Towards a Low Carbon Climate Resilient Development
Discussion Paper on Shaping a Just Transition for Kenya
Towards a Low Carbon Climate Resilient Development: Discussion Paper on Shaping a Just Transition for Kenya

Author: Dr. Robert Kibugi

Reviewed By:
Robert Muthami
Vivienne Kigondu
Jan Siebert
Michael Okumu
Rebecca Okello

ISBN: 9966-957-34-0

Copyright ©Friedrich-Ebert-Stiftung Kenya Office 2020
All rights reserved. No part of this publication should be reproduced without written permission from the publisher except for brief quotation in books and critical reviews. For information and permission write to Friedrich-Ebert-Stiftung. Opinions expressed are the responsibility of the individual author and do not necessarily reflect the opinion of the Friedrich-Ebert-Stiftung.
Towards a Low Carbon Climate Resilient Development
Discussion Paper on Shaping a Just Transition for Kenya

REPUBLIC OF KENYA

FRIEDRICH EBERT STIFTUNG

MINISTRY OF ENVIRONMENT AND FORESTRY
# Table of Contents

3 List Of Acronyms  
4 Introduction  
6 Background To The Paper: Kenya’s Evolving Obligations On Greenhouse Gas (Ghg) Emissions Under Climate Change Treaties  

2.1 The United Nations Framework Convention on Climate Change (UNFCCC)  
2.2 Obligations under the Kyoto Protocol  
2.3 Kenya’s GHG emissions reduction obligations under the Paris Agreement  

12 Unbundling The Concept Of A Just Transition Under The Paris Agreement  
3.1 Elements of the Just Transition Concept in context of climate change and Paris Agreement  
3.1.1 Imperatives of a just transition of the workforce (the process integrating justice)  
3.1.2 The creation of decent work and quality jobs (the outcomes); and,  
3.1.3 Paying attention to nationally defined development priorities and circumstances (the context)  

22 Just Transition From Different The Different Lens Of Kenya As A Developing Country: Reviewing Kenya’s Ghg Emissions And National Development Prioritization  
4.1 National development priorities for Kenya in the period to 2030  
4.1.1 Petroleum and mining in context of national development  
4.1.2 Prioritization of petroleum and mining in the Vision 2030 Medium Term Plan for 2018-2022
4.2 The role of Environmental Impacts Assessment in integrating climate change considerations for mitigation and adaptation in economic plans and projects
4.3 The role of the 2016 Climate Change Act in balancing economic action with adaptation and mitigation
4.4 Reviewing Kenya’s mitigation potential and priority adaptation approach under the NDC and 2018-2022 NCCAP
4.4.1 Agriculture sector
4.4.2 Energy sector
4.4.3 Industry sector
4.4.4 Forestry sector

36 Framing Potential Approaches For Kenya To A Just Transition To A Low Carbon Climate Resilient Pathway

5.1 Understanding the impacts of the legal and policy framework on sustainable development and climate change
5.1.1 Constitutional provisions
5.1.2 Climate change law, policy and the mainstreaming opportunity
5.1.3 National development planning: Vision 2030 and Medium-Term Implementation Plans
5.2 Assessment of the impacts of climate change
5.3 Consultation and social dialogue
5.4 Training and skills development
5.5 Social protection mechanisms
5.6 Financing climate change

52 Utility Of The Mainstreaming Approach To The Just Transition
53 Conclusion
55 Select References
**List Of Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASAL</td>
<td>Arid and Semi-Arid Lands</td>
</tr>
<tr>
<td>BAU</td>
<td>Business as Usual</td>
</tr>
<tr>
<td>CCA</td>
<td>Climate Change Act</td>
</tr>
<tr>
<td>CoP</td>
<td>Conference of Parties</td>
</tr>
<tr>
<td>EOPS</td>
<td>Early Oil Pilot Scheme</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>ESIA</td>
<td>Environmental and Social Impact Assessment</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GHG</td>
<td>Greenhouse Gases</td>
</tr>
<tr>
<td>KAM</td>
<td>Kenya Association of Manufacturers</td>
</tr>
<tr>
<td>KES</td>
<td>Kenya Shillings</td>
</tr>
<tr>
<td>LULUCF</td>
<td>Land Use, Land-Use Change and Forestry</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>INDC</td>
<td>Intended Nationally Determined Contributions</td>
</tr>
<tr>
<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
</tr>
<tr>
<td>LOM</td>
<td>Life of Mine</td>
</tr>
<tr>
<td>MT</td>
<td>Metric Tonnes</td>
</tr>
<tr>
<td>MTP</td>
<td>Medium Term Plan</td>
</tr>
<tr>
<td>MtCO2e</td>
<td>Metric tons of carbon dioxide equivalent</td>
</tr>
<tr>
<td>MW</td>
<td>Megawatts</td>
</tr>
<tr>
<td>N2</td>
<td>Dinitrogen</td>
</tr>
<tr>
<td>Nb2O5</td>
<td>Niobium Pentoxide</td>
</tr>
<tr>
<td>NCCAP</td>
<td>National Climate Change Action Plan</td>
</tr>
<tr>
<td>NDC</td>
<td>Nationally Determined Contributions</td>
</tr>
<tr>
<td>NET</td>
<td>National Environment Tribunal</td>
</tr>
<tr>
<td>NEMA</td>
<td>National Environment Management Authority</td>
</tr>
<tr>
<td>NOCK</td>
<td>National Oil Corporation of Kenya</td>
</tr>
<tr>
<td>OCAW</td>
<td>Oil, Chemical and Atomic Workers’ Union</td>
</tr>
<tr>
<td>TIVET</td>
<td>Technical Vocational and Training Institutions</td>
</tr>
<tr>
<td>QELRC</td>
<td>Quantified emission limitation or reduction commitment</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>SESA</td>
<td>Strategic Environmental and Social Assessment</td>
</tr>
<tr>
<td>UNFCC</td>
<td>United Nations Climate Change Convention</td>
</tr>
</tbody>
</table>
1. Introduction

Just Transition is a concept that, when appropriately framed and implemented, can provide much needed impetus to countries that are taking action to combat climate change. Just Transition, as set out in the Paris Agreement and as Trade Unions define it, focuses on how the workforce will transition through decent work and quality jobs, as countries implement mitigation actions to reduce Greenhouse Gas (GHG) emissions within their national circumstances, to ensure global temperature rise to stay below 1.5°C. In July 2015, Kenya submitted its Intended Nationally Determined Contributions, as its contribution towards achievement of Article 2 of UNFCCC, which aims to stabilize GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Based on article 4 of the Paris Agreement, the INDCs are now classified as Nationally Determined Contributions. As discussed later, Kenya’s NDC while setting a mitigation target of reducing GHG emissions by 30% to the year 2030, clearly prioritizes adaptation because the country, while a minimal contributor of Greenhouse Gas (GHG) emissions, is extensively affected by the adverse impacts of climate change. This means that Kenya, while meeting its obligations under the Paris Agreement, as set out in the NDC, has to ensure the GHG emission reduction commitment goal is consistent with the prioritization of adaptation. The latter is necessary to ensure the country can build resilience and adaptive capacity in society, economy and environment.

The country, in view of the foregoing, has been an active participant in global climate change discourse and negotiations and ratified the 1992 United Nations Framework Convention (UNFCCC) in 1994. The Paris Agreement was ratified by Kenya on 26th December 2016 and entered into force for Kenya on 27th January 2017. The Paris Agreement as discussed later requires all nations to work, within their national circumstances to reduce Greenhouse Gas (GHG) emissions to ensure the global temperature raise can ideally stay below 1.5°C. This target is already almost impossible to achieve due to the complex transitions required, particularly...
the deep reductions in key areas like energy in order to reduce GHG emissions.

Kenya, in 2016, became the first African nation to put in place a home-grown Climate Change Act (CCA) that provides the legal and institutional tools for mitigation, adaptation, public administration of climate change action, and the role of various non-state actors including the private sector. While the CCA does not prescribe or set out any GHG emissions obligations for Kenya, it identifies the country’s goal in addressing climate change, as the achievement of a low carbon climate resilient pathway for sustainable development. It also provides for the preparation of a National Climate Change Action Plan (NCCAP) which identifies how mitigation and adaptation will be undertaken across all sectors of the economy. Once it is approved, the NCCAP is mandatory for implementation by all institutions at the national, and county level of government. The first NCCAP was prepared for the 2013-2017 period, and a new NCCAP has been prepared for the 2018-2022 period.

The 2018-2022 NCCAP emphasises that the country’s responsibility for global climate change is very little, standing at less than 1% of total GHG emissions. It notes that in achieving the NDC targets, Kenya is prioritizing the six sectors specified in article 4 of the UNFCCC. The 2018-2022 NCCAP provides mechanisms through which Kenya can realise low carbon climate resilient development. However, the NCCAP prioritises adaptation actions, and enhanced climate resilience for vulnerable groups, including women, youth, persons with disabilities, and marginalized communities.

Kenya’s economy is very dependent on climate-sensitive sectors such as agriculture, water, energy, tourism, wildlife, and health. The economic cost of climate change is estimated to be equivalent to 2-2.4 per cent of GDP each year. Specifically, estimated costs of floods are 5.5 per cent of GDP every 7 years, while droughts account for 8% of the GDP in every 5 years. The increasing intensity and magnitude of weather-related disasters in Kenya aggravates conflicts, mostly over natural resources, and contributes to security threats. According to the Adaptation Technical Report prepared for the 2018-2022 National Climate Change Action Plan (NCCAP), climate change and extreme weather events are major factors contributing to land degradation, with changes in soil properties that reduce the soil’s ability to sustain peculiar quality and quantity of plant growth. However,
human activities pose the greatest threat through unsustainable land management practices, such as destruction of natural vegetation, over-cultivation, over-grazing and excessive forest conversion. Further, desertification in the Arid and Semi-Arid Lands (ASALs) can be attributed to climate change impacts, in addition to human activities, with the ASAL landmass in Kenya intensifying and spreading, from 80% to 89% in 2017 thereby reducing the productivity of the land and negatively affecting communities.

From the foregoing, it is clear that in its commitments to the international community under article 4 of the Paris Agreement, as seen through the 2015 NDC, Kenya is set to implement economic, social and environmental transitions in a pathway that will result in achievement of a low carbon climate resilient and sustainable development. This commitment, to carry out a transition of the socio-economic and environmental circumstances is well underpinned under Kenya’s Constitution and law. The focus of this Discussion Paper is to then examine how this established need for Kenya to undertake a transition, in response to climate change, can be aligned with the concept of a Just Transition, that is set out by the Paris Agreement and Trade Unions under the ITUC umbrella.

2. Background to The Paper: Kenya’s Evolving Obligations on Greenhouse Gas (Ghg) Emissions Under Climate Change Treaties


8. Although article 2(6) provides that treaties ratified by Kenya form part of the law under the Constitution – article 94(5) provides that only institution with legal authority to make national law is Parliament. Hence enactment of the Treaty Making and Ratification Act to provide a procedure that gives Parliament (National Assembly) the authority to ratify and therefore make a treaty part of national law as required by Article 94(5) of the Constitution.
2.1 The United Nations Framework Convention on Climate Change (UNFCCC)

The UNFCCC’s central objective is to achieve the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.9 Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.10 The UNFCCC requires developed country parties and some countries whose economies were in transition to market economies to take actions to limit their anthropogenic emissions of Greenhouse Gases, not controlled by the Montreal Protocol,11 with the aim of returning individually or jointly to their 1990 levels of GHG emissions.12 It did not apply any emissions reductions obligations responsibilities on developing countries, based on the argument that developed nations bore a historical responsibility on emissions.

2.2 Obligations under the Kyoto Protocol

The 1997 Kyoto Protocol, coming into force in 2005, continued with the binary differentiation between developed and developing countries, adopted by the UNFCCC. It required Annex 1 Parties, to take action to ensure their aggregate GHG emissions reduced by at least five (5) percent below the 1990 levels, in the first commitment period to 2012.13

The 2012 Doha Amendment to the Kyoto Protocol covers the Second Commitment period (2013-2020) for which 38 countries accepted obligations to reduce their GHG emissions by at least eighteen percent (18%) below 1990 levels.14 Japan indicated that it would not accept any obligations for the second commitment period; New Zealand announced it will be taking a quantified economy-wide emission reduction target under the UNFCCC in the period 2013 to 2020, and

14. Decision 1/CMP.8 Doha Amendment to the Kyoto Protocol 2012 C.N.718.2012.TREATIES-XXVII.7.c
15. Decision 1/CMP.8 Doha Amendment to the Kyoto Protocol 2012 C.N.718.2012.TREATIES-XXVII.7.c, p.3
16. Decision 1/CMP.8 Doha Amendment to the Kyoto Protocol 2012 C.N.718.2012.TREATIES-XXVII.7.c, p.3
17. Online: https://ec.europa.eu/clima/policies/strategies/progress/kyoto_2_en
Russia indicated it did not intend to assume a quantitative emission limitation or reduction commitment for the second commitment period. Canada withdrew from the Kyoto Protocol effective 15 December 2012. On the other hand, Norway’s Quantified emission limitation or reduction commitment (QELRC) of 84 in the second commitment period is consistent with its target of 30 per cent reduction of emissions by 2020, compared to 1990; and the country announced that if it can contribute to a global and comprehensive agreement where major emitting Parties agree on emission reductions in line with the 2°C target, it will move to a level of 40 per cent reduction for 2020 based on 1990 levels. In the same period, the EU and 20 nations have agreed, jointly to make further emission cuts to achieve a twenty percent (20%) emissions reduction target compared to 1990 levels.

The Kyoto Protocol Second Commitment (2013-2020) period is a bridge to the commencement of the Paris Agreement in 2020. It is important to note that under both the UNFCCC and Kyoto Protocol, only developed countries have commitments for GHG emissions reductions in line with the principle of common but differentiated responsibilities. As a developing country Party, Kenya does not have any GHG emissions reductions targets under either the Kyoto Protocol, or the UNFCCC.

2.3 Kenya’s GHG Emissions Reduction Obligations Under the Paris Agreement

Unlike the Kyoto Protocol, the 2015 Paris Agreement is clear that it will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances. This approach marks a departure from the tradition in

18. Paris Agreement, article 2(2).
20. Paris Agreement, article 4(2).
21. Paris Agreement, article 4(3).
23. Paris Agreement, article 4(3).
25. Fiji’s Nationally Determined Contributions, November 2015, p.5.
the UNFCCC and Kyoto Protocol of binary differentiation between Parties with obligations to reduce GHG emissions, and those without, as seen in their annexes, to adoption of commitments by all parties, in line with their national circumstances. Article 4 of the Paris Agreement is instructive: requiring each Party to prepare, communicate and maintain the successive Nationally Determined Contributions (NDC) in reduction of GHG emissions that it intends to achieve; and to pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions. Developed country Parties are required to continue taking the lead by undertaking economy-wide absolute emission reduction targets; while developing country Parties should continue enhancing their mitigation efforts moving, over time, towards economy-wide emission reduction or limitation targets in the light of different national circumstances. In this case, all countries participate in defining their commitments with no legal differentiation between developed and developing countries, except in terms of how countries define their NDC commitments. Once the GHG emissions are voluntarily determined at country-level, and submitted to the UNFCCC Secretariat, they become legally binding on the respective State Parties; and can only be enhanced in future periods, reflecting the Party’s highest possible ambition.

The only exception arises where an NDC is made fully or partially conditional, such as the Kenya NDC that is conditional on receiving financial support, technology development and transfer, and capacity building under articles 9, 10 and 11 of the Paris Agreement. In contrast, Fiji’s NDC specifies an emission reduction target to be achieved through both unconditional and conditional means based on domestically available and additional external financing being made available to Fiji. From the 30% emission reduction target, 10% will be achieved through the implementation of the Green Growth Framework, utilizing resources available in country (unconditional) whereas the remaining target can only be met with the availability of external funding amounting to US$500 million (conditional).

The Paris Agreement does not determine emission levels relative to a baseline, such as the UNFCCC and Kyoto, which are relative to 1990 levels. Instead, the Paris Agreement aims to stabilize the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above
pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change. This means that cumulatively, the NDC commitments of developed and developing countries around the world should result in reduction of GHG emissions to limit the temperature increase to 1.5 °C above pre-industrial levels. Emphasis on the need to achieve this was made in the 2018 Special Report by the Intergovernmental Panel on Climate Change (IPCC) on the impacts of global warming of 1.5°C above pre-industrial levels (IPCC 1.5°C Report) which warned that climate-related risks for natural and human systems are higher for global warming of 1.5°C than at present, but lower than at 2°C and called for global efforts to limit global warming to 1.5°C.

The IPCC 1.5°C Report argues that limiting global warming to 1.5°C would require substantial societal and technological transformations, dependent in turn on global and regional sustainable development pathways. The paragraph below, drawn from the IPCC 1.5°C Report is indicative of the complexity of this transition. Indeed, it will be difficult to keep global warming below 1.5°C without significant commitments by both developed and developing countries, within context of differentiated responsibilities and national circumstances:

**Carbon dioxide (CO₂) emissions reductions that limit global warming to 1.5°C with no or limited overshoot can involve different portfolios of mitigation measures, striking**
different balances between lowering energy and resource intensity, rate of decarbonization, and the reliance on carbon dioxide removal.\textsuperscript{30} Pathways that limit global warming to 1.5°C with no or limited overshoot involve deep reductions in emissions of methane and black carbon (35% or more of both by 2050 relative to 2010); and also reduce most of the cooling aerosols, which partially offsets mitigation effects for two to three decades. Non-CO2 emissions\textsuperscript{12} can be reduced as a result of broad mitigation measures in the energy sector; and targeted non-CO2 mitigation measures can reduce nitrous oxide and methane from agriculture, methane from the waste sector, some sources of black carbon, and hydrofluorocarbons.\textsuperscript{31}

The complexity of these pathways reflects the difficult choices developed and developing States have to make to reduce emissions in order to keep temperature rise below 1.5°C, making the target unlikely to attain unless State-level behavior and commitments to cut GHG emissions drastically changes.

For developing countries, including Kenya, this situation presents a conundrum between their international obligations to contribute towards GHG emissions reductions; and the need to utilize natural resources for economic advancement which could increase emissions. Adoption of stringent compliance with Paris Agreement obligations to reduce emissions at national level by Kenya for instance might result in the outcome now referred to as “stranded assets” where carbon intensive natural resources such as oil and minerals maybe left unutilized as a consequence of pursuing a low-carbon development pathway. Additionally, as seen below, Kenya has prioritized adaptation in its Nationally Determined Contribution (NDC) under the Paris Agreement, which means its GHG emissions commitments are implemented in context of adaptation actions. In order to build resilience and enhance adaptive capacity, the adaptation actions such as in agriculture could result in higher GHG emissions. In this context, Kenya has determined that the country will pursue a low carbon climate resilient development pathway for sustainable development.\textsuperscript{32} In context of the Paris Agreement, this development pathway and the subscription to sustainable development requires Kenya to identify how to transition the economy towards a low carbon climate resilient development pathway, in a just manner that results in sustainable development. An optimal approach will be to ensure that these adaptation actions result in complementary mitigation benefits that contribute to reduction of GHG emissions. This has implications on how Kenya can frame and implement a Just
Transition, within the context of the Paris agreement. In the section below, the paper first unbundles the just transition concept, and subsequently examines the implications for Kenya’s climate change interventions.

3. Unbundling The Concept of A Just Transition Under The Paris Agreement

In this section, the Just Transition Concept under the Paris Agreement is unbundled, and the key elements through literature review are set out. This includes review of ILO approaches to the Just Transition and Decent work, and some reflection on how this could be applied to climate change actions at national level. The discussion concludes by reviewing how, as guided by the Paris Agreement, the Just Transition agenda can be implemented within nationally defined priorities. This is a Segway to section 4, which examines how Kenya, as a developing country, can approach Just Transition in line with its NDC commitments, and national law.

In context of climate change, transition to ensure societies, economies and the environment is responsive to global needs to reduce GHG emissions is now integral to implementation of obligations by Parties under the Paris Agreement, which in its preamble introduces the concept of a Just Transition as follows:

*Taking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities.*

The idea behind what now called “Just Transition” was conceptualized in the United States, in the 1970s, by Tony Mazzocchi, a trade unionist from the Oil, Chemical and Atomic Workers’ Union (OCAW), as he endeavoured to reconcile environmental and social concerns.33 Around 1973, Mazzocchi successfully enlisted support from environmentalists to help OCAW wage what he presented as “the first environmental strike” over health and safety issues at Shell refineries across four US states.34 They acknowledged that the industries they worked in were causing environmental and health problems. They were also convinced that addressing these problems did not necessarily mean destroying communities.35 In 1993, Mazocchi called for establishment of a “Superfund for Workers” to provide financial support and opportunities for higher education for workers displaced by environmental protection policies.36 In

32. Climate Change Act, No.11 of 2016, section 3(1).
1995, the President of the OCAW laid out the Superfund or Just Transition Proposal, and by 1997, several US and Canadian Unions officially endorsed the Just Transition Principle. In 1996, Brian Kohler, a labour leader from the Communications, Energy, and Paperworkers Union of Canada subsequently emphasized that “the real choice is not jobs or environment. It is both or neither”. The Just Transition Alliance was launched in 1997, with aim of connecting the trade union movement with community-focused environmental justice groups.

3.1 Elements of the Just Transition Concept in context of climate change and Paris Agreement

Prior to inclusion in the 2015 Paris Agreement, the concept of a Just Transition was included in the Final Decision of the 16th Conference of Parties (CoP) of the UNFCCC held in Cancun, Mexico in Decision 1/CP.16. Here, CoP 16 noted that it realises that addressing climate change:

i) requires a paradigm shift towards building a low-carbon society that offers substantial opportunities; and,

ii) ensures continued high growth and sustainable development, based on innovative technologies and more sustainable production, consumption and lifestyles.

iii) ensures a just transition of the workforce that creates decent work and quality jobs.

35. Béla Galgóczi, Just transition towards environmentally sustainable economies and societies for all, ILO ACTRAV Policy Brief, 2018, p.1
36. Béla Galgóczi, Just transition towards environmentally sustainable economies and societies for all, ILO ACTRAV Policy Brief, 2018, p.1
37. Béla Galgóczi, Just transition towards environmentally sustainable economies and societies for all, ILO ACTRAV Policy Brief, 2018, p.1
40. Decision 1/CP.16 The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, FCCC/CP/2010/7/Add.1, p.4
The CoP further recognized the importance of:

i) avoiding or minimizing negative impacts of response measures on social and economic sectors, promoting a just transition of the workforce;

ii) the creation of decent work and quality jobs in accordance with nationally defined development priorities and strategies; and,

iii) contributing to building new capacity for both production and service-related jobs in all sectors, promoting economic growth and sustainable development,

The ILO has taken lead in unbundling the applicability of the Just Transition Concept, and in 2015, released the “Guidelines for a just transition towards environmentally sustainable economies and societies for all” which play a key role in framing this Discussion Paper.

The Paris Agreement frames Just Transition as comprising three dimensions, as follows:

3.1.1 Imperatives of a just transition of the workforce (the process integrating justice)

According to the ILO the process of implementing the transition is about “how we get there”, such that it should be based on a managed transition with meaningful social dialogue at all levels to make sure that burden sharing is fair and nobody is left behind. This process is about the pathway taken to ensure that the transition integrates all the components of justice, such as equity, inclusion, participation, respect for human rights, respect for human dignity, among others. Importantly, the obligation of States to respect, protect and fulfil human rights is integral to this dimension of justice. For purposes of Kenya, the imperatives of Just Transition therefore should be integrated within the nationally adopted pathway of ensuring all climate actions result in realisation of a low carbon climate resilient sustainable development. There is need to ensure that the notion of justice is carefully

---


44. UNGA/Res/70/1 Transforming our world: the 2030 Agenda for Sustainable Development, p. 19.
harmonised with the national human rights framework, as set out in Chapter 4 of the Constitution of Kenya on the Bill of Rights, and especially the obligation of the State to ensure there is respect, promotion, protection and fulfilment of human rights, stipulated in article 19 of the Constitution. Additionally, Kenya’s Constitution frames sustainable development as a binding value and principle of national governance, and thus the pursuit of Just Transition must not only comply with these values and principles of governance, but also have sustainable development elements integrated into the process. In this context, the 2030 Sustainable Development Goals (SDGs) provide reinforcement to the Just Transition process, and outcomes.

3.1.2 The creation of decent work and quality jobs (the outcomes); and,

The second dimension of the Just Transition, to a low carbon climate resilient development pathway, is the creation of decent work and quality jobs. This is consistent with SDG 8, which calls on States to work toward achieving sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. The 1999 Report of the ILO Director General focused on Decent Work, noting that the “primary goal of the ILO today is to promote opportunities for women and men to obtain decent and productive work, in conditions of freed, equity, security and human dignity. Decent work was defined as the converging focus of all ILO strategic objectives, with the following four pillars:

1) The promotion of rights at work;
2) Employment;
3) Social protection; and,
4) Social dialogue.

The goal, in pursuit of decent work is not just the creation of jobs, but the creation of jobs of acceptable quality, as the quantity of employment cannot be divorced from its quality. The 1999 report noted that all societies have a notion of decent work, but the quality of employment can mean many things. It could relate to different forms of work, different conditions of work, as well as feelings of value and satisfaction. Thus, the need today is to devise social and economic systems which ensure basic security and employment while remaining capable of adaptation to rapidly changing circumstances in a highly competitive global market.

In 2008, the ILO adopted a framework of Decent Work Indicators, which covers ten substantive elements which are closely
linked to the four strategic pillars of the Decent Work Agenda:  

i) Employment opportunities;  
ii) Adequate earnings and productive work;  
iii) Decent working time;  
iv) Combining work, family and personal life;  
v) Work that should be abolished;  
vi) Stability and security of work;  
vii) Equal opportunity and treatment in employment;  
viii) Safe work environment;  
ix) Social security; and  
x) Social dialogue, employers’ and workers’ representation.

General focused on Decent Work, noting that the “primary goal of the ILO today is to promote opportunities for women and men to obtain decent and productive work, in conditions of freed, equity, security and human dignity. Decent work was defined as the converging focus of all ILO strategic objectives, with the following four pillars:

For each of these elements, the Framework of Decent work indicators by the ILO has developed an analytical framework which (a) identifies which pillars each element falls within, (b) identifies statistical indicators that allow monitoring progress made with regard to the substantive elements, and (c) identifies legal indicators that provide descriptive information on rights at work and the legal framework for decent work. Table 1 below is an excerpt from measurement of decent work based on guidance received at the Tripartite Meeting of Experts on the Measurement of Decent Work.

Table 1: Excerpt from measurement of decent work based on guidance received at the Tripartite Meeting of Experts on the Measurement of Decent Work

<table>
<thead>
<tr>
<th>Substantive element of the Statistical Indicators Decent Work Agenda</th>
<th>Statistical Indicators</th>
<th>Legal Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpretation</td>
<td>Interpretation</td>
<td>Interpretation</td>
</tr>
<tr>
<td>Numbers in parentheses in the first column below refer to ILO strategic objectives:</td>
<td>M – Main decent work indicators</td>
<td>L – Descriptive indicators providing information on rights at work and the legal framework for decent work.</td>
</tr>
<tr>
<td>1. Standards and fundamental principles and rights at work;</td>
<td>A – Additional decent work indicators</td>
<td>Description of relevant national legislation, policies and institutions in relation to the substantive elements of the Decent Work Agenda; where relevant, information on the qualifying conditions, the benefit level and its financing; evidence of implementation effectiveness (as recorded by ILO supervisory bodies); estimates of coverage of workers in law and in practice; information on the ratification of relevant ILO Conventions.</td>
</tr>
<tr>
<td>2. Employment;</td>
<td>F – Candidate for future inclusion / developmental work to be done by the Office</td>
<td></td>
</tr>
<tr>
<td>3. Social protection;</td>
<td>C – Economic and social context for decent work (S) indicates that an indicator should be reported separately for men and women in addition to the total.</td>
<td></td>
</tr>
<tr>
<td>4. Social dialogue.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment opportunities (1 + 2)</td>
<td>M – Employment-to-population ratio (S)*</td>
<td>L – Government commitment to full employment</td>
</tr>
<tr>
<td></td>
<td>M – Unemployment rate (S)</td>
<td>L – Unemployment insurance</td>
</tr>
<tr>
<td></td>
<td>M – Youth not in employment, education, or training, 15-24 years (S)*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M – Informal employment rate (S)*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A – Labour force participation rate (1)</td>
<td>[to be used especially where statistics</td>
</tr>
</tbody>
</table>

* indicates that an indicator should be reported separately for men and women in addition to the total.
| Work that should be abolished (1 + 3) | M – Child labour rate [as defined by ICLS resolution] (S)*  
A – Hazardous child labour rate (S)*  
A – Rate of worst forms of child labour (WFCL) other than hazardous work (S)**  
A – Forced labour rate (S)**  
A - Forced labour rate among returned migrants (S)** | L – Child labour (including public policies to combat it)  
L – Forced labour (including public policies to combat it) |
|---|---|---|
| on Employment-to-population ratio and/or Unemployment rate (total) are not available | A – Youth unemployment rate, 15-24 years (S)  
A – Unemployment by level of educational attainment (S)*  
A – Employment by status in employment (S)  
A – Proportion of own-account workers and contributing family workers in total employment (S)* [to be used especially where statistics on informal employment are not available]  
A – Share of wage employment in non-agricultural employment (S)  
F – Labour underutilization (S)  
Memo item: Time-related underemployment rate (S) grouped as A under “Decent Working time” | |
| Stability and security of work (1, 2 + 3) | M - Precarious employment rate**  
A - Job tenure**  
A - Subsistence worker rate**  
A – Real earnings of casual workers** (S) | L – Termination of employment* (incl. notice of termination in weeks) |
|----------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Adequate earnings and productive work (1 + 3) | M – Working poverty rate (S)*  
M – Employees with low pay rate (below 2/3 of median hourly earnings) (S)*  
A – Average hourly earnings by occupation group (S)*  
A – Average real wages (S)  
A – Minimum wage as a percentage of median wage  
A – Manufacturing wage index  
A – Employees with recent job training (past year / past 4 weeks) (S) | L – Statutory minimum wage* |
From the excerpt above, it is therefore possible to measure how a country is proceeding in putting in place decent work measures, and in achieving outcomes. For instance, employment opportunities are an element that falls within pillars 1 and 2 (promotion of rights at work; and employment) of the ILO Decent Work agenda.

In terms of monitoring progress, the statistical indicators M, A, F, C and S (in the second column) would examine employment to population ratio, and youth employment among others. The legal indicator would examine for instance if social protection exists, for instance in the form of unemployment insurance.

Another element, focusing on work that should be abolished falls within pillars 1 and 3 (promotion of rights at work; and social dialogue) of the ILO Decent Work agenda. In monitoring progress, the statistical indicators M, A, F, C and S (in the second column) would examine employment to population ratio, and youth employment among others. The legal indicator would examine for instance if social protection exists, for instance in the form of unemployment insurance.

In terms of monitoring progress, the statistical indicators M and A (in the second column) would examine child labour rates, or hazardous child labour among others. The legal indicator would examine existence of laws and policies eliminating and enforcing prohibitions on child labour.

Adapted to Climate Change Just Transition, the employment opportunities element of the Decent Work agenda would possibly integrate statistical indicators to monitor progress such as net total of job losses or gains during the economic transition; or programmes to build new skills or adapt skills of workers to new work opportunities under the low carbon climate resilient pathways. The legal indicator could be presence of rights to collective bargaining procedures to guarantee job security is taken into account during the Just Transition process. The other element, focusing on work that should be abolished, would possibly integrate statistical indicators for progress monitoring such as employment ratio in carbon intensive economic activities, such as hydrocarbon production. The legal indicator could be presence of law and policies providing alternative pathways, and social protection in the event of redundancies.
from abolition of carbon intensive jobs without immediate transition to low carbon opportunities. The foregoing are hypothetical illustrations of how the ILO Decent Work Agenda and its core elements could be adapted nationally as a tool to evaluate the readiness of a country in integrating the Decent Work agenda as part of ensuring the transition to a low carbon climate resilient pathway is fair and just.

3.1.3 Paying attention to nationally defined development priorities and circumstances (the context)

It is important for the Decent Work Agenda, as part of the Just Transition approach, to contribute to the reduction of GHG emissions, and to support adaptation actions at country level, in line with national circumstances as per the Paris Agreement requirements. In this context, the Columns in Table A would need to be adjusted to include analysis on contribution to National GHG emissions reduction targets, for Kenya this being along the six UNFCCC priority sectors with 2030 NDC target of 30%; and contribution to adaptation priorities as per the 2015 NDC, and the 2018-2022 NCCAP. It is important to note that the Just Transition agenda has to be approached from two perspectives. First, the creation of opportunities which through innovation and entrepreneurship implement the economic, social and environmental transition, and provide the much-needed decent work. Innovation and entrepreneurship should develop business that is in accordance with nationally determined developed priorities. This means that for Kenya it’s the low carbon climate resilient development pathway that prioritizes adaptation and conforms to the elements of sustainable development in line with article 10 of the Constitution. Second, ensuring that the process of Just Transition is undertaken in a participatory manner (consultation and social dialogue) in line with the human rights framework under the Constitution of Kenya, reviewed later in section 5 of this paper. In this context, section 3 below examines more specifically, the unique circumstances of Kenya relative to (i) contribution of GHG gas emissions, (ii) vulnerability to impact of climate change, (iii) level of economic development, and (iv) nationally determined development priorities through Vision 2030.
4. Just Transition From The Different Lens Of Kenya As A Developing Country: Reviewing Kenya’s Ghg Emissions And National Development Prioritisation

When considering a Just Transition for a developing country like Kenya, it is important to consider its unique circumstances, in line with (i) contribution of GHG gas emissions, (ii) vulnerability to impact of climate change, (iii) level of economic development, and (iv) nationally determined development priorities through Vision 2030. A key concern that arises is the need for a differentiated approach for Kenya as a developing country in line with nationally determined development priorities, such as pursuit of a stronger industrial and manufacturing base; and socio-economic interventions to reduce vulnerability to the adverse impacts of climate change. This must be contrasted with how Kenya intends to attain its commitments to reduce GHG emissions; and further, to ensure development is sustainable. Two questions are therefore pertinent:

(1) How does Kenya implement mitigation actions, without compromising adaptation priorities or slowing down development priorities?
(2) How does Kenya implement its economic priority agenda, through Vision 2030 and the Big Four Agenda, without violating its GHG emissions reduction commitments in the 2015 NDC?

In the long-term these questions must be analysed and answered through participatory discussions and further studies. This discussion paper has framed the questions and provides preliminary review on what should be of primary concern to Kenya in line with international commitments to reduce GHG emissions, and national development concerns that revolve around economic advancement and adaptation actions.

4.1 National development priorities for Kenya in the period to 2030

The exact social, economic and environmental implication of reducing national GHG emissions by 30% to the year 2030 must be fully examined and understood, in terms of social, economic and environmental consideration. That is
the only way the country can ensure that it is firmly on the low carbon climate resilient development pathway for sustainable development, consistent with article 10 of the Constitution, provisions of the Climate Change Act, and the Paris Agreement. The country’s national development plan, Vision 2030, focuses on advancement of the economy, and its current implementation plan focuses on the “Big Four” agenda: food security, affordable housing, manufacturing, and affordable healthcare for all.

Taking manufacturing for instance, the development of oil and gas, as well as mining are considered to be prioritised as economic enablers. Food security is considered critical and will involve intensification of agriculture production. Intensive use of electricity is common to all the Big Four elements. According to the Kenya Association of Manufacturers (KAM) in the 2008-2014 period, the manufacturing section has contributed 10% to the GDP, and in 2017, this declined to 8.4%. KAM argues that Kenya is de-industrializing, because majority of the countries that are considered as developed, realised that status through the process of industrialisation. However, the Big Four Agenda still aims to increase the contribution of manufacturing to the GDP to 22%.

In the following, it is important to provide a context on the implication of petroleum and mining being a priority for the manufacturing sector in Kenya.

4.1.1 Petroleum and mining in context of national development

Petroleum: In 2012, Tullow Oil made the first discovery of crude oil in the South Lokichar Basin at the Ngamia-1 well. Since then, Tullow has drilled more than 11 wells in Turkana County-with an estimated 750 million recoverable barrels of crude oil. The company continues to review options for re-starting the exploration campaign in the South Lokichar basin to de-risk the overall upside potential of 1 billion barrels. Other (seismic) exploration activities have taken place near the South Sudan and Ethiopian borders. Out of the 63 blocks gazetted as of May 2016, more than 40 had been licensed to oil exploration and production companies and operated by over 20 international oil companies and the National Oil Corporation of Kenya (NOCK). This means an uptake of over 65% of the oil blocks for exploration.

Mining: According to a Strategic Environment and Social Assessment (SESA) of the Mining Sector:
i) Kenya is endowed with over 129 different types of minerals which are classified into seven categories that include; i) 53 types of construction and industrial minerals, ii) 5 types of precious stones, iii) 8 types of precious metals, iv) 22 types of semi-precious stones, v) 35 types of base and rare metals, vi) 3 types of gaseous minerals and, vii) 3 types of fuel minerals.

ii) Commercial trona (hydrated sodium bicarbonate carbonate) mining in Kenya has been undertaken for over 100 years since 1911 in Lake Magadi in Kajiado County, at around one million tonnes in 2005 and a source of employment.

iii) Commercial fluorspar mining in Kerio Valley within the north rift was initiated in 1971, with a total of approximately 360,000 tonnes of ore being mined each year until the year 2016. In 2012, Kenya contributed substantially to the world’s natural soda ash and fluorspar production at about 2% and 5% respectively.

iv) It is estimated that 250,000 tonnes of Titanium ores will be exported annually from Kwale while a further 3.2 billion tonnes of the same mineral deposits are said to exist in the north coast. Overall, the country earned more than $232 million from the mining sector in 2015 which was an increase from $203m in 2014.

v) Explorations around the Mrima Hill in Kwale County have also confirmed a total of 105 MT inferred mineral resource in the area at an average grade of 0.65% Nb2O5 including 12 MT of High Grade niobium at 1.21% Nb2O5. This ore has been found to contain large deposits of rutile, ilmenite and zircon that contain titanium. The estimated area underlain by Niobium Ore at a cut-off grade of 0.9% N2 is estimated at 61ha, and up to 12.6Mt of weathered ore with an estimated Life of Mine (LOM) of about twenty (20) years.

Overall, Kenya is endowed with over 129 different types of minerals which are classified into seven categories that include; i) 53 types of construction and industrial minerals, ii) 5 types of precious minerals, iii) 8 types of precious metals, iv) 22 types of semi-precious stones, v) 35 types of base and rare metals, vi) 3 types of gaseous minerals and, vii) 3 types of fuel minerals.

51. Kenya Association of Manufacturers, Manufacturing Priority Agenda, 2019, p.15
54. To insert
55. To insert
of gaseous minerals and, vii) 3 types of fuel minerals. In addition to these minerals, prioritisation of affordable housing for all under the Big Four Agenda will increase the need for stone quarrying, and the demand for cement production, which increasing the need for limestone, and demand for coal in order to provide energy for the limestone factories.

4.1.2 Prioritization of petroleum and mining in the Vision 2030 Medium Term Plan for 2018-2022

Vision 2030 is implemented through Medium Term Plans (MTP), with the previous one being for the 2013-2017 period. According to the new 2018-2022 MTP, during the 2013-2017, the following achievements were made with respect to upstream petroleum and mining sector integration into Kenya’s economy.\(^{57}\)

Achievements for the petroleum sector:

i) Modification of tanks and related facilities for receipt of crude oil for the interim scope for the Early Oil Pilot Scheme (EOPS). The EOPS is the pilot scheme started in June 2018 to transfer crude oil by road to the port of Mombasa (pending construction of pipeline) for export, and according to Tullow Oil, over 150,000 barrels of oil have been safely delivered to Mombasa, with the first cargo to be sold and lifted during the third quarter of 2019.\(^{58}\)

ii) Drilling of 17 oil exploratory and 22 appraisal wells.

iii) Drilling 51 oil wells at a well density of 10 wells per year.

iv) Completion of the roadmap and report towards a Petroleum Master Plan for Kenya;

v) Gazettement of additional 17 new oil exploration blocks

vi) Development of the Strategic Environment and Social Assessment (SESA), and Gender Assessment Guidelines for the petroleum sector.

vii) Enactment of the Petroleum Act 2019 to provide a comprehensive legal framework.

Achievements for the mining sector:

i) Extraction of heavy sand in Kwale County.

ii) Enactment of the Mining Act 2016 to provide a comprehensive legal framework.

iii) Construction of the Gemstone Value Addition Centre in Taita/Taveta County

iv) Cabinet approved the establishment of the National Mining Corporation, established by the Mining Act 2016, in April 2016, to act as the investment arm of the National Government in mining.

According to the Third MTP to Vision 2030, the government is prioritizing the following actions in the oil and gas sector in the period 2018-2022:

i) Commercialisation of the Oil and Gas Discoveries: The programme entails implementation of Early Oil Pilot Scheme (EOPS) Project, final Field Development Plan for South Lokichar field Basin; Gas exploration, production and utilisation while ensuring environmental integrity, and; Development of a Regional Hub for Upstream Petroleum Services.

ii) Completing the Early Oil Pilot Scheme (EOPS) Project: The Early Oil Pilot Scheme (EOPS) is an initiative by the Government of Kenya.

iii) Completing the Early Oil Pilot Scheme (EOPS) Project: The Early Oil Pilot Scheme (EOPS) is an initiative by the Government of Kenya and the Kenya Joint Venture (Tullow Oil, Africa Oil Corporation and Maersk) to use the existing road infrastructure to transport crude oil from Lokichar to Mombasa for export. The key objectives for EOPS are to enable Full Field Development and establish Kenya as an oil exporter commencing with testing the international market for Turkana crude. The EOPS is not generating profits and is intended to create an investment case.

iv) Construction of Lokichar-Lamu Crude Oil Pipeline: The project involves development of the crude oil pipeline from Lokichar to Lamu for transportation of the oil for export and early monetisation of the resource. The pipeline system will include a 840Km pipeline, pumping stations, heating system, marine terminal storage and export facility and all associated facilities. The pipeline will pass through Turkana, Samburu, Isiolo, Garissa, Tana River and Lamu counties. According to the MTP, this will commence once the Environmental and Social Impact Assessment (ESIA) and Front-End Engineering Design are completed. The MTP indicates this approach will have added climate change benefits through the avoidance of greenhouse gas emissions, but it does not specify in what manner.
The MTP addresses the critical question of power generation, required for Vision 2030, and in the medium term, for the Big Four Agenda. While the MTP focuses on renewable energy, it does not indicate when the Thermal Power generators would be decommissioned, and anticipates coal power as part of the energy mix, in order to achieve 5,221 MW by 2022, as follows:

a) 93MW from Hydro Power Projects;
b) 913MW from Geothermal Power Projects;
c) 800MW from Wind Power Projects;
d) 157MW from Biomass Power Projects;
e) 442MW from Solar Power Projects;
f) 328MW from Coal Power Project;

It is important to note that in 2019 the National Environment Tribunal (NET) in Kenya cancelled an Environmental Impact Assessment Licence issued by the National Environment Management Authority (NEMA) under section 58 of the Environmental Management and Coordination Act (EMCA), in Save Lamu and others v. NEMA and Amu Power Company. The Tribunal found that the EIA study, while containing measures to mitigate the adverse impacts of the coal power plan, was not adequately subjected to proper public participation and therefore the study remained as mere academic representations.

Addressing itself to coal, the Tribunal observed as follows:

17. With this in mind, we must also make it absolutely clear that the common perception that a coal power plant project will always be rejected in Kenya as part of its development agenda is not correct. As long as coal power plant projects meet the required standards of the law and abide by conditions imposed to mitigate potential impacts then they remain a viable and an acceptable mode of power generation. We say this being alive to the recent changes in the Energy law as enacted by the Energy Act 2019 that contains an entire provision on coal plants. Part V of the Energy Act 2019, (sections 94 to 116) capture the licensing requirements for operation of Downstream Coal activities and includes environmental conditions as one of the things to be met before licensing.

19. Accordingly, Parliament in its wisdom has identified coal energy

60. Save Lamu and others v. NEMA and Amu Power Company Tribunal Appeal No. NET 196 of 2016, para 141.
61. Save Lamu and others v. NEMA and Amu Power Company Tribunal Appeal No. NET 196 of 2016, para 17
as one source of possible energy sources for this country. The only relevant considerations are compliance with the provisions of the Energy Act 2019 and the Environmental Management and Coordination Act, 1999 when setting up such plants. As such, we repeat that, subject to meeting the conditions set out in the Act and in so far as it relates to this Tribunal, if the requisite conditions are met with respect to environmental matters including the due and proper preparation of an EIA study report in compliance with EMCA, coal fired power plants remain, for the time being, a lawful option in the power generation mix of this country.

In its final orders, the Tribunal nullified the EIA licence issued by NEMA to Amu Power Company for construction of a coal power plant in Lamu, Kenya but invited Amu Power company, “…should it wish to pursue construction and operation of the (coal power) project, to undertake a fresh EIA study.

The foregoing section examines the centrality of petroleum, mining and energy needs to Kenya’s economic development targets in the medium term period to the year 2030. The discussion focused on national development priorities as framed by government policy, and through which private actors carry out their investment and other plans. It is clear that in spite of its NDC GHG reduction targets to 2030, the country has for the same period prioritized economic activities likely to result in higher GHG emissions.

4.2 The role of Environmental Impacts Assessment in integrating climate change considerations for mitigation and adaptation in economic plans and projects

It is important to note that section 20 of the Climate Change Act requires to NEMA to “integrate climate risk and vulnerability assessment into all forms of assessment.” This will require review of the current 2003 Environmental (Impact Assessment and Audit) Regulations to comply with section 20 of the Climate Change Act. A review of the draft EIA regulations published by NEMA for public consultations reveals that section 20 of those draft regulations requires that an Integrated Environmental Impact Assessment study should among other things, provide detailed information how
the project will integrate climate change vulnerability assessment, adaptation and mitigation actions.

Section 34 of the draft regulations requires that Environmental Audit report, to be undertaken by every holder of an EIA licence should contain detailed information how project implementation has integrated climate change vulnerability assessments, adaptation and mitigation actions, and where applicable, indicate the level of compliance with National Climate Change obligations.

While these regulations are likely to be refined further after public consultations, the fact that climate change vulnerability assessments as well as mitigation and adaptation actions are included, demonstrates a growing national consciousness on the need to address climate change. Importantly, the draft regulations in section 34 on the contents on Environmental Audit report, requires the EIA licence holder to demonstrate, where applicable how the project is complying with national climate change obligations.

4.3 The role of the 2016 Climate Change Act in balancing economic action with adaptation and mitigation

It is important to put this in context of national climate change governance and priorities, as explained below:

i) The Climate Change Act provides for imposition of climate change duties on public and private entities. These climate change duties are defined as the statutory obligations conferred on public and private entities to implement climate change actions consistent with the national goal of low carbon climate resilient development.

ii) Section 15 of the Climate Change Act provides for the national government to, consultatively, impose duties relating to climate change on any public entity at all levels of government. Any public entity on which a climate change duty has been imposed is required, in exercising its functions to act in the manner best suited to achieve the successful implementation of the CCA and the National Climate Change Action Plan (NCCAP). A public entity

62. See online: http://www.nema.go.ke/images/featured/Draft_Regulation_22.5.18.pdf
According to the NDC, Kenya’s focus on GHG emission reductions selects six sectors prioritized by the UNFCCC: energy, transport, industry, agriculture, forests and waste management. In 2017, Kenya undertook an analysis of each of these sectors (NDC sector analysis) to clarify how Kenya will achieve its NDC, including adaptation goals and the GHG emission reduction contribution of 30% below the 2030 business as usual scenario. The 2017 NDC Sector Analysis examined options to deliver on Kenya’s contributions in the six mitigation sectors, including through both adaptation and mitigation actions, recognising that adaptation is the priority in Kenya and is a critical part of its NDC.

For purposes of the current discussion evaluating Kenya’s current development trajectory, and how the country can fit in the Just Transition process, the discussion paper only highlights findings of the NDC Sector analysis for agriculture, industry, energy and forestry sectors:

4.4 Reviewing Kenya’s mitigation potential and priority adaptation approach under the NDC and 2018-2022 NCCAP

According to the NDC, Kenya’s focus on GHG emission reductions selects six sectors prioritized by the UNFCCC: energy, transport, industry, agriculture, forests and waste management. In 2017, Kenya undertook an analysis of each of these sectors (NDC sector analysis) to clarify how Kenya will achieve its NDC, including adaptation goals and the GHG emission reduction contribution of 30% below the 2030 business as usual scenario. The 2017 NDC Sector Analysis examined options to deliver on Kenya’s contributions in the six mitigation sectors, including through both adaptation and mitigation actions, recognising that adaptation is the priority in Kenya and is a critical part of its NDC. For purposes of the current discussion evaluating Kenya’s current development trajectory, and how the country can fit in the Just Transition process, the discussion paper only highlights findings of the NDC Sector analysis for agriculture, industry, energy and forestry sectors:
4.4.1 Agriculture sector:

The NDC Sector analysis identified a low (minimum) target emission reduction of 1.6 MtCO₂e for the agriculture sector. This is equivalent to a 4% reduction in 2030 baseline agriculture emissions and is the lowest proportional contribution of any sector due to a lack of proven mitigation options and considerable barriers to changing practices in the agricultural sector. This was adjusted to reduction of GHG emissions of 2.61 MtCO₂e by 2022 through agroforestry, minimum tillage systems, manure management, and efficiency in livestock management by the 2018-2022 NCCAP.

i) The analysis argued that the agriculture sector should strive to meet the low range of emission reductions, requiring that other sectors implement actions to achieve the high range of emission reductions. This is primarily because Agriculture contributes 26% of the GDP, and contributes 40% of employment nationally.

ii) According to Kenya’s Agriculture Development Strategy for 2010-2020, small-scale agriculture accounts for 75% of national agriculture production, and 70% of agricultural produce in the market at any time and small-scale farmers account for 70% of maize, 65% of coffee, 50% of tea, 80% of milk, 85% of fish, and 70% of beef. In the rangelands (arid and semi-arid lowlands that comprise 85% of Kenya’s land area), small-scale livestock production system features mainly pastoralists, with considerably large livestock herds, because of communal grazing with low use of purchased inputs like feed, drugs and artificial insemination.

The mitigation options proposed by the NDC sector analysis include agroforestry, sustainable land management, limiting the use of fire in range and cropland management, and reducing enteric methane from livestock through improvement of feed and food additives.

63. Civil society organizations are classified as bodies registered under the Public Benefits Organisations Act, 2013 (No. 18 of 2013).
64. UNFCCC, article 4(1)(c).
The range of priority adaptation actions for agriculture is broad, as seen in Table 2 below:

**Table 2 – Priority adaptation actions for agriculture.**

<table>
<thead>
<tr>
<th>Short term sub-actions</th>
<th>Medium term sub-actions</th>
<th>Long term sub-actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agriculture</strong></td>
<td><strong>Agriculture</strong></td>
<td></td>
</tr>
<tr>
<td>• Promote indigenous knowledge on crops</td>
<td>• Establish, maintain and promote the uptake of climate change related information on agriculture</td>
<td>• Promote and implement climate smart agriculture practices</td>
</tr>
<tr>
<td>• Coordinate and mainstream climate change adaptation into agricultural extension services</td>
<td>• Develop and up-scale specific adaptation actions: promotion and bulking of drought tolerant traditional high value crops; water harvesting; index-based weather insurance; conservation agriculture; agroforestry; and integrated soil fertility management</td>
<td>• Enhance selection, breeding and management of animals to adapt to climate change</td>
</tr>
<tr>
<td>• Promote new food habits</td>
<td>• Develop and apply Performance Benefit Measurement methodologies for adaptation and development</td>
<td>• Promote climate smart agriculture</td>
</tr>
<tr>
<td><strong>Livestock</strong></td>
<td><strong>Livestock</strong></td>
<td></td>
</tr>
<tr>
<td>• Conduct capacity building on indigenous knowledge on crops, livestock insurance schemes, early warning systems, early action, livestock management and breeding</td>
<td>• Support adaptation of private sector agricultural value chain actors through capacity building efforts</td>
<td>• Strengthen monitoring capacity and capability to prevent overfishing and unauthorized exploitation in inland waters and Exclusive Economic Zone.</td>
</tr>
<tr>
<td>• Strengthen land management systems including rangeland management, fodder banks and strategic reserves</td>
<td>• Establish price stabilization schemes and strategic-based food reserves</td>
<td>• Promote upscaling of climate resilient strategy technologies in fisheries and climate resilient fish varieties</td>
</tr>
<tr>
<td><strong>Fisheries</strong></td>
<td><strong>Fisheries</strong></td>
<td></td>
</tr>
<tr>
<td>• Upscale sustainable aquaculture initiatives</td>
<td>• Develop new feeds.</td>
<td>• Expand the fishing zones in both inland and coastal waters</td>
</tr>
<tr>
<td>• Promote sustainable fish farming as a means of economic diversification, to reduce over-fishing in inland lakes and rivers, and adapting to climate change</td>
<td>• Promote livestock diversification and market access</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• (camels, indigenous poultry, beekeeping, rabbits, emerging livestock – quails, guineas fowl, ostrich, etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Establish price stabilization schemes and strategic-based food reserves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Restore degraded grazing lands</td>
<td></td>
</tr>
</tbody>
</table>

According to the 2018-2022 NCCAP, the climate change actions required to improve food and nutrition security result in adaptation through maintained or increased productivity and enhanced resilience of the agricultural systems through livelihood and crop diversification, increased water harvesting and storage, increased irrigation, sustainable land management, reduction in post-harvest losses, and uptake of insurance.\(^{70}\)

### 4.4.2 Energy sector

The NDC Sector analysis identified a low (minimum) target of emission reductions of 7.5 MtCO\(_2\)e for the Energy Supply and Residential and Commercial Energy Demand Sector, equivalent to a 21% reduction in 2030 baseline energy emissions.\(^{71}\) While 12 mitigation options were identified, the NDC analysis advised flexibility in order to achieve the NDC target.\(^{72}\) There are two priority areas, each with specific actions, electricity generation; household and commercial energy demand. For mitigation in electricity generation there is focus on geothermal, wind, solar, clean coal, and improved cookstoves. Clean coal was marked as ultra-super critical requiring high pressure and temperature steam generator, turbine, piping systems. On this electricity generation mix, the NDC Sector analysis echoes a caution that if the geothermal generation expansion mitigation option that envisions 2,775 Megawatts (MW) of additional geothermal capacity (total of 5,510 MW in 2030) could not be implemented, it would require that the top three mitigation options with the next highest technical mitigation potential be fully implemented. Ultimately choosing appropriate mitigation options to implement in the sector to achieve the target will require a careful balancing of priorities and may involve greater breadth in lieu of maximizing technical potential.\(^{73}\)

### 4.4.3 Industry sector

The NDC Sector analysis identified a low (minimum) target emission reduction of 1.0 MtCO\(_2\)e for the industrial sector. This is equivalent to a 10% reduction in 2030 baseline industry emissions, substantially less than half of the overall NDC target of 30%. It is imperative to note that the NDC analysis recommended that a lower

---


proportional contribution may make sense because of the high cost of mitigation (i.e., $/tonne reduced) in the industrial sector relative to other sectors.  

The analysis profiled the manufacturing sector, a key cog of industry, in Kenya as comprising agro-processing (such as grain milling, beer production and sugarcane crushing), paper production, textile and apparels, leather, pharmaceutical and medical equipment, construction materials and services, and chemical and chemical-related industries. The manufacture of cement is identified as a core industrial sector, with a growing demand for cement from within Kenya and from neighboring countries. Charcoal manufacturing, which uses mainly traditional inefficient technologies and the sector remains largely informal, was identified as employing almost one million people on apart and full-time basis, and contributing an estimated KES 135 billion annually to the Kenyan economy. This profile of the manufacturing sector does not include petroleum and mining (except cement), and with this being added to the core of Kenya’s industry, the emissions profile likely to increase.

According to the 2018-2022 NCCAP, the mitigation actions in manufacturing will realize GHG emission reductions of 0.45 MtCO₂e by 2022, through sustainable briquettes and charcoal production, industrial energy efficiency, and industrial symbiosis. While the adaptation actions in the NCCAP include provide for water efficiency and industrial symbiosis (to cut down waste products through cyclic production), the NCCAP only refers to the Big Four Agenda noting there will be progress in implementing the manufacturing pillar, but fails to pay attention to petroleum, mining and coal production which represent a substantial possibility in increased GHG emissions. Indeed, the 2015 NDC noted that the future contribution from the extractive sector was not been included in the accounting.

4.4.4 Forestry sector

The NDC Sector analysis examined emissions from the forestry sector under Land Use, Land-Use Change and Forestry (LULUCF), a mitigation sector under the

---

76. Kenya Nationally Determined Contributions, July 2015, p.3.
United Nations Framework Convention on Climate Change (UNFCCC) concerned with the exchange and balance of carbon dioxide between the atmosphere and the terrestrial biosphere system (sink).\textsuperscript{77}

The NDC Sector analysis examined emissions from the forestry sector under Land Use, Land-Use Change and Forestry (LULUCF), a mitigation sector under the United Nations Framework Convention on Climate Change (UNFCCC) concerned with the exchange and balance of carbon dioxide between the atmosphere and the terrestrial biosphere system (sink).\textsuperscript{78} In this context, the NDC forest sector analysis noted that the LULUCF sector is the second largest contributor to Kenya’s greenhouse gas emissions after agriculture, accounting for 32% of emissions in 2015; largely a result of deforestation.\textsuperscript{79}

It is important to note that the NDC Sector analysis identified a low (minimum) target emission reduction of 11.3 MtCO\textsubscript{2}e for the LULUCF Sector, which is equivalent to a 51% reduction in 2030 baseline LULUCF emissions. The very high target is due to the unique position of the LULUCF sector to create net sinks of carbon when, for example, new forests are planted. It is possible for emission reductions to exceed baseline emissions as identified by the maximum technical potential of 40.2 MtCO\textsubscript{2}e. Emission reductions in the LULUCF sector are attractive because of the relatively low cost to create these carbon sinks compared to actions in other sectors.\textsuperscript{80} This opportunity in forestry, can be contrasted with the low opportunity for mitigation in the industrial and manufacturing sector. Broadly, three main mitigation actions are identified: 81

i) Restoration of forests on degraded lands
ii) Rehabilitation of degraded forests
iii) Reducing deforestation and forest degradation

Adaptation approaches, identified by the NDC forest sector analysis, include

management practices to reduce the vulnerability of forests to climate change, and reduce the vulnerability of people to climate change.\textsuperscript{82}

The discussion in this section has deliberately relied on government documents to demonstrate how Kenya’s national development and economic expansion is currently structured, and how the Just Transition agenda needs to be integrated. It is important to highlight that Kenya’s NDC is conditional on availability of financial, technological and capacity building support from the international community, in line with article 9, 10 and 11 of the Paris Agreement.\textsuperscript{83}

5. Framing Potential Approaches For Kenya To A Just Transition An Low Carbon Climate Resilient Pathway

5.1. Understanding the impacts of the legal and policy framework on sustainable development and climate change

The Just Transition is concerned with the overall legal and policy framework governing sustainable development, and not just climate change policy. In its 2016 technical paper on a Just Transition, the UNFCCC Secretariat frames this element as “understanding the mitigation policy,” arguing that in order to address the impacts of climate change mitigation policies, it is important that the climate change policies incorporate an employment and social impacts dimension.\textsuperscript{84} While this is not inaccurate,

\textsuperscript{82} Kenya Nationally Determined Contributions, July 2015, p.3.
\textsuperscript{83} UNFCCC, Just transition of the workforce, and the creation of decent work and quality jobs. Technical Paper by the Secretariat, 26 October 2016. FCCC/TP/2016/7, para 100.
\textsuperscript{84} Communications Commission of Kenya & 5 others v Royal Media Services Limited & 5 others [2014] eKLR, para 380.
this discussion paper argues that for a developing country, Kenya should evaluate the impacts of not just mitigation policies, but laws and policies that impact sustainable development and climate change. This because the country has identified a low carbon climate resilient development pathway as the guiding principle, and as stated in the NDC, prioritized adaptation even while making global commitments on GHG emissions.

5.1.1 Constitutional Provisions

Additionally, Kenya’s Constitution has crystallized sustainable development as a legal construct. Article 10 sets out values and principles of governance which include sustainable development. These values and principles of governance are mandatory when implementing the Constitution; making and implementing any law; and when making any public policy decisions. They bind all public officers and other persons (natural persons and corporations), and according to the Supreme Court of Kenya, the failure to apply article 10 can cause a law or public policy decision to be declared unconstitutional. The concept of sustainable development highlights the challenge of development and the balancing of interests. These requires a delicate coherence when making choices to ensure a balanced outcome between the three dimensions of sustainable development: economic, social and environmental. This means that the government of Kenya has a mandatory constitutional obligation to ensure that all laws and public policy decisions on climate change actions consider the balance between economic, social and environmental considerations. The Bill of Rights recognises the right to a clean and healthy environment in article 42, and this implies a need to maintain an environment that can perform and provide provisioning, support, cultural and regulating ecosystem services. Article 43 provides every person with socio-economic rights, which include the human rights to highest attainable standard of health; adequate food and freedom from hunger; to accessible and adequate housing, and to reasonable standards of sanitation; clean and safe water in adequate quantities; to social security; and education. Importantly, article 43(3) emphasizes an additional obligation on the State to provide appropriate social security to persons who are unable to support themselves and their dependents. Article 41 provides every person with a right to fair labour practices, which include the rights of all workers to fair remuneration, reasonable working conditions, and to join a trade
union. Additionally, every trade union, employers’ organization and employer has the right to engage in collective bargaining. These rights are pertinent in addressing the vulnerabilities resulting from the impacts of climate change, and should be kept in mind when framing actions concerning Just Transition. Indeed, article 21 places a duty on the Kenyan State to address the needs of vulnerable groups within society. Overall the Kenyan state has the obligation to respect, protect and fulfil all these rights, while integrating sustainable development in all its actions as required by article 10.

5.1.2 Climate change law, policy and the mainstreaming opportunity

The Climate Change Act, enacted in 2016, states that the objective of Kenya is to attain a low carbon climate resilience economy by mainstreaming climate change considerations across various sectors of the economy. This is to be achieved through various mainstreaming tools, key among them the National Climate Change Action Plan (NCCAP), which should be sector-wide implemented by all public agencies at national and county level. It is through the NCCAP that Kenya implements its Nationally Determined Contributions (NDC) commitments made in 2015, to reduce GHG gas emissions by 30% from the Business as Usual (BAU) scenario, in the period to the year 2030. This presents an opportunity to harmonise this transition with Kenya’s economic transformation targets under Vision 2030, and in a manner consistent with the SDGs that also have a 2030 goal. Importantly, Kenya’s Climate Change Act creates climate change duties for business and industry (private sector, etc), as well as incentives for actions contributing to climate change mitigation, which will be pertinent in the discourse on how industry and private businesses in Kenya can contribute to the Just Transition to a low carbon climate resilient pathway to sustainable development. It is however important that in framing Just Transition policy actions and measures, Kenya pays attention to the prioritisation of adaptation actions. This climate law also establishes a Climate Fund, with a mandate to provide a financing

89. Climate Change Act, No. 11 of 2016, section 16.
mechanism for priority climate change actions and interventions.\textsuperscript{91}

Implementation of the Climate Change Act is supported by Sessional Paper No.5 of 2016 on National Climate Change Framework Policy which recognises that Kenya is a developing country whose economy is highly dependent on the natural resource base, making it highly vulnerable to climate variability and change.\textsuperscript{92} The Policy objective, aligned to the climate legislation, is to enhance adaptive capacity and resilience to climate change, and promote low carbon development for the sustainable development of Kenya.\textsuperscript{93} It is evident that the objective clearly prioritises enhancement of adaptive capacity and resilience to climate change. In terms of low carbon growth opportunities, the Policy highlights that Kenya currently contributes very little to global GHG emissions and examines how economic activity in some key sectors will impact national GHG emissions.\textsuperscript{94} Box 1 below is illustrative.

Box 1 – Analysis of how key economic sectors correlate with GHG emissions by Kenya Climate Change Policy, 2016

\begin{itemize}
  \item[i)] 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.
\end{itemize}
ii) 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.

iii) 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.

iv) 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.

v) 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.
Kenya’s current national development plan is Sessional Paper No. 10 of 2020 on Vision 2030, which identifies ten foundations for the economic, social and political development of Kenya within the period to the year 2030. These pillars include macroeconomic stability for long-term development; continuity in governance reforms; enhanced equity and wealth creation opportunities for the poor; infrastructure development; energy; science, technology and innovation; land reform; human resource development; security; and public service reform. Vision 2030 is implemented through Medium Term Plans (MTP) developed for every five-year period, the current one being for the 2018-2022 period. In the current period, the focus of national development is classified as the ‘Big Four Agenda” which means that implementation of Vision 2030 through the 2018-2022 MTP will prioritize four key economic sectors: food security, affordable housing, manufacturing, and affordable healthcare for all. These are all important areas that are impacted by the adverse impacts of climate change, and integral to limiting GHG emissions, and therefore central to the Just Transition agenda.

5.2. Assessment of the impacts of climate change

The Fifth Assessment Report of the IPCC published in 2014 noted that warming projections under medium scenarios indicate that extensive areas of Africa will exceed 2 °C by the last 2 decades of this century relative to the late 20th century mean annual temperature. In 2018, the IPCC 1.5C Report indicated that limiting global warming to 1.5°C compared with 2°C is projected to result in smaller net reductions in yields of maize, rice, wheat, and potentially other cereal crops, particularly in sub-Saharan Africa.

According to the NCCRS, and confirmed by the 2013-2017 NCCAP, 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. Many of the impacts of climate change are materialising through extreme events such as droughts and floods, which are hazards and combine with socio-economic and environmental vulnerabilities and result in disasters. Thus, these extreme events, and disasters result in severe human suffering, and hamper economic development and efforts at poverty reduction. These adverse impacts are multi-dimensional and therefore requiring a coordinated multi-sectoral approach in addressing them. They present a threat to the resilience, and sustainable development of Kenya.

The 2018-2022 NCCAP has identified the impacts of climate change as either economic, social or environmental impacts, thereby aligning with the dimensions of sustainable development. Box 2 below summarizes the economic, social and environmental impacts of climate change:

Box 2 – summary of the economic, social and environmental impacts of climate change in Kenya

**Social impacts:**

- Floods have caused huge disruptions to human lives in Kenya. The floods experienced in early 2018 claimed over 183 lives, displaced more than 225,000 people, including over 145,000 children, and led to closure of over 700 schools. They have been associated with cholera outbreaks in at least five Counties, and people experiencing upsurges in mosquito-borne diseases, such as malaria, and dengue fever.

- Between 1990 and 2015, a total of 43 flood disasters happened in Kenya. This is equivalent to an average of 1.65 flood disasters per year. On

---

96. See online: https://vision2030.go.ke/towards-2030/ (accessed on 2 December 2019)
Social impacts:

- Floods have caused huge disruptions to human lives in Kenya. The floods experienced in early 2018 claimed over 183 lives, displaced more than 225,000 people, including over 145,000 children, and led to closure of over 700 schools. They have been associated with cholera outbreaks in at least five Counties, and people experiencing upsurges in mosquito-borne diseases, such as malaria, and dengue fever.

- Between 1990 and 2015, a total of 43 flood disasters happened in Kenya. This is equivalent to an average of 1.65 flood disasters per year. On average, each flood disaster affected 68,000 people. Estimates show that 267,000 Kenyans will be at risk from coastal flooding by 2030, because of sea level rise.

- An increase of 30 centimetres of sea water at the Kenyan coast is capable of submerging Mombasa and 17% of coastal areas. This could be a threat to the country’s economy, and to the movement of imports and exports by Kenya and countries that use the port of Mombasa, as the area supports tourism and fishing industries, and has the largest seaport in East Africa.

- On average, droughts in Kenya affect about 4.8 million people. Droughts have destroyed livelihoods, triggered local conflicts over scarce resources, and eroded the ability of communities to cope. The 2014-2018 drought was declared a national emergency in February 2017. At that time, it had affected 23 out of the 47 Counties, with Counties in ASALs being the most affected. At least 3.4 million Kenyans were severely food insecure, and an estimated 500,000 people did not have access to water.

- An estimated 482,882 children, mainly from 23 ASAL Counties, required treatment for acute malnutrition. School attendance dropped in the
Counties that were impacted by the drought. Droughts also cause changes in the migratory patterns of animals, and increase conflicts between people and large mammals like elephants.

**Economic impacts:**

- The economic cost of floods and droughts in Kenya is estimated to create a long-term fiscal liability equivalent to between 2% and 2.8% of the country’s GDP every year. Specifically, the costs of floods are estimated to be about 5.5% of GDP every seven years, while droughts account for 8% of GDP every five years.

- The economic impacts of floods are severe; in 2018, rain and flooding wiped out resources worth billions of shillings. Roads and infrastructure were damaged, seasonal crops across an estimated 8,500 hectares of land destroyed, and over 20,000 livestock drowned. The Government allocated over KES 75 billion to combat floods and fix the roads destroyed by the rains.

- Droughts have had the greatest climate change-related economic impacts in Kenya. On average, a 0.6 percentage point decline in GDP growth is observed in years of poor rains (see Figure 3). This is because most of the country’s growth sectors are climate-sensitive. The agriculture sector, for example, grew by a mere 1.6% in 2017, compared to 4.7% in 2016. This is because drought suppressed production of crops, and adversely affected livestock production.57 From 2007 to 2017, losses in livestock populations due to drought-related causes amounted to about US$ 1.08 billion.

- The 2008-2011 drought is estimated to have cost the Kenyan economy KES 968.6 billion; KES 64.4 billion for the destruction of physical assets, and KES 904.1 billion for losses in the flows of the economy. Along with other internal and external shocks, the severe droughts between 2008 and 2011 contributed to the reduction in Kenya’s GDP growth rate, from
an average of 6.5% in 2006/2007 to an average of 3.8% between 2008 and 2012. The drought also depressed generation of hydroelectricity, leading to an increase in generation from thermal sources that are more costly and produce GHG emissions.

Environmental impacts:

- Droughts are large-scale disasters in Kenya. The International Disaster Database reported that a total of ten droughts occurred in Kenya between 1990 and 2015. This translates to one drought disaster every two and a half years. An assessment conducted by the Kenya Food Security Steering Group on the 2017 long-rain season in Kenya’s ASAL Counties found that spatial and temporal distribution of rain was poor across the entire country. The assessment also established that rains began late in most parts of the country, resulting in a shortened rainy season. Most areas were reported to have received 50-90% of normal rainfall.

- Rising sea levels are a concern for Kenya’s coastline consisting of mangroves, coral reefs, sea grass and, rocky, sandy, and muddy shores. IPCC reports that over the 1901-2010 period, global mean sea level rose by 0.19 metres, as a result of thermal expansion of the ocean due to warming, and addition of water from the loss of mass from melting glaciers and ice sheets. The annual rise over the past 20 years has been 3.2 millimetres per year, which is roughly twice the average speed observed in prior 80 years. Globally, sea levels are expected to rise from 26 cm to 82 cm by 2080s. The rate of sea level rise along Africa’s Indian Ocean coast is expected to be greater than the global.

- Desertification in ASALs is also a major environmental impact attributable to climate change, besides human activities. It is intensifying and spreading, and reducing the productivity of land, which negatively affects communities. Restoration of degraded land has important climate benefits, including the sequestration of carbon dioxide, and improved climate resilience through recovery of lost ecosystems. Kenya launched an
ambitious land restoration programme in 2016, which targets restoration of 5.1 million hectares of degraded and deforested landscapes by 2030.

- Climate change is contributing to the loss of Kenya's biodiversity. Dozens of animals died in 2017 as a result of lack of water and pasture in national parks and reserves; as a direct impact of drought. Kenya Wildlife Services (KWS) has reported that in some years, more animals die from drought than poaching in Kenya. Climate change has the potential to alter migratory routes and timings of species, such as migratory birds that use seasonal wetlands, and herbivores that track seasonal changes in vegetation. Climate change significantly affects marine ecosystems, and could lead to large-scale shifts in patterns of marine productivity, biodiversity, community composition, and ecosystem structure.

- Kenya lost about 12,000 hectares of forest annually, from 1990 to 2005, through deforestation. At independence in 1963, Kenya had a 12% forest cover. Due to population pressure for settlements, infrastructure, demand for wood products, and conversion to agriculture, forest cover had been reduced to about 6.9% in 2017.

- Deforestation is a major cause of climate change, because clearing forests releases huge amounts of greenhouse gases. Deforestation and forest degradation in Kenya largely results from human activities. Climate change could affect the growth, composition, and regeneration capacity of forests, which would result in reduced biodiversity, and diminished capacity to deliver important forest goods and services. Rising temperatures and long periods of drought could lead to more frequent and intense forest fires, while rising temperatures could extend the ecosystem range of pests and pathogens. Climate change impacts tree growth, survival, yield, and quality of wood and non-wood products. Rising sea levels could submerge mangrove forests in low-lying coastal areas.
The impacts of climate change in Kenya’s society, economy and environment are therefore extensive, and as these impacts continue to evolve, Kenya must invest in continuously identifying the impacts in order to frame response mechanisms accordingly. Financing, technology and technical capacity, together with a high-quality climate change knowledge management system is required for this purpose.

5.3 Consultation and social dialogue

According to the UNFCCC, consultation and social dialogue are among those most affected by climate change effects and policies are at the core of the just transition framework and the Decent Work agenda. The role of dialogue to reach decisions by consensus, and to identify new business and employment opportunities and potential challenges as well as the need for adaptation of current skills and for new skills, has positioned consultation and tripartitism as an essential element of labour relations around the world. In the context of climate change, social dialogue has been identified as an essential tool for anticipating and managing the effects of greening on the quality of work and employment. Consultation and social dialogue can only exist and thrive in a society that has a democratic backbone, and guarantees all the fundamental rights and freedoms needed. These include the freedom of expression, and freedom of assembly which allow for workers, entrepreneurs and others working on the Just Transition to assemble ideas and thoughts, which is a foundation for innovation.

Consultations for purposes of contributing to the national policy direction is important, and in this case freedom of expression and assembly are

---

98. UNFCCC, Just transition of the workforce, and the creation of decent work and quality jobs. Technical Paper by the Secretariat, 26 October 2016. FCCC/TP/2016/7, para 154.
supported by constitutional rights relating to public participation such as consultation during decision making, representation during decision making, public awareness and civic education; and the right of access to information. The latter right is guaranteed by the Constitution and includes the right to access information held by government, as well as information held by private entities where such information is required to fulfill fundamental rights. The government has an obligation to proactively disclose and disseminate information that it holds, in order to build public awareness. Public consultation is important, in order to obtain the perspectives of the public during decision making, and to receive feedback. Section 23 of the Climate Change Act requires public consultations during climate change decision making and places an obligation on public agencies to ensure there is meaningful consultation, and appropriate feedback is provided. These freedoms are critical to innovation as they permit a society to freely engage in the exchange of ideas, and the development and shaping of thoughts, and public policy decisions. Public participation, in all its forms, including access to court is also a binding value and principle of national governance just like sustainable development, under the Constitution. Consultation and social dialogue also incorporate the roles of trade unions which have played an important role in framing the Just Transition Agenda, as well as the Decent Work approach. As pointed out earlier, Kenya recognises fair labour practices and fair remuneration as a human right and provides that each person has the right to join a trade union, which in turn has a constitutional duty to pursue collective bargaining for its members. Consultation and social dialogue can be implemented through public participation mechanisms, which includes engagement between government, civil society and private sector. It can also occur through engagement with trade unions as part of the public participation to shape policy, and particularly the process of a just transition, in order to avoid net job losses.

5.4 Training and skills development

The Just Transition to a low carbon climate resilient pathway to sustainable development in Kenya will require a review of the training and skills development policy approach. It is necessary for the public sector to review the manner of providing on-the-job or in-service training for staff in order to build and enhance a climate change
consciousness in decision making. This will enhance the ability to mainstream climate change actions across various policies and public sector functions, as required by the Climate Change Act.

The Climate Change Act creates various obligations for private sector, including provision for future imposition of climate duties, and also the window for incentives for enhancing mitigation actions. Based on this, it will be necessary for industry and private sector to work with government in order to identify the existing skills and examine how a national training framework can be developed that has the Just Transition to a low carbon climate resilient development at the core.

Other climate change priorities for Kenya can inform development of a training and skills development capacity. This include the mandatory requirement to integrate climate change into the national basic education curriculum required by the Climate Change Act which also requires progressive integration of climate change into the curricula of tertiary institutions as maybe necessary. The basic education system will permit Kenya to develop climate change consciousness and innovative into younger and future generations of Kenyans, including those coming to the job market in the short to medium term period. An important opportunity arises in mainstreaming of climate change into curricula for post-secondary learning institutions. This is because of Kenya has a unified regulatory regime through the Universities Act (2012), which establishes the Commission for University Education with the power to approve curriculum. For other levels of post-secondary education, including technical and vocational training, Kenya has the Technical Vocational and Training Institutions (TIVET) Act that creates a TIVET Authority with a mandate to regulate curriculum and training. This is an important pathway for retraining and retooling workers for business, and the review of this curriculum to integrate the needs of a Just Transition should be underpinned by consultation and social dialogue with various stakeholders and the public.

5.5 Social protection mechanisms

The Constitution of Kenya requires the government to and education. Importantly, article 43(3) emphasizes an additional obligation on the State to provide appropriate social security to persons who are unable to support themselves and their dependents. Social protection is one of the pillars of a Just
Transition framework developed by ILO. Social protection provides economic benefit to people in cases of unemployment, work-related injury, maternity or retirement. Nearly half of all people over pensionable age do not receive a pension, and for those who do, pension levels are often inadequate.100 Kenya has put in place a Retirement Benefits Act, and a regulatory authority to govern investments in, and access to retirement funds. Social protection mechanisms should be refined to include systems for providing financial benefits to individuals during temporary periods of unemployment, or lack of income during business collapse or decline due to the transition process. For instance, section 41(2) of the Employment Act empowers the Cabinet Secretary responsible for labour through regulations to require employers to ensure employees against risk of redundancy through an unemployment insurance scheme. This scheme could be through a publicly operated scheme, or a scheme through an insurance firm. These provisions have not been operationalized, and should be reviewed further against the needs of a just transition (and other critical needs such as the current Covid-19 pandemic), in order to make it fully responsive and sufficient to protect the rights of employees.

5.6 Financing climate change actions and interventions

Climate change interventions, in adaptation and mitigation, required for the Just Transition will be expensive to implement. The required climate financing will include funding from all international, public and private sources (including multilateral banks) that provide investments needed for Kenya to achieve the low carbon climate resilient development pathway. Together with technology and capacity building, they will require retooling of equipment, purchase of new equipment and retraining of staff with new skills. Research and innovations will be needed to provide solutions.

With Kenya prioritising adaptation actions, it is necessary to have finances, technology and capacity to avoid the pursuit of adaptation solutions that increase emissions, especially now that Kenya is a net GHG emitter. The NDC was submitted as being conditional on availability of finance, technology and capacity building. There is a risk that key

100. UNFCCC, Just transition of the workforce, and the creation of decent work and quality jobs. Technical Paper by the Secretariat, 26 October 2016. FCCC/TP/2016/7, para 184.
economic priorities, intended to build resilience of the economy, such as petroleum, mining and coal, will increase Kenya’s GHG emissions; and indeed extractives were not part of the NDC computations. Alternative innovations are needed that can support Kenya’s national economic development projection towards a low carbon pathway, instead of carbon intensive oil and minerals. However, not utilizing petroleum and minerals for economic development, in a country where poverty remains a challenge, will result in those resources becoming stranded assets.

This would pave way for an economic transition akin to that of Costa Rica which produces 99% of its electricity from renewable energy sources including hydroelectricity, geothermal, wind, and solar, and has laws that prohibit open pit mining and offshore oil and gas development. The country has a national carbon tax whose revenues are dedicated to helping small-scale farmers in reforestation and habitat protection. According to the 2019 Global Biodiversity Assessment, twenty years ago, Costa Rica’s leading exports were coffee and bananas. Today Costa Rica’s most valuable exports are computer chips and medical prosthetics, as corporations have located manufacturing facilities to take advantage of the country’s educated workforce, clean air, and clean water. 101

Climate financing mechanisms will therefore continue to play a role, but the significant opportunity lies in trade and business, and in the transfer of technology that can catalyse innovations. Market-based financing options, including green private and public bonds, and other innovative vehicles will play an important role. Similarly, multilateral financing sources such such as the Green Climate Fund, the Global Environment Facility, among other available ones will remain important. The Kenya government also retains the opportunity to frame financing from multilateral financing institutions such as the World Bank, African Development Bank as specifically funding investments with low carbon climate resilient outcomes, and elements of the Just Transition.

101. IPBES Global Assessment on Biodiversity and Ecosystem Services (Chapter 5) Pathways toward a sustainable future, p.112-113.
6. Utility Of The Mainstreaming Approach To The Just Transition

Both the Climate Change Act, and the Climate Change Policy require the mainstreaming of adaptation, mitigation and other relevant climate change actions into the functions of all public entities at the national and county government, through the NCCAP. County governments must undertake this mainstreaming of the NCCAP into their County Integrated Development Plans, required by law for every five-year period, as the development planning master plans for each county. Climate change duties, for public and private entities provide a window through which climate targets for mitigation and adaptation can be clearly defined, in line with the economic agenda, national and international obligations, and the mandatory requirement to adhere to sustainable development by balancing the three dimensions (social, economic and environment) during decision making. As seen earlier, amendments to EIA regulations to integrate the climate risk vulnerability assessment is being implemented through Draft EIA regulations, and during Environmental Audit, could require a project to report on compliance with national climate change obligations, such as duties, or any GHG emissions reduction targets that could be developed. This is also important for an additional reason. Private sector business and industry is at the heart of research and innovations, especially those towards a low carbon climate resilient pathway. Incentives under section 26 of the Climate Change Act can play a key role in balancing between climate change duties and providing positive incentives to support innovations in mitigation actions. The Climate Change Fund established under section 25 of the CCA, while only one aspect of climate finance, can provide funds to catalyse research, development and innovation that is acutely needed for a Just Transition.

From an institutional perspective, the Climate Change establishes a Climate Change Council chaired by the President of Kenya, whose members include Cabinet Secretaries responsible for Finance, Economic Planning, Energy and Climate Change. Membership includes Chairperson of the Council of Governors, and members representing key stakeholders including civil society, private sector, academia, and marginalized communities. This Climate Change Council has the mandate to provide high level political oversight on implementation of the Climate Change
Act, to approve the NCCAP and ensure it is mainstreamed across all sectors. The Council has the power to approve access to the Climate Change Fund, and to impose climate change duties on public and private entities. At the time of writing, the Climate Change Council has not yet been formally convened due to litigation revolving around a dispute on the nomination of the civil society representative. The convening of the Council will provide a much-needed catalyst to examine what Kenya needs for the Just Transition, including how to balance between mitigation and adaptation actions, without violating obligations under the Paris Agreement.

7. Conclusion

The Just Transition concept, under the Paris Agreement, is turning out to have more implications than Decent Work. This is because job security and decent work are outcomes of a more complex social, economic and environmental process of converting economic priorities to operate on low carbon climate resilient trajectory. The implication is that developing countries like Kenya, which have identified adaptation as a priority, must find an optimal methodology through which to transition their economies as they reduce GHG emissions and implement adaptation actions. An emerging challenge, based on a review of Kenya’s economic development priorities, is that the utilization of petroleum and mineral resources is high on the priority of economic choices, and this is likely to result in higher GHG emissions. However, with high levels of poverty and economic vulnerability, Kenya must urgently find alternatives to finance the Just Transition to a low carbon climate resilient economy without the use of hydrocarbons and minerals. If these alternatives, which required financing, technology and capacity cannot be found soon, the country will be unlikely to fulfil its NDC commitments and could adopt the use of hydrocarbons and minerals as a major
cog of its industrial base, which will increase emissions. Additionally, efforts to reverse deforestation and forest degradation will be unsuccessful, therefore losing out on the high abatement potential from the forestry sector. This discussion paper has laid out the key concerns and important elements that need to be considered during the Just Transition discussion, and it is intended to catalyse the development of a national position by Kenya on the approach it will take on a Just Transition, and harmonise that approach with the NCCAP and the MTP to Vision 2030.

As stated by States in Silesia Declaration on Solidarity and Just Transition, Climate Change is one of the greatest challenges of our time and a common concern of humankind requires a paradigm shift towards building low greenhouse gas emission and climate resilient economies and societies that offer substantial opportunities, continued high growth and sustainable development, while ensuring a just transition of the workforce that creates decent work. It is however important that Kenya recognises its own special circumstances as having historically low GHG emissions, and a uniquely urgent need to build resilience of its economy to address vulnerability and poverty. These special circumstances are reflected in the national development priorities highlighted in this discussion paper. Moreover, the urgency for Kenya and other developing countries to access funds, technology and capacity has heightened. Nationally, Kenya must commence a conversation with the public and all key stakeholders to reflect on the national development priorities and how to integrate them with the climate obligations; and to do so within the context of a democratic nation.
8. Select References

1. Béla Galgóczi, Just transition towards environmentally sustainable economies and societies for all, ILO ACTRAV Policy Brief, 2018

2. Communications Commission of Kenya & 5 others v Royal Media Services Limited & 5 others [2014] eKLR


7. IPBES Global Assessment on Biodiversity and Ecosystem Services (Chapter 5) Pathways toward a sustainable future

8. Just Transition Research Collaborative, Mapping Just Transition(s) to a Low Carbon World: Report of the Just Transition Research Collaborative nited Nations Research Institute for Social Development (UNRISD) and Edouard Morena of the University of London Institute in Paris (ULIP), 2018
9. Kenya Association of Manufacturers, Manufacturing Priority Agenda, 2019
15. Kenya, Sessional Paper No.5 of 2016 on National Climate Change Framework Policy
23. UNFCCC, Just transition of the workforce, and the creation of decent work and quality jobs. Technical Paper by the Secretariat, 26 October 2016. FCCC/TP/2016/7
Friedrich Ebert Stiftung
Kenya Office

Postal Address
P.O. Box 14932 - 00800
NAIROBI - KENYA

Physical Address
Peponi Road
Peponi Plaza, Unit D2
Westlands

Fax : +254 20 3746992
Telephone : +254 20 3748338/9
: +254 733 610432
: +254 721 540955

Email : info@fes-kenya.org
Website : http://fes-kenya.org

ISBN: 9966-957-34-0