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National Climate Change Framework Policy

**MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES
STATE DEPARTMENT OF ENVIRONMENT**

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EXECUTIVE SUMMARY

Preamble

Kenya's economy is highly dependent on the natural resource base, and thus is highly vulnerable to climate variability and change. Rising temperatures and changing rainfall patterns, resulting in increased frequency and intensity of extreme weather events such as droughts and flooding, threaten the sustainability of the country's development. In order to safeguard sustainable development, the Government of Kenya has developed this National Climate Change Framework Policy to provide a clear and concise articulation of overall response priorities to climate variability and change.

Kenya has shown commitment to protect the climate system for the benefit of the present and future generations by supporting the United Nations Framework Convention on Climate Change (UNFCCC) process, ratifying the Kyoto Protocol in 2005, and contributing to continental and regional climate change initiatives. Further, the country's Constitution has set out a legal commitment to attain ecologically sustainable development; hence providing a firm basis to address the challenge of climate change while striving to attain the development goals set out in Kenya Vision 2030.

This Policy's focus is on the interlinkages between sustainable national development and climate change. Climate change adversely impacts key sectors that are important to the economy and society: Environment, Water and Forestry; Agriculture, Livestock and Fisheries; Trade; Extractive industries; Energy; Physical Infrastructure; Tourism; and Health. This Policy therefore elaborates intervention measures that can help to achieve the goal of low carbon climate resilient development.

Why a Framework Climate Change Policy?

This Policy was developed to facilitate a coordinated, coherent and effective response to the local, national and global challenges and opportunities presented by climate change. An overarching mainstreaming approach has been adopted to ensure the integration of climate change considerations into development planning, budgeting and implementation in all sectors and at all levels of government. This Policy therefore aims to enhance adaptive capacity and build resilience to climate variability and change, while promoting a low carbon development pathway.

The Climate Change Governance Approach

The response to climate change in Kenya must adhere to the constitutional governance framework and commitment to sustainable development, while addressing the goal of attaining low carbon climate resilient development. To attain the latter, this policy focuses on appropriate mechanisms to enhance climate resilience and adaptive capacity, and the transition to low carbon growth.

Enhancing Climate Resilience and Adaptive Capacity

Key economic sectors in Kenya are particularly susceptible to climate change impacts and this threatens to undermine Kenya's recent and impressive development gains. It is therefore important that the country builds and enhances its climate resilience and adaptive capacity. Building climate resilience requires that Kenyan systems of governance, ecosystems and society have capability to maintain competent function in the face of climate change. This would aid a return to some normal range of function even when faced with adverse impacts of climate change. Adaptive capacity is key to improving socio-economic characteristics of communities, households and industry as it includes adjustments in behaviour, resources and technologies, and is a necessary condition for design and implementation of effective adaptation strategies. There is mutual reliance in that the national adaptive capacity depends on the resilience of its systems.

The sustainable development of Kenya therefore significantly depends on the design and implementation of mechanisms that trigger and enhance climate change resilience and adaptive capacity. Devolved governments present an opportunity to diversify and implement appropriate climate change responses to build resilience, as each level of government performs distinct functions while pursuing cooperation with the other level of government, where necessary.

Low Carbon Growth

While Kenya currently makes little contribution to global greenhouse gas (GHG) emissions, a significant number of priority development initiatives outlined in Vision 2030 and its Medium Term Plans will impact on Kenya's levels of GHG emissions. Actions that will positively impact GHG emissions include increased geothermal electricity generation in the energy sector, switching movement of freight from road to rail in the transport sector, reforestation in the forestry sector, and agroforestry in the agricultural sector. In order to attain low carbon growth, the government will take steps outlined in this Policy by implementing regulatory mechanisms that mainstream low carbon growth options into the planning processes and functions of the national and county governments.

Mainstreaming Climate Change into the Planning Process

Climate change mainstreaming is necessary to equip various coordinating and sectoral agencies of the Kenyan national and county governments with the tools to effectively respond to the complex challenges of climate change. In this context, mainstreaming implies the integration of climate change policy responses and actions into national, county, and sectoral planning and management processes. This requires explicitly linking climate change actions to core planning processes through cross-sectoral policy integration. This integration operates horizontally by providing an overarching national guidance system, such as through this Policy and national climate change legislation; and vertically by requiring all sectors and levels of government to implement climate change responses in their core functions. This is done, for instance, through the Medium Term Expenditure Framework for budget making, and converting policies and plans linked to climate change into expenditure and action. Mainstreaming is a process that encourages cooperation across government departments in planning for a longer-term period; rather than fragmented, short-term and reactive budgeting. County governments are, for instance, required by law to prepare and implement County Integrated Development Plans, through which climate change actions can be mainstreamed. To attain this climate change mainstreaming, the government will

develop a framework and tools to integrate climate change responses into national and county planning processes, including economic planning, development policies, performance contracting, and the budget making process.

Enabling Regulatory Framework

Kenya requires appropriately designed legislative, policy and institutional frameworks that provide a regulatory architecture comprising the vital components of climate change governance. It is imperative to ensure compliance with the constitutional framework of public administration, especially the devolved system of government. The Constitution has set up a renewed structure of public administration, with one national government and 47 county governments. These two levels of government, while distinct, are interdependent and expected to function consultatively in a cooperative manner to discharge their respective and concurrent mandates. The national government is mandated to make policy on climate change. Various functions assigned to county governments are integral to fulfilment of actions required to address climate change. In certain instances, there may be concurrent performance of climate change related functions by the two levels of government. It is therefore necessary to review the overall legislative and institutional arrangements that govern climate change actions. Various sectoral laws and policies that will provide the legislative basis for specific actions will need to be analysed for potential amendments to enhance their capability to tackle climate change challenges and exploit emerging opportunities. This complex undertaking forms a foundation for attainment of low carbon climate resilient development, and sets the basis for climate change mainstreaming. It therefore requires the government to undertake various core interventions, including the enactment of overarching climate change legislation to provide the framework for coordinated implementation of climate change responses and action plans. It is also necessary to have an institutional coordination mechanism with high-level convening power to enhance the inter-sectoral response to climate change; and a technical institutional framework to guide policy and functional implementation of climate change legal obligations of the national and county governments.

The eventual climate change regulatory framework must observe the requirements for gender equality mandated by the 2010 Constitution. The adoption of a gender mainstreaming approach involves assessing the implications for women and men of any planned climate change action, including legislation, policies or programmes, in any area and at all government levels to achieve gender equality. It is also important that the policy and law account for the youth when planning and executing climate change responses because the youth represent a crossover between the present and future generations, and play a critical role in socio-economic development. The overarching climate change legislation and amendments to sectoral laws must therefore carve out specific roles and opportunities for the youth to participate in decision-making in climate change governance and pursue opportunities that arise through climate change actions.

Climate change is a global challenge, and Kenya has been a key participant in the UNFCCC and Kyoto Protocol processes, and also regionally within the East African Community. The national governance approach to climate change should be consistent with national strategic interests, while also linking with global and regional approaches.

1 INTRODUCTION

1.1 Background

- 1.1.1 Kenya is a developing country whose economy is highly dependent on the natural resource base, making it highly vulnerable to climate variability and change.
- 1.1.2 Realisation of sustainable development in Kenya, despite significant progress to date, is threatened by climate change and its resultant impacts. The country has in the recent past seen increased evidence of climate change such as rising temperatures and changing rainfall patterns, and has experienced extensive climate related impacts through the increased frequency and intensity of extreme weather events such as droughts and flooding. These manifestations of climate change constitute a serious threat to Kenya's natural, built economic and physical systems, on which the country's sustainable development and future prosperity depends.
- 1.1.3 Climate change is defined by the United Nations Framework Convention on Climate Change (UNFCCC) 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.' Current data demonstrates that the climate in Kenya and globally is changing at an unprecedented rate and that unparalleled levels of human induced greenhouse gas (GHG), especially carbon dioxide, emissions are causing an increase in global temperatures that creates changes in the earth's weather. It is now clear that climate change has become an impediment to the sustainable development of Kenya, and urgent action is required.

1.2 International and Regional Context

- 1.2.1 The Intergovernmental Panel on Climate Change (IPCC) has noted that Africa is highly vulnerable to climate change. Impacts of particular concern to Africa are related to water resources, food production, human health, desertification and coastal zones. These impacts are already manifesting in Kenya with shifts in rainfall patterns and extreme weather events expected to have far reaching consequences.
- 1.2.2 Cognizant of this, the Government has, through the UNFCCC process committed to protect the climate system for the benefit of the present and future generations. Kenya ratified the UNFCCC in 1994 and the Kyoto Protocol in 2005. The country is a key player in the global climate change governance system, and annually participates in the Conference of the Parties to the UNFCCC and Conference of the Parties serving as Meeting of the Parties to the Kyoto Protocol, articulating the national interest and position during international negotiations.
- 1.2.3 Kenya has also actively participated in regional initiatives to respond to climate change, including the development of the East African Community (EAC) Climate Change Policy, Master Plan, and Strategy, which also inform this National Climate Change Framework Policy. The EAC regional Climate Change Master Plan (2011-2031), indeed, serves as the blueprint to guide regional climate change response measures over the long term.

1.2.4 Through this extensive global and regional engagement, Kenya recognizes the imperative of a transboundary approach to climate change response in addition to initiatives at the national, county and local levels.

1.3 Rationale for a National Climate Change Framework Policy

1.3.1 The Constitution of Kenya sets out a commitment to ecologically sustainable development. The Sessional Paper No. 10 of 2012 on Kenya Vision 2030 establishes the goal of Kenya becoming a middle-income country providing a high quality life to all its citizens by the year 2030. Climate change poses a significant challenge to these sustainable national development goals.

1.3.2 Kenya's continuing vulnerability to climate change and the threat this poses to achieving long-term development goals has thus been clearly recognised. As a result, Kenya initiated a concerted national effort to respond to climate change, which commenced with development of the National Climate Change Response Strategy (NCCRS) in 2010. It was the first national planning document dedicated to addressing the threats posed by climate change and taking advantage of potential climate change related opportunities. The NCCRS identified the need to develop a comprehensive national policy on climate change.

1.3.3 Formulation of this Policy was initiated within the framework of the National Climate Change Action Plan (NCCAP, 2013-2017) whose objective is to encourage low carbon climate resilient development through implementation of the NCCRS. This Policy has been informed extensively by the NCCAP process and outputs.

1.3.4 A broad range of strategies and programmes have been pursued by various governmental and non-governmental entities to address the effects of climate change in Kenya. However, these initiatives have taken place without a coherent policy framework and therefore appear reactive and uncoordinated. Accordingly, this Policy reflects the Government's commitment to formulating a proactive, coherent and integrated climate change response that focuses on reducing vulnerability and building the resilience of the Kenyan people, property, environment and economy. The Policy will position Kenya to capture the economic, social and environmental benefits of the transition to a low carbon climate resilient economy.

1.3.5 This Policy will facilitate a coordinated, coherent and effective response to the local, national and global challenges and opportunities that climate change presents. This will be achieved through the adoption of a mainstreaming approach that ensures integration of climate change considerations into the development planning, budgeting, and implementation processes.

1.3.6 This Policy is therefore designed to provide a framework to guide the development and implementation of specific, detailed and costed climate change interventions through regular and periodic Climate Change Action Plans. By putting in place this policy architecture, Kenya aims to safeguard the wellbeing of its citizens, their property, and the country's prosperity in the face of a changing climate. This Policy therefore aims to enhance adaptive capacity and build resilience to climate variability and change, while promoting a low carbon development pathway.

2 SITUATIONAL ANALYSIS OF CLIMATE CHANGE IN KENYA

2.1 Evidence of Climate Change in Kenya

- 2.1.1 Evidence of climate change is based on statistical analysis of trends in historical records of temperature, rainfall, sea level rise, mountain glacier coverage and climate extremes.
- 2.1.2 Temperature and rainfall records from the Kenya Meteorological Department over the last fifty years provide clear evidence of climate change in Kenya, with temperatures generally showing increasing trends in many parts of the country starting from the early 1960s. This evidence is also provided in the State of the Environment Reports published by the National Environment Management Authority.
- 2.1.3 Rainfall patterns indicate increased irregularity and variability with neutral to slightly decreasing trends in annual rainfall over most areas. Decreasing rainfall trends have been observed in the total annual rainfall and during the long rainfall season (March – May) in recent years. This season contributes the higher proportion of the total rainfall for most parts of the country. A general increase in rainfall amounts has, however, been observed during the months of September to February in some parts of the country. This increase has been attributed to a tendency of the short rainfall season (October-December) to extend into the normally hot and dry months of January and February. Generally, the 24-hour rainfall intensity has shown a decreasing trend.
- 2.1.4 Since the early 1960s, Kenya has experienced increasing temperature trends in many parts of the country. For example, meteorological data demonstrates that the arid and semi-arid lands (ASALs) have witnessed a reduction in extreme cold temperature occurrences.
- 2.1.5 Impacts of temperature increase include the depletion of glaciers on Mount Kenya and sea level rise. These temperature increases will have negative implications on biodiversity and ecosystem services in the country.
- 2.1.6 A changing climate impacts the frequency, intensity, spatial extent, duration and timing of extreme weather and climate events. In recent years, evidence of higher frequency and intensity of extreme climate events such as droughts and floods has been noted in Kenya. The country's drought cycles have been reduced from 20 years (1964-1984), to 12 years (1984-1996), to two years (2004-2006), to a yearly occurrence of drought recorded in the period between 2007 and 2012.

2.2 Impacts of Climate Change In Kenya

- 2.2.1 ASALs, which comprise 83 per cent of Kenya's landmass, are fragile ecosystems and the lack of investment in public goods and services in ASAL areas increases the country's vulnerability to climate change.
- 2.2.2 The impacts of climate change cut across diverse aspects of society, the economy and the environment. The adverse impacts of climate change have the potential to significantly

inhibit the sustainable development of Kenya in key priority areas:

(i) Environment, Water and Forestry

Natural ecosystems have been adversely affected by climate change, including through variations of temperature and precipitation. The decline in environmental quality brings social and economic hardship to the people who depend on these ecosystems, and increases contestation and the likelihood of conflict over diminishing natural resources. It also creates a window for invasive species, new pests and diseases. The ASALs are particularly vulnerable to climate change impacts especially in the absence of sufficient investments in mechanisms to build resilience. They are currently under threat from land degradation and desertification caused by climatic variations and human impacts such as overgrazing of livestock, smallholder farming on poor soils, and the creation of small cities or towns. Impacts include loss of biodiversity, threats to animal and plant species, change in vegetation composition and structure, decrease in forest coverage, rapid deterioration of land cover, and depletion of water quality and quantity through the destruction of catchments and underground aquifers.

Increased scarcity of water resources is a core concern, making resource management more difficult and increasing the likelihood of conflict. Water scarcity will affect energy production and agricultural systems. Potential impacts include declining forest coverage, reduced water quality and quantity for domestic and industrial use, high water pricing and increases in water borne diseases.

Forests are highly sensitive to climate change. The Kenya Forest Service estimates a six per cent forest cover that include indigenous, open woodland and plantation forests. The five major water towers, Mt. Kenya, Mau Forests Complex, Cherangany Hills, Mt. Elgon and the Aberdare Ranges, act as the main water catchment areas. Forests also provide environmental goods and are a major source of biomass energy. Forest degradation and deforestation, exacerbated by climate change, have led to reduced canopy cover and altered biodiversity composition. This affects the ecosystem services that forests provide, such as reducing soil erosion, natural pest control, preserving water availability and maintaining water quality. Deforestation and forest degradation also increase GHG emissions.

(ii) Agriculture, Livestock and Fisheries

The agriculture, livestock and fisheries sector is one of the economic sectors in Kenya that is most vulnerable to climate change. Over 70 per cent of rural livelihoods are dependent on rain-fed subsistence agriculture, and are therefore significantly impacted by declining agricultural production due to unpredictable rainfall, reduced soil productivity through erosion and increased evapo-transpiration.

Some crops in Kenya are expected to experience more favourable growing conditions as a result of climate change, whereas others will find future climatic conditions intolerable. For example, maize yields are likely to increase in mixed rain-fed temperate and tropical highlands; while the ASALS are projected to experience a significant decline in crop yields.

Livestock management systems in Kenya, especially in the ASALs, rely extensively on natural systems such as rain fed pasture. These livestock systems are very climate sensitive, being vulnerable to the impacts of changing and irregular rainfall patterns and droughts. Greater drought frequency in the ASALs increases livestock morbidity and mortality because of reduced availability of forage, increased disease incidences and a breakdown of marketing infrastructure.

In the fisheries sector, temperature changes in the aquatic environment affect the breeding and feeding behaviour of fish, and have a significant effect on the species composition. There is evidence of a thinning of species and biomass abundance owing to the effects of temperature increase on the nesting and feeding grounds. In some cases, catches of non-resident species have been reported, with a compounded risk of alien invasive species. The species of fish that can be farmed in certain areas, such as cold-water aquaculture that has been practiced over the past decade, is increasingly becoming unsustainable. Combined effects of these factors have a negative impact on the socio-economic status and livelihoods of the fisher folk.

(iii) Trade

A robust, diversified and climate resilient trade sector is imperative for Kenya to attain low carbon climate resilient development. The trade sector depends on products and services developed by other sectors of the economy, and therefore any adverse climate change impacts of such sectors, will likely impact trade. The agriculture, manufacturing and transportation sectors, which are key cogs for internal and international trade, are highly vulnerable to climate variability and extreme weather events. A successful trade sector will therefore require building resilience across the entire economy of Kenya.

(iv) Physical Infrastructure

An improved and expanded physical infrastructure is an important and necessary enabler of socio-economic development. Vision 2030 aspires to develop world-class infrastructure facilities and services by focusing on quality, aesthetics and functionality of the infrastructure services. The target is increased investments in the road network; water and sanitation services; rail, sea and air transport; and energy supply services. The adverse impacts of climate change need to be identified and addressed when developing these world-class infrastructure facilities. One approach is to climate proof infrastructure, which refers to the integration of climate change risks and opportunities in the design, operation and management of infrastructure. Another consideration is the promotion of investment in infrastructure that supports transformation to a low carbon economy while creating employment and reducing poverty.

(v) Extractive Industries

The extractive industry in Kenya is rapidly developing into a potentially high contributor to economic growth. High value resources such as petroleum, coal, and titanium have been discovered. Natural resource extraction contributes to and is vulnerable to climate change. Extraction of resources such as petroleum and minerals utilises copious quantities of water and energy, and releases GHG emissions. The exposure of sensitive infrastructure, such as

pipelines, to extreme weather events could result in disasters with significant adverse impacts on the Kenyan environment, economy, people and their property. Infrastructure investments by extractive industries have to internalise climate proofing in order to protect value for money. Kenya needs to put in place regulatory mechanisms that ensure resource extraction contributes to low carbon climate resilience development.

(vi) Energy

To achieve the goal of becoming a middle-income economy by 2030, it is imperative for Kenya to attain energy security and accessibility to address increasing demand for energy. Peak electricity demand has increased from 899 megawatts in 2004/05 to 1,194 megawatts in 2010/11, while the number of electricity consumers more than doubled from 735,144 in 2004/05 to 1,753,348 in 2011. This increase is mirrored in petroleum uptake with the country's energy consumption in 2010 standing at 3.77 million Tons of Oil Equivalent,, up from 2.9 million Tons Of Oil Equivalent in 2004. Some of the factors that explain this variation in consumption include increases in Gross Domestic Product (GDP), electricity demand, population growth, urban population, and motorisation and air transport.

Energy production and utilisation has a close connection with climate change. Biomass energy, such as charcoal and firewood, continues to be used in the country's urban and rural households. Security in access to biomass energy is important for building resilience. However, it is equally critical to ensure efficient production and use of this biomass energy, including through sustainable plantation forests, sustainable tree harvesting techniques for commercial charcoal production, and efficient charcoal kilns and cook stoves.

Hydroelectricity generation, which accounted for over 50 per cent of Kenya's electricity in 2013, is affected by extreme events such as droughts. Reductions in reservoir levels can decrease hydroelectricity generation, leading to higher prices and greater use of fossil fuels, which increase GHG emissions. Coal and petroleum as sources of electricity generation contribute to GHG emissions. Kenya possesses significant renewable energy potential, including geothermal, wind, solar, biomass and biofuels.

(vii) Tourism

Tourism in the Kenyan context is highly climate sensitive because of its close connection to the natural environment. A large proportion of tourism depends directly on natural resources and much is focused on protected areas. In addition, the tourism sector, which accounts for about 10 per cent of GDP, is important for human development in Kenya because of its potential to reduce poverty and create employment. However climate variability is causing negative impacts that could inhibit the positive contribution of tourism to Kenya. Increasingly warmer temperatures are reducing plant and vegetation productivity in semi-arid environments, affecting wildlife diversity and distribution. This results in wildlife competing with domestic livestock and human beings for both food and water. Kenya's coastline and beaches are prime attractions for tourists, especially during the northern hemisphere winter months. However, the main coastal areas are susceptible to sea level rise due to low altitude, high temperatures and high humidity levels. Realising the Vision 2030 objective of developing Kenya as a major tourism destination globally will require consideration of climate change impacts and commencement of appropriate response and

intervention measures.

(viii) Health

Human health has been affected adversely by climate change impacts in Kenya. The country has a high degree of risk from climate-sensitive infectious diseases such as food or waterborne diseases like diarrhoea, hepatitis A, and typhoid fever. Vector-borne diseases such as malaria, dengue fever, and Rift Valley Fever are also common. High temperatures and intense rainfall, which are some of the effects of climate change, are known to be critical factors in initiating malaria epidemics in Kenya.

(ix) Coastal and Marine Ecosystems

Local communities have a high dependence on coastal and marine ecosystems, with a majority of people relying on fishing or fishery-related activities, and tourism being a major income earner. Coastal and marine ecosystems such as wetlands, mangroves, estuaries and coral reefs are particularly vulnerable to climate change. Temperature increase, irregular precipitation, sea level rise, and ocean acidification pose great challenges to the health, structure and function of these ecosystems. Changes in precipitation and sea level rise will have important consequences for the water balance of these ecosystems. Increases or decreases in precipitation and runoff may increase the risk of coastal flooding or drought. Sea-level rise resulting from climate change will gradually inundate coastal lands..

- 2.2.3 The implementation of Vision 2030 will increase the consumption of scarce natural resources as economic activities grow in the key sectors discussed above. Expected outcomes include further urbanisation, heightened competition for resources, and increased demand for energy, physical infrastructure, food, and health care, among others. Incorporation of climate proofing in economic planning, budgeting and implementation systems can help to ensure that actions to address national development priorities do not exacerbate vulnerability to climate change.

2.3 Summary of the National Emissions Profile

- 2.3.1 The last official GHG emissions inventory for Kenya, required for UNFCCC reporting, was completed for the year 1994 for the First National Communication. An updated GHG inventory was developed for the NCCAP in 2010, calculating historical emissions between 2001-2010 and using historical trends and expert assessments to project annual emissions until 2030. The agriculture and forestry sectors were the largest emitters in the 2010 NCCAP GHG inventory, accounting for approximately two-thirds of national emissions, mainly due to emissions from livestock and deforestation. Energy demand was the next largest emitting sector accounting for about 16 per cent of emissions, followed by transportation at about 10 per cent. Industrial processes and waste contributed about four per cent and one per cent of GHG emissions respectively. The current total emissions by Kenya account for less than one per cent of the total global emissions.
- 2.3.2 The NCCAP analysis suggests that GHG emissions in Kenya will increase up until 2030 in all sectors except forestry where emissions are likely to decline after 2020 due to the reduced clearing of forests and increases in the number and size of trees. Emissions in other sectors

will grow significantly up to 2030, with transport emissions increasing by a factor of three, and those from the waste sector doubling.

2.4 Status of Climate Change Governance

- 2.4.1 Climate change is a sustainable national development issue in Kenya. A coherent and coordinated regulatory framework must therefore guide the national, county and local level responses to the impacts of climate change. The absence of internal coherence in laws and policies has resulted in duplicity and overlap in execution of institutional mandates, with a suboptimal outcome for Kenya.
- 2.4.2 The various sectoral laws, policies and institutional mandates that define roles and functions required for climate change response should therefore be harmonised in order to enhance coordination and mainstream climate change into their functions.
- 2.4.3 The changes to the national governance framework in 2010, which introduced National and County levels of government, indicate a need to promptly ensure internal coherence and proper coordination of functions. This should be done in a manner that is complementary and respects the philosophy that specific sectoral functions should be undertaken by the most suitable sector or level of government.
- 2.4.4 Devolution is central to inclusive governance mechanisms, including public participation through awareness, consultation and access to information. Climate change governance should internalise progressive approaches, such as mainstreaming gender equity and accounting for the role of youth and persons with special needs. Governance approaches should avail opportunities for all Kenyan people to participate in decision making and become agents for design and implementation of climate change responses.

2.5 Climate Change Opportunities

- 2.5.1 Despite the many and varied negative impacts, climate change also presents opportunities to government, businesses and the public at large, which this Policy aims to fully exploit. Above all, climate change represents an opportunity to catalyse realignment of Kenya's development model to one that is climate resilient, based on lower GHG emissions, and takes full advantage of the green economy. A more people-centred approach to development can be achieved by focusing on vulnerable groups, and addressing climate change concurrently with poverty, food insecurity and unemployment measures.
- 2.5.2 Climate finance flows and carbon asset mechanisms present an opportunity to access new and additional levels of funding. For government, this means accessing international financing for ambitious climate resilient and low emission development programmes. For the private sector this can entail developing financial and insurance services, engaging in projects to generate carbon credits for sale in international markets, exploiting new green economy opportunities and creating green jobs.

2.5.3 The introduction of a devolved system of government provides a new opportunity to reorganize climate change governance by ensuring that climate change responses are mainstreamed into the functions of the national and county levels of government, and by facilitating the effective participation of citizens in climate change governance.

3 GOAL, OBJECTIVES AND GUIDING PRINCIPLES

3.1 Goal

The goal of this framework Policy is to enhance adaptive capacity and resilience to climate change, and promote low carbon development for the sustainable development of Kenya.

3.2 Objectives

The objectives of this Policy are to:

- (i) Establish and maintain an effective and efficient institutional framework to mainstream climate change responses across relevant sectors and into integrated planning, budgeting, decision-making and implementation, at both the national and county levels.
- (ii) Reduce vulnerability to the impacts of climate change by building adaptive capacity, enhancing climate change resilience and strengthening capacities for disaster risk reduction.
- (iii) Catalyse Kenya's transition to cleaner, lower emission and less carbon intensive development.
- (iv) Incentivize private sector involvement in building climate change resilience and engaging in low carbon development opportunities.
- (v) Facilitate widespread public awareness, participation, ownership and oversight of Kenya's climate change response efforts and Action Plans.
- (vi) Provide a framework to mobilise resources for Kenya's climate change response and ensure effective and transparent utilisation of the resources.
- (vii) Adopt intergenerational, special needs and gender mainstreaming approaches across all aspects of Kenya's climate change response.
- (viii) Provide the policy framework to facilitate effective implementation of regularly updated and scientifically informed Climate Change Action Plans.
- (ix) Enhance research and use of science and technology in policy decisions and sustainable management of resources.

3.3 Guiding Principles

The implementation of this Policy will be guided by the following principles:

- (i) **Common but differentiated responsibilities and respective capabilities:** under the

UNFCCC Kenya has common but differentiated obligations in the global effort to address climate change because of its negligible historical responsibility for causing global climate change, and its limited capability to mitigate climate change and adapt to its impacts in light of its stage of development,.

- (ii) **Right to a clean and healthy environment:** under the 2010 Constitution every person in Kenya has a right to a clean and healthy environment and a duty to safeguard and enhance the environment.
- (iii) **Right to sustainable development:** the right to development will be respected taking into account economic, social and environmental needs. Kenya seeks to achieve people-centred development that builds human capabilities, improves people's well being and enhances quality of life.
- (iv) **Partnership:** building partnerships, collaboration and synergies among various stakeholders from the public, government, non-governmental organisations, civil society and private sector, as well as vulnerable communities and populations including women and youth, will be prioritized to achieve effective implementation of this Policy.
- (v) **Cooperative government:** embracing a system of consultation, negotiation and consensus building in government administration between and within the national and county governments.
- (vi) **Equity and social inclusion:** ensuring a fair and equitable allocation of effort and cost, as well as ploughing back of benefits in the context of the need to address disproportionate vulnerabilities, responsibilities, capabilities, disparities, and inter- and intra-generational equity.
- (vii) **Special needs and circumstances:** the special needs and circumstances of people and geographic areas that are particularly vulnerable to the adverse effects of climate change will be prioritized. This includes, but is not limited to, vulnerable groups such as women, children, the elderly and persons with disability.
- (viii) **Avoiding maladaptation:** the climate change response will be conducted in such a way so as to avoid maladaptation, defined by the UNFCCC as any changes in natural or human systems that inadvertently increase vulnerability to climatic stimuli.
- (ix) **Integrity and transparency:** the mobilisation and utilisation of financial resources shall be undertaken with integrity and transparency in order to eliminate corruption and achieve optimal results in climate change responses.
- (x) **Cost effectiveness:** the selection of climate change interventions will take into account available alternatives in order to identify appropriate choices that provide most benefit to society at least cost.

4 LOW CARBON CLIMATE RESILIENT DEVELOPMENT

4.1 Enhancing Climate Resilience and Adaptive Capacity

- 4.1.1 The Kenyan social, economic and environmental architecture significantly relies on the environment and natural resources. Key economic sectors are particularly susceptible to climate change impacts that threaten to undermine Kenya's recent and impressive development gains. It is important for the country to build and enhance its climate resilience and adaptive capacity. Building climate resilience requires Kenyan governance systems, ecosystems and society to have capability to maintain competent function in the face of climate change and to return to some normal range of function even when faced with adverse impacts of climate change. The adaptive capacity of the country depends on its capability to enhance resilience of its systems.
- 4.1.2 Adaptive capacity is key to improving socio-economic characteristics of communities, households and industry as it includes adjustments in both behaviour and in resources and technologies. Adaptive capacity is a necessary condition for the design and implementation of effective adaptation strategies so as to reduce the likelihood and magnitude of harmful outcomes resulting from climate change. The ability of Kenya to enhance adaptive capacity is therefore imperative to enable sectors and institutions to take advantage of opportunities or benefits from climate change. An enhanced understanding of the adaptive capacity of Kenya can be derived from vulnerability assessments. Reducing the vulnerability to climate change of people, ecosystems and the economy is a positive approach to enhancing adaptive capacity, but further research is required to identify specific parameters and indicators of enhanced capacity.
- 4.1.3 A drastic increase in climate-induced disasters such as droughts, famine and floods, has resulted in significant socio-economic damage and environmental degradation. These climate change impacts have the potential to undermine realisation of the country's sustainable development objectives. Enhancing climate resilience and reducing vulnerability to climate change is therefore a key policy priority.
- 4.1.4 Integrating climate change considerations into existing environmental assessment mechanisms, such as strategic environmental assessments, environment impact assessments and environmental audits, can help to ensure that plans and programmes take full account of climate issues within a clear systematic process.
- 4.1.5 The prevalence of poverty is a major national challenge. The resilience and adaptive capacity of poor communities must be strengthened to protect against projected climate change impacts and vulnerability arising from increased food insecurity and escalating public health threats. The sustainable development of Kenya therefore significantly depends on the design and implementation of mechanisms that trigger and enhance climate change resilience and adaptive capacity.
- 4.1.6 Devolved governments present an opportunity to diversify and implement appropriate climate change responses to build resilience, as each level of government performs distinct functions while pursuing cooperation where necessary. Clear policy guidelines, sound coordination and effective oversight can promote coherence in Kenya's devolved governance system, helping to overcome the challenge of fragmented policy responses.

Policy Statements

The Government will:

1. Put in place mechanisms for sustainable utilisation of natural resources to enhance climate resilience and adaptive capacity to protect the natural capital of Kenya.
2. Mainstream climate resilience into national and county government development plans, processes and implementation.
3. Ensure integration of climate change risk and vulnerability assessment in environment impact assessment and strategic environmental assessment.
4. Develop incentives to promote climate resilient actions among public, private and other actors.
5. Identify and implement priority adaptation actions across key social, environmental and economic sectors under the framework of a National Adaptation Plan.
6. Promote public and stakeholder consultation and participation, including with vulnerable groups, to enhance adaptive capacity and climate resilience.
7. Develop mechanisms to build capacity to mainstream climate change into disaster risk reduction and management programmes.

4.2 Towards Low Carbon Growth

- 4.2.1 Kenya currently contributes very little to global GHG emissions. However, a significant number of priority development initiatives outlined in Vision 2030 and regular Medium Term Plans (MTPs) will impact on Kenya's levels of GHG emissions.
- 4.2.2 The energy sector is a crucial driver of economic growth. However, fossil fuel based electricity generation and consumption, and increases in fossil fuel use in the transportation sector contribute significantly to GHG emissions. The recent discovery of commercially viable deposits of oil and coal will likely contribute to increased emissions in Kenya. The extraction and use of these resources could take low carbon considerations into account, such as encouraging clean technologies with international support and considering allocation of royalties to a fund to support climate resilient and low carbon actions. Energy use in the form of fuel wood and charcoal by the majority of the Kenyan population increases emissions and contributes to on-going deforestation and forest degradation. Kenya has significant renewable energy potential, including geothermal, wind, solar and hydro.
- 4.2.3 The agricultural sector is the largest contributor of GHGs emissions in the country mainly from livestock methane emissions and land-use change. GHG emissions for the livestock subsector are expected to increase by 30 per cent up to 2030. The agricultural sector has the potential to reduce GHG emissions through sequestration of carbon in trees and soils through agroforestry, improved pasture and range land management, conservation agriculture, efficient dairy production systems, and improved manure management.
- 4.2.4 Forests in Kenya are important for economic development and for environmental services. They play a vital role in the conservation of biological diversity, regulation of water supplies,

sequestration of carbon, and are a major habitat for wildlife. Forestry contributed about 30 per cent of total GHG emissions mainly through deforestation and forest degradation in search for fuel wood, charcoal production and creation of agricultural land.

- 4.2.5 The transport sector in Kenya is dominated by road transport for the movement of both people and freight. Public transport is dominated by minibuses (matatus), which have a low passenger capacity. Traffic congestion in Nairobi and other cities and major towns, especially during peak hours, contributes to GHG emissions through the use of more fossil fuel and increases local air pollution, which has serious health implications.
- 4.2.6 Industrial processing in Kenya, though a relatively small contributor to GHG emissions, offers mitigation potential. A main source of emissions in this sector is the release of emissions from the cement manufacturing and charcoal production. Solid and liquid wastes from domestic and commercial sources further contribute to emission of GHGs through the release of methane gas from landfills and sewerage treatment works. The mitigation potential of industry is important because the economic growth targets set by Vision 2030 and the MTPs aim to convert Kenya into a middle-income economy, with industry as a major contributor.
- 4.2.7 Climate change therefore affords opportunities as well as challenges. Actions to address climate change can help to catalyse Kenya's transition to a green economy and generate employment in new areas. A priority action will be the development of an enabling policy framework for green job creation, which will identify emerging green economy opportunities that promote private sector investment and engagement to maximise employment creation.

Policy Statements

The Government will:

1. Identify and implement fiscal, taxation and other policy options in priority areas with high GHG emission abatement potential that enhance sustainable development.
2. Mainstream low carbon growth options into the planning processes and functions of the national and county governments.
3. Put in place mechanisms to establish a GHG emissions inventory to achieve efficient and effective collection, recording, sharing and utilisation of GHG emissions data.
4. In view of strategic national interests, consider participating in voluntary emission reduction programmes when they support the country's sustainable development goals and achieve co-benefits.
5. Put in place mechanisms to develop and promote clean technologies in all sectors of economic development.
6. Promote the creation of green jobs by establishing an enabling policy framework for investment, and creating business friendly regulatory environments in key areas such as renewable energy, efficient transport, clean manufacturing and sustainable agriculture.

5 MAINSTREAMING CLIMATE CHANGE

- 5.1.1 Kenya recognizes that climate change mainstreaming represents the best strategic approach to ensure that action on climate change results in meeting the overall policy objective of attaining low carbon and climate resilient development. Given that climate change affects fundamental economic, social and environmental aspects of Kenya's development, and an effective cross-sectoral climate change response must place mainstreaming at the core of Kenya's climate change response efforts.
- 5.1.2 A climate change mainstreaming approach will provide the various coordinating and sectoral agencies of the Kenyan national and county governments with the tools to effectively respond to the complex challenges of climate change. In this context, mainstreaming implies the integration of climate change policy responses into national, county and sectoral planning, budgeting and management processes.
- 5.1.3 Accordingly, climate change mainstreaming is a new approach that provides the framework to achieve coordinated action on climate change across government functions. Mainstreaming in this sense requires cross-sectoral policy integration that operates both horizontally, by providing an overarching guide for all sectors; and vertically, by requiring all sectors and levels of government to implement climate change responses in their core functions.
- 5.1.4 The Medium Term Expenditure Framework (MTEF) for budget making is a critical process for translating policies and plans into expenditure and action. It encourages cooperation across government departments in long-term planning, rather than fragmented, short-term and reactive budgeting. Vision 2030, the development master plan for Kenya, and its MTP framework also present opportunities to mainstream climate change into national planning. County governments are required by law to prepare and implement County Integrated Development Plans, through which climate change actions can be mainstreamed for subsequent implementation by county sectors. A mechanism facilitating linkages and exchange of climate change information and data with planning processes across all levels of government is an important element of the mainstreaming framework.
- 5.1.5 Climate change mainstreaming therefore provides an opportunity to reconfigure Kenya's development planning processes to effectively integrate climate resilience and low carbon development. The benefits of a climate change mainstreaming approach are manifold: it ensures vulnerability assessments are integral to major policy decisions, it facilitates a coordinated and comprehensive policy response across sectors and administrative levels, and it ensures Kenya's prosperity in the context of a changing climate by explicitly linking its climate change response to sustainable development.

Policy Statements

The Government will:

1. Mainstream climate change into national and county planning processes, including national development policies and plans, County Integrated Development Plans, Performance

Contracts, and the short to medium term budget making process.

2. Develop a framework and tools for mainstreaming climate change responses into national and county government planning and budget procedures.
3. Ensure that national and county planning processes and documents account for climate risk analyses and vulnerability assessments, and identify opportunities to build climate resilience and achieve low carbon development.
4. Establish the institutional framework and build capacity to coordinate and enhance mainstreaming at the sector level.
5. Put in place mechanisms linking climate change data and information with national and county planning processes.

6 RESEARCH AND TECHNOLOGY

- 6.1.1 Research and technology will play a key role in climate change adaptation and mitigation strategies and interventions. The complex and dynamic nature of climate change and its impacts requires Kenya to expand and maintain systems for targeted and continuous research and technology advancement. These systems will assist in understanding and prediction of climate-related changes, and identification of optimal and cost effective remedial measures. Despite considerable effort, further research inputs are required to determine how climate change will impact various economic sectors, ecosystems and vulnerable groups. Empirical evidence is required to support policy, legislative, technological and other interventions.
- 6.1.2 Various stakeholders play distinct yet complementary roles in research and technology advancement. The government invests in research and technology development and has the ability to put in place policies and programmes that incentivize research. The private sector invests in Research and Development (R&D), and linkage between private sector R&D and the government's goal of attaining low carbon climate resilient development is important. Universities and other tertiary educational institutions provide the ideal context for scholarly research aligned to support climate change interventions beneficial to the public and private sectors. Civil society provides a voice for advocacy on policy direction and implementation, and engages in research that generates evidence. R&D requires financial support that could be drawn from the public and private sectors.
- 6.1.3 Technological innovation, which involves expanding and adapting existing technologies to the national or local context, is an imperative component of Kenya's climate change interventions. It requires not only strong capabilities of the various actors but a strategy to build, enhance and maintain the requisite human resource capacity. The youth, as the bridge between the present and future generations, can be tapped to provide this human resource capacity. Support to technological innovation requires an architecture that provides incentives and capacity to institutions and actors that contribute the technology, including enforcement of intellectual property rights, financing and other facilitation.

- 6.1.4 Environmentally sustainable and locally appropriate technology development is a necessary element of achieving low carbon climate resilient development. Knowledge and use of locally appropriate tools can enhance the adaptive capacity of society and institutions and help them maintain competent function under adverse climatic conditions. Interventions are also necessary to introduce low carbon technologies that have utility to the socio-economic, environmental and political circumstances of Kenya. The deployment of technologies, whether new or through innovation steps, requires application of endogenous philosophies that ensure optimal utility to Kenya. The Government recognizes the need to accelerate development and diffusion of endogenous and locally adapted technologies, and will promote an enabling investment environment.
- 6.1.5 Indigenous, local and traditional knowledge is an important resource for adapting to climate change. Communities that depend on natural resources have a long history of adaptation that build on this knowledge. However, these systems are increasingly being challenged by a changing climate. In addition, this knowledge has often been ignored in policy and research, even though it can increase the effectiveness of adaptation strategies.

Policy Statements

The Government will:

1. Identify research and technology needs; and promote strategic and systematic climate change-related research, impact and vulnerability assessments, and technology development and diffusion.
2. Put in place mechanisms to encourage and facilitate locally appropriate climate change technological development, including strategies to enhance and maintain human capacity, especially amongst the youth.
3. Enhance the capacity of the public and private sectors, civil society and research institutions to develop and utilise technological innovations.
4. Identify and implement incentives for the private sector and institutions of higher learning to undertake R&D and develop affordable and locally appropriate adaptation and mitigation technologies.
5. Enhance linkages between government, academia, private sector, civil society and global climate change innovation institutions.
6. Put in place mechanisms to facilitate the integration of indigenous, traditional and local knowledge into R&D and technology development.
7. Put in place mechanisms to enhance resource mobilisation for climate change R&D and technology development.

7 EDUCATION AND PUBLIC AWARENESS

- 7.1.1 Public participation is a core value and principle of national governance in Kenya. Raising and maintaining the awareness of the public on matters of climate change is one way to enhance this participation. Public awareness can inform policymaking because it provides a two-way directional flow of information and feedback.
- 7.1.2 Increasing public awareness on climate change impacts and interventions can help to facilitate the role of the public as a positive agent to reinforce climate change interventions. Kenya has various mechanisms for public awareness, especially through government, private sector and civil society. Nationally designed and implemented civic education programs and conventional public awareness mechanisms, such as extension services that are prevalent in natural resource management sectors, play an instrumental role in public awareness, albeit on a limited sectoral scale. The media, including local-area radio stations, is an important avenue to provide meteorological and other climate change information.
- 7.1.3 Public awareness on climate change should integrate knowledge on critical and crosscutting policy issues such as mainstreaming of gender, youth and special needs. This approach is important because public awareness is central to the subsidiarity principle, which requires an active role of the people in governance, at the lowest possible level of public administration, when it is optimal to do so. Climate change interventions, such as those relating to building resilience or enhancing adaptive capacity are closely related to how people understand the impacts of climate change. These interventions can support the transition of people from victims of and contributors to climate change, to positive agents working against climate change.
- 7.1.4 While public awareness normally takes the form of informal education, the formal education mechanisms are equally instrumental. Basic education is, as a constitutional rule, free and compulsory to every child in Kenya. The mainstreaming of relevant climate change knowledge into the basic education curriculum would provide knowledge and awareness to millions of Kenyan children. A similar approach at secondary, tertiary and adult literacy levels could increase awareness on climate change. The Government can play an important role because it has the mandate to prepare or approve education curricula at all levels in public and private education institutions.
- 7.1.5 The mainstreaming of climate change into the functions of various sector institutions and county governments is central to implementation of this Policy. These players therefore need to develop sector or county specific public awareness strategies on climate change.

Policy Statements

The Government will:

1. Put in place a strategy for identifying, refining and disseminating climate change knowledge to the public and other stakeholders in user-friendly formats.
2. Mainstream climate change in basic, secondary and tertiary level education curricula.

3. Incorporate climate change knowledge into government implemented public awareness initiatives including civic education and extension programmes.
4. Collaborate with, and support, private sector and civil society in incorporating climate change knowledge into advocacy and public awareness raising programmes.
5. Strengthen the capacity and ensure sufficient resourcing of institutions engaged in climate change public awareness.

8 KNOWLEDGE MANAGEMENT AND ACCESS TO INFORMATION

- 8.1.1 The ability of the country to respond appropriately and effectively to climate change depends, to a great extent, on the ability to understand and assess impacts and vulnerability. Policy makers, the public and private sector can then use that knowledge to make informed decisions on appropriate steps for adaptation and mitigation. The Government is aware of the need to gather and organize already existing data, while generating additional knowledge and information to inform decision-making.
- 8.1.2 In Kenya, knowledge can exist as undocumented or documented. The process of knowledge management must be cognizant of this, and also that availability of knowledge may be restricted by intellectual property or public safety protections. Indigenous, traditional and local knowledge, which are critical elements of sharing and building resilience and enhancing adaptive capacity, are not protected through intellectual property rights. The Constitution however obliges the Kenyan State to protect and enhance this knowledge.
- 8.1.3 Mainstreaming of gender considerations in knowledge management is important to assure the relevance and applicability of the outputs. The impacts of climate change affect women and men in different ways, just as various women or men maybe impacted differently from other members of the same gender. It is important to mainstream gender analysis and put in place mechanisms for disaggregation of knowledge on how impacts and roles, even within the same gender, affect people based on their contexts and circumstances.
- 8.1.4 Generation of climate change knowledge and information, combined with effective communication strategies, can enhance public participation and awareness. A major concern in Kenya is the lack of adequate and appropriate climate change information and knowledge and the lack of data available to researchers, planners, policy-makers and the general public. A climate change knowledge and communication needs assessment is required to develop appropriate systems and processes for climate related data collection, knowledge gathering, storage, utilisation and effective communication.
- 8.1.5 The nature of knowledge is diverse and the stakeholders are extensive. To enhance public participation, climate change knowledge and information management systems must engender community ownership and participation, and provide culturally and contextually relevant information, in local languages where possible. Knowledge and information management should utilise appropriate high- and low-tech dissemination technologies to meet the needs of the public. The availability of knowledge and information management hubs at various levels of government would assist in knowledge management and

dissemination.

- 8.1.6 The utility and relevance of knowledge is dependent on the dissemination mechanisms and accessibility to various interested parties. Access to information is one tool through which persons can procure knowledge held by public or private parties and apply it for various purposes. As a basic right, access to information is grounded in the Constitution, and its entitlement is limited only to citizens of Kenya. This right has various elements that are key to its utility on dissemination of climate change knowledge. Information held by a private party can only be accessed if it is necessary in realisation of a specific basic right, while information held by public agencies can be accessed. However, various procedural limitations are likely to be imposed in order to safeguard integrity of certain knowledge, such as that subject to intellectual property rights, proprietary interest or of a confidential nature, or information classified for national security reasons.
- 8.1.7 The rules on access to information should be interpreted liberally to ensure the widest latitude is given to public access to information, bearing in mind the constitutional origins of the right. Procedural mechanisms on access to information require that an interested party should make a formal request, and likely make a reasonable payment to cover modest administrative costs. Minimisation of these procedures or their elimination with regard to climate change information would expand the scope of accessible knowledge and information. Since it is a constitutional requirement to publicize any important information affecting the nation, the government should classify climate change information as falling in this category and proactively provide refined information on climate change to the public.

Policy Statements

The Government will:

1. Facilitate establishment and operation of a national climate change information hub and clearinghouse to generate, coordinate, collect, collate, store, retrieve and disseminate reliable, high quality and up-to-date data and information.
2. Facilitate setting up of climate change information hubs by county governments to collect primary information and act as dissemination points for knowledge and information.
3. Put in place mechanisms for and undertake climate change knowledge and communication needs assessment in order to develop appropriate systems and processes for climate related data collection.
4. Develop a comprehensive communication strategy to enhance dissemination of timely, credible and reliable climate change information and research findings.
5. Put in place mechanisms to gather, document and promote application of traditional indigenous knowledge and practices on climate change.
6. Mainstream gender analysis into climate change knowledge and information management.
7. Implement mechanisms to facilitate and support access to climate change information.

9 CLIMATE CHANGE GOVERNANCE

9.1 Enabling Regulatory Framework

- 9.1.1 Appropriately designed legislative, policy and institutional frameworks provide a regulatory architecture comprising the vital components of climate change governance. This architecture is crucial to achieving effective policy and action plan implementation. Clear and well-defined structures will help to overcome significant obstacles in translating climate change responses from concept to reality.
- 9.1.2 It is imperative that Kenya aims to attain sustainable development, which is framed by the Constitution as an important value of national governance. Climate change impacts will continue to place significant obstacles in the path of sustainable development mechanisms. The Constitution has set up a renewed structure of public administration, with one national government and 47 County governments. These two levels of government while distinct are interdependent and expected to function consultatively in a cooperative manner to discharge their respective and concurrent mandates. The national government is mandated to make policy on climate change. Various functions assigned to county governments are integral to fulfilment of actions required to address climate change. In certain instances, there may be concurrent performance of climate change related functions by the two levels of government. This context requires clarity in the overall regulatory framework.
- 9.1.3 The effective implementation of climate change responses requires a review of the overall legislative and institutional arrangements that govern climate change actions. Laws and policies have to be reviewed and designed to accord with powers and functions of a devolved system of government; and uphold distinctiveness, mutual cooperation and consultation across the national and county governments. The principles of cooperative government underpin performance of climate change mandates, respecting that functions can be concurrent and that the principle of subsidiarity may favour implementation through the lowest level of government, when doing so is the most effective approach.
- 9.1.4 Similarly, various sectoral laws and policies that will provide the legislative basis for specific actions will need to be analysed for potential amendments that enhance their capability to tackle climate change challenges and exploit emerging opportunities. Legislative and regulatory review will be an ongoing iterative process to ensure that barriers to action are removed and enabling frameworks for implementation are in place based on evolving circumstances.
- 9.1.5 Climate change is a complex policy issue that impacts national development. The responses and actions to address climate change require horizontal and vertical integration. The achievement of horizontal integration requires a legislative and institutional mechanism that provides high-level guidance. The legislative mechanism is necessary to provide overall content and direction on how climate change responses are structured through mainstreaming. The institutional mechanism is equally critical to provide high-level coordination and political authority to guide mainstreaming of climate change functions in sectoral mandates at all levels of government. Vertical integration is instrumental in

determining the roles of various sector institutions and devolved governments in performing climate change mandates. This integrated approach is, cumulatively, an important step to minimise or eliminate instances of regulatory incoherence where no coordination or linkage exists between sectoral climate change mandates.

- 9.1.6 The effective discharge of Kenya's international climate change obligations significantly depends on the existence of an effective regulatory framework. This also bears upon the country's participation in international negotiations because an effective regulatory framework provides a context to prepare for negotiations and develop strategic national positions on key issues.

Policy Statements

The Government will:

1. Put in place overarching climate change legislation to provide the framework for coordinated implementation of climate change responses and action plans.
2. Put in place a Cabinet level climate change committee to coordinate the mainstreaming of climate change into national development processes.
3. Put in place an appropriate institutional coordination mechanism with high-level convening power to enhance inter-sectoral and inter-governmental responses to climate change.
4. Put in place a technical institutional framework to guide policy and functional implementation of climate change legal obligations of the national and county governments.
5. Put in place and regularly review subsidiary legislation as may be necessary to support implementation of various interventions through the national climate change legislation.
6. Regularly review and amend relevant sectoral laws and policies in order to integrate climate change policy considerations and implement priority actions in respective sectors.
7. Put in place mechanisms for public consultation and participation in climate change governance at all levels of government.
8. Strengthen coordination and capacity for international climate change negotiations.

9.2 Climate Finance and Other Resources

- 9.2.1 Adequate and predictable financial resources are a crucial component for achieving Kenya's ambitious climate change response objectives. Given the extent of projected climate change adaptation and mitigation needs in Kenya, it is important to ensure that all sources of finances can be mobilized – international, domestic, public and private – including through Public-Private Partnerships (PPPs). Kenya therefore requires a suitable framework to attract and efficiently utilise climate finance.
- 9.2.2 A functional climate finance mechanism can help to diversify financial reserves, safeguard the interests of Kenyan citizens and preserve wealth for future generations. Adequate

financial resources are integral to the identification, design and implementation of interventions required to achieve climate resilience, adaptive capacity and low carbon growth. The resources mobilised through such a mechanism will therefore play an instrumental role in developing and maintaining required human capacity, support governance arrangements and enhance collaboration amongst the various actors.

- 9.2.3 Kenya continues to face tremendous climate change challenges that require mitigation and adaptation interventions. Prudent management of resources requires a balance in the allocation of mobilised resources to both mitigation and adaptation to address the climate change needs of the country. Criteria should be developed to identify an appropriate allocation of resources in a manner that proportionately responds to both climate resilience and low carbon priority needs.
- 9.2.4 PPPs have emerged as viable mechanisms for leveraging private sector financing to support public policy goals. An enabling regulatory framework has been put in place by the government to support PPPs. Investments that support low carbon climate resilient development can therefore be identified, prepared and implemented through the PPP framework.
- 9.2.5 Achieving the desired goal of an improved climate change response requires strengthening of the capacity of actors to disburse, absorb and manage funds in a transparent and accountable manner. This will ensure that all mobilised climate finance achieves gains in securing climate resilience, building adaptive capacity and implementing low carbon development.
- 9.2.6 The government recognizes the urgency of strengthening transparency and accountability and will therefore take necessary steps to prevent corrupt practices in climate finance resource allocations for low carbon climate resilience actions.
- 9.2.7 The diversity in sources of climate finance introduces difficulties in monitoring and evaluating the implementation and impact of climate change interventions. Mechanisms to identify the sources and track how the finance has been utilised are needed to optimise the application of climate finance. These mechanisms will assess the disbursement, absorption and management of funds in a transparent and accountable manner. A framework for tracking climate finance should incorporate finance sources derived from the broad spectrum of actors, including international and domestic, public, private and civil society.

Policy Statements

The Government will:

1. Adopt a climate finance strategy and establish an appropriate fund mechanism that enables implementation of priority actions for climate resilience and adaptive capacity and low carbon growth.
2. Explore possible avenues to attract internal and external climate finance, including through foreign direct investment and other multilateral or bilateral funding.
3. Put in place a mechanism and criteria for balance in the allocation of mobilised climate

finance to adaptation and mitigation actions.

4. Develop policies and strategies to enhance Kenyan capacity to engage in carbon asset activities, strengthen the viability of domestic carbon asset production and increase access to international carbon markets.
5. Promote private sector involvement in climate finance opportunities through the introduction of incentives, removal of investment barriers, creation of a conducive investment climate and facilitation of access to finance.
6. Adopt and implement sector specific anti-corruption, transparency, accountability and integrity mechanisms to safeguard prudent management of climate finance.
7. Promote Public-Private Partnerships in the climate change response.
8. Put in place a framework for coordination and monitoring and tracking sources, application and impacts of climate finance.

9.3 Mainstreaming Issues of Gender, Youth and Special Needs Groups in Climate Change Actions

- 9.3.1 The constitutional foundations of governance in Kenya aim for an equal society, and clearly assert that women and men are equal. This equality is the goal that Kenya aims to achieve in all aspects of society interaction, whether economic, social or environmental. Steps must be taken to ensure that existing disparities between women and men are addressed in order to reduce or eliminate vulnerability and poverty that are exacerbated by climate change. The Constitution provides for socio-economic rights, such as the right to water, food, housing, emergency medical services and sanitation. These rights are mechanisms for addressing vulnerability arising from gender inequity, but also for supporting the youth and persons with special needs to reinforce intra- and inter-generational equity.
- 9.3.2 Given gender disparities in social and economic roles, women and men experience the effects of climate change differently. Women suffer more because of vulnerability arising from the gender division of labour and allocation of power at the household, work and other levels. Climate change exacerbates these inequalities, and it is therefore necessary to understand the risks and impacts of climate change on women and men. This disaggregation should be applied not just across genders but also amongst the members of each gender, as the factors that exacerbate vulnerability to climate change vary.
- 9.3.3 Women, because of their roles in society, can be active agents to address climate change challenges. Mechanisms are needed to enhance this role and improve coping capacity. Women's coping capacity is low and adversely affected by the gender division of labour and power at household, work and other levels.
- 9.3.4 Gender equality, as mandated by the 2010 Constitution, will be achieved in relation to the government's climate change response by the adoption of a gender mainstreaming approach. This involves assessing the implications of any planned climate change action on women and men, including legislation, policies or programmes, in any area and at all levels to achieve gender equality.

- 9.3.5 The youth represent a crossover between the present and future generations, and therefore play a critical role in socio-economic development, including addressing climate change. It is necessary to carve out specific roles and opportunities for youth participation in decision-making in climate change governance, and to pursue opportunities that arise through climate change actions.
- 9.3.6 The equitable basis of governance in Kenya, as set out by the Constitution, requires that social and economic justice be upheld, especially to extend protection and opportunities to persons with special needs who could be vulnerable. Equally, the governance system must integrate the participation of persons with special needs in decision making as well as mainstream specific considerations that ensure government policies are responsive and extend opportunities. The challenges posed by climate change represent an area of governance where this inclusive governance is very critical.

Policy Statements

The Government will:

1. Ensure that its climate change response is equally beneficial to both women and men and enhances gender equality and equity.
2. Undertake systematic gender analysis of its climate change response, through the collection and utilisation of gender-disaggregated data, including in relation to budgetary processes.
3. Ensure that marginalisation and vulnerability arising from gender disparities are addressed at all stages of climate change response.
4. Adopt a gender mainstreaming approach at all stages of the climate change policy cycle from research, to analysis, to the design and implementation of actions.
5. Put in place mechanism to ensure and enhance the participation of the youth in climate change governance and position them to take advantage of opportunities.
6. Undertake a systemic analysis of the various special needs and ensure that planning and climate change responses mainstream participation and protection to persons with special needs.

9.4 Climate Change Measurement, Reporting and Benefit Measurement

- 9.4.1 All actions taken to respond to climate change should be measured, reported and verified. The Measurement, Reporting and Verification (MRV) requirements established under the UNFCCC requires that Kenya submit national communications on climate change action every four years, and biennial update reports every two years. These reports should include information on greenhouse gas emissions, and mitigation and adaptation actions, needs and support received. These reports are important to demonstrate that adaptation efforts and emission pathways are on the right track or that additional efforts are necessary.
- 9.4.2 Currently, Kenya has weak mechanisms for collecting information on climate change, with relevant indicators unconsolidated and scattered throughout different agencies and departments. This fragmented framework makes it difficult for the public and other key

stakeholders to track progress, share results and access information. This fragmented framework makes it difficult for the public and other key stakeholders to track progress, share results and access information. The role of the public in the MRV process, especially stakeholders in target groups, should therefore be identified, including their role in tracking outcomes and measuring benefits.

- 9.4.3 In response to this challenge, an integrated, holistic and adequately resourced monitoring, reporting and benefit measurement system is needed to respond to this challenge. An integrated MRV mechanism (MRV+) that tracks adaptation and mitigation actions, impacts and benefits is needed to determine progress toward the achievement of low carbon climate resilient development. MRV for climate finance is also necessary to track allocations, and their results and benefits in regard to enhancing climate resilience, building adaptive capacity and reducing emissions.
- 9.4.4 This integrated approach where MRV is applied to mitigation and adaptation actions and climate finance will help to determine the impact of actions and implementation challenges, as well as facilitate evidence-based decision-making. It further provides a vital governance tool to assess performance against set targets and to update action plans accordingly. By demonstrating Kenya's progress toward climate resilience and emission reduction goals, the MRV approach will further contribute to attracting climate finance.

Policy Statements

The Government will:

1. Establish an integrated MRV framework for performance, outcomes and benefits of mitigation, adaptation and climate finance actions.
2. Prioritize the use of existing MRV processes, data collection and information management systems to ensure efficiency in climate change related monitoring, reporting and benefit measurement.
3. Prioritize the integration of climate change parameters, data and information required for MRV into the national statistical management system.
4. Ensure that the national MRV system is transparently linked with national sustainable development planning, budgeting and monitoring systems.
5. Enhance awareness and build capacities of both national and county entities to participate in the MRV process and systems.

10 IMPLEMENTATION FRAMEWORK

10.1 Implementation Framework and Costs

- 10.1.1 Implementation of climate change policy priorities and other actions will require significant planning, including detailing the full cost to determine budgetary and other economic implications.

10.1.2 This Policy will be implemented through specifically developed and fully costed Climate Change Action Plans commencing with the National Climate Change Action Plan 2013 - 2017 and continuing through new and amended action plans developed in at least five-year intervals.

10.1.3 To facilitate climate change mainstreaming and realisation of the overall policy objective of climate resilient and low carbon development, current and future Climate Change Action Plans will be fully aligned with and integrated into the regular MTPs of Vision 2030.

Policy Statements

The Government will:

1. Prepare and implement comprehensive, fully costed and periodically reviewed Climate Change Action Plans under the framework of this Policy.
2. Ensure that Climate Change Action Plans for implementation of this Policy are aligned with the regular MTPs of Vision 2030.
3. Facilitate continuous consultations and public awareness across all sectors, interest groups and the public.

10.2 Monitoring and Evaluation of Policy Implementation

10.2.1 The Government recognizes the importance of tracking implementation of this climate change Policy and evaluating related outcomes. This important task can signal potential weaknesses in design, identify implementation challenges and facilitate policy adjustments. In this context, it is crucial to prioritize rigorous and continuous Monitoring and Evaluation (M&E) of this Policy.

10.2.2 In order to track the implementation of this Policy, it will be essential to record and measure progress and changes, as well as the overall performance of climate change actions. M&E will provide reliable and timely data on progress, results and shortcomings of the Policy implementation to inform decision makers, stakeholders and the public. A highly consultative and participatory M&E system will be adopted to facilitate periodic reviews of this Policy and its contribution to the national economy. Efforts will be made to link this system to the National Integrated Monitoring and Evaluation System.

10.2.3 The M&E system will monitor implementation by tracking inputs and actions to mainstream climate change by national and county government entities. Performance contracts provide a useful tool through which targets, inputs and the resultant outputs can be determined and evaluated.

10.2.4 An appropriate climate change M&E system will coordinate inputs from different sources, including various stakeholders, to provide reliable and timely information and data for planning purposes, and as inputs to national and county level reports.

10.2.5 M&E of this Policy will be synchronized to the five year MTPs of Vision 2030, and will adopting a participatory approach that facilitates active engagement of stakeholders,

Policy Statements

The Government will:

1. Put in place mechanisms to utilize actions plans and performance contracts as tools for review and evaluation of inputs and results under this Policy.
2. Collaborate with county governments in setting up M&E procedures for this climate change policy.
3. Incorporate climate change indicators into the National Integrated Monitoring and Evaluation System.
4. Set up a coordination mechanism involving relevant stakeholders to undertake M&E of this Policy over five year intervals in line with the Climate Change Action Plans and the MTPs of Vision 2030.
5. Disseminate the outcomes of reviews and evaluations for public and stakeholder discussion, and for parliamentary and county assembly debate and oversight.

10.3 Resource Mobilisation

- 10.3.1 Funding required for financing climate change responses under this policy will be mobilised from both internal and external sources. In this context, resource mobilisation will be closely linked to Kenya's climate finance strategy, particularly in regard to mobilising external financing.
- 10.3.2 Governments at all levels will be required to integrate climate change response actions into budgetary processes. This will complement and be in addition to any external climate finance resources. In particular, sufficient budgetary allocation for all institutions performing climate change functions will be prioritised to ensure that the necessary human, technical and financial resources are available.
- 10.3.3 This Policy underscores the Government's commitment to increase PPP initiatives for actions that help to achieve low carbon climate resilience development.

Policy Statements

The Government will:

1. Allocate resources for climate change actions in national and county budgetary processes.
2. Build capacity to mobilise and enhance absorption of resources for climate change interventions.
3. Mobilise substantial levels of climate finance to fund implementation of this Policy and the associated Climate Change Action Plans from internal and external sources.
4. Put in place mechanisms to attract and leverage PPPs as a vehicle to mobilise resources and enhance private sector participation in low carbon climate resilient development activities.

10.4 Collaboration and stakeholders participation

10.4.1 Article 10 of the Constitution identifies public participation as a binding national value during the implementation of any public policy or decision, or in the making or implementation of any law. The Government therefore recognizes the importance of building and sustaining partnerships with the Kenyan public, at all levels of society, to ensure a collective national ownership of climate change responses.

10.4.2 The Government will continue to play the lead role in the strategic planning and management of climate change responses. The national government will foster participatory partnerships between itself and county governments, other public entities, the private sector, civil society, development partners, media and international agencies. Steps will be taken to consolidate and strengthen the working relations with development partners. Improved sectoral and donor coordination will be formalized through periodic meetings and fora.

Policy Statements

The Government will:

1. Put in place and operationalise a climate change public participation strategy.
2. Ensure that public participation enhances consultation and awareness of citizens, including facilitating equitable roles for women and men, persons with special needs and the youth.
3. Establish and sustain partnerships with various categories of climate change stakeholders including development partners and sectoral departments.

Annex I – Abbreviations and Acronyms

ASALs	Arid and Semi-Arid Lands
EAC	East African Community
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GoK	Government of Kenya
IPCC	Intergovernmental Panel on Climate Change
M&E	Monitoring and Evaluation
MEWNR	Ministry of Environment, Water and Natural Resources
MRV	Measurement, Reporting and Verification
MTEF	Medium Term Expenditure Framework
MTP	Medium Term Plan
NCCAP	National Climate Change Action Plan
NCCRS	National Climate Change Response Strategy
PPP	Public Private Partnership
R&D	Research and Development
UNFCCC	United Nations Framework Convention on Climate Change

Annex II – Terminology

Adaptation

Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Adaptive Capacity

The ability or potential of a system to respond successfully to climate variability and change, and includes adjustments in both behaviour and in resources and technologies.

Capacity building

In the context of climate change, the process of developing the technical skills and institutional capability in developing countries to enable them to address effectively the causes and results of climate change.

Carbon market

A trading system through which countries or other entities may buy or sell units of greenhouse gas emissions in an effort to meet their national limits on emissions, either under the Kyoto Protocol or under other agreements, such as that among member states of the European Union. The term comes from the fact that carbon dioxide is the predominant greenhouse gas, and other gases are measured in units called "carbon dioxide equivalents."

Carbon sequestration

The process of removing carbon from the atmosphere and depositing it in a reservoir or "sink", such as soil or trees

Climate

The average pattern for weather conditions occurs over a long time period. Weather refers to the atmospheric conditions at a specific place at a specific point in time. Climate has always varied because of natural causes. Increasingly, however, human increases in GHG emissions causing changes in climate as well.

Climate Change

Changes in global or regional climate patterns, including changes in temperature, wind patterns and rainfall. In particular, climate change refers to a change apparent from the mid to late 20th century onwards and attributed largely to human activities that increase levels of GHG emissions, especially atmospheric carbon dioxide produced by the use of fossil fuels. Climate change is sometimes referred to as global warming, which specifically refers to the long-term trend of a rising average global temperature.

Climate Finance

Local, national or international financing that may be drawn from public, private and alternative sources of financing, and is critical to addressing climate change because large-scale investments are required for adaptation and mitigation.

Climate Resilience

Closely linked to adaptation, building climate resilience includes reducing vulnerability to climate change, making sure that the impacts of climate change are avoided or cushioned, and enabling people to respond to climate risks.

Conference of the Parties

The supreme governing body of the UNFCCC, which meets once a year to review the Convention's progress. The word "conference" is not used here in the sense of "meeting", but rather of "association".

Deforestation

The long-term or permanent loss of forest cover. The term implies transformation of forest into another land use, which is caused and maintained by a continued human-induced or natural perturbation.

Greenhouse gases

The atmospheric gases responsible for causing global warming and climate change. The major GHGs are carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). Less prevalent -- but very powerful -- greenhouse gases are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆).

Intergovernmental Panel on Climate Change (IPCC)

Established in 1988 by the World Meteorological Organization and the UN Environment Programme, the IPCC surveys worldwide scientific and technical literature and publishes assessment reports that are widely recognized as the most credible existing sources of information on climate change. The IPCC also works on methodologies and responds to specific requests from the UNFCCC's subsidiary bodies. The IPCC is independent of the UNFCCC.

Kyoto Protocol

An international agreement standing on its own, and requiring separate ratification by governments, but linked to the UNFCCC. The Kyoto Protocol, among other things, sets binding targets for the reduction of GHG emissions by industrialized countries.

Low Carbon Development Pathway

A national development plan or strategy that encompasses low-emission economic growth. Transitioning to this pathway means taking actions, where possible, to encourage GHG emissions that are lower than business-as-usual practice; and reducing the human causes of emissions by moving toward a resource efficient economy that is as low-carbon as possible and enhancing carbon sinks.

Mitigation

In the context of climate change, a human intervention to reduce the sources or enhance the sinks of greenhouse gases. Examples include using fossil fuels more efficiently for industrial processes or electricity generation, switching to solar energy or wind power, improving the insulation of buildings, and expanding forests and other "sinks" to remove greater amounts of carbon dioxide from the atmosphere.

Measurement, Reporting and Verification Plus (MRV+)

An integrated framework proposed for Kenya to measure, monitor, verify and report results and impacts of mitigation, adaptation and climate finance actions, and the synergies between them.

National Adaptation Plan

A document prepared by developing countries that identifies urgent and immediate needs for adapting to climate change.

National Climate Change Action Plans

National plans of action, prepared at five-year intervals, that set out in detail the requirements and costs for the design and implementation of the various climate change interventions required for Kenya to attain low carbon climate resilient development.

Public Private Partnerships (PPPs)

Public-Private Partnerships are an association between government and private sector through which private financing is utilized to perform a public function, at a profit to the private sector.

REDD+

Reducing Emissions from Deforestation and Forest Degradation plus the role of conservation, sustainable management of forests and enhancement of forest carbon stocks. REDD+ is a mechanism under the UNFCCC designed to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands.

Sustainable development

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

Technology Transfer

A broad set of processes covering the flows of know-how, experience and equipment for mitigating and adapting to climate change among different stakeholders.

United Framework Convention on Climate Change (UNFCCC)

An international treaty signed by 195 countries that entered into force in 1994. The objective of the Convention is "...stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate systems..."

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.