MINISTRY OF ENVIRONMENT AND FORESTRY

OFFICE OF THE CABINET SECRETARY

Telephone: 254-20-2730808/9
Website : www.environment.go.ke
Email:cs@environment.go.ke
When replying please quote:

N.H.I.F BUILDING
RAGATI ROAD
P. O. BOX 30126-00100
NAIROBI

Ref. ME&F/CS/249/2020

24th December, 2020

Ms. Patricia Espinosa
Executive Secretary
United Nations Framework Convention on
Climate Change (UNFCCC) Secretariat
P.O. Box 260 124. D-53153
BONN GERMANY

RE: SUBMISSION OF KENYA'S UPDATED NATIONALLY DETERMINED CONTRIBUTION

1. Kenya submitted her Nationally Determined Contribution (NDC) on 28th December 2016. The NDC sets out both adaptation and mitigation contribution based on conditional support. The mitigation contribution intended to abate greenhouse gas (GHG) emissions by **30% by 2030** relative to the business as usual (BAU) scenario.

2. Despite our first NDC being fully conditional to international support, most of the progress made in implementation to date is from domestic resources.

3. Compared to our first NDC target of **30 % emission reduction**, our updated NDC commits to Abate GHG emissions by **32% by 2030 relative** to the BAU scenario of 143 MtCO2eq; and in line with our sustainable development agenda and national circumstances. The timeframe for implementation of the NDC is up to 2030, with milestone targets at 2025.

4. The total cost of implementing mitigation and adaptation actions in the Updated NDC **is estimated at USD 62 Billion.**

5. Compared to our first NDC which was fully conditional to support, Kenya commits to mobilize resources to meet **13%** of this budget, and will require international support for **87%** of the budget.

6. Kenya's Updated NDC is hereby attached, and formally submitted.

Keriako Tobiko, CBS, SC
Cabinet Secretary/National Focal Point
Ministry of Environment and Forestry
NAIROBI

Signature:.....
Date: 24/12/2020

Amb. Raychelle Omamo, SC, EGH
Cabinet Secretary
Ministry of Foreign Affairs
NAIROBI

Signature:.....
Date: 24/12/2020

Hon. Justice (Rtd) Paul Kihara Kariuki
Attorney General
Office of the Attorney General and
Department of Justice
State Law Office
NAIROBI

Signature:.....
Date: 24th December 2020

Hon. (Amb) Ukur Yattani, EGH
Cabinet Secretary
The National Treasury and Planning
NAIROBI

Signature:.....
Date: 27th December 2020

Kenya's Updated Nationally Determined Contribution (NDC)

1. Introduction

Over the past decade, Kenya has been experiencing successive impacts of climate change resulting to great socio-economic losses estimated at 3-5% of the Gross Domestic Product (GDP) annually, and impeding development efforts. The situation is exacerbated by the country's dependence on climate sensitive natural resources. Despite the country's negligible contribution to global greenhouse gas (GHG) emissions (less than 0.1% in 2018), Kenya has put up ambitious policies and measures to pursue her low carbon climate resilient development pathway to realise Vision 2030.

This updated Nationally Determined Contribution (NDC) is in accordance with paragraph 22-35 of decision 1/CP.21 and Decision 4/CMA.1 and its annex. The contributions described in this submission build upon Kenya's initial NDC, the National Adaptation Plan (NAP) 2015-2030, new policies and national plans, and reflect subsequent work as captured in Kenya's Second National Climate Change Action Plan (NCCAP 2018-2022) and the Third National Inventory Report (NIR 3). The updated NDC has been informed by a more detailed and robust assessment of mitigation and adaptation measures, in-depth analysis, improved information and data, and an extensive stakeholder consultation process.

1.1. Background and Overview

The frequency and intensity of extreme weather events have increased in Kenya over the past decade. Prior to 2010, Kenyan sectors had ad-hoc responses to extreme weather events and other climate change impacts. The responses included distribution of famine relief food, El Nino Response programmes, and Animal off-take programs, among others. Kenya developed a National Climate Change Response Strategy (NCCRS) in 2010, the first National Climate Change Action Plan (NCCAP) in 2013, and a National Adaptation Plan (NAP) in 2015. The strategy and plans jointly provide a vision for low carbon and climate resilient development pathway, while a National Climate Change Framework Policy was adopted and Climate Change Act (2016) enacted to facilitate effective response to climate change. Kenya has operationalized these policies and plans through the implementation of climate change actions in various sectoral plans, programmes and projects such as afforestation and reforestation, geothermal and other clean energy development, energy efficiency, climate smart agriculture, and drought management, amongst others.

Kenya, as a Party to the UNFCCC, submitted its Intended NDC in July 2015. The country signed the PA in December 2015. The INDC subsequently became the NDC when Kenya ratified the PA on 28th December 2016. The NDC sets out the country's adaptation and mitigation contributions. This updated NDC is in line with Decision 1/CP.21 (paragraph 24) which requires an update by 2020 and every five years thereafter pursuant to the PA (Article 4 paragraph 9). Although Kenya also communicated adaptation actions to the UNFCCC through NAP (2015-2030), the actions outlined in this NDC form Kenya's adaptation communication regarding the Paris Agreement. The NAP, from which the priority adaptation

actions communicated in the NDC are drawn, is aligned with the Constitution of Kenya, the Climate Change Act (2016) and Vision 2030 which is Kenya's long-term development plan up to 2030. It is also aligned with the Medium-Term Plans (MTPs), which are the five-year implementation plans for Vision 2030.

The priority mitigation and adaptation actions in this NDC will be implemented through the NCCAPs as set out in the Climate Change Act, 2016, therefore availing opportunity to enhance the ambition every five years with the revision of the NCCAPs. Kenya's Updated Nationally Determined Contribution (Updated NDC) describes Kenya's mitigation and adaptation contribution for the period 2020 to 2030 and proposes priority mitigation and adaptation actions for the period. The Updated NDC proposes a more ambitious contribution relative to the first NDC even though significant international support is required to exploit mitigation and adaptation potential to realise the overall NDC targets.

This Updated NDC is based on the findings of the analysis carried out during the NDC updating process. The analysis provided evidence that, with substantial support, Kenya can meet and exceed the initial NDC mitigation target of reducing emissions by 30% relative to the Business as Usual Scenario by 2030. In addition, it examines the climate projections and the associated impacts before proposing and identifying the priority adaptation actions. It also provides the evidence base and recommendations for ambition enhancements in the Updated NDC.

1.2. National Circumstances

The Republic of Kenya is a unitary state with a multi-party-political system, located in the Greater Horn of Africa. The Constitution of Kenya creates two levels of Government, namely: the National Government and 47 County Governments that have defined mandates and functions. The National Government has the responsibility of formulating policies that will ensure that the country transforms to a low carbon climate resilient development pathway, and of ensuring that programmes are put in place to deliver its obligations under the United Nations Framework Convention on Climate Change (UNFCCC).

The population of Kenya was 47.6 million in 2019, (2019 Population Census), and is projected to reach 60.4 million by 2030. The country is a lower middle-income country with an estimated national GDP of US$ 82.0 billion in 2017, and aspires to be *"a newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment".*

Over 84% of Kenya's land area is arid and semi-arid, with poor infrastructure and other developmental challenges, leaving less than 16% of the land area to support over 80% of the population. The Kenyan economy is dependent on climate-sensitive sectors, such as rain-fed agriculture, water, energy, tourism, wildlife, and health, whose vulnerability is increased by climate change. Increased intensities and magnitudes of climate related risks in Kenya aggravate conflicts, mostly over natural resources. This has frequently forced the country to reallocate development resources to address climate related emergencies. These impacts are not gender neutral, impacting men, women and other gender groups differently.

Kenya's mean surface temperature is projected to increase in the range of 1°C to 1.5°C by 2030. Rising temperatures trend is expected to continue in Kenya in all seasons. The temperatures may increase at a higher rate in lowlands than those in plateaus and highlands. It is estimated that temperatures in western Kenya could increase between by 0.9°C and 1.1°C by 2025. Temperatures in the northern Kenya could increase by a similar amount (1.1°C), but a projected lower rate of warming in the southern coastal region (of 0.5°C). IPCC 2014 presents strong evidence that surface temperatures across the region have increased by 0.5 – 2 °C over the past 100 years, and from 1950 onwards, climate change has altered the magnitude and frequency of extreme climate events. The frequency of cold days, cold nights, and frost, has decreased; while the frequency of hot days, hot nights, and heatwaves, has increased. Rainfall projections show that the October–December (OND) short rains will increase in many counties of Kenya compared to the March – May (MAM) long rains that will extremely be low under the RCP 2.6 and 8.5 scenarios with most of northern Kenya having rainfall deficits whilst southern Kenya will have a slight increase of rainfall. During the dry season June–September (JJAS), the rains are projected to decrease for RCP 2.6 and 8.5, whilst increase for RCP 4.5. Studies forecast that by 2015, precipitation levels in the long rains season will decline by more than 100 mm in large parts of the interior of Kenya. Analysis of climate trends in 21 ASAL counties between 1977 and 2014 shows an increase in temperature in all 21 counties, with five counties surpassing a 1.5°C increase, and a general decline in rainfall in 15 out of the 21 counties. These results suggest that the normal variability in Kenya's precipitation patterns will be the dominant influence on its climate over the coming decades.

Drought and floods are the main climate hazards, negatively impacting lives and livelihoods, with human health increasingly being at risk. Extreme climate events cause significant loss of life, and adversely affect the national economy. They are a threat to Kenya's security. Adverse climate effects, particularly floods and droughts, have the catastrophic and increasing impacts across the country. In 2018, floods led to loss of human lives in Kenya displacing more than 230,000 people including 150,000 children, and closed over 700 schools, while wiping out billions of shillings worth of Roads and infrastructure, 8,500 hectares of crop and drowning over 20,000 head of livestock.

Droughts cause large-scale disasters destroying livelihoods, triggering local conflicts over scarce resources, and eroding the ability of communities to cope. The 2011 drought caused over $11 billion damage, with hundreds of thousands of refugees streaming in from affected neighbouring countries. The 2014-18 drought affected 23 counties, 3.4 million Kenyans were severely food insecure and 500,000 people did not have access to water.

Sea level rise is already affecting coastal towns and communities and is expected to impact up to 86,000 people a year and lead to coastal erosion and wetlands loss at an annual cost of about KES 6 billion by 2030. Rising sea temperatures off the coast of Kenya have triggered mass coral bleaching and mortality on coral reef systems over the past two decades. This impacts the abundance and composition of fish species and negatively impacts coastal fisheries. The key water tower, Mount Kenya's glaciers have shrunk to only 17% of their size and are expected to disappear in the next 30 years, threatening Kenya's largest river that carries more than 60% of the country's hydropower and that has many cities and critical portion of Kenya's agricultural land.

While Kenya has abundant renewable energy resources such as geothermal, solar, wind and hydro for electricity generation, more than one half of Kenya's households use wood fuel for cooking. Hydro power, which has been a major source of electricity for a long time is increasingly impacted by variable and unpredictable rainfall. The country also has significant oil reserves and about 400 million tons of coal reserves which are yet to be exploited. Coal mining, in particular open pit mining as planned for Mui basin, could have strong environmental and social impacts in future. Due to its production experience in many countries as well as relatively low costs, coal is also an important fuel option for electricity expansion planning for Kenya, but the negative environmental impacts must be factored in. There have been proposals to build two coal power plant in Kenya, one of which would be based on local coal while the other would use imported coal. However, the use of coal is accompanied by strong environmental impacts, such as high emissions of sulphur dioxide, heavy metals and harmful greenhouse gases. The country is therefore faced with choosing between the exploitation of her fossil fuel resources to realise her development objectives and foregoing their exploitation for environmental reasons. To forego all the benefits of exploiting the fossil fuel resources, Kenya will need significant international support.

Kenya's total greenhouse gas emissions have increased from 56.8 $MtCO_2e$ in 1995 to 93.7 $MtCO_2e$ in 2015 and are projected to increase to 143 $MtCO_2e$ by 2030 as the country pursues the Vision 2030 development agenda. The 2015 emissions represent an increase of 65.2 % over the period and less than 0.1% of the 2015 global emissions, including LULUCF. In 2015, the leading source of emissions was agriculture at 40% of the total national emissions, mostly due to livestock enteric fermentation, manure left on pasture and agricultural soils and fertilizer application. This was closely followed by LULUCF at 38% because of deforestation and energy, including transport at 18%. The balance is from industrial processes and product use (IPPU) at 3% and waste management at 1%. However, projections show that by 2030, energy will be the leading contributor to emissions because of increased consumption of fossil fuels in generating electricity, meeting domestic, commercial and industrial heating demands and for transportation.

Kenya Vision 2030 identified climate change as a risk that could slow the country's development. Climate change actions have been incorporated into the Medium-Term Plans (MTP), starting from the second MTP (2013-2017). In the Third Medium-Term Plan (2018-2022), climate change was mainstreamed across sector plans. The country's focus is adaptation with great mitigation potential.

1.3 Policy, Legal and Institutional Framework

1.3.1 Policy Framework

The Kenya Vision 2030, the long-term national development blueprint encapsulates flagship programmes and projects with aspects of adaptation and mitigation. The National Climate Change Response Strategy (NCCRS), which was developed in 2010, was the first national policy document on climate change. It aimed to advance the integration of climate change adaptation and mitigation into all government planning, budgeting and development objectives.

To operationalize the NCCRS, the first National Climate Change Action Plan (NCCAP 2013-2017) was prepared in 2013 for a period of five years. It established Kenya's baseline emissions projections up to 2030 and developed a low carbon climate resilient development pathway for the country outlining priority adaptation and mitigation actions. The second NCCAP (2018-2022) for the period 2018 to 2022 was developed in 2018. The current NCCAP II identifies the country's priority climate change adaptation and mitigation actions. The actions are intended to contribute to the country's achievement of the low carbon climate resilient development pathway, poverty eradication and the NDC target. Financing of the NCCAP is achieved through the current and successive medium-term plans (MTPs). As an Annex to the NCCAP (2018-2022), a Mitigation Technical Analysis Report (MTAR 2018-2022) and an Adaptation Technical Analysis Report (ATAR 2018-2022) were provided to elaborate on the mitigation and adaptation actions, respectively. Kenya has also developed its National Adaptation Plan (NAP) (2015-2030) which was submitted to the UNFCCC in 2017. The NAP provided a climate hazard and vulnerability assessment and set out priority adaptation actions.

In addition to the Kenya Vision 2030 and climate change-related policies, the country has put in place several sectoral policies to support implementation of climate change adaptation and mitigation actions. Some of the key policies include: the National Policy on Climate Finance; Climate Risk Management framework; the National Livestock Policy 2015; National Oceans and Fisheries Policy 2008; the Agricultural Sector Transformation and Growth Strategy (ASTGS) (2019 – 2029); the Kenya Climate-Smart Agriculture Strategy (2017-2028); the Reducing Emissions from Deforestation and Forest Degradation (REDD+); the National Drought Management Authority Management Authority (NDMA) Act (2016); the Water Act, (2016); Forest Conservation and Management Act (2016) among others.

1.3.2 Legal Framework

The Constitution of Kenya (2010) provides the foundation for implementation of climate change actions through its Bill of Rights provisions especially the right to a clean and healthy environment. To provide a legal framework for climate change, the Climate Change Act was enacted in 2016. The Act provides for a regulatory framework for enhanced response to climate change and mechanism and measures to achieve low carbon climate development. The Act establishes governance structures for climate change management in the country with the National Climate Change Council being responsible for oversight and coordination. The NCCC is chaired by His Excellency, the President of the Republic of Kenya. In addition, the Act defines the roles of both national and county governments in mainstreaming and implementation of climate change actions in the country. It also defines the role of non-state actors in the reporting and management of emissions.

The Act obligates the Cabinet Secretary responsible for climate change affairs every five years to formulate an economy-wide National Climate Change Action Plan (NCCAP) that prescribe measures and mechanisms, inter alia to guide the county toward the achievement of low carbon climate resilient sustainable development and mainstreaming climate change into national and sectoral development

planning and the County Integrated Development Plans (CIDPs). To ensure that the NCCAP is implemented across all sectors, the Act provides that it shall be approved by the NCCC. Consequently, the implementation of the country's NDC is to be done through the current and successive NCCAPs.

1.3.3 Institutional Framework

The Act establishes the Climate Change Directorate (CCD) as the lead government agency responsible for coordinating climate change plans and actions and related measurement, monitoring, and reporting. To ensure coherence, the Act designates the CCD as the Secretariat for the NCCC with the responsibility of coordinating the technical aspects of the implementation of climate change functions. Such functions, include: providing analytical support and technical assistance on climate change and coordinating the implementation of and reporting on the NCCAPs as well as capacity building support at the two levels of government – National and County Governments.

The Act obligates, at the sectoral level, state departments to establish Climate Change Units (CCUs) to integrate NCCAP actions into their strategies and implementation plans. At the sub-national level, county governments are required to designate a County Executive Committee member to coordinate climate change in each county through the establishment of a Climate Change Unit (CCU).

2. NDC Revision Process

The NDC update process entailed working closely with the stakeholders in an inclusive and consultative manner to update and enhance Kenya's initial NDC. This is in accordance with paragraph 22-35 of decision 1/CP.21 and Decision 4/CMA.1 and its annex. In addition, the process was structured to support enhancement of mitigation, adaptation and transparent communication, together with the alignment of the NDC with the Sustainable Development Goals (SDGs). The enhancements have not only targeted mitigation ambitions of the NDC, but also the strengthening of NDC's implementation. The adaptation component of this NDC draws from the National Adaptation Plan (NAP). Throughout the process, clear communication was a major consideration in order to facilitate stakeholder ownership and effective implementation.

Following the guidance provided in *'Enhancing NDCs: A Guide to Strengthening National Climate Plans By 2020'*[1], a clear and inclusive process for NDC enhancement was established. The process entailed the review of relevant national plans, policies and legislation in order to ensure alignment and coherence with the NDC. Working with a defined work plan, the process was led by the Ministry of Environment and Forestry while the coordination was carried by the Climate Change Directorate under the Ministry. Stakeholders were identified from various national and county government sectors, civil society, academia and private sector. In person expert consultative workshops were held prior to COVID 19 limitations, thereafter virtual workshops were adopted as a means of stakeholder engagements.

[1] https://ndcpartnership.org/toolbox/enhancing-ndcs-guide-strengthening-national-climate-plans; World Resource Institute and UNDP

For the update of the NDC, reference has been made to the technical analysis reports of the NCCAP 2018-2022. The Mitigation Technical Analysis Report, the Adaptation Technical Analysis Report and the NIR 3 have been used as the starting point for the update analysis. The document review framework is summarised in Figure 1.

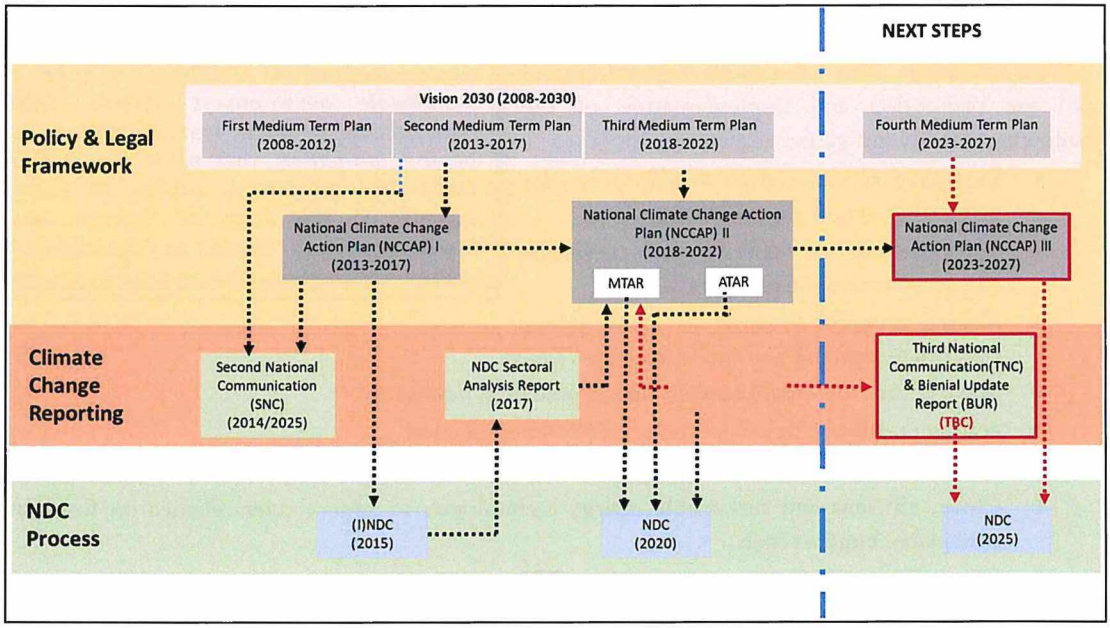

Figure 1: Document Review for NDC Update

The data and information collected from the document reviews and various consultations were then used for the simultaneous determination and design of the updated NDC, including mitigation and adaptation enhancements. As part of the assessment of the extent and impact of implementation of the NDC to date, an inventory of historical GHG emissions was prepared up to June 2020, subject to data availability. The inventory applied the GHG Inventory established under the NIR 3 up to the year 2015. Thereafter, the inventory was extended to cover up to June 2020 applying the best available data from various official sources and reports.

3. Contribution

Kenya's Updated NDC includes both mitigation and adaptation components based on her national circumstances and in line with decisions 1/CP.19 and 1/CP.20. The mitigation co-benefits of the adaptation actions will be included in the mitigation contribution of this NDC. Kenya will develop domestic legislation and institutional frameworks to govern her engagement in market and non-market mechanisms. Cognisant that different gender groups have different vulnerabilities in regards to climate change and contribute differently to the same due to their respective gender roles, Kenya will implement the outlined adaptation and mitigation priorities in a gender responsive manner.

3.1. Mitigation

MITIGATION GOAL: Kenya seeks to undertake an ambitious mitigation contribution towards the Paris Agreement. Kenya therefore seeks to abate her GHG emissions by 32% by 2030 relative to the BAU scenario of 143 $MtCO_2eq$; and in line with her sustainable development agenda. Subject to national circumstances, Kenya intends to bear 21% of the mitigation cost from domestic sources, while 79% of this is subject to international support in the form of finance, technology development and transfer, and capacity building.

Kenya aims to achieve her Vision 2030 through a low carbon, climate resilient development pathway. Kenya will implement and periodically update the National Climate Change Action Plans (NCCAPs) to achieve this target. This will include (but not limited to) the promotion and implementation of the following priority mitigation activities:

- Increasing of renewables in the electricity generation mix of the national grid.
- Enhancement of energy and resource efficiency across the different sectors.
- Making progress towards achieving a tree cover of at least 10% of the land area of Kenya.
- Make efforts towards achieving land degradation neutrality.
- Scaling up Nature Based Solutions (NBS) for mitigation
- Enhancement of REDD+ activities
- Clean, efficient and sustainable energy technologies to reduce over-reliance on fossil and non-sustainable biomass fuels.
- Low carbon and efficient transportation systems.
- Climate smart agriculture (CSA) in line with the Kenya CSA Strategy with emphasis to efficient livestock management systems.
- Sustainable waste management systems.
- Harness the mitigation benefits of the sustainable blue economy, including coastal carbon Payment for Ecosystem Services (PES).

The resource requirements estimates mitigation activities for the period 2020 to 2030 are estimated at USD 17, 725 Million. Subject to national circumstances, Kenya intends to bear 21% (3,725 Million USD) of the mitigation cost from domestic sources, while the balance of USD 14,000 Million (79% of this) is subject to international support. However, these estimated resource requirements may change with changing circumstances.

3.1.1. Information to facilitate clarity, transparency and understanding

Para	*Guidance in decision 4/CMA.1*	*ICTU guidance as applicable to Kenya's NDC*
1	***Quantifiable information on the reference point (including, as appropriate, a base year):***	
(a)	*Reference year(s), base year(s), reference period(s) or other starting point(s)*	Base year for emission projections: 2010 Reference year for BAU emissions target: 2030
(b)	*Quantifiable information on the reference indicators, their values in the reference year(s), base year(s), reference period(s) or other starting point(s), and, as applicable, in the target year;*	The projected emission level in 2030 is 143 Million tonnes of CO_2-equivalents ($MtCO_2e$).
(c)	*For strategies, plans and actions referred to in Article 4, paragraph 6, of the Paris Agreement, or polices and measures as components of nationally determined contributions where paragraph 1(b)above is not*	*Not applicable.*

Para	Guidance in decision 4/CMA.1	ICTU guidance as applicable to Kenya's NDC
	applicable, Parties to provide other relevant information	
(d)	*Target relative to the reference indicator, expressed numerically, for example in percentage or amount of reduction*	32% reduction in greenhouse gas emission compared to 2030 BAU (baseline) scenario levels.
(e)	*Information on sources of data used in quantifying the reference point(s)*	The reference indicator was quantified based on projected national total GHG emissions in 2030 reported in Kenya's NCCAP 2013-2017.
(f)	*Information on the circumstances under which the Party may update the values of the reference indicators.*	The national total GHG emissions in 2030 may be updated and recalculated due to continuous methodological improvements or data availability. Information on updates made will be included in the NIR and/or Biennial Transparency Reports.
2	***Time frames and/or periods for implementation:***	
(a)	*Time frame and/or period for implementation, including start and end date, consistent with any further relevant decision adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA);*	From 1st January 2021 to 31st December 2030, with milestone targets at 2025.
(b)	*Whether it is a single-year or multi-year target, as applicable.*	Single-year target in 2030.
3	***Scope and coverage:***	
(a)	*General description of the target*	Economy-wide, emission reductions by at least 32% compared to 2030 BAU (baseline) emissions.The target covers all sectors and greenhouse gases. In the event that Kenya's enhanced NDC Target is exceeded, Kenya intends to use the both market and non-market provisions mechanisms provisions of Article 6 of the Paris Agreement, based on domestic legislation developed.
(b)	*Sectors, gases, categories and pools covered by the nationally determined contribution, including, as applicable, consistent with Intergovernmental Panel on Climate Change (IPCC) guidelines*	Information will be provided in Kenya's NIR that will be consistent with the IPCC guidelines. ***Sectors:*** Energy; industrial processes and product use; agriculture; land-use, land-use change and forestry; and waste. ***Gases:*** Carbon dioxide (CO_2); methane (CH_4); and nitrous oxide (N_2O). The following gases, which are currently negligible, may be included in the Updated NDC: perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). For the land-use, land-use change, and forestry sector, emissions and removals the following reporting categories are included: forest land, cropland, grassland, and wetland, including land use changes between the categories, and between these categories and settlements and other land. The five carbon pools above-ground biomass, below-ground biomass, litter, dead wood and soil organic matters are included. In addition, the carbon pool harvested wood products is included.
(c)	*How the Party has taken into consideration paragraph 31(c) and (d) of decision 1/CP.21;*	Kenya's NIR describes the sources considered insignificant and reported as not estimated. The NIR provides justifications for exclusion in terms of the likely level of emissions and how these are in line with the thresholds specified in decision 24/CP.19. A similar approach, consistent with decision 18/CMA.1 will be used for reporting under the Paris Agreement.

Para	Guidance in decision 4/CMA.1	ICTU guidance as applicable to Kenya's NDC
(d)	*Mitigation co-benefits resulting from Parties' adaptation actions and/or economic diversification plans, including description of specific projects, measures and initiatives of Parties' adaptation actions and/or economic diversification plans.*	The mitigation co-benefits of the adaptation actions will be included in the mitigation contribution of this NDC
4	***Planning processes:***	
(a)	*Information on the planning processes that the Party undertook to prepare its nationally determined contribution and, if available, on the Party's implementation plans, including, as appropriate:*	Covered in section 2
(i)	*Domestic institutional arrangements, public participation and engagement with local communities and indigenous peoples, in a gender-responsive manner*	Covered in section 2
(ii)	*Contextual matters, including, inter alia, as appropriate:*	
a.	*National circumstances, such as geography, climate, economy, sustainable development and poverty eradication*	Covered in section 1.2
b.	*Best practices and experience related to the preparation of the nationally determined contribution*	Covered in section 2
c.	*Other contextual aspirations and priorities acknowledged when joining the Paris Agreement*	***Just transition:*** Kenya has an extensive consultation process for social protection and institutionalised review by stakeholders. This serves, amongst others, to to ensure all stakeholder interests are considered in all climate action. ***Human Rights:*** Citizen rights are enshrined in The Constitution of Kenya. ***Food security:*** Kenya prioritizes food security of its citizens, hence response to climate change should safeguard the citizens basic rights to food. ***All of society approach:*** Kenya's approach in tackling climate change and its impacts involves engagement of all actors – government and non government players that include civil society actors, private sector, academia, media, development partners and the citizens. ***Gender equality:*** Kenya has various laws to promote gender equality and provide for the protection against discrimination on the basis of gender, with equal opportunities in education, work, and in cultural and professional development.
(b)	*Specific information applicable to Parties, including regional economic integration organizations and their member States, that have reached an agreement to act jointly under Article 4,paragraph 2, of the Paris Agreement, including the Parties that agreed to act jointly and the terms of the agreement, in accordance with Article 4, paragraphs16–18, of the Paris Agreement.*	*Not applicable*
(c)	*How the Party's preparation of its nationally determined contribution has been informed by the outcomes of the global stocktake, in accordance with Article 4, paragraph 9, of the Paris Agreement*	Kenya's climate targets and polices are developed in the context of best available science, and hence the IPCC Special Report on 1.5°C, has been central to the assessment of the nationally determined contribution.
(d)	*Each Party with a nationally determined contribution under Article 4 of the Paris Agreement that consists of adaptation action and/or economic diversification plans resulting in mitigation co-benefits consistent with Article 4, paragraph 7, of the Paris Agreement to submit*	

Para	Guidance in decision 4/CMA.1	ICTU guidance as applicable to Kenya's NDC
	information on:	
(i)	*How the economic and social consequences of response measures have been considered in developing the nationally determined contribution*	Kenya's NDC consists of adaptation actions. The economic and social consequences of the adaptation measures were analysed in the NAP and also in the adaptation section of the NDC.
(ii)	*Specific projects, measures and activities to be implemented to contribute to mitigation co-benefits, including information on adaptation plans that also yield mitigation co-benefits, which may cover, but are not limited to, key sectors, such as energy, resources, water resources, coastal resources, human settlements and urban planning, agriculture and forestry; and economic diversification actions, which may cover, but are not limited to, sectorssuch as manufacturing and industry, energy and mining, transport and communication, construction, tourism, real estate, agriculture and fisheries.*	Such projects, measures and activities have been identified in various technical documents but their contributions have not been included in the NDC. Each such project, measure or activities will be considered for inclusion in to the NDC mitigation contribution on a case by case basis.
5	***Assumptions and methodological approaches, including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals:***	
(a)	*Assumptions and methodological approaches used for accounting for anthropogenic greenhouse gas emissions and removals corresponding to the Party's nationally determined contribution, consistent with decision 1/CP.21, paragraph 31, and accounting guidance adopted by the CMA;*	Kenya will at the latest by 31 December 2021 report a GHG inventory in accordance with 18/CMA.1 and report on progress towards its nationally determined contribution by 2025. For accounting relevant information, Kenya will use the accounting guidance in 4/CMA.1. For IPCC methodologies and metrics, see 5 (d). Final accounting towards the target, that will take place in 2032, may depend on further arrangements with Kenya's participation in Article 6 programmes. Any use of internationally transferred mitigation outcomes within that framework will be included in Kenya's accounting, consistent with the approach that will have been negotiated under the UNFCCC process.
(b)	*Assumptions and methodological approaches used for accounting for the implementation of policies and measures or strategies in the nationally determined contribution;*	*Not applicable.*
(c)	*If applicable, information on how the Party will take into account existing methods and guidance under the Convention to account for anthropogenic emissions and removals, in accordance with Article 4, paragraph 14, of the Paris Agreement, as appropriate*	Kenya's current GHG inventory is in accordance with decision 24/CP.19 and hence the Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories (IPCC, 2006), the Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories (IPCC, 2000), Good Practice Guidance for Land Use, Land-Use Change and Forestry (IPCC, 2003). The concepts contained in Good Practice Guidance are being implemented in stages, according to sector priorities and national circumstances.
(d)	*IPCC methodologies and metrics used for estimating anthropogenic greenhouse gas emissions and removals*	IPCC 2006 guidelines, global warming potentials (GWP) for a 100-year time horizon from the IPCCs fifth Assessment Report will be used to calculate CO_2 equivalents.
(e)	*Sector-, category- or activity-specific assumptions, methodologies and approaches consistent with IPCC guidance, as appropriate, including, as applicable:*	
(i)	*Approach to addressing emissions and subsequent removals from natural disturbances on managed lands*	This is treated as part of land use change under LULUCF as per the Good Practice Guidance for Land Use, Land-Use Change and Forestry (IPCC, 2003)
(ii)	*Approach used to account for emissions and removals*	Harvested wood products are not included in the emission

Para	Guidance in decision 4/CMA.1	ICTU guidance as applicable to Kenya's NDC
	from harvested wood products	calculations.
(iii)	*Approach used to address the effects of age-class structure in forests;*	*Not applicable*
(f)	*Other assumptions and methodological approaches used for understanding the nationally determined contribution and, if applicable, estimating corresponding emissions and removals, including:*	
(i)	*How the reference indicators, baseline(s)and/or reference level(s), including, where applicable, sector-, category- or activity-specific reference levels, are constructed, including, for example, key parameters, assumptions, definitions, methodologies, data sources and models used*	Removals from the land sector will be accounted for based on specific accounting rules for the different land categories as per the Good Practice Guidance for Land Use, Land-Use Change and Forestry (IPCC, 2003)
(ii)	*For Parties with nationally determined contributions that contain non green house-gas components, information on assumptions and methodological approaches used in relation to those components, as applicable*	Not applicable.
(iii)	*For climate forcers included in nationally determined contributions not covered by IPCC guidelines, information on how the climate forcers are estimated*	*Not applicable.*
(iv)	*Further technical information, as unecessary*	*Not applicable*
(g)	*The intention to use voluntary cooperation under Article 6 of the Paris Agreement, if applicable.*	Kenya intends to use voluntary cooperation under Article 6 of the Paris Agreement, if applicable, with the guidance adopted by CMA. Kenya will develop domestic legislation and institutional frameworks to govern her engagement in market and non-market mechanism.
6	***How the Party considers that its nationally determined contribution is fair and ambitious in the light of its national circumstances:***	
(a)	*How the Party considers that its nationally determined contribution is fair and ambitious in the light of its national circumstances*	• Kenya is a developing country, with diverse economic development challenges compounded by climate change impacts. • Kenya's contribution to total global emissions is less than 0.1% (in 2019), while the per-capita emissions are less than 2.06 $MtCO_2eq$ compared to the global average of 4.92 $MtCO_2e$ (2018), • This update builds on the initial NDC in which Kenya undertook to make a contribution that targeted a high proportion of its mitigation potential, and was dependent on the level of international support available. • The contributions set through this Updated NDC therefore reflect an enhancement of ambition in the following two areas: a. An increase in emission reduction target by 2030 from 30% in the initial NDC to 32% in this Updated NDC b. Enhanced domestic contribution from 0% to 13% of the NDC budget
(b)	*Fairness considerations, including reflecting on equity*	Kenya being a developing country prioritizes increasing the per-capita GDP growth above the 2019 levels of 6.36% so as to address poverty alleviation and sustainable economic development in a the low carbon climate resilient development pathway. This has informed the NDC update process, and represents a high level of fairness and ambition in light of Kenya's national circumstances. Kenya regards its nationally determined contribution to represent its fair share of the efforts to achieve the global long-term goal of the Paris Agreement.
(c)	*How the Party has addressed Article 4,paragraph 3, of*	Kenya's updated NDC represents a progression beyond its

Para	Guidance in decision 4/CMA.1	ICTU guidance as applicable to Kenya's NDC
	the Paris Agreement	previously communicated NDC, as the emission reductions are enhanced from at least 30% to 32% under extremely difficult national circumstances. It is an ambitious target for Kenya to achieve by 2030. The achievement of the target is dependent on a broad set of mitigation measures. The implementation of the Updated NDC for 2030 will be an important part of Kenya's process of transforming to a low-emission society by 2050.
(d)	*How the Party has addressed Article 4,paragraph 4, of the Paris Agreement*	Kenya's NDC covers all sectors of the economy.
(e)	*How the Party has addressed Article 4, paragraph 6, of the Paris Agreement.*	*Not applicable.*
7	***How the nationally determined contribution contributes towards achieving the objective of the Convention as set out in its Article 2:***	
(a)	*How the nationally determined contribution contributes towards achieving the objective of the Convention as set out in its Article 2*	Kenya regards the long-term target of the Paris Agreement to be in line with Article 2 of the Convention, as explained under 6a (above).
(b)	*How the NDC contributes towards Article2, paragraph 1(a), and Article 4,paragraph 1, of the Paris Agreement.*	Addressed in 6a and 7a.

3.2. Adaptation and Loss & Damage

All sectors of the Kenyan economy are vulnerable to climate change. Kenya's GDP relies on climate sensitive sectors such as agriculture, tourism, industry and manufacturing. Adaptation thus is the highest priority for Kenya, not only through preventing further losses and damage, but underpinning infrastructure and economic development, while safeguarding lives, livelihoods and social development in line with Kenya Vision 2030, MTP III (2018-2022), the NCCAP II (2018-2022) and the NAP (2015-2030). Effective adaptation action will catalyse mitigation activity across sectors.

ADAPTATION GOAL: Kenya aims to ensure a climate resilient society. This is to be achieved through mainstreaming climate change adaptation into the Medium-Term Plans (MTPs) and County Integrated Development Plans (CIDPs) and implementing adaptation actions. Subject to national circumstances, Kenya intends to mobilize domestic resources to cater for 10% of the adaptation cost, while 90% of the adaptation cost will require international support in form of finance, technology development and transfer, and capacity building.

Kenya is committed to enhancing its adaptation ambition by committing to bridging the implementation gaps which include:

- enhancing the adaptive capacity and climate resilience across all the sectors of the economy and at the two levels of government – National and County Governments;
- exploring innovative livelihood strategies for enhancing climate resilience of local communities through financing of locally led climate change actions;
- enhancing risk-based approach to climate change adaptation through development and application of comprehensive climate risk management tools that would help in addressing and adaptively managing climate risks;
- addressing residual climate change impacts, loss and damage especially in the productive sectors of the economy;
- enhance generation, packaging and widespread uptake and use of climate information in decision making and planning across sectors and counties with robust early warning systems (EWS);
- Enhance uptake of adaptation technology especially of women, youth and other vulnerable groups, incorporating scientific and indigenous knowledge;
- Enhancing investment in ocean and blue economy;
- Institutional strengthening of the CCD, the Climate Change Units and related institutions across sectors and counties as well as non-state actor institutions; and
- Strengthening tools for adaptation monitoring, evaluation and learning (MEL) at the national and county levels, including non-state actors.

To achieve the above, Kenya intends to implement various priority actions, to attain the Triple Adaptation Dividend namely; avoided losses, economic benefits, social and environmental benefits. Some of these interventions may result in mitigation co-benefits.

The total cost of adaptation actions up to 2030 is estimated at USD 43,927 Million. Subject to national circumstances, Kenya intends to mobilize domestic resources to cater for 10% of the adaptation cost, while 90% of the adaptation cost, will require international support in form of finance, technology development and transfer, and capacity building. The prioritised programmes are presented in Table 2 below.

Table 2: Prioritized Adaptation Programs

Sector	Adaptation Programme
Disaster risk reduction	P1: Drought risk management including drought early warning, preparedness, and response for enhanced drought resilience.
	P2: Flood risk management incorporating nature based solutions
Agriculture (crops, livestock and fisheries)	P3: Mainstream CSA towards increased productivity through value chain approach to support the transformation of agriculture (crops, livestock and fisheries) into an innovative, commercially oriented, competitive and modern sector.
	P4: Build resilience of the agriculture (crops, livestock and fisheries) systems through sustainable management of land, soil, water and other natural resources as well as insurance and other safety nets.
	P5: Strengthen communication systems on CSA extension and agro-weather issues
Environment	P6: Rehabilitation and conservation of degraded forests
	P7: Establish at least 2,000 hectares to promote nature based (non-wood forest products) enterprises across the country
	P8: Establish 150,000 ha commercial private forests plantations
	P9: Plant 350,000 agro-forestry trees in farmlands established
	P10: Greening of 14,000 ha of infrastructure (roads, railway lines, dams)
	P11: Enhance/strengthen governance of community structures in participatory resource management in coastal ecosystems
	P12:Conduct blue carbon readiness assessment for full integration of blue carbon/ocean climate actions into NDCs
	P13: Develop marine spatial planning and outline sustainable management approaches
	P14: Promote and expand opportunities for nature based enterprises including seaweed farming, and mangrove ecotourism
	P15: Integrate the use of nature based solutions, including the implementation of national mangrove management plan, into national and county development plans
	P16: Strengthen early-warning and tailor made climate information services through institutional strengthening of KMD and other information user institutions
	P17: Roll-out Early Action Protocols for forecast based financing
Infrastructure (energy)	P18:Develop and adopt guidelines on how to climate proof energy infrastructure using vulnerability risk assessments
	P19:Enhance climate proofing of energy infrastructure along the renewable energy supply chain
	P20: Increase the number of companies participating in energy efficient water-use initiatives by 40% from the baseline
Infrastructure (roads)	P21:Upscale the construction of roads to systematically harvest water and reduce flooding
	P22: Enhance institutional capacities on climate proofing vulnerable road infrastructure through vulnerability assessments
	P23: Promote the use of appropriate designs and building materials to enhance resilience of, at least 4500km of roads to climate risk
Water and sanitation	P24:Conduct and implement recommendations on climate and risk assessments on water, sanitation and irrigation infrastructure
	P25:Build resilience infrastructure for the protection of dams and dykes and river lines
	P26:Promote water harvesting and storage at county and household levels
	P27: Mainstream climate change into water catchment management plans
Health	P28:Conduct a vulnerability and risk assessment of different climate risks on human health
	P29: Develop a public awareness and social mobilisation strategy on climate change and health impacts
	P30: Develop health programmes, protocols and guidance to manage new climate change related

Sector	Adaptation Programme
	diseases and risks
	P31:Reduce the incidence of malaria, other vector borne disease and other health conditions
Population, urbanisation and housing	P32: Introduce nature based solutions in flood control especially around informal settlements and selected urban areas
	P33: Strengthen the enforcement of green building codes by national and county governments
	P34:Conduct climate risk and vulnerability assessment of building/housing infrastructure especially to flooding, and sea level rise
Tourism	P35: Develop and adopt guidelines of how to integrate adaptation across the tourism sector
	P36: Conduct a climate risk and vulnerability assessment of the tourism sector
	P37: Develop climate resilient action plans for the sector
Gender, youth and other vulnerable groups	P38: Develop social safety net structures for women, youth and other vulnerable groups within the CCCFs
	P39: Strengthen access of women, youth, other vulnerable groups to enterprise funds, climate finance and credit lines
	P40: Promote gender responsive technologies and innovations in the private sector, through financing capacity building and start-up services
	P41: Consolidate successful technologies and develop a transfer strategy to women, youth and other vulnerable populations
Private Sector	P42:Mobilize financial resources from capital markets and other financial instruments for green investments and implementation of the Green Business Agenda
	P43: Eco-label industrial products to promote green procurement especially by public procurement agencies
	P44:Climate-proof waste management infrastructure for waste management facilities in SEZ (effluent treatment plants)
	P45:Increase the number of companies participating in efficient water-use initiatives
Devolution	P46: Develop and adopt county adaptation guidelines for integration in CIDPs
	P47: Build the capacities of County CCUs on adaptation
	P48: Conducting vulnerability and risk assessments in counties
	P49: Develop county adaptation plans for the counties with CCCFs
Adaptation M&E system	P50: Refine and operationalise the adaptation M&E system at national and county levels
TOTAL	

4. Monitoring, Reporting and Verification of Adaptation and Mitigation Actions and Support

Kenya has developed an Integrated MRV system, including an Integrated MRV tool, for monitoring and reporting of both mitigation and adaptation actions, together with their results. To facilitate the tracking of climate change actions and reporting, the system includes appropriate indicators, including those on baselines that will be continuously improved over time through an evaluation mechanism. This Integrated MRV system is linked with the already existing monitoring and reporting systems including the National Integrated Monitoring System (NIMES) and County Integrated Monitoring System (CIMES). Under the Integrated MRV system, Counties and various sectors are to downscale and contextualise the indicators into their county and sector planning documents. To implement the MRV system, the M&E frameworks developed for sectors and counties will track progress of climate action and results.

The Integrated MRV system, which is coordinated from the Climate Change Directorate, is embedded in the Climate Change Act which obligates all State and Non-State climate change actors to report on all their climate change activities on an annual basis. The annual reports, which are generated under the Act by State and Non- State climate change actors do not only track the implementation status of the NCCAP, the NAP and the NDC, but also constitute a key component of the Integrated MRV System.

The reports generated through the Integrated MRV System will provide input for both national and international reporting, thus addressing various reporting obligations. Tracking of support required and received for climate action by all actors in Kenya (both state and non-state) is done by the National Treasury.

5. Fairness and ambition

Kenya believes that the key factors in determining the fairness of a contribution should include historical responsibility and respective capability to address climate change. The UNFCCC also recognises that the extent to which developing countries will meet their obligations under the Convention will depend on the level of support in terms of finance, technology and capacity building available.

While Kenya's historical emission contribution is negligible, at less than 0.1% (in 2019) of the total global emissions, while the per-capita emissions are less than 2.06 $MtCO_2eq$ compared to the global average of 4.92 $MtCO_2e$ (2018), Kenya places a high priority on response to climate change. In order to meet the below 2^0C objective, all countries will need to undertake mitigation based on the common but differentiated responsibilities and respective capabilities in accordance with the Convention.

Kenya is determined to continue playing her role in addressing climate change by communicating a fair and ambitious contribution. This update builds on the initial NDC in which Kenya undertook to make a contribution that targeted a high proportion of its mitigation potential, and was dependent on the level of international support available. This will involve implementing the priority mitigation and adaptation actions in the NCCAP to achieve a low carbon climate resilient development in line with Vision 2030, and committing some domestic resources for that purpose.
The contributions set through this Updated NDC therefore reflect an enhancement of ambition in the following two areas:

- An increase in emission reduction target by 2030 from 30% in the initial NDC to 32% in this Updated NDC
- An enhanced commitment to domestic contribution (subject to national circumstances) to the NDC cost from 0% to 13.2% compared to the initial NDC.

However, the country's capability to implement this contribution is also subject to limitations, with poverty alleviation and sustainable economic development being the key national objectives. Increasing the per-capita GDP growth equitably above the 2019 levels of 6.36% is therefore a priority. Therefore, the country will need substantial support to realize its development objectives through the low carbon climate resilient development pathway that has informed the NDC update process. Kenya's NDC represents her

aspiration to increase the resilience to climate change by introducing programmes for adaptation action across sectors in support of livelihoods, poverty eradication and economic well-being of the Kenyan people while at the same time pursuing a low carbon development pathway. This represents a high level of fairness and ambition in light of Kenya's national circumstances.

4. Planning process

Kenya's planning process on mitigation and adaptation hinges on the Vision 2030, the MTPs, NCCAP I and II and the NAP. The NCCAPs are reviewed every five years to inform the MTP. The adaptation actions are proposed in the NAP 2015-2030 and further detailed in in the ATARs in each NCCAP.

Mitigation and adaptation actions are implemented across the various sectors and at national and county government levels. The Ministry of Environment and Forestry coordinates the country's climate change affairs through the National Climate Change Council and the Climate Change Directorate.

5. Means of implementation

Implementation of Kenya's NDC will cost over USD 62 Billion up to 2030. Kenya will consider any climate finance in terms of loans as part of her domestic contribution.

Kenya's contribution will be implemented with both domestic and international support. It is estimated that over USD 62 billion is required for mitigation and adaptation actions across sectors up to 2030. Of the estimated total budget, 71% is required to make Kenya resilient to the increasing impacts of climate change. This is expected to catalyze mitigation actions as well as provide mitigation co-benefits. 29% of the budget will support mitigation activities and ensure a low carbon development pathway. Kenya will mobilize resources to meet approximately 13% of this budget, requiring international support for the balance. The international support required is in form of finance, technology development and transfer, and capacity-building to fully realize her NDC. Kenya will consider any climate finance in terms of loans as part of her domestic contribution.

Signed:.....
Hon. Keriako Tobiko, CBS, SC,
Cabinet Secretary, Ministry of Environment and Forestry, Kenya

Date: 24/12/2020

Signed.....
Hon. (Amb.) Ukur Yatani, EGH
Cabinet Secretary, The National Treasury & Planning, Kenya

Date: 24th December, 2020.

Signed.....
Hon. Justice (Rtd) Paul Kihara Kariuki
Attorney General, Kenya

Date: 24th December 2020

Signed.....
Amb. Raychelle A. Omamo, EGH, SC
Cabinet Secretary, Ministry of Foreign Affairs, Kenya

Date: 24/12/2020