation
Mitigation refers to efforts to reduce/prevent emission of greenhouse gases (GHG's) or to enhance their removal from the atmosphere by sinks. (UNFCCC 2009)

Risk / Hazard
A **Hazard** is a POTENTIAL source of harm or adverse effect on people or the environment. A **Risk** is the LIKELIHOOD that a person or the environment may be harmed or suffers adverse effect if exposed to a hazard. The terms Hazard and Risk are often used interchangeably but this simple example explains the difference between the two.

Renewables
Energy sources that are, within a short time frame relative to the Earth's natural cycles, sustainable, and include non-carbon technologies such as solar energy, hydropower, and wind, as well as carbon-neutral technologies such as biomass.

Resilience
Ecosystem resilience is the capacity of an ecosystem to tolerate disturbance without collapsing into a qualitatively different state that is controlled by a different set of processes. A resilient ecosystem can withstand shocks and rebuild itself when necessary. Resilience in social systems has the added capacity of humans to anticipate and plan for the future. Humans are part of the natural world. We depend on ecological systems for our survival and we continuously impact the ecosystems in which we live from the local to global scale. Resilience is a property of these linked social-ecological systems. "Resilience" as applied to ecosystems, or to integrated systems of people and the natural environment, has three defining characteristics;

- The amount of change the system can undergo and still retain the same controls on function and structure
- The degree to which the system is capable of self-organization
- The ability to build and increase the capacity for learning and adaptation.

Sustainable Development
Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Vulnerability
The degree to which a system is susceptible to, or unable to cope with, adverse effects of Climate Change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity.