



The Landscape of Climate Finance in Kenya

On the road to implementing Kenya's NDC

March 2021



REPUBLIC OF KENYA
THE NATIONAL TREASURY AND PLANNING

GNI^{plus}
THE GLOBAL NDC
IMPLEMENTATION PARTNERS



AUTHORS

The National Treasury: Peter Odhengo, Hillary Korir, Dr. Davis Muthini, and Dr. Walter Moturi

Climate Policy Initiative: Federico Mazza, Helene Van Caenegem, and Anna Balm

The Kenya Climate Innovation Centre: Christine Mwangi, Lydia Mwithiga, Dr. Samuel Njoroge, and Mwalya Wambua

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CONTACT

Comments, suggestions as well as requests for clarification of information contained in this report are welcome and should be addressed to:

The Principal Secretary

The National Treasury

P.O Box 30007-00100, GPO,

Nairobi, Kenya

Tel. +254 020 2252299

E-mail: ps@treasury.go.ke

Website: www.treasury.go.ke

ABOUT GNI^{PLUS}

GNI^{plus} brings together the combined expertise of AECOM, Pollination, and Climate Policy Initiative, to provide governments with the best available policy, technical, financial, governance, and legal expertise to support the implementation of their Nationally Determined Contributions (NDCs). GNI^{plus} also supports governments as they work to mobilize private investment and create long-term, sustainable growth, and development.

GNI^{plus} maximizes impact by building on its partners' existing collaborations with governments, multilateral agencies, and private investors to facilitate climate action by enhancing current national strategies and initiatives.

GNI^{plus} is part of the International Climate Initiative (IKI). The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) supports this initiative on the basis of a decision adopted by the German Bundestag. In Kenya, GNI^{plus} will work in partnership with the Government of Kenya and other public and private stakeholders to help achieve its climate and development goals.



ABOUT CPI

CPI is an analysis and advisory organization with deep expertise in finance and policy. Our mission is to help governments, businesses, and financial institutions drive economic growth while addressing climate change. CPI has six offices around the world in Brazil, India, Indonesia, Kenya, the United Kingdom, and the United States.

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FOREWORD

Kenya is a party to the United Nations Framework Convention on Climate Change (UNFCCC), its Kyoto Protocol, and the Paris Agreement. Over the past five years, considerable efforts have been made to mainstream climate change considerations into the country's plans, policies, strategies, projects and programmes. These documents include the Vision 2030; the National Climate Change Response Strategy, 2010; the National Climate Change Framework Policy; the National Policy on Climate Finance; the Green Economy Strategy and Implementation Plan; and the Climate Change Act, 2016. They provide a regulatory framework for an enhanced response to climate change and mechanisms and measures to achieve low-carbon, climate-resilient development. Further, they enable mechanisms for mobilizing, tracking and reporting on climate finance.

Kenya's economy is highly dependent on its natural resource base. This makes our country highly vulnerable to climate change and threatens our Vision 2030 goal to create a globally competitive and prosperous nation with a high quality of life. Addressing climate change requires us to transform our economy by integrating climate change into development policies and actions across multiple sectors. This will lower greenhouse gas emissions, reduce our vulnerability to climate shocks and deliver poverty reduction gains. Taking action to adapt to and mitigate climate change is in our national interest.

Climate finance is an important enabling aspect of our efforts to address climate change. The Paris Agreement sets a goal of mobilizing USD 100 billion per year by 2020 to support mitigation and adaptation activities in developing countries. Significant financial resources from the public and private sectors are expected to be channeled towards climate action. If Kenya is to take advantage of these opportunities, the proper institutional and financial mechanisms must be in place so that resources are directed efficiently toward national climate and development priorities. This is the context in which we have developed this Kenya Landscape of Climate Finance Report.

Tracking and reporting of climate finance flows has become a central concern for development and economic policy. Tracking helps to provide comprehensive data on climate change-relevant budgeting and spending, enabling the government to make informed climate policy decisions. Alongside other climate data, such as GHG inventories and vulnerability studies, climate finance data will serve as a cornerstone of data-driven decisions on climate investments in the country. Climate finance tracking is therefore essential to provide a standardized guide to identify climate-related projects and track the public climate finance that the country receives.

This report presents Kenya's first step towards enhancing transparency of the climate finance support needed and received through international and national sources. Further, it links the inputs and impacts in terms of emission reduction and resilience building at national and sub-national levels.



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

NOTE FROM THE NATIONAL TREASURY

This report was commissioned by the Government of Kenya through the National Treasury and Planning. The report is part of the Government of Kenya's strategic intervention to track and report climate-relevant expenditures. Climate finance tracking and reporting will not only enhance coordination and effectiveness of climate change mitigation and adaptation efforts but will also promote robust transparency in accordance with The Paris Agreement.

The report was developed by a Multi-Stakeholder Technical team coordinated by the National Treasury's Climate Finance and Green Economy Unit and Climate Policy Initiative (CPI). The data collection and analysis was undertaken by The National Treasury with support from the GNI^{plus} team (led by CPI) and the Kenya Climate Innovation Centre (KCIC). I take this early opportunity to recognize their professionalism and diligence throughout the process of developing the report.

A wide range of institutions drawn from National Government (Ministries, Departments and Agencies), County Governments, Private Sector, Development Partners, Academia, Research Organizations and Civil Society Organizations provided data that informed the development of this report. I take this opportunity to acknowledge their support. The National Treasury is also grateful to the national and international experts who provided valuable technical inputs to the process.

Reaching this significant milestone would not have been possible without the generous financial and technical support from the German International Climate Initiative (IKI) through the GNI^{plus} Programme.



A stylized handwritten signature in black ink, appearing to read 'Julius Muia'.

Julius Muia, PhD,
CBS Principal Secretary
The National Treasury

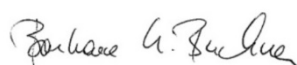
NOTE FROM CLIMATE POLICY INITIATIVE / GNI^{PLUS}

In Kenya, the economic impacts of climate change – and its effect on development and growth – are already significant. Climate-related disasters, such as droughts and floods, are estimated to create an economic liability of 2-2.8% of its gross domestic product every year. This is largely due to the climate-sensitive nature of Kenya's economy with the agriculture, water, energy, tourism, and wildlife sectors being of upmost importance. And, in the past year, these challenges have been exacerbated by the COVID-19 pandemic.

There is good news though. Kenya has pledged to reduce its greenhouse gas emissions by 32% by 2030 relative to the business-as-usual scenario, and its leaders are dedicated to making sure this happens. Also, there are clear and actionable solutions. Increased finance for mitigation and adaptation in Kenya, particularly in the transport, forestry, water, land use, and waste sectors could create jobs for millions of people and lead the way to a greener, more resilient future. Though, to achieve this both public and private climate finance needs to be scaled-up significantly.

This study, the first attempt to track the climate finance flows in the country since the Paris Agreement, is of critical importance and comes at a time when it is urgently needed. While there is a lot of information on how climate change is impacting Kenya's economy, there is a need to better understand which sectors are receiving climate finance and whether it is enough to meet the ambitions of Kenya's climate goals. This information is vital for more targeted policy-making and distribution of climate finance as well as informing the scale-up of investment for sustainable and transformational impact.

We thank the Government of Kenya for initiating this project and working with the GNI^{plus} team in such a robust and transparent manner. The findings are clear: While Kenya has made great progress in mainstreaming climate change into sectoral policies and plans, now it's time to switch gears and target finance at scale to enable a true transformation that will create a better future for Kenya and its people. We are optimistic that this study allows for that next step.

A handwritten signature in black ink that reads "Barbara A. Buchner".

Barbara Buchner
Global Managing Director
Climate Policy Initiative

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EXECUTIVE SUMMARY

In 2015, the Government of Kenya submitted its nationally determined contribution (NDC) to the Paris Agreement, a landmark agreement to combat climate change. Kenya pledged to reduce its greenhouse gas (GHG) emissions by 30% by 2030 relative to the business-as-usual scenario. At the time, the Government of Kenya estimated that KES 4,040 billion (USD 40 billion)¹ would be needed by 2030 to meet its NDC target. In 2018, these numbers were revised upwards in its National Climate Change Action plan (NCCAP) to KES 1,848 billion (USD 18.3 billion) for the 2018-2022 period only, equivalent to nearly KES 465 billion a year (USD 4.6 billion). In December 2020 the Government submitted an updated NDC further increasing the need. The current estimated cost of implementing Kenya's mitigation and adaptation actions stands at KES 6,775 billion (USD 65 billion) in 2020-2030.

The Landscape of Climate Finance in Kenya is the first attempt to track the climate finance flows in the country since the Paris Agreement. The report finds that KES 243.3 billion (USD 2.4 billion) flowed to climate-related investments in 2018, one third of the finance needed annually. Led by the National Treasury of Kenya, the analysis shows that the financing tracked is disproportionately targeting certain sectors and activities that will only partially address climate issues and significant efforts will be needed to align all sectors relevant to achieving Kenya's NDCs. If finance continues to flow at this same rate, Kenya will fall short of what is needed to achieve its climate goals.

Kenya is highly vulnerable to climate change and is already feeling the effects with a notable increase in climate-related disasters, such as droughts and floods. These events are estimated to create an economic liability of 2%-2.8% of its gross domestic product (GDP) every year. This is largely because the economy is dependent on many climate-sensitive sectors, such as agriculture, water, energy, tourism, wildlife, and health. This vulnerability is then worsened when the country is exposed to multiple crises, such as the locust invasion and COVID-19 pandemic in 2020.

Kenya's 'Vision 2030' policy aims to transform it to an industrialized, middle-income country by 2030. However, given the vulnerability of its key sectors it is vital that this is 'green growth' to ensure Kenya builds a sustainable, resilient economy. To achieve this, both the public and private sector will need to scale-up and mainstream climate-related investments.

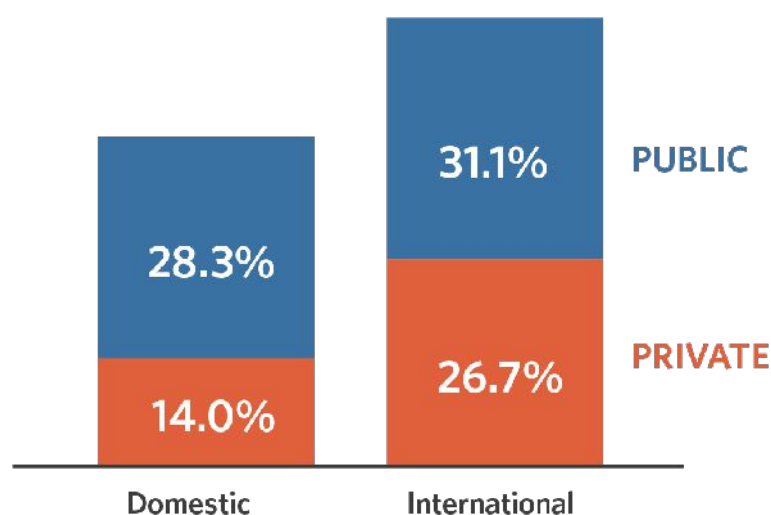
Through the research outlined in this report, there is an opportunity to examine the finance flowing in Kenya in 2018 and evaluate how aligned it is with the climate ambitions and needs. This study explores which sectors are receiving climate finance and whether this is enough to meet the ambitions of Kenya's NDC. The research examines investments from the public and private sectors, as well as domestic and international investors.

¹ Throughout this report, unless otherwise stated, the average 2018 exchange rate of KES 101.01/USD has been used to convert United States Dollars (USD) to Kenyan Shillings and vice-versa.

KEY FINDINGS

In 2018, KES 243.3 billion (USD 2.4 billion) of public and private capital was invested in climate-related activities. This is approximately half of the financing that Kenya needs annually to meet the targets set in its NDC. Overall, public investment (from domestic and international providers) totaled KES 144.3 billion (59.4%) while investment from the private sector totaled KES 98.9 billion (40.7%). In order to meet the climate ambitions outlined in the NDC, both public and private climate finance needs to be scaled-up significantly by 2030.

ES Figure 1: Overview of climate finance in Kenya in 2018



PUBLIC FINANCE

The Kenyan government disbursed KES 76 billion (USD 752.4 million) in climate-related development expenditures in the fiscal year 2017/18. This amount included KES 42 billion (55%) of external resources from international partners channeled into the national budget, while KES 34 billion (45%) was from domestic public resources.

Less than 60% of the tracked finance comes from international public and private sources. Implementing Kenya's NDC requires that international partners will sustain at least 87% of the costs by 2030, a level not met in 2018. Development partners in particular provided less than one third of all finance tracked.

Seventy-nine percent of international public climate finance was delivered through debt and was mostly channeled towards mitigation activities (55%). There is an urgent need for international investors to scale-up their investments in adaptation sectors, which requires more innovative financing models.

PRIVATE FINANCE

Investment from the private sector totaled KES 98.9 billion (USD 979 million), 34.4% originating domestically from Kenyan companies through their own resources and 65.6% from overseas private companies investing into projects located in the country. Private

finance represents almost 41% of total climate finance tracked in Kenya, and most of this was directed to renewable energy generation.

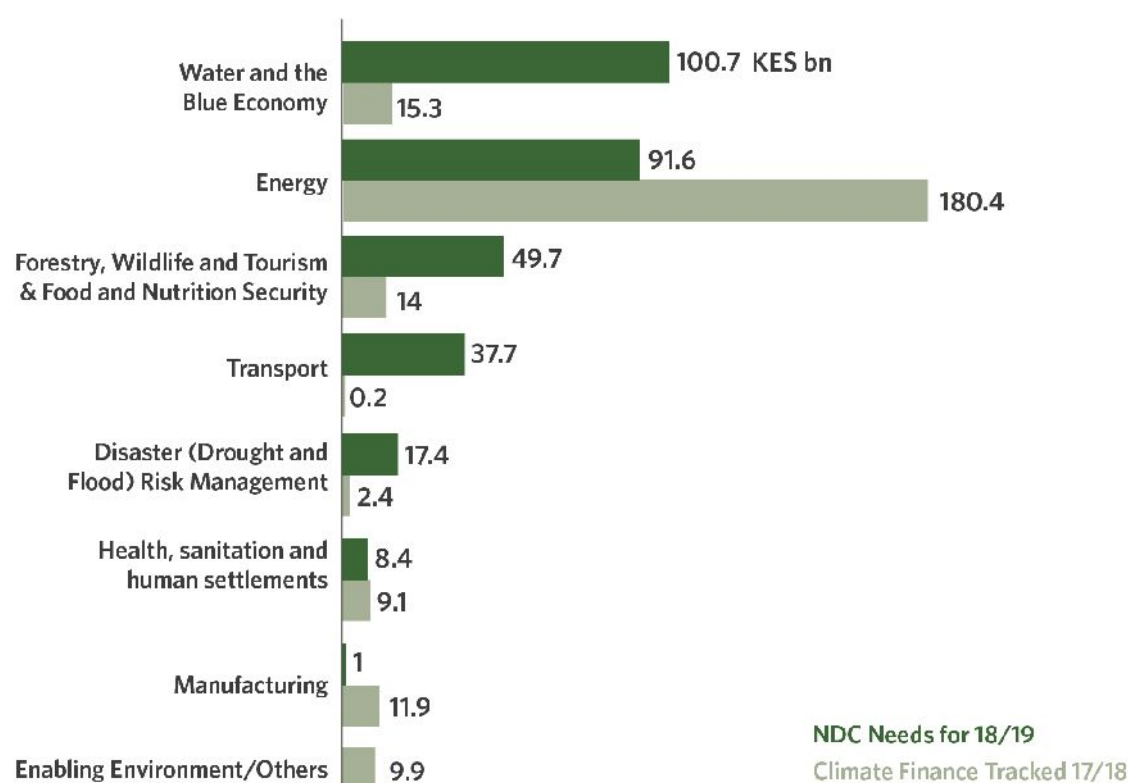
Foreign private sector actors invested KES 64.9 billion (USD 643 million) in climate-related capital in Kenya, predominantly in renewable energy projects (99.7% of the total). Beyond renewable energy, philanthropic foundations are the only international private actors that have invested in other climate sectors, in particular supporting adaptation, health, and water projects in Kenya.

For Kenya to reach the scale of finance needed to achieve its NDC, the private sector will need to play a larger role in the key sectors beyond renewable energy.

USES AND SECTORS

Slightly more than 79% of climate finance in Kenya was directed to the implementation of climate mitigation measures which is in stark contrast to the need given that Kenya has an adaptation focused NDC. This presents an economic risk due to the cost of climate events such as drought and flooding. Within the mitigation sector, climate finance is disproportionally targeting the renewable energy sector, while other key sectors, like agriculture, forestry and land use, transport, and water management, are dramatically underfunded.

ES Figure 2: Investment gaps in NDC priority actions



Source: National Climate Change Action Plan NCCAP (2018-2022).

Only 11.7% of climate finance in Kenya was directed to adaptation. The largest financing gap in meeting Kenya's NDC is in the water and blue economy sector. Improved water

security and management is vital for Kenya to achieve its NDC and adequately adapt to climate change, however this requires investment. There is also an urgent need to increase finance for the forestry and disaster-risk management sectors, as both will build Kenya's resilience against drought and flooding. The COVID-19 pandemic has also shown the increased importance of health, sanitation, and human settlement, as those without access to healthcare or permanent housing are most at risk during crises. The figures outlined above represent the needs estimated in the NDC, but it is likely that this need could now be much higher for Kenya to increase its resilience to pandemics.

GREEN RECOVERY

This report is written during the onset of the COVID-19 pandemic, which is likely to have a significant impact on flows of finance in Kenya. The pandemic has had a devastating financial impact globally, the extent of which is still unknown. The World Bank has projected that in Kenya GDP growth will decelerate from an annual average of 5.7% (2015-2019) to 1.5% in 2020 (World Bank, 2020b). This reduced economic growth, and its cost to Government combined with the human toll from the pandemic, is a risk for the state of climate finance in Kenya. However, it also presents an opportunity to accelerate the transformation. It is now more important than ever that stimulus packages and new investments are aligned with climate ambitions to create a 'green recovery' and to build a more resilient economy.

RECOMMENDATIONS

This report provides key recommendations for how climate-related investments can be scaled in Kenya:

Adaptation. There is an urgent need to increase finance for adaptation in Kenya, particularly in the water, disaster risk management, and forestry sectors. This should be the priority of the public sector given the unique challenges in financing adaptation, and the focus of both domestic and international public finance.

Mitigation. While the renewable energy sector has been a success story in Kenya, there is a need to scale-up investment in most of the key mitigation sectors, namely transport and forestry (which is cross-cutting with adaptation).

Subsidies and incentives for private sector. The private sector has a key role closing Kenya's investment gap. Implementation of incentives and subsidies to create a more attractive enabling environment for private investment in the transport, forestry, water, land use, and waste sectors are therefore of critical importance. For example, implementation of the proposed incentive schemes in the national strategy for achieving and maintaining over 10% tree cover by 2022.

International public finance. There is a need for international public finance to focus on more challenging sectors which are not receiving private finance at scale. For example, using innovative financing to mobilize investment into key underfunded sectors, such as forestry, transport, and water.

Coordination among actors. Climate finance should be used more effectively to increase its impact. This will require improved coordination and reporting between Kenyan actors at all levels: Ministries, agencies, county-level government entities, international development partners, and private sector stakeholders.

Climate finance tracking and reporting. To better understand whether finance is meeting Kenya's climate needs and how to scale-up investment, there is a need for regular reporting from Ministries to the National Treasury on climate-related expenditure. This can be implemented through the new segment 8 component of the Integrated Financial Management and Information System (IFMIS). Once in place, the National Treasury should annually monitor the climate finance flows relative to the need to monitor progress and respond to short falls.

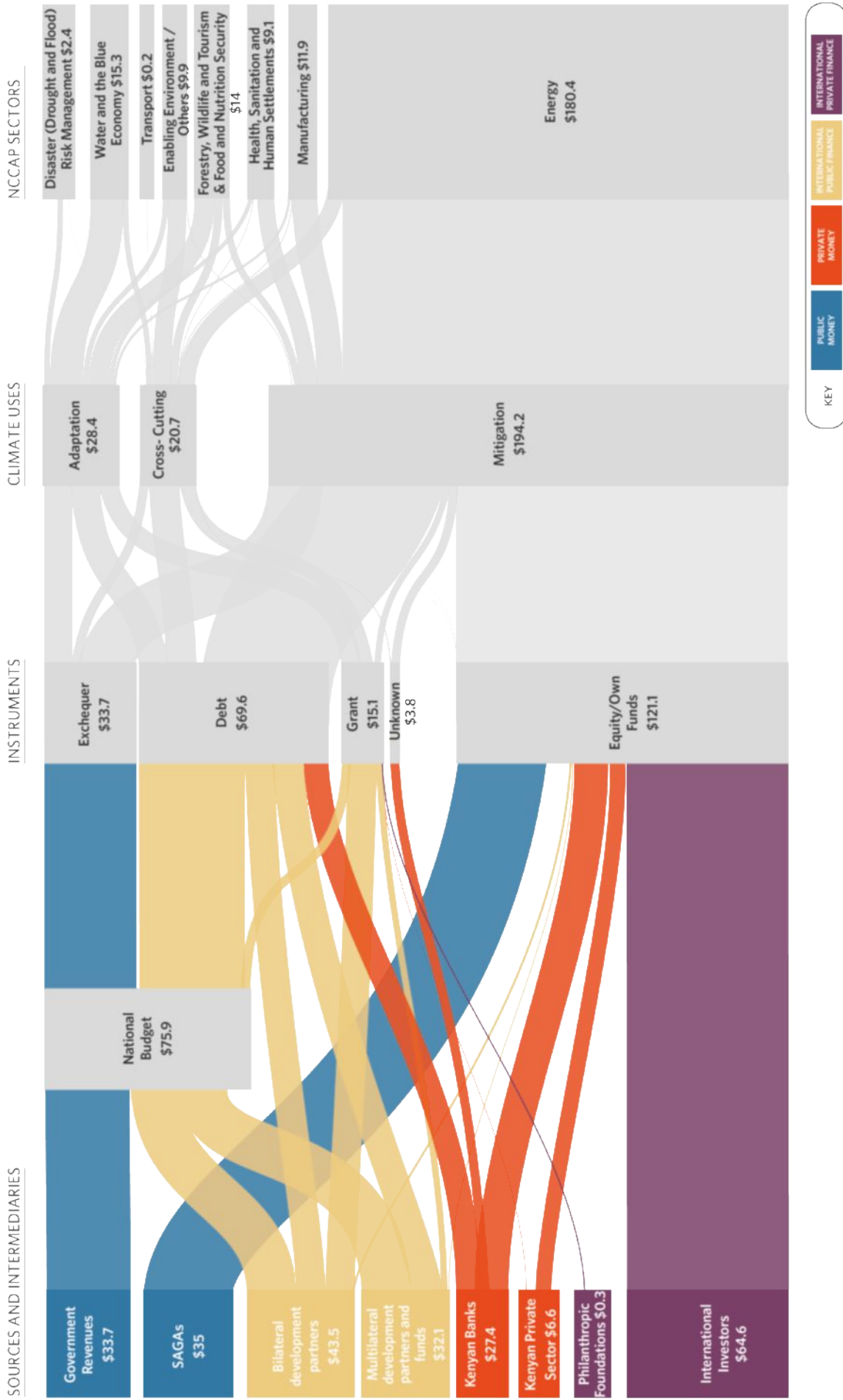
Reading the Sankey:

The Sankey diagram shows the path of finance flows along their life cycle.

1. **Sources** (type of organizations providing capital for green finance). This includes government budgets, public sector undertakings, bilateral and multilateral development finance institutions, foreign direct investment, philanthropic grants, project developers and corporates, commercial banks, and residential, commercial, and institutional investments.
2. **Instruments** (mix of financial instruments used). This includes grants, equity, and debt instruments. Those investments that could not be mapped to a financial instrument have been classified as flows through 'Unknown' instruments.
3. **Uses** (types of activities financed). This includes the use of finance for climate change mitigation, adaptation and cross-cutting activities.
4. **NCCAP Sectors** (what the finance is used for). The specific priority sectors of the National Climate Change Action Plan (NCCAP) that were financed.

LANDSCAPE OF CLIMATE FINANCE IN KENYA 2018

KES 243.3 bn



Public finance mostly refer to the fiscal year 2017/18, private finance refers to the calendar year 2018. All figures are in billion Kenyan Shillings (1 KES = 0.0099 USD, average 2018 exchange rate). SAGAs = Semi-Autonomous Government Agencies. NCCAP = National Climate Change Action Plan. More details available in the report's Methodology.

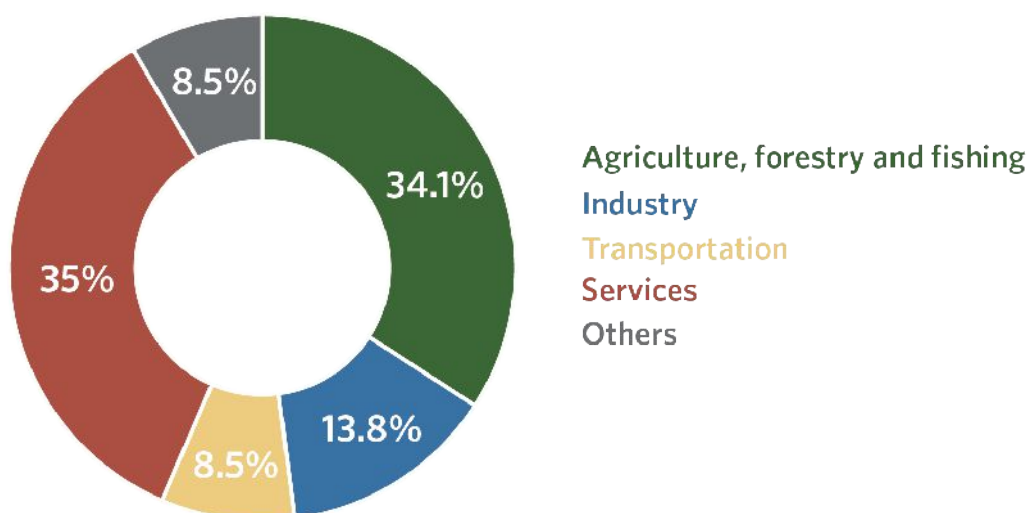
1. INTRODUCTION

For Kenya to meet its climate targets and build resilience to climate change, finance will need to be mobilized both domestically and internationally at scale. The finance needed to support the Government's low-carbon and climate resilient transition is outlined in Kenya's Nationally Determined Contribution (NDC), National Adaptation Plan (NAP 2015-2030), and the National Climate Change Action Plan (NCCAP 2018-2022). This study is the first opportunity to determine the scale of finance currently flowing to climate mitigation and adaptation activities in Kenya since the ratification of the Paris Agreement, and explores which sectors are receiving it and whether this is enough to meet the need.

1.1 BACKGROUND

Kenya's economy has been growing at an average of 5.6% between 2015 and 2019. Agriculture is the main contributor to Kenya's Gross Domestic Product (GDP) contributing an average of 32.9% between 2015-2019 (KNBS, 2020). Kenya is heavily reliant on natural resources, with at least 50% of its GDP derived from climate related sectors (see Figure 1) making Kenya's economy vulnerable to climate change.

Figure 1: Kenya's key economic sectors contributing to GDP in 2018



Source: Kenya National Bureau of Statistics.

The impacts of climate change are already estimated to cost Kenya about 2.6% of its GDP each year (SEI, 2009). This impact is even greater in years of drought or flood, as demonstrated during the 2008-2011 drought in Kenya. In 2008, Kenya saw its annual economic growth fall year-on-year from 7% to 1.5%. While some of this drop can be attributed to the global financial crisis, the post-drought analysis took this into consideration and found the drought limited economic growth by an average of 2.8% per annum (GoK, 2012). It should be noted that this is in addition to the overall economic impact from climate

change previously mentioned. The overall impact of the 2008-2011 drought in Kenya is estimated at KES 968.6 billion (USD 12.1 billion). More recently, a drought in 2017 had significant economic cost and then a following flooding in 2018 displaced more than 300,000 people (OCHA, 2018).

Without action, the impacts of climate change on Kenya's economy are likely to increase and could be a significant factor limiting Kenya's ability to grow at the scale and speed desired. The effect of climate change on the country's development was identified in Kenya's Vision 2030, the country's long-term development blueprint. Recognizing these vulnerabilities, Kenya was one of the first countries globally to develop policies, strategies, and institutional frameworks for climate action (Figure 2), creating a policy and legal environment to advance an effective climate change response in the country. Climate change legislations, policies, plans, and institutions have been established at the national and county levels.

The National Climate Change Response Strategy of 2010 was the first national policy document on climate change. It sought to advance the integration of climate change adaptation and mitigation into all government planning, budgeting, and development objectives. The National Climate Change Action Plan 2013-2017 followed, and identified five-year climate change priority actions. Kenya is currently implementing the second action plan (NCCAP 2018-2022).

Other climate change policies, plans, and legislations include: the National Adaptation Plan 2015-2030, the Nationally Determined Contribution 2015-2030, Climate Change Act, 2016, the Green Economy Strategy and Implementation Plan 2016-2030, the National Climate Change Framework Policy 2018, and the National Climate Finance Policy 2018. At the sub national level, county governments are also developing their climate change policies and legislations which have prioritized creation of county climate change funds. These documents all demonstrate not only Kenya's desire to grow economically and become a middle-income country, but also its ambition to build a low carbon and climate resilient economy.

Figure 2: Timeline of Kenya's key policy documents for climate change



Box 1: A summary of Kenya's NDC

- Kenya submitted an Intended Nationally Determined Contribution (INDC) to the UNFCCC on 23rd July 2015, which became Kenya's First Nationally Determined Contribution (NDC) with the ratification on 28th December 2016.
- It targets 30% emission reduction by 2030 relative to Business as Usual (BAU).
- The goal is conditional on international support in the form of finance, investment, technology development and transfer, and capacity building.
- The NDC employed a base year of 2010 when Kenya's total greenhouse gas emissions were determined to be 73 MtCO₂e but were expected to rise to 143 MtCO₂e by 2030.
- Mitigation sectors include: Energy, Transport, Waste, Forestry, and Agriculture.
- Kenya places significant priority on adapting to the effects of climate change and the priority adaptation actions are presented in the NCCAP and the National Adaptation Plan (NAP). These actions cut across most sectors in Kenya.
- Climate Action Tracker rated Kenya's NDC as "2°C compatible."
- Most of the abatement potential is in the forestry sector through reforestation efforts (NCCAP, 2018).
- Most of the new emissions in the baseline scenario are from projects in the energy sector (fossil fuel generation), followed by the agriculture and transport sectors.
- Kenya is on track to meet its current NDC pledge and given the delay in the fossil fuel projects the energy sector could have a much lower contribution to Kenya's emissions than planned. However, the recent Forest Reference Level (MOEF, 2019) showed that Kenya has a lower forest cover than previously estimated meaning more action is required in the forestry sector (5.9%).

Kenya's NDC Update:

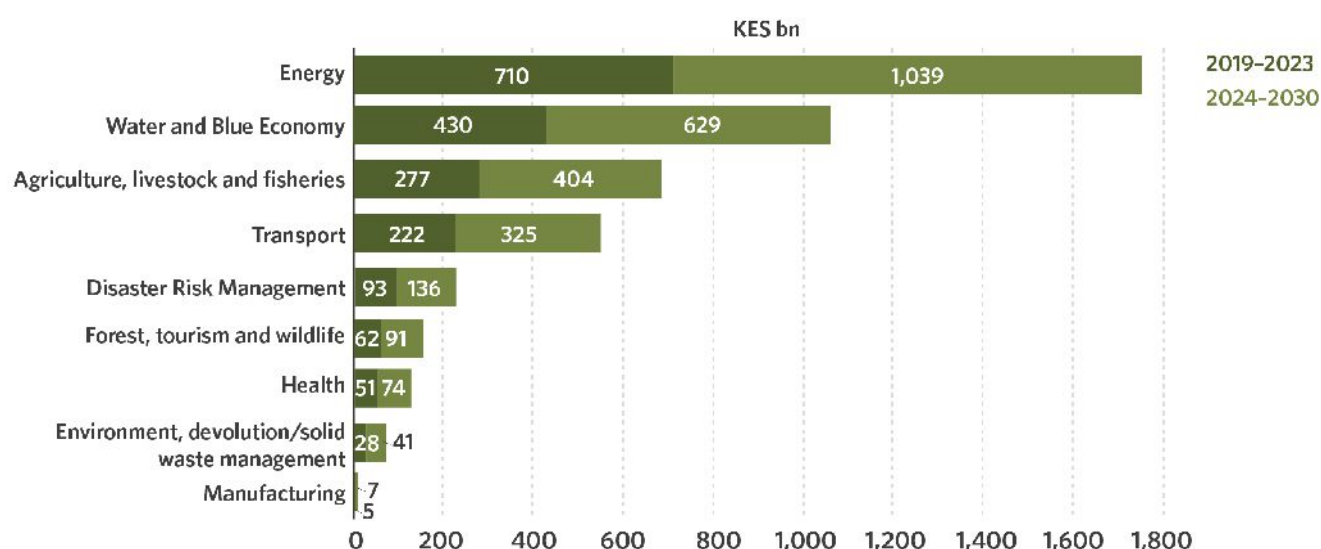
In order to comply with the Paris Agreement, Kenya is currently updating the NDC so as make it responsive to the facts and figures that have come up since the INDC was submitted. The updated NDC was submitted on 24th December 2020 and covers priority mitigation and adaptation actions and their indicative costs, with a clear desegregation of those actions that will be funded from local sources; actions that will require foreign support as well as investments from the private sector. The updated NDC commits to abate GHG emissions by 32% by 2030 relative to the BAU scenario. The total cost of implementing the mitigation and adaptation actions in the updated NDC is estimated at USD 62 Billion. Kenya has committed to mobilize 13% of this budget and will require international support for 87% of the budget (UNFCCC, 2020).

1.1.1 FINANCING KENYA'S NDC

Financing the implementation of Kenya's climate ambitions requires significant public and private finance. Kenya's Financing Strategy for the NDC (UNDP, 2020) estimated USD 40 billion of new investment is needed for the next 10 years (2020 - 2030) to implement priority climate mitigation and adaptation actions. These funds are to be sourced locally and internationally with a significant contribution expected from the private sector.

If this financing requirement is met, the country would abate its GHG emissions by 30% by 2030 relative to BAU scenario and meet the climate adaptation goals stated in its NDC.

The total requirement for the first five years (2019/20 - 2023/24) is USD 18.6 billion, of which USD 8.7 billion for adaptation and USD 9.9 billion for mitigation actions; and an additional USD 21.4 billion is needed for 2024 – 2030 (Figure 3).

Figure 3: Investment needed to implement Kenya's NDCs by 2030

Source: UNDP, 2020. Kenya's Financing Strategy for NDC.

The strategy however notes that this investment gap is a conservative estimate, derived from the analysis of the costs of climate change activities in the Government planning reports (Medium Term Plan (MTP) III 2018-2022 and NCCAP II 2018-2022). The strategy further notes that there are a number of programs in MTP III where climate change is not mainstreamed, therefore the total cost of climate action could be much higher, meaning there is a significant need to scale-up financing to meet the targets. This requires significant participation from the private sector and development partners, as well as a strong enabling environment.

The recent NDC update, submitted to the UNFCCC in December 2020, has raised Kenya's climate mitigation ambitions (from 30 to 32% emission reduction) as well as the estimated investment needed to implement its NDC actions, to USD 62 billion (KES 6,775 billion) for the period 2020-2030.

About 71% of the investment needed will target adaptation actions (USD 43.9 billion), while 29% will fund mitigation actions (USD 17.7 billion). The Government of Kenya has also increased its own domestic commitment to cover a portion of the costs, from 0% to 13% compared to the previous NDC, with the majority still conditional to international support.

As the updated NDC figures are new and not yet broken down into sectors, this report uses the previous NDC and NCCAP investment estimates to understand the financing gap in 2018, across mitigation and adaptation sectors.

1.1.2 KENYA'S LANDSCAPE OF CLIMATE FINANCE

The Landscape of Climate Finance in Kenya presents a first opportunity to map climate finance flows following the Paris Agreement. It builds on the 'Climate Public Expenditure Budget Review (CPEBR)' (CPEBR, 2016) which was the first climate finance tagging effort in Kenya, and covered climate finance flows during 2011- 2015. The Landscape applies Climate Policy Initiative's framework for mapping climate finance flows both globally and

domestically. It aims to help the Government understand the climate finance flows in the economy and highlight areas of focus to achieve Kenya's climate targets.

The study maps both public and private sector flows in the country by identifying the sources, intermediaries, instruments, disbursement channels, and utilization. The study focuses on finance flows for 2017 and 2018, as this was the latest audited data available across all sources of finance at the time of analysis. The private sector data focuses on calendar year 2018, which aligns to the financial reporting timelines of most private sector institutions.

It is important to collect data from all sources for one year to achieve a comprehensive assessment of current flows, and to be able to compare sources and sectors. The findings are supplemented with more recent data where available.

1.1.4 THE IMPACT OF COVID-19

This study was developed during the peak of the COVID-19 pandemic in Kenya, which is estimated to reduce the GDP growth in Kenya to 2.6% in 2020, down from 5.4% recorded in 2019 (GoK, 2020c).

The measures put in place by the Government to contain the spread of the COVID-19 pandemic has led to significant fiscal financing gaps as revenue collections have dropped and expenditure pressures increased. In the supplementary budget II for FY 2020/21 the Government has had to further reduce budgetary allocations to various MDAs. These cuts will limit the Government's ability to implement the NDC and direct finance to climate-related activities. Further, the Government has prepared a Post-COVID-19 Economic Recovery Strategy which aims to accelerate economic recovery and bring it back to the projected growth trajectory in the MTP III.

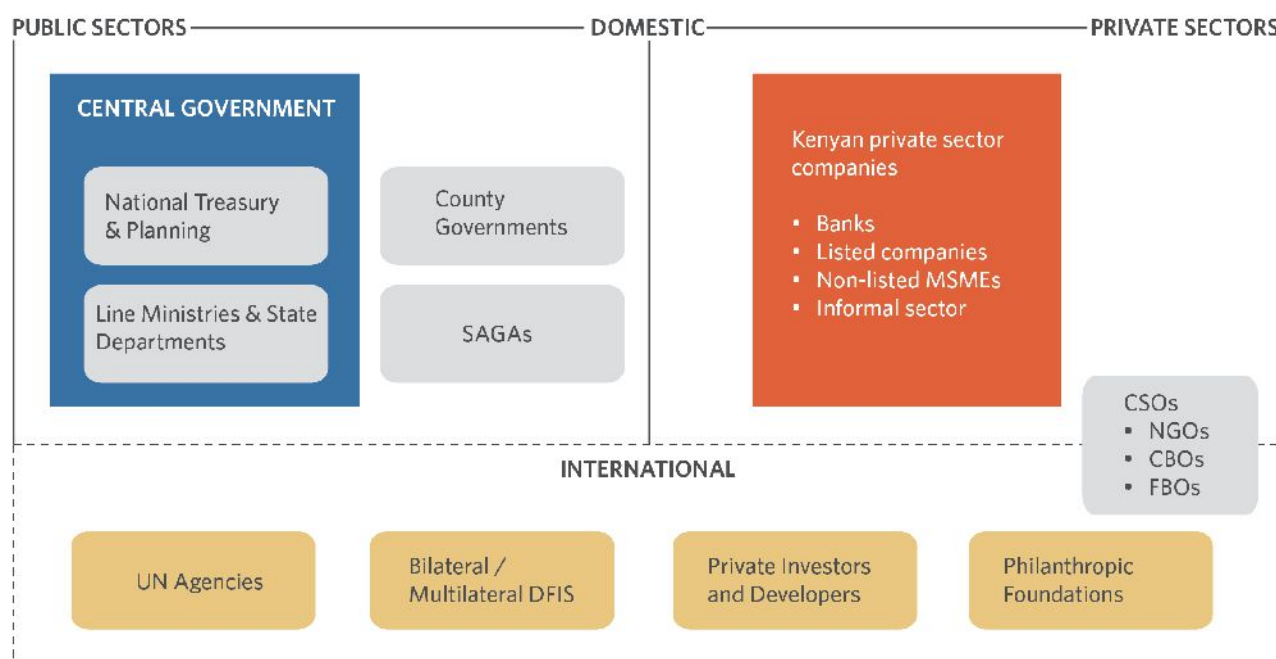
2. METHODOLOGICAL APPROACH

This study utilized the methodology and approach developed by Climate Policy Initiative in its Global Landscape of Climate Finance reports (CPI, 2019). First published in 2012, this is the most comprehensive overview of global climate-related primary investment.

The scope of the Landscape of Climate Finance in Kenya provides a comprehensive overview of climate-relevant expenditures in Kenya by domestic and international, public and private actors. The data in the study tracks expenditures and disbursements (rather than cumulative pledges or commitments) into climate mitigation and adaptation sectors as defined in CPI's *Global Landscape of Climate Finance*.

The primary expenditure data were obtained from the Integrated Financial Management Information System (IFMIS) of the Government of Kenya. It was collected through a standardized template for ministries, counties, departments, and agencies and administered through online surveys to private sector. Secondary data from various published reports and databases were also utilized.

Figure 4: Overview of key data providers of climate finance in Kenya



Acronyms: Semi-autonomous Government Agencies (SAGAs), Development Finance Institutions (DFIs), Micro, Small and Medium Enterprises (MSMEs), Civil Society Organizations (CSOs), Community-based Organizations (CBOs), Non-Governmental Organizations (NGOs), Faith-based Organizations (FBOs).

Below is a summary of the main data clusters and their methodologies:²

- **National Government budget expenditures:** Data from 11 selected Ministries and their 22 State Departments was collected from the Integrated Financial Management and Information System (IFMIS) of the National Treasury of Kenya. IFMIS data were complemented with information collected through dedicated surveys. The development expenditures were manually screened using OECD-DAC's Rio Markers methodology to identify and tag climate-related financial expenditures³ (OECD, 2016).
- **Semi-Autonomous Government Agencies and counties:** Data from Semi-Autonomous Government Agencies (SAGAs) and County Governments were collected through the IFMIS system and dedicated surveys.
- **International public finance:** The data were obtained from the IFMIS system and complemented by information collected from the OECD-DAC Creditor Reporting Systems and other databases.
- **Private sector finance:** Data on climate-related expenditures from private sector and civil society organizations (CSOs) were obtained through a mixture of desk-based research (involved information from companies' websites and commercial databases such as IJ Global and Bloomberg New Energy Finance), and surveys from a number of corporations and banking sector organizations. The Kenya Private Sector Alliance (KEPSA) and Kenya Bankers Association (KBA) have been pivotal in surveying and facilitating dialogue with individual companies in Kenya.

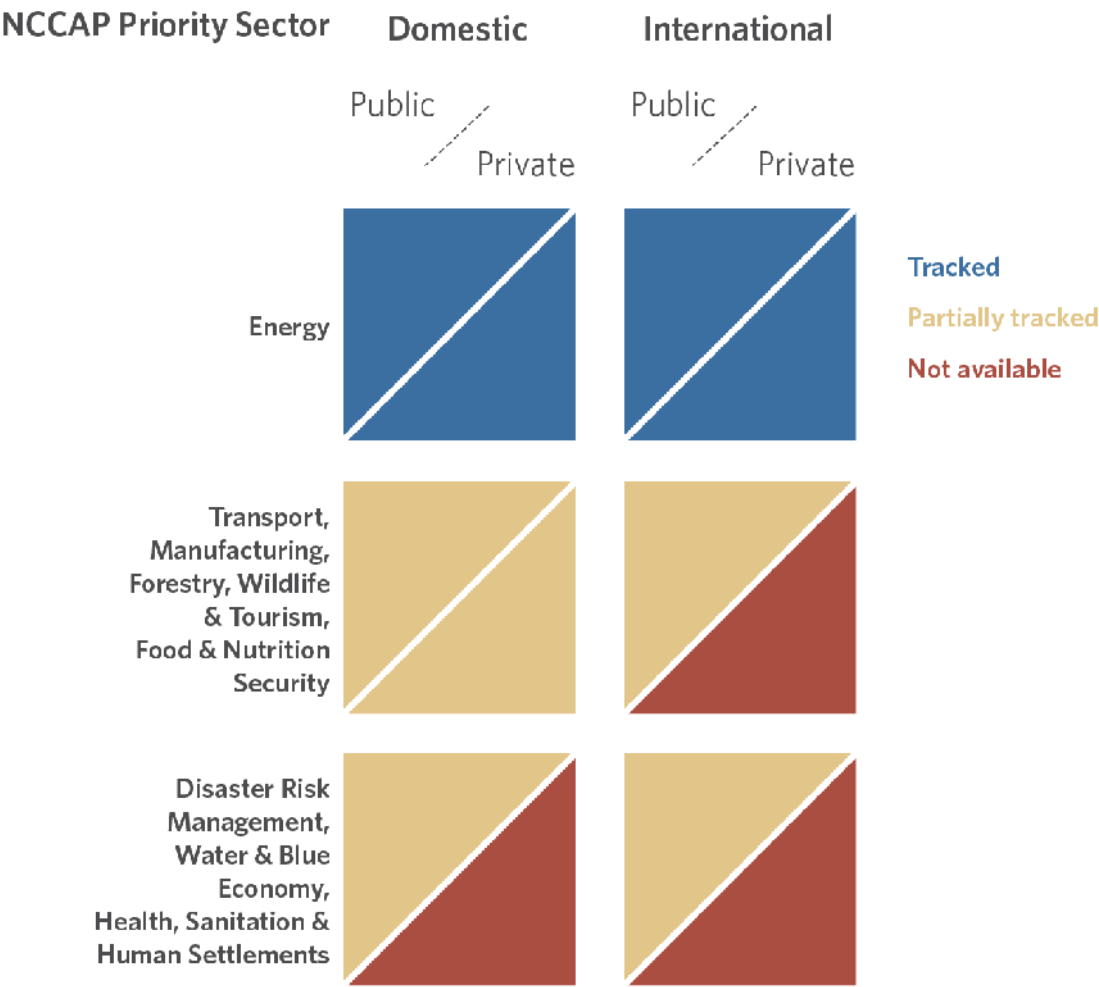
² For the detailed methodology, refer to Annex I

³ The terms "climate finance" and "climate-related expenditures" are used interchangeably throughout the report.

LIMITATIONS

The main limitation during the data collection was availability, completeness, and robustness especially from the private sectors (Figure 5). Notwithstanding the limitations, adequate data were collected, described in detail in the report’s methodology (Annex I).

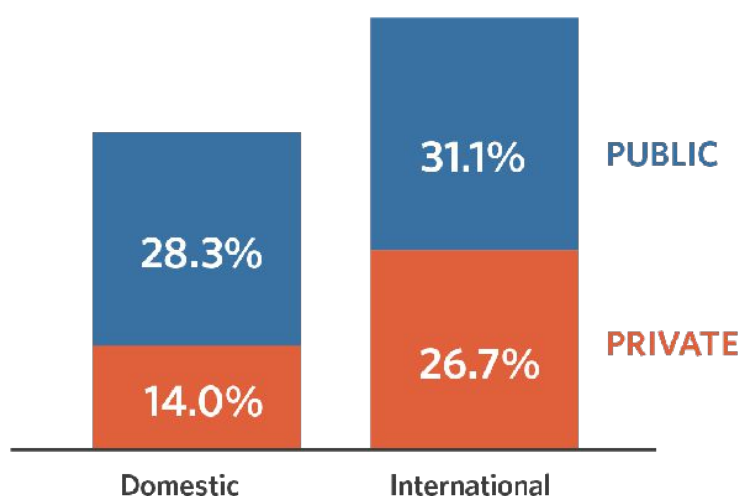
Figure 5: Data gaps



3. OVERVIEW OF TOTAL CLIMATE FINANCE IN KENYA

In 2018, KES 243.3 billion (USD 2.4 billion) in public and private capital was invested in climate mitigation and adaptation activities in Kenya from both domestic and international sources (Figure 6).

Figure 6: Overview of climate finance in Kenya in 2018



Domestic sources contributed 42.2% (KES 102.7 billion) of the total climate finance tracked. This included domestic public and private sector sources accounting for 28.3% (KES 68.8 billion) and 14% (KES 34 billion), respectively.

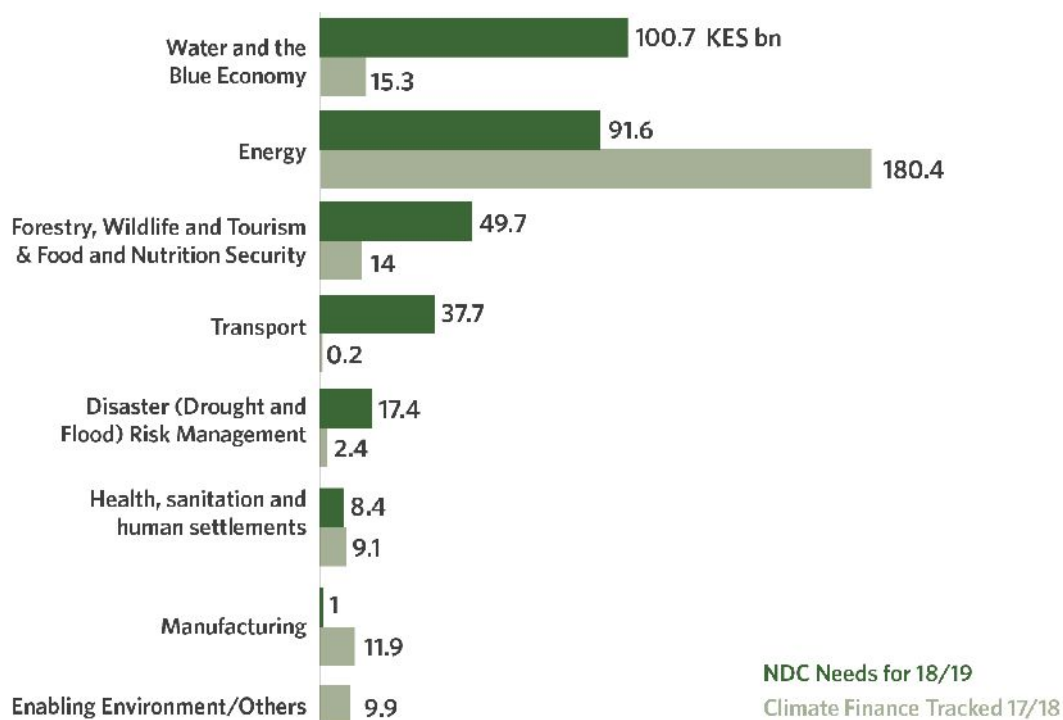
International actors contributed 57.8% of total climate finance in Kenya (KES 140.5 billion). Development partners contributed 31.1% of the total (KES 75.6 billion) in resources that were largely channeled through the national budget (see Table 1). More than KES 75.9 billion in external and domestic resources were channeled for climate-related development expenditures through the national budget.

International private sector investors and project developers provided a further 26.7% (KES 64.9 billion) of total climate finance tracked.

Table 1: Detailed overview of climate finance sources in Kenya in 2018

SOURCE	% ON TOTAL FINANCE TRACKED	ENTITIES	KES BILLION	OF WHICH, CHANNELLED THROUGH KENYA'S CENTRAL BUDGET
PUBLIC - DOMESTIC	28.3%	Ministries, State Departments	33.7	33.7
		SAGAs	35.0	-
PUBLIC - INTERNATIONAL	31.1%	Bilateral development partners	43.5	21.8
		Multilateral development partners and funds	32.1	20.4
PRIVATE - DOMESTIC	14.0%	Kenyan Banks	27.4	-
		Kenyan private sector	6.6	-
PRIVATE - INTERNATIONAL	26.7%	Project developers and investors	64.6	-
		Philanthropic Foundations	0.3	-
TOTAL			243.3	75.9

When comparing the estimated finance needed for each of the sectors in the NDC for 2018/19 (outlined in the NCCAP 2018-2022)⁴ to the expenditure tracked in 2018, the energy, health, and manufacturing sectors fulfil the budgeted needs. This is in contrast to almost all other sectors which fall short of the estimated finance needed (Figure 7). The greatest investment needs are recorded in the adaptation sectors, particularly the water and blue economy sector. It should be noted that in the revised 2020 NDC the Government estimates that even greater investment is needed to implement priority climate action, however the total figures are not yet broken down into sectors. Therefore the sectorial financing gaps identified in this report are likely even higher.

Figure 7: Investment gap with NDC priority actions (taken from the NCCAP 2018-2022)

⁴ The NCCAP 2018-22 provides the most updated and accurate estimates of the financing needed to meet Kenya's climate priorities, across the different mitigation and adaptation sectors. The earliest year available in the report is the year 2018/19.

Source: National Climate Change Action Plan NCCAP (2018-2022) and findings from the report. Notes: NCCAP estimates refer to combined investment needs for adaptation and mitigation in each sector. Climate finance tracked refer to adaptation, mitigation and cross-cutting, combined to match the NCCAP sectors.

Mitigation measures accounted for a significant investment constituting 79.8% (KES 194.2 billion) of the total. This was mainly due to large-scale investments in renewable energy generation which accounted for KES 161 billion (Figure 9).

Figure 8: Overview of climate finance uses in 2018

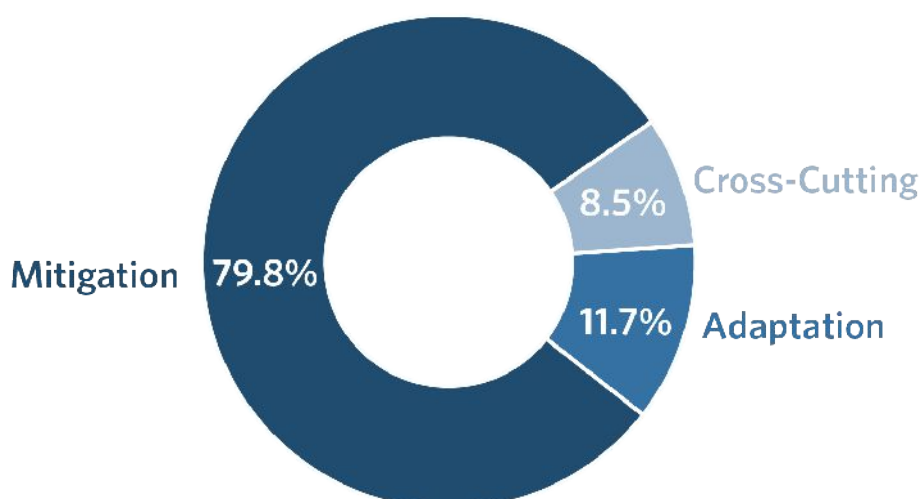
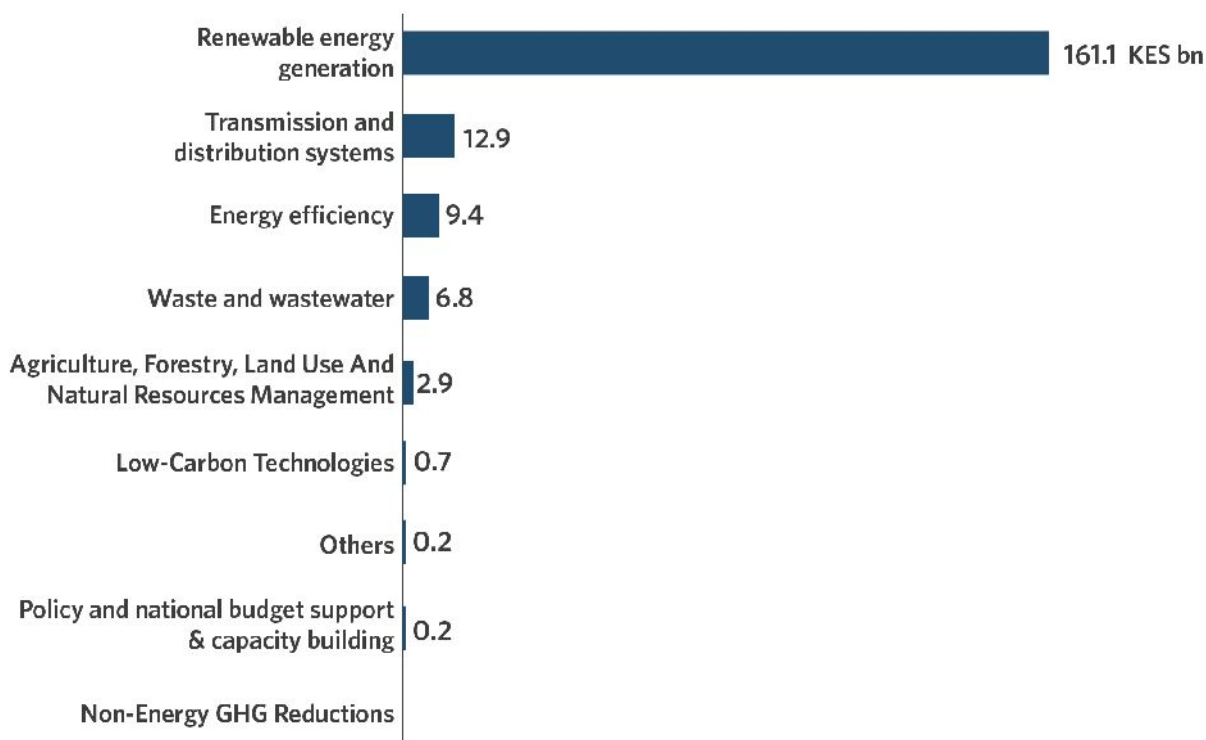
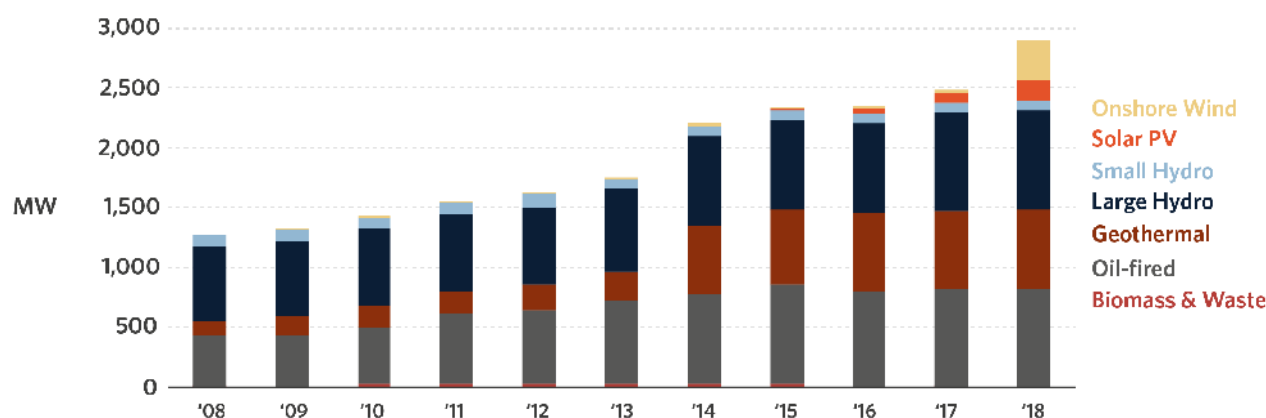


Figure 9: Overview of mitigation sub-sectors



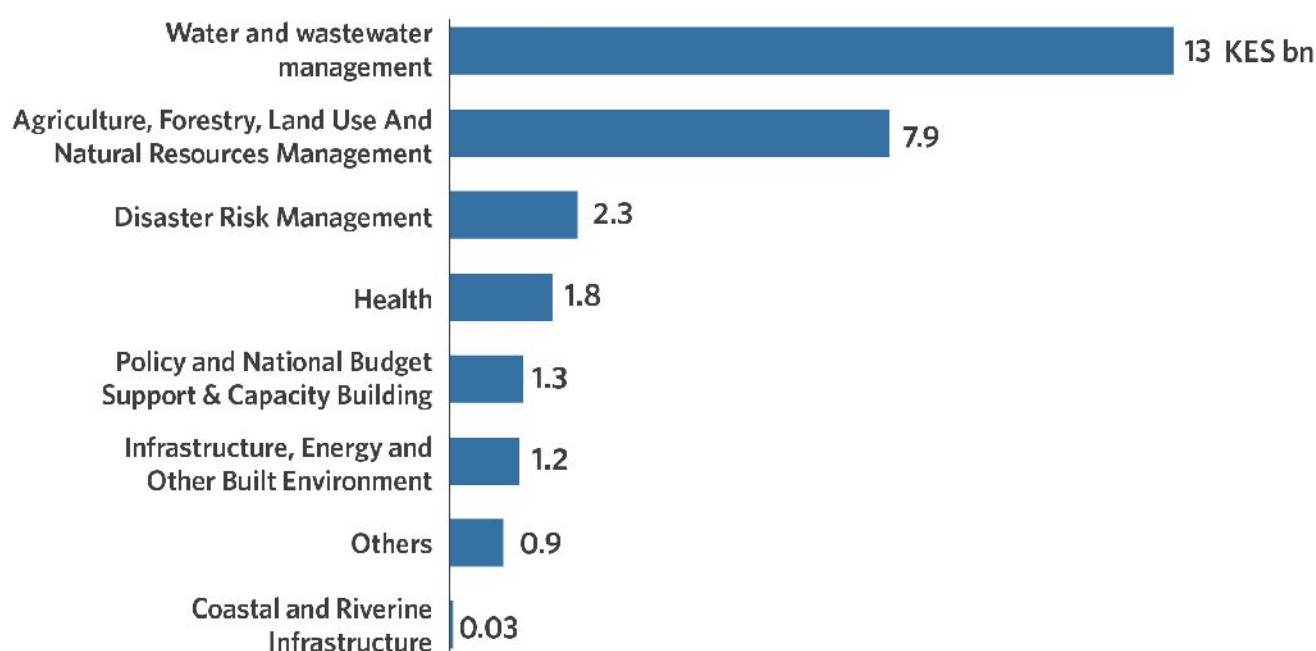
The increased investment in renewable energy generation is evidenced by the change in the energy mix in Kenya. In 2017/18 there was significant investments in geothermal, solar, and wind (Figure 10). Over 400 MW of new solar and wind capacity was installed.

Figure 10: Electricity generation in Kenya, cumulative installed capacity (in MW)

Source: Bloomberg New Energy Finance

Financing for large-scale renewable energy projects was predominantly from development finance institutions and Development Partners. Investments in distributed renewable energy startups (such as pay-as-you-go solar companies, and microgrid developers) were mainly from private equity and venture capital (BNEF, 2020).

Investment in climate adaptation projects attracted 11.7% of all climate finance tracked (KES 28.4 billion). This finance was largely targeted at strengthening the country's water and agricultural resilience in the country (Figure 11). The KES 12.9 billion investment in the water and wastewater sector falls short compared to the KES 100.7 billion needs in 2018/2019 estimated by the NCCAP (Figure 7).

Figure 11: Overview of adaptation sub-sectors

The next two chapters provide a detailed analysis of climate finance flows in Kenya and the interconnection between domestic and international finance flows.

4. THE PUBLIC CLIMATE FINANCE LANDSCAPE

This chapter provides an overview of the public climate finance landscape in Kenya, from four complementary angles:

1. Kenyan Government Expenditures, from Ministries and State Departments.
2. Expenditures of the Kenyan Counties, including a case study about Makueni County.
3. Expenditures of Semi-Autonomous Government Agencies (SAGAs).
4. International public finance flows.

4.1 KENYAN GOVERNMENT EXPENDITURES

The Government disbursed KES 76 billion in climate-related development expenditures in the FY 2017/18. This amount included KES 42 billion of external resources and KES 34 billion in domestic resources representing 55% and 45%, respectively.⁵

The four main expenditure types of Kenya's national budget are:

- Development Expenditure refers to spending for the creation or renewal of assets and infrastructure.
- Recurrent Expenditures refers to finance for operating and maintaining the services provided by the government, including interest payments, pensions, salaries, and allowances.
- Transfers to county governments representing each county's share of the revenue and other county allocations.
- Transfers to Semi-Autonomous Government Agencies (SAGAs) transfers to SAGAs are counted as part of the recurrent and development expenditure.

Expenditure by the national government in Kenya can be classified under four categories: Development Expenditures (DE), Recurrent Expenditures (RE), and transfers to county governments and Semi-Autonomous Government Agencies (SAGAs). The report tracked and tagged the mitigation and adaptation relevant activities within the Development Expenditures (DE)⁶, from the Kenyan Ministries and State Departments⁷ that are most relevant for funding climate activities. Their expenditures represent 97% of the total Kenyan Development Expenditure in 2017/18. The data was obtained directly from the Integrated Financial Management and Information System (IFMIS) of the National Treasury of Kenya.

⁵ An overview of the budgeting process of Kenya is presented in Annex II, and an overview of the tagging process can be found in Annex I. The OECD-DAC Rio Markers methodology was used to screen, identify and tag which budget expenditures contributed to climate mitigation and adaptation outcomes

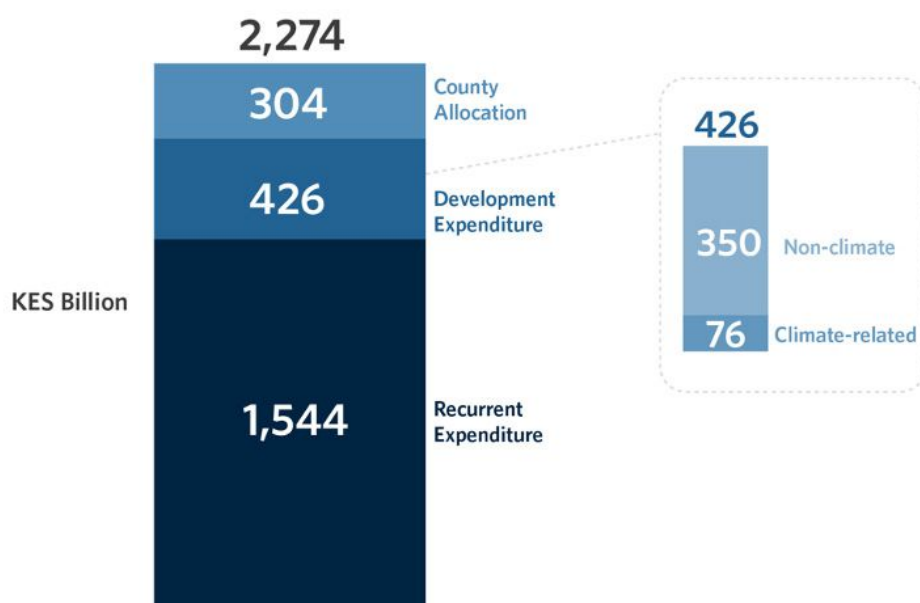
⁶ Recurrent Expenditure does not refer to investments in real assets and infrastructure (which can be climate-friendly or not) and therefore are out of scope in this analysis.

⁷ 11 Ministries and 22 State Departments have been tracked in this analysis, accounting for KES 414 billion out of KES 426 billion. A full list of tracked Ministries can be found in the methodology (Annex I).

The National Government's total expenditure in the fiscal year 2017/18 was KES 2,274 billion (USD 21 billion), with Recurrent Expenditures accounting for KES 1,544 billion (or 68% of the total expenditure), while Development Expenditure and County Allocations represented 19% and 13% respectively (Figure 12).

The climate-related expenditures tracked represent 18% of development expenditures or 3.3% of the cumulative Government expenditures for FY 2017/18.

Figure 12: Kenya's total and climate-related budget expenditures in 2017/18



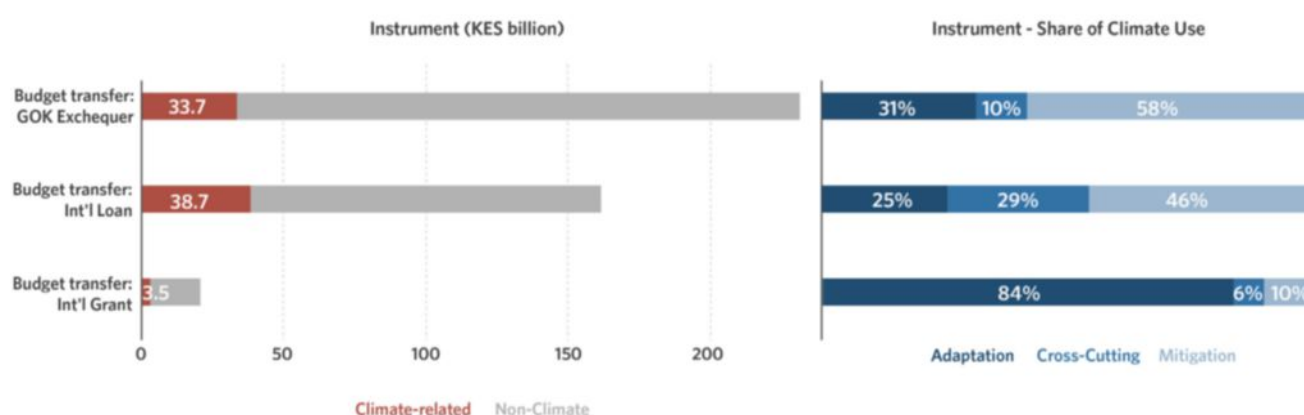
Source: National Government budget implementation review report for FY 17/18. Transfers to SAGAs are counted inside the Development and Recurrent expenditures totals.

4.1.1 INSTRUMENTS

External loans and grants from international public institutions for financing climate relevant projects and programmes accounted for KES 42 billion, while KES 34 billion of climate-related expenditure came from the Government's Exchequer⁸. Seventeen percent of the international grants (KES 3.5 billion) and 24% of the international loans (KES 39 billion) supported climate-related activities (Figure 13), with the former mainly targeting adaptation projects, whereas mitigation projects made up most of the international loan's and the Government's Exchequer expenditures.

⁸ The Exchequer is an account kept at the Central Bank of Kenya and maintained by the National Treasury into which tax funds and other public funds raised or received are deposited (GOK, 2009).

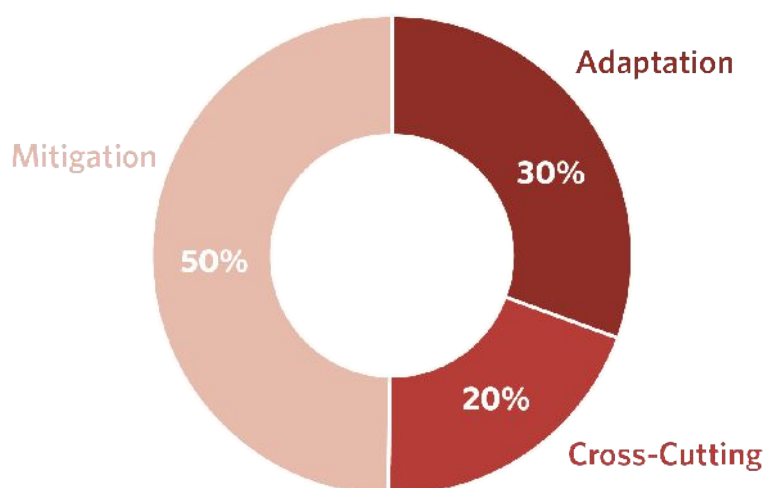
Figure 13: Instruments used for Kenyan Government Expenditures



4.1.2 CLIMATE SECTORS

Activities financed by the Kenyan Government are mostly mitigation-related, and focused on the renewable energy sector, despite adaptation actions being prioritized in the NCCAP 2018-2022 and emphasised in the National Adaptation Plan (NAP) (GoK, 2018c). Based on this analysis, 50% (KES 38 billion) of all climate finance channeled through the government central budget was allocated to mitigation activities, while 30% (KES 23 billion) was spent on adaptation activities and 20% (KES 15 billion) for activities with dual mitigation and adaptation outcomes⁹ (Figure 14).

Figure 14: Climate Finance Expenditure in Kenya



KES 37.2 billion from the Kenyan government was channeled to mitigation interventions focusing on sustainable energy, including renewable energy generation and transmission and distribution projects, for KES 24.4 billion and KES 12.8 billion respectively (Figure 15). In the renewable energy generation sector financing went primarily to geothermal and wind power energy amounting to KES 9 billion and KES 7 billion, respectively.

⁹ Cross-cutting finance is defined as resources directed to activities contributing to both “climate change mitigation” and “climate change adaptation” and meeting the respective criteria for each category.

The transport sector in Kenya was responsible for 11% of the country's emissions, or 8.9 MtCO₂e in 2016 (Climatewatch, 2020), yet no climate finance has been tracked in the low-carbon transport sector through IFMIS in 2017/18. The NCCAP mentions relevant projects to achieve a more sustainable transport sector, such as i) the development of a bus rapid transit in Nairobi, ii) encouraging low-carbon technologies in the aviation and maritime sector, and iii) on the adaptation side, the climate-proofing of roads to be able to withstand extreme weather events. An enabling environment has been created with the introduction of a reduced excise duty rate of 10% on the import of electric vehicles, but no investments have been tracked in electric vehicles or the development or supporting infrastructures in 2018 (GoK, 2018). Finally, the Standard Gauge Railway (SGR), a 472km rail project, is expected to shift 30% of freight from Mombasa to Nairobi from road to rail and is expected to become fully powered from electricity by 2022 (GoK, 2018c). However, the SGR is currently diesel-powered and therefore not counted as climate finance.

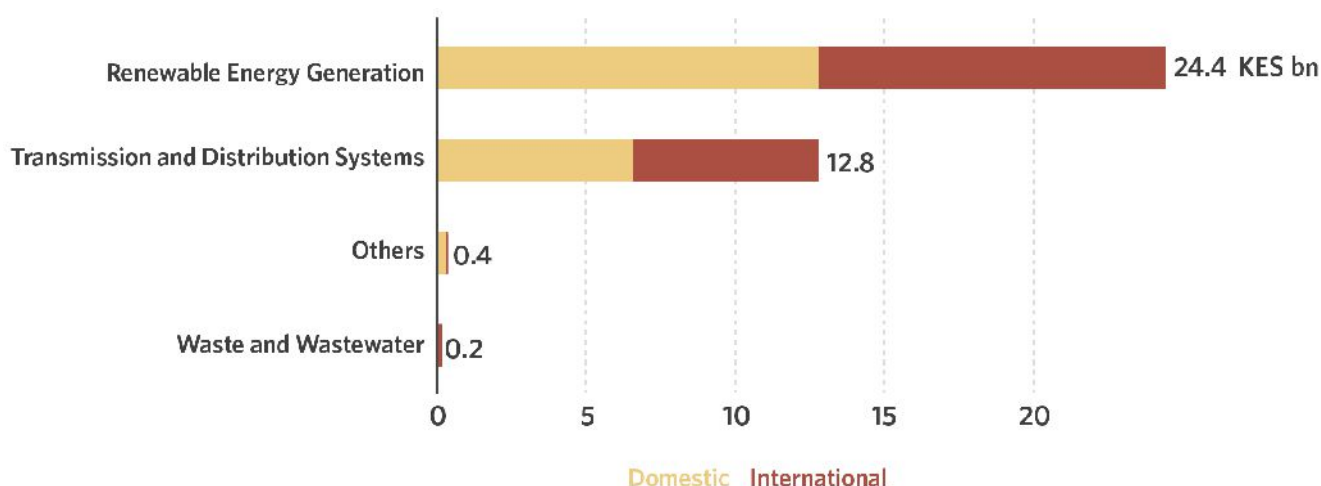
Climate finance tracked in the manufacturing sector, focused on improving energy and resource efficiency, exceeds the NCCAP indicative budget in Figure 7, with KES 50 million tracked in energy efficiency and non-energy GHG reductions sectors and KES 85 million in other low-carbon technologies.

The forestry, agriculture, and land use sector¹⁰ is crucial for both adaptation and mitigation actions, yet its budgetary allocation is inadequate. Kenya's priority actions include achieving and maintaining a 10% tree cover by 2022 from 5.9% in 2019 (MOEF, 2019), a strategy with an estimated total cost of KES 48 billion for both the public and private sector (GoK, 2019d). Nonetheless, the total mitigation finance tracked for the combined sectors of agriculture, forestry, land use, and natural resource management amounted to KES 1.28 billion in 2017/18, of which KES 540 million has been spent on the forestry sector.

The agriculture sector is Kenya's largest emitter, with emissions amounting to 45.8 MtCO₂e in 2016 (Climatewatch, 2020). The total climate expenditure in the agriculture, forestry, land use, and natural resource management sector amounted to KES 6.87 billion¹¹, and represents less than 15% of what is needed in the agriculture sector alone to achieve the NDC (GoK, 2017a). The 2017-2026 Kenya Climate Smart Agriculture Strategy estimates that KES 500 billion for adaptation and mitigation actions in the agriculture sector up to 2026, or an average of KES 50 billion per year from domestic and international sources to achieve Kenya's NDC target (GoK, 2017a).

10 This report, like other Landscape reports published by CPI, uses the macro category "Agriculture, Forestry, Land Use and Natural Resources Management" which corresponds to two NCCAP priority sectors: i) Food and Nutrition Security, ii) Forestry, Wildlife and Tourism. The full sectorial comparison used in the report is provided in Section 10.2.6.

11 The total amount represents the sum of mitigation, adaptation and cross-cutting financing in the Agriculture, Forestry, Land Use and Natural Resource management sector.

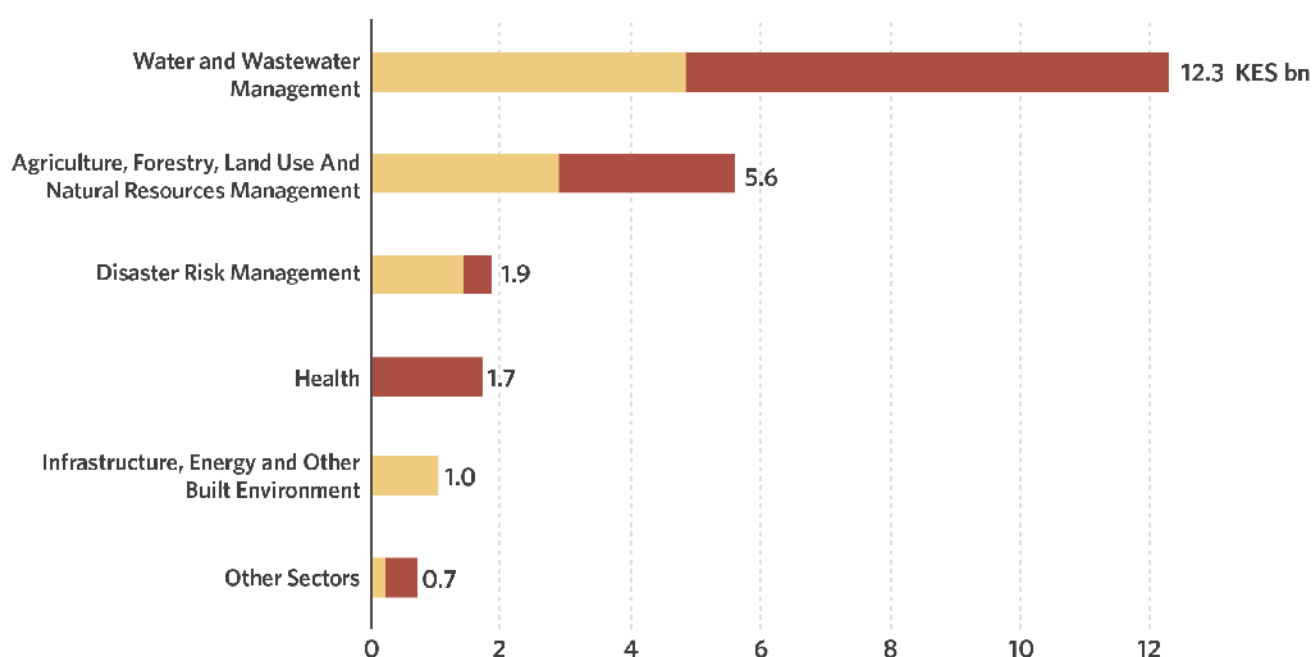
Figure 15: Overview of mitigation sub-sectors

Regarding adaptation, KES 12.3 billion was tracked in the water and wastewater management category, followed by agriculture, forestry, land-use, and natural resources (KES 5.6 billion), disaster risk management (KES 1.9 billion), and health (KES 1.7 billion) (Figure 16).

Kenya is considered amongst the most water-scarce countries in the world with only 59% of Kenyans having access to basic water services, and 29% to sanitary services (UNICEF, 2019). The NCCAP identifies water and the blue economy as one of its priority actions with the objective of increasing annual per capita water availability from 647m³ to 1000 m³ through development of water infrastructure¹² (GoK, 2018c). Despite the water sector being key to achieving Kenya's NDC, it is inadequately financed. In 2017/18 the climate-relevant public expenditure in the water and wastewater management sector amounted to KES 14.5 billion which was only 15% of the budgeted need in NCCAP 2018-2022 (Figure 17).

Total public spending for adaptation tracked in 2017/18 was equivalent to 0.3% of Kenya's GDP in 2017, and disaster risk management spending tracked in 2017/18 only accounts for 0.02% of it. This needs to be significantly ramped up because of Kenya's high vulnerability to climate change. Climate induced extreme events have caused an estimated GDP loss of 0.4% annually from 1997 to 2016 (GoK, 2018c) and risks related to droughts could further reduce GDP by 8% every five years (UNDP, 2013). The study has tracked KES 1.4 billion of domestic financing from the central government going to the disaster risk management sector and KES 1.9 billion when including both domestic and international finance. Financing to adaptation and disaster risk management is crucial to enhance Kenya's resilience to climate change and currently falls short of the estimated KES 17.4 billion in the NCCAP 2018-2022.

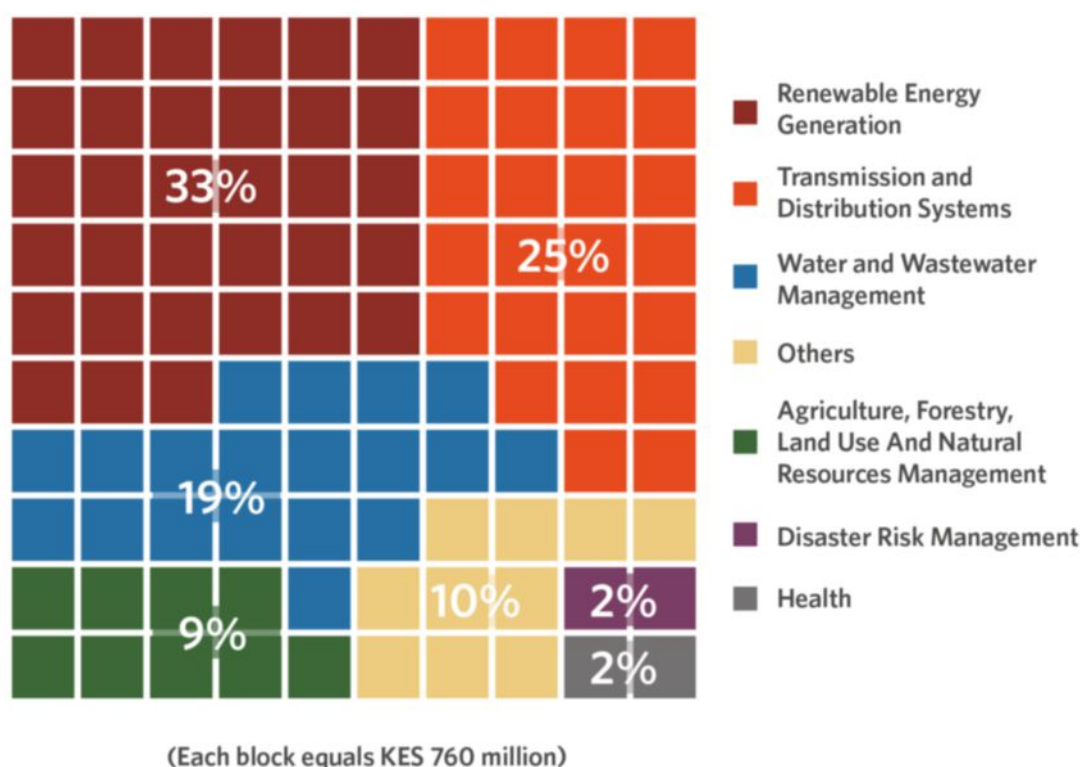
¹² Other activities listed in the NCCAP are related to increasing the access to affordable and clean water including i) climate-proofed water harvesting, flood control, and water storage infrastructure ii) Enhanced household access to water, and food security through water harvesting, iii) promoting water efficiency, iv) improving access to quality water. As well as creating an enabling environment and climate-proofing coastal infrastructure (GOK, 2018).

Figure 16: Overview of adaptation sub-sectors

Twenty percent of climate finance has both mitigation and adaptation co-benefits. Most of the finance categorized as cross-cutting originates from international sources (KES 11.4 billion) while KES 3.5 billion from domestic projects. Transmission and distribution projects (KES 6.4 billion) are the main activities categorized with both adaptation and mitigation co-benefits, an example of which are last mile connections to remote consumers with limited access to electricity.

Figure 17 provides summarizes the sectorial breakdown of climate related expenditures from the national budget, combining all the mitigation, adaptation and cross-cutting activities.

Figure 17: Climate-relevant activities financed by the Kenyan Government



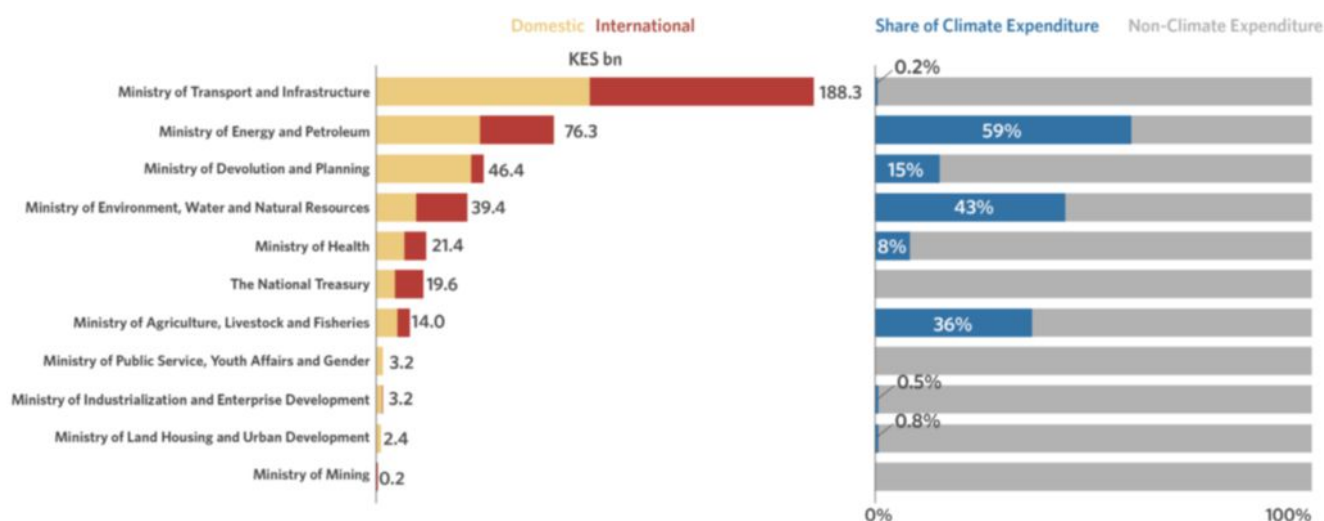
Note: The figure includes all climate finance expenditures, including “cross-cutting finance” which was added to the other mitigation and adaptation sectors. Each block equals KES 760 million.

4.1.3 MINISTRIES AND STATE DEPARTMENTS¹³

This section analyzes the development expenditure channeled to climate related actions by Kenyan Ministries and State Departments. Figure 18 shows the total development expenditures tracked in 2017/18 on the left side, with the related source of funding (domestic and external), while the right part shows the share of development expenditures dedicated to climate-related actions by each Ministry.

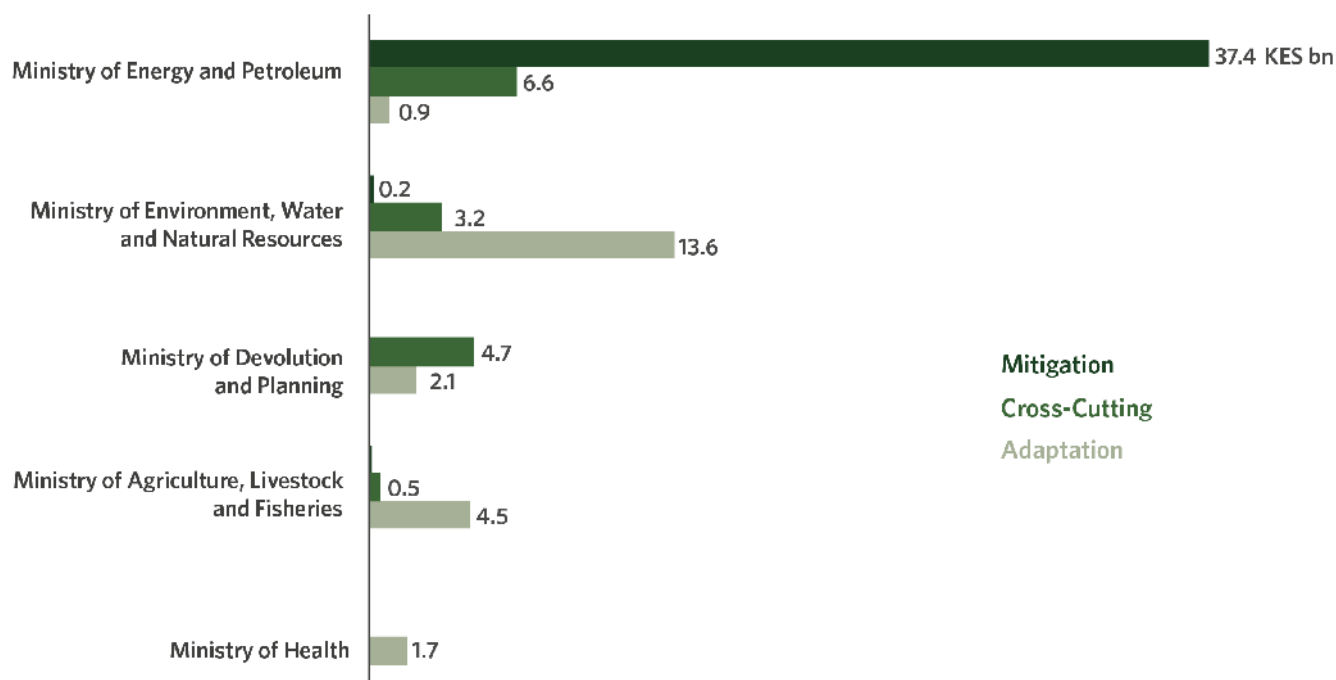
The Ministry of Energy and Petroleum spent 59% of its resources on climate related projects (generally renewable energy projects), accounting for KES 44.9 billion.

¹³ The report tracked finance from 11 Line Ministries and 22 out of 66 of their state departments. The ministries as depicted in figure 18 and 19 are the Ministry names from the year 2017/18 and include: Ministry of Energy and Petroleum; Ministry of Environment, Water and Natural Resources; Ministry of Devolution and Planning; Ministry of Public Service, Youth Affairs, & Gender; Ministry of Industrialization and Enterprise Development; Ministry of Land Housing and Urban Development; Ministry of Health; Ministry of Agriculture, Livestock and Fisheries; The National Treasury; and Ministry of Mining. Note that in 2019/2020 the composition of the Ministries and their state departments changed. The Ministries in 2019/2020 were structured as follows: Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works; Ministry of Energy; The National Treasury and Planning; Ministry of Environment and Forestry; Ministry of Devolution and the Arid and Semi-Arid Lands (Ministry of Devolution and ASALs); Ministry of Public Service and Gender; Ministry of Industry, Trade and Cooperatives; Ministry of Lands and Physical Planning; Ministry of Petroleum and Mining; Table 9 in Annex I provides a complete comparison of the Ministries in 2017/18 and the Ministries in 2019/20.

Figure 18: Total Development Expenditure by Ministries (KES billion) and climate share

The Ministry of Environment, Water and Forestry has dedicated 43% of its development expenditures in 2017/18 to climate related projects for a cumulative KES 17.1 billion, followed in absolute terms by the Ministry of Devolution and Planning with KES 6.8 billion (15% of its expenditures). The Ministry of Agriculture, Livestock and Fisheries has spent 36% of its expenditures to climate-related projects, or KES 5 billion.

On the other hand, the Ministry with the highest total expenditures was Transport and Infrastructure (KES 188 billion), but almost none of its projects were climate related.

Figure 19: Climate-related development expenditures by key Ministries

Box 2: Fiscal incentives and policies for low-carbon development

The Government has continued to provide fiscal incentives to enhance private investments in climate actions. Tax incentives represent forgone revenue to the government, thus an indirect expenditure. This expenditure is not captured in this report. Examples of these fiscal reforms include:

Energy: The exemption from value added tax (VAT) for specialized equipment for the development and generation of solar and wind energy, including deep cycle batteries which use or store solar power. Direct financial support through feed-in tariff policies and concessional loans.

Transport: Excise duty for electric powered motor vehicles is 10%, compared to 25% for petrol and diesel cars. There are ongoing discussions about increasing subsidies for green vehicles.

Clean cooking: The exemption from VAT for goods locally purchased or imported for use in the assembly, manufacture, or repair of clean cook stoves; and inputs or raw materials locally purchased or imported by manufacturers of clean cook stoves.

However, some subsidies still support increased emissions. For example, VAT is charged at 8% on all petroleum products (Standard VAT rate for other goods is 16%). This can make it harder for green technologies to enter the market and compete.

The National Treasury and Planning is developing a National Policy Framework on Green Fiscal Incentives. The framework will provide guidelines on enhancing private financing of climate actions, spur green innovation and technology development, improve green fiscal consolidation, and help identify smarter ways for government taxation and spending.

Box 3: Tracking Climate Expenditures in IFMIS

The Standard Chart of Accounts (SCOA) is an organized and coded listing of all the individual accounts and makes up the centralized ledger of Ministries, Departments and Agencies (MDAs) and counties. The National Treasury and Planning uses Integrated Financial Management and Information System (IFMIS) for public financial management. This is also the system the SCOA is embedded in.

To allow for extended reporting in the SCOA, including reporting on climate finance, gender and other topics, a new analytical segment, "Segment 8," has been introduced, but is not yet rolled out in the system. The Segment will consist of three distinct levels which allow for analyzing climate related expenditures: adaptation, mitigation, cross-cutting or enablers. The OECD Rio Markers have been adopted in this analytical segment. The introduction of the Segment will allow both the national and county governments to track climate-related expenditures, therefore serving as a tool to promote an enabling environment for low-carbon, climate-resilient development projects.

Through the close review of expenditure data in IFMIS, this study recommends fast tracking the operationalization of the analytical climate segment "Segment 8."

Previous climate finance tracking efforts from CPEBR 2016

Kenya's first "Climate Public Expenditure and Budget Review" in 2016 represented the first attempt to identify climate related expenditures within the Kenyan budget. The CPEBR identified KES 20.4 billion of climate related expenditures in the fiscal year 2013/14, KES 17.2 billion in 2012/13 and KES 15.2 billion in 2011/12 within three macro sectors: Agriculture, Rural and Urban Development (ARUD); Energy, Infrastructure and ICT (EII); and Environment Protection, Water and Natural Resources (EPW).

While the development of this report was inspired by the CPEBR, the figures provided are only partially comparable, as this report adopts a different methodology and wider scope (most notably the inclusion of

Box 4: Accuracy of data

Important methodological considerations need to be kept in mind to understand the magnitude and accuracy of the climate-related government expenditures tracked in the report.

The data used in this study does not include climate expenditures for 47 counties, and only partially include expenditures data for projects and programs by the SAGAs. In addition, the study utilized data from 11 Ministries and 22 State Departments (accounting for 97% of all development expenditures). This may suggest that the actual climate expenditures for the country could be higher than reported.

Further, the manual identification of climate-relevant expenditures may have led to over or under reporting due to inadequate information. Most data collected lacked sufficient descriptive details to properly assess climate relevance and extent (attributable climate expenditure percentage). As a result, some expenditures were classified as “significantly” contributing to the climate-objective and counted for 40% of their value, while the effective climate component might have been much lower.

4.2 COUNTIES

Kenya is divided into 47 counties that are governed by county governments that are distinct from the national government. The county governments generate both their own revenue and receive allocations from the national government based on an approved revenue allocation formula. In fiscal year 2017/18, counties’ overall spending totalled KES 303.8 billion, of which 22% went towards development expenditures (KES 66.9 billion) (GoK, 2018b).

Several counties have developed their own tailored climate change policies, and five have also established a local climate change fund through the Climate Change Fund Mechanism (CCCF): Makueni (2015), Wajir (2016), Isiolo, Kitui and Garissa (2018) (IIED and ADA, 2019). As of 2020, the county climate change funds have financed approximately one hundred projects for a cumulative of KES 267 million, predominantly focused on climate resilience and adaptation priorities (Table 2) (BRACED, 2020).

Table 2. Climate resilience investment portfolio of the 5 climate change funds

County	Number of investments	Total cost (KES)	Per capita amount (KES/person)
Makueni	9	28,920,295	1,655
Kitui	12	59,217,778	1,752
Isiolo	44	76,113,760	718
Wajir	24	92,702,364	169
Garissa	5	9,969,011	119
TOTAL	94	266,923,208	

Source: BRACED, 2020.

All the five county governments (Isiolo, Kitui, Garissa, Makueni and Wajir) have enacted laws to allocate approximately 1-2% of their development budget to support the implementation of their climate objectives (IIED and ADA, 2019).

However, quantifying the precise amount of climate-related expenditures for each Kenyan county beyond the CCCF is challenging, as counties’ expenditures are not recorded through IFMIS system.

To obtain detailed information about each county’s expenditures, the information needs to be obtained from each county’s treasury. Most of the counties had not submitted their climate

expenditure data at the time of publication of this report. From IFMIS, this study tracked the project locations in which the national development projects with a climate component were implemented¹⁴. The counties where most of the national development expenditure has been tracked as climate-related expenditure from IFMIS are Nakuru (KES 10.4 billion), Turkana (KES 10.1 billion), Garissa (KES 9.4 billion), Nairobi (KES 5.1 billion) and Kisumu (KES 1.4 billion).

In order to provide a snapshot of the contribution of Kenya's county governments to addressing climate issues, the report analyzed the climate-related expenditure of Makueni County as a case study in the next section.

4.2.1 CASE STUDY: MAKUENI COUNTY

Makueni County is located in the south eastern part of the country (See Figure 20) and covers an area of approximately 8,034.7 km², most of which is arid and semi-arid and prone to frequent droughts (GoMC, 2018b). The county had a population of 987,653 in 2019 (GoK, 2019c) and it is characterized by a low-lying terrain with a few hilly areas such as Kilungu, Mbooni and Chyulu Hills.

The agricultural sector is an integral component of the county's economy, contributing approximately 78% to household incomes (MoALF, 2016). As over 80% of the population depends on rain-fed agriculture for their livelihood, Makueni is particularly vulnerable to climate change, as smallholder farmers do not have adequate resources to adapt to it.

Figure 20: Map of Makueni County



In response to climate challenges, Makueni County has enacted a number of climate policies¹⁵.

¹⁴ This analysis has been performed on 427 budget lines out of a total of 863 that have an allocated project location representing KES 48.5 billion (or 64%) of all climate finance tracked.

¹⁵ Including the Sand Conservation and Utilization Act in 2015, the Climate Change Fund regulations in 2015, the Fruit Development and Marketing Authority Act in 2017, the Water Bill in 2019 as well as the Forest Management Agreement with the Kenya Forest Service on conservation of local forests.

It was the first county in Kenya to enact regulations to mainstream climate change in development and established a County Climate Change Fund (CCCCF) (GoK, 2015c).

The goal of the CCCC is to create, access, and use climate finance to build communities' resilience and reduce vulnerabilities to climate change in a coordinated way. The CCCC Regulations of 2015 stipulates that 1% of the annual county development budget is to be devoted to climate change interventions. Up until April 2017 the Makueni CCCC had invested KES 28.9 million in several projects to enhance climate adaptive capacity of local communities (BRACED, 2020).

The County Integrated Development Plan (CIDP) 2018-22 focuses on actualizing socio-economic transformation envisaged under the Vision 2025. The rallying theme of the CIDP II is "Increased Household Income for Sustainable Livelihoods," which is to be delivered through interventions in five thematic areas: Community economic empowerment, Water resource management, Lands, Urban planning and development, Socio-economic development amidst other enablers (GoMC, 2018b). Some of the strategies put forward to achieve economic transformation include promotion of climate smart agriculture, conservation of the water towers and wetlands, enhancement of the county forest cover from 10% to at least 15%, and provision of climate information to equip communities on timely decision making.

The county has progressively invested in water conservation, water harvesting, and storage and distribution to help enhance access to water. The population accessing potable water increased from 21% in 2013 to 35.6% by 2017 and the average distance to water sources reduced from 8km in 2013 to 5 km in 2017. The forest cover increased from 8% in 2013 to 10% in 2017 (GoMC, 2018b) from tree-planting and rehabilitation of existing forests in partnership with Kenya Forest Service (KFS).

Over the financial years 2017/18, 2018/19, and 2019/20 the Makueni county has directed over KES 843 million (USD 8.2 million) to climate-related projects, increasing from KES 67 million in 2017/18 to KES 492 million in 2018/19 (GoK, 2020a). This corresponds to almost 3.5% of all the county's expenditures across the period (KES 24.2 billion in development and recurrent expenditures), increasing the share from 1% in 2017/18 to 6% in 2019/20, which in line with the requirements of the CCCC.

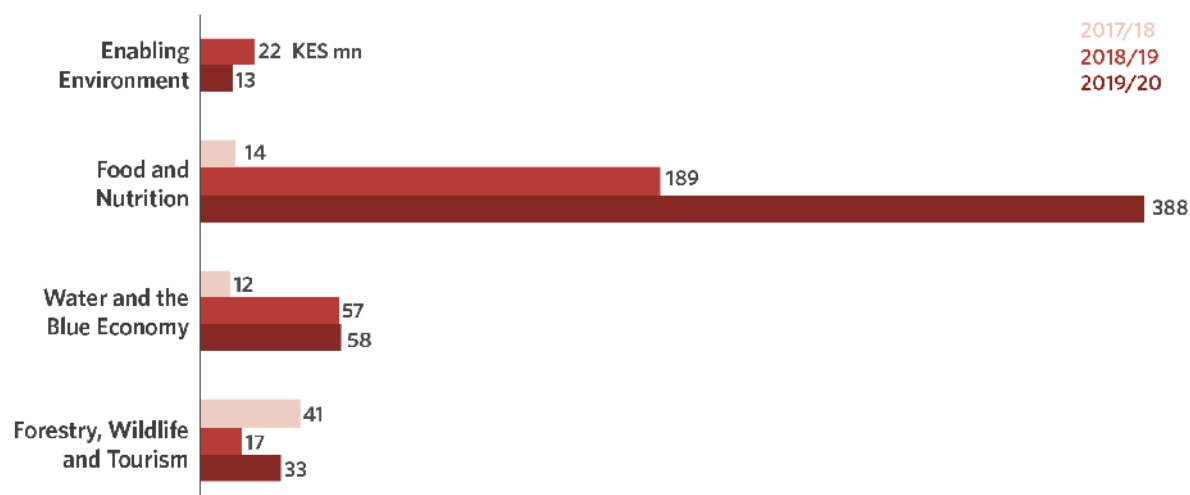
Table 3: Makueni County Revenue & Expenditure (KES million)

Funds Received	2017/18	2018/19	2019/20
Equitable revenue share	6,820	7,130	7,406
Grants- Development partners	157	527	1,092
Grants- National government	338	231	290
County own generated funds	319	512	655
Other revenues	1,320	1,090	735
Total	8,955	9,490	10,179
Expenditure			
Climate-related expenditures	67	284	492
Other expenditure	7,123	8,156	8,065
Total	7,190	8,440	8,557
Percentage spent on climate related projects	1%	3%	6%

Source: CBIRR & Makueni County budget implementation reports, 2018-2020. Figures reported include own resources from Makueni County and transfer from the National Government and development partners.

Most of the expenditures targeted the agriculture sector (Figure 21), to increase the resilience food production and agricultural value chains. Forestry investment targeted the reforestation and rehabilitation of county forests, tree planting and construction of gabions to prevent soil erosion. In the water sector, the county invested in the installation of water infrastructure, supply of water tanks to citizens, and construction of sand dams and road drifts.

Figure 21: Makueni County Climate Related Expenditure per NCCAP sectors



Source: Makueni County budget implementation reports 2018-2020

As an arid and semi-arid region, Makueni county is constantly exposed to climate hazards, such as drought and high temperatures, which are likely to occur more frequently in the future due to climate variability. Farmers need enhanced capacities to cope with emerging conditions. This will involve short-term and long-term adaptation and mitigation measures that holistically target production systems and value chains key to the population's food security and livelihoods.

In recent years, Makueni County has achieved remarkable progress in policy development, building resilience of farmers, soil and water conservation and increased allocation of funds to climate related projects. However, the county should harmonize its institutional, policy, and governance environment and allocate more funds to climate related projects, all of which are critical in addressing climate vulnerabilities in the county.

4.3 SEMI-AUTONOMOUS GOVERNMENT AGENCIES (SAGAS)

Semi-Autonomous Government Agencies (SAGAs) are crucial entities in the Kenyan climate finance landscape, as they are responsible for budget implementation and therefore are the de facto implementers of several climate-related projects.

The State Department for Energy has eight SAGAs, some of them particularly relevant for implementing climate-related projects, including: (i) Kenya Electricity Generating Company Limited (KenGen), 70% state-owned and responsible for power generation in Kenya (mostly renewable-based); (ii) the Rural Electrification Authority (REA), with a mandate for extending

electricity to rural areas, often realized through decentralized solar power systems and mini-grids; (iii) the Geothermal Development Company Limited (GDC), a 100% state-owned agency responsible for the development of geothermal power plants; and, (iv) the Kenya Electricity Transmission Company Limited (KETRACO), which is also 100% state-owned and responsible for developing the electricity transmission infrastructures of the countries.

There are 26 SAGAs tasked with different environmental protection, water, and natural resources management functions, domiciled under five State Departments (GoK, 2016e). Most notably, the National Environment Management Authority (NEMA) exercises general supervision and coordination over all matters relating to the environment and is the principal instrument of Government in the implementation of policies, regulations and standards relating to the environment. NEMA is also a direct access entity for Green Climate Fund (GCF) resources for the country. The National Environment Trust Fund (NETFUND) is responsible for financing research and capacity building on environmental matters, while the Kenya Forest Service (KFS) is tasked with the conservation, development, and sustainable management of forest resources for Kenya's socio-economic development. The Kenya Forest Research Institute (KEFRI) undertakes research on forestry and natural resources.

Transfers to SAGAs was the second highest expenditure item in the Kenyan national budget. In the fiscal year 2017/18, KES 364.4 billion (36% of all recurrent expenditures) was transferred to SAGAs. Out of the total transfers, KES 102 billion were capital transfers (24% of the total) (GoK, 2018d). The State Department of Transport accounted for the highest capital transfers to its SAGAs with KES 14.5 billion (GoK, 2018d).

Despite the significant resources under management and the clear importance of SAGAs in implementing climate projects in Kenya, their climate-related expenditures cannot be tracked easily and their contribution is only partially reported in this report. In fact, SAGAs have different budget systems from the National government and are not required to report their expenditures through the IFMIS (CPEBR, 2016). Only a small percentage of transactions in IFMIS indicate SAGA's expenditure from National Government's capital transfers or external resources, allowing for just a partial understanding of their expenditures. The main gap relates to information on climate-related projects that are implemented with SAGA's own resources.

Given these complexities, this report examines SAGA's expenditures from multiple angles:

1. data on KenGen's financing from renewable energy projects were collected from Bloomberg New Energy Finance (BNEF) database;
2. information available on IFMIS for project implemented by SAGAs (with the original source being a budget transfer); and
3. additional information on projects implemented using SAGAs own funds was collected from the SAGAs. To obtain this information the National Treasury issued a formal request to all SAGAs, and 29 responded with the detailed climate-relevant expenditures. The surveys were specifically designed for this purpose and the National Treasury has issued a circular requiring quarterly reporting of climate related expenditures by SAGAs.

In 2018 SAGAs spent at least KES 35 billion on climate-related investments. The largest proportion (KES 33.6 billion) was spent by KenGen for the implementation of renewable

energy projects and the remainder (KES 1.4 billion) from other SAGA's own resources, obtained through the survey's responses.

In the surveys, SAGAs¹⁶ reported implementing KES 12 billion worth of projects, funded primarily with resources obtained from the Kenyan government and/or external resources from international development partners, which were already captured as national budget expenditures (see chapter 7.1). Of the KES 1.4 billion financed with SAGAs' own resources, the majority was dedicated to mitigation projects (KES 988 million, mainly provided by the Kenya Civil Aviation Authority for the installation of solar PV systems), followed by forestry/agriculture (KES 395 million) and adaptation (KES 22 million).

Due to the data challenges highlighted in this report, only a partial depiction of SAGAs financing for climate projects is provided. There is a critical need to ensure that expenditures from all public actors in Kenya, including SAGAs, are released and reported through IFMIS at the national and county level. This will ensure tracking of SAGA's expenditure and avoid double counting. To improve reporting, it is important that each SAGA uses the same climate-terminology of the treasury or other funders, to ensure that data reconciliation is possible when the same information is collected from both perspectives.

4.4 INTERNATIONAL PUBLIC FINANCE

International climate finance flowing to Kenya from development partner countries, international financial organizations, and other public sector institutions accounted for KES 75.6 billion (USD 749 million), or 31.1% of all climate finance disbursed to Kenya in 2018. Of these resources, 56% were channeled to end-users through the National government Budget (analyzed in the previous Chapter), while 44% was received by private, public-private, and non-government organizations in Kenya.

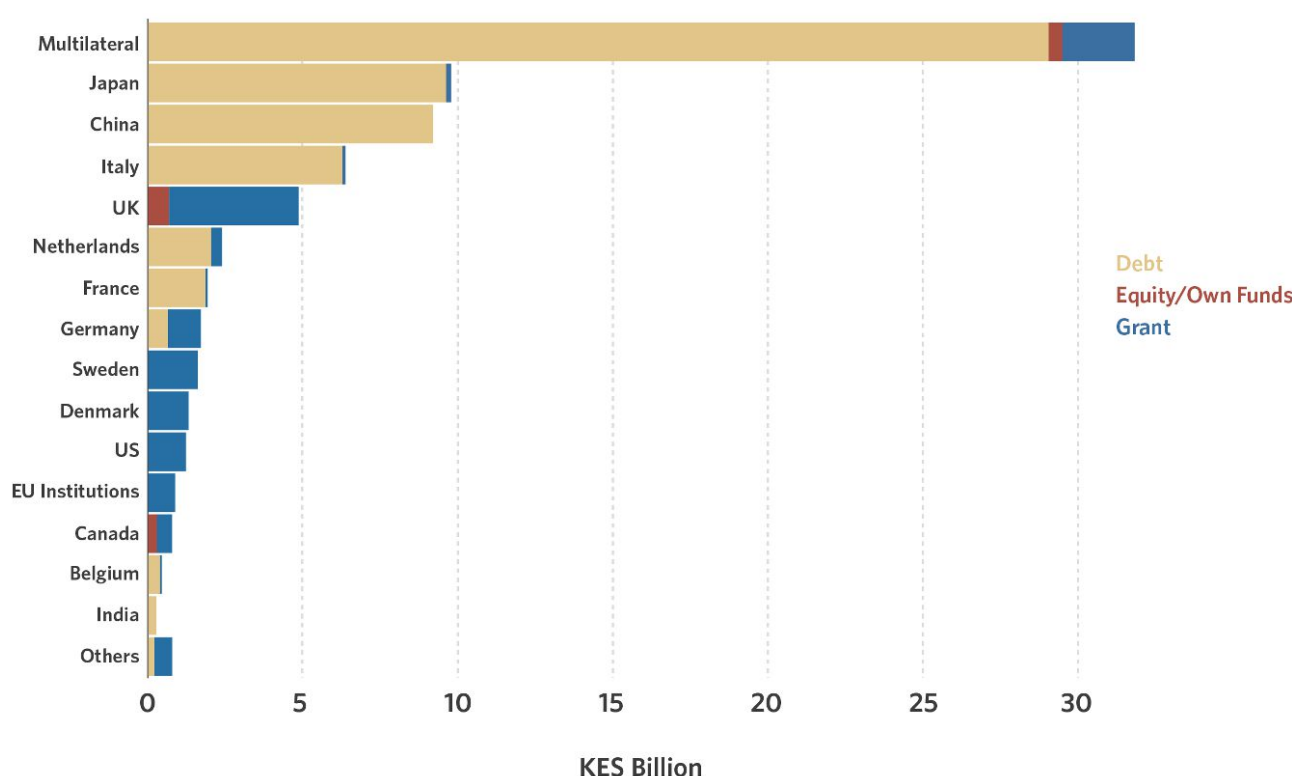
To analyze international public finance flows, this report adopts the perspective of the National Treasury of Kenya, using the information contained in its IFMIS system which comprehensively records financing from external development partners, including from countries that are not OECD members (more details in Box 5).

Overall, bilateral development partners (through their ministries, agencies, and development finance institutions) provided 57.5% of all international public finance tracked, corresponding to KES 43.5 billion (USD 431 million).

Japan was the main contributor of bilateral climate finance, with KES 9.8 billion (USD 97 million) mainly invested for geothermal and solar power plants, and transmission and distribution projects. China, Italy, United Kingdom, Netherlands, France, and Germany were other key bilateral providers of climate finance to Kenya in 2018 (see Figure 22).

Multilateral institutions, including development banks, UN agencies and climate funds provided 42% of all international public climate finance disbursements in 2018 or KES 32.1 billion (USD 318 million). The World Bank's International Development Association (IDA), the African Development Bank, and the International Fund for Agricultural Development (IFAD) were the main contributors.

¹⁶ The surveys did not include KenGen, whose financing data was retrieved from Bloomberg New Energy Finance.

Figure 22: Providers of international public climate finance to Kenya

Notes: data from IFMIS and OECD-CRS.

Most of the international public finance supported mitigation projects (KES 41.6 billion or 55%), while adaptation and projects with cross-cutting benefits also received significant amounts, accounting for KES 17.5 billion (23%) and KES 16.5 billion (22%), respectively.

Approximately 79% of international climate finance was delivered through debt (ranging from official development assistance to loans on market terms), 19% through grants, and 2% with different types of equity. International grants in particular totaled KES 14.5 billion and were largely used to finance adaptation (KES 6.9 billion) and projects with cross-cutting adaptation and mitigation outcomes (KES 5.3 billion). Debt instruments were predominantly employed to support mitigation activities (KES 37.8 billion), although adaptation and activities with cross-cutting benefits also attracted significant amounts of debt (KES 10.6 billion and KES 11.2 billion, respectively). Sixty-five percent and 24% of debt and grants, respectively, were channeled to end-projects through the Kenyan national budget as discussed in the previous section as external sources.

International public finance deployed with concessional terms (grants and concessional loans) ranged between KES 15.6 and 54.3 billion, however, due to a lack of details and conflicting data sources it was not possible to measure the amount more precisely.

A further KES 5.4 billion was utilized for risk mitigation products, which are often crucial in improving the viability of projects and unlocking overseas private capital. Interest rate payments and debt forgiveness linked to international climate projects was also identified as risk mitigation products used in Kenya but are not included in the chart.

Box 5: Tracking international public finance

Tracking international climate finance to Kenya is not straightforward. The process can be analyzed from two perspectives: from both the development partner and the recipient. This report adopts the perspective of the National Treasury of Kenya, using the information contained in its IFMIS system which comprehensively records financing from external development partners, including from countries that are not OECD members. The development partner perspective is available from the OECD-Creditor Reporting System (CRS), which tracks Official Development Assistance (ODA) statistics by the member countries of the OECD's Development Assistance Committee (DAC) and most multilateral organizations.¹⁷

These two perspectives however present discrepancies. For transparency purposes, the report briefly presents the provider's perspective.¹⁸

According to the OECD-CRS, climate-related ODA¹⁹ disbursed to Kenya in 2018 by OECD development and multilateral partners totaled nearly USD 600 million, representing 18% of all ODA disbursements to Kenya in the same year (USD 3.4 billion). These amounts are larger than the flows received by the National Treasury of Kenya and recorded in IFMIS. One explanation is that only direct co-financing to Kenyan development projects is tracked in IFMIS and not the institutional/budget level funding support provided to the Government of Kenya by external development partners. Delays in the disbursement schedule of such funds may also have generated discrepancies in the way financial amounts are tracked by different stakeholders. In addition, the study did not track all government Ministries and therefore some relevant expenditures may have been left out.

More generally, significant challenges were encountered in analyzing financial information from multiple data sources. Limited information and commonly mismatched information regarding the project names, descriptions, and financial amounts made a complete reconciliation of the development partners' and recipient's perspectives practically impossible to achieve.

¹⁷ The CRS also tracks flows from philanthropic foundations, which are classified as private sector flows and discussed in Section 8.2.

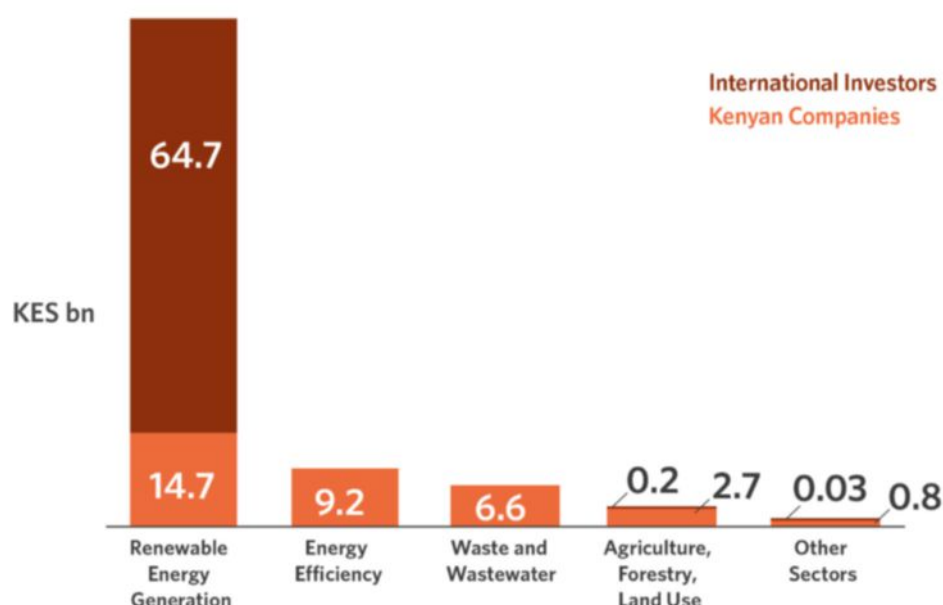
¹⁸ Of the OECD members only.

¹⁹ This report's used Rio Markers to identify and tag climate-related expenditures. The figures provided in the report only counted a portion of such expenditures, applying components based on the specific climate relevance of each transaction.

5. THE PRIVATE CLIMATE FINANCE LANDSCAPE

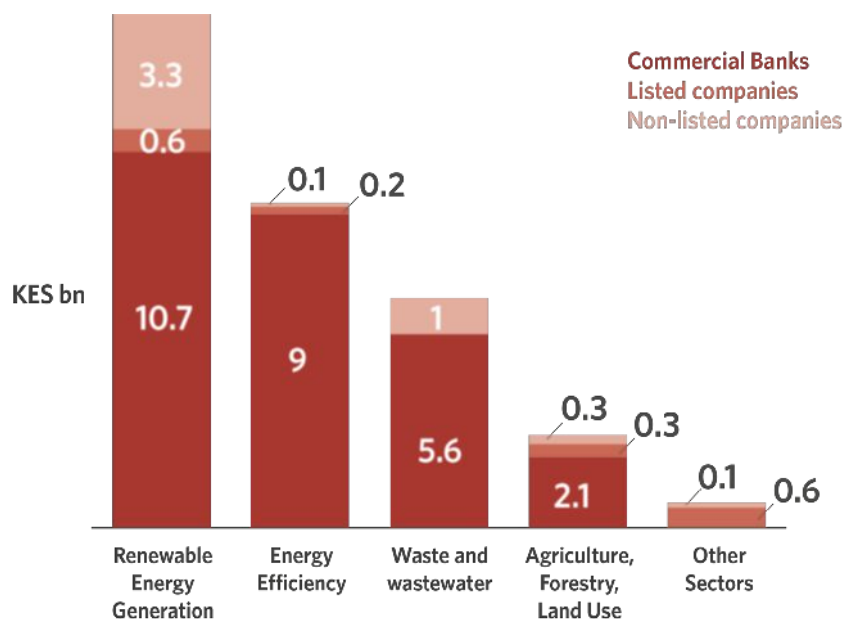
In 2018, a total of KES 98.9 billion (USD 979 million) in climate-related investment from private sector entities was identified, 34.4% originating domestically from Kenyan companies through their own resources and 65.6% from overseas private companies investing into projects located in the country (Figure 23).

Figure 23: Climate-expenditures by domestic and international private actors in Kenya



5.1 KENYAN PRIVATE SECTOR COMPANIES

In 2018, KES 34 billion of investment was tracked from various Kenyan private sector companies into climate-related activities in the country. Kenya's private sector is classified into two main categories: the "formal sector," consisting of large and well-organized corporates, and the "informal sector" which consists of a huge number of micro, small, and medium sized enterprises (MSMEs) that have not been formalized but which contribute 9 out of 10 jobs in Kenya (AFDB, 2013). Within the formal sector, the report further separated companies listed on the Nairobi Securities Exchange (NSE) from other non-listed Kenyan companies, banks (either listed or not) and civil society organizations (CSOs). Both the formal and informal sectors are a critical source of finance for the climate change agenda as businesses seek out potential opportunities for investment as well as mitigating their imminent climate risks. Figure 24 provides an overview of funding by domestic private entities by sector.

Figure 24: Sectors funded by domestic private sector entities in Kenya

The banking sector in Kenya had a total assets base of KES 4,408 billion (USD 44 billion) and contributed 49.5% nominal GDP in 2018, making it a key stakeholder in climate finance flows for the public sector, private sector, and development partners in Kenya (CBK, 2018). Banks in Kenya provided 81% of all tracked domestic private sector climate-related expenditures (KES 27 billion), lending to renewable energy projects, providing credit lines for energy efficiency (like solar installation for lighting and water heating) and wastewater management in the hospitality industry, as well as funding tree planting projects across the country. A case study about the climate efforts of the Kenya Commercial Bank Group is provided in Section 8.1.2.

Listed and non-listed Kenyan corporations provided the remaining 19% of domestic private financing (5% and 14% respectively) from their internal resources, primarily for funding wind and solar power plants and reforestation initiatives.

The figures presented in this section show only the financing from a companies' own resources. This is an important distinction because a significant proportion of the climate activities reviewed were implemented by private sector companies but financed by external sources (either the Government of Kenya, development finance institutions, philanthropic foundations, or other donors). DFIs and development partner agencies also channeled funding through industry associations like KEPSA, KAM, and CSO's to build capacity and support policy development towards creating a conducive environment for climate investments. A case study about the climate efforts of the corporation Safaricom Plc. is provided in Section 8.1.3.

Due to the complexity in separating own from externally funded expenditures, CSOs are presented separately.

5.1.1 CIVIL SOCIETY ORGANIZATIONS

According to the World Bank, “Civil society, refers to a wide array of organisations: community-based organisations (CBOs), non-governmental organisations (NGOs), labour unions, indigenous groups, charitable organisations, faith-based organisations (FBOs), professional associations, and foundations.”

Civil Society Organisations (CSOs) have been involved in many climate-relevant initiatives and projects in Kenya, working with communities at grassroots and are therefore well suited to create adaptive capacities within the communities. For this reason, some funders work directly or indirectly with CSOs for greater impact at the local level. The national and county governments partner with CSOs on climate projects, research, policy work and capacity building, however involvement of CSOs in policy formulation is still limited. CSOs in Kenya together with research institutions and academia are progressively forming a community of practice for climate change adaptation and mitigation and are learning how to raise the number and quality of their interventions as well as share knowledge and experiences.

A review of published reports from 43 CSOs in Kenya revealed that projects are largely funded by international development organizations, and generally leaning more towards adaptation than mitigation.

In 2018, projects focused on the development and management of sustainable water, sanitation and hygiene services, climate-smart dairy systems, integrated natural resource management, climate resilient horticulture value chains, and renewable energy.

The lack of a central database to collect all the climate-related activities and financing from CSOs made information of their contribution in the country limited. Concerted efforts to coordinate reporting is required to create a central database to capture finance flowing into climate projects through CSOs – potentially achieved through annual reporting of climate change inflows and outflows to the regulator of NGOs and CBOs.

5.1.2 THE IMPACT OF COVID-19 ON THE KENYAN PRIVATE SECTOR

COVID-19 has had a significant and negative impact on the Kenyan private sector. Economic shocks are being felt mostly in tourism, transport, and trade sectors as a result of the pandemic leaving their economic and financial viability under serious threat. The agricultural sector, particularly the flower sector, is losing approximately KES 250 million per day and is estimated to lose half of its value (KES 60 billion) by the end of 2020 (Deloitte, 2020). The agriculture sector, vital for the Kenyan economy, has further been hit this year by both drought and multiple locust invasions which have reduced agricultural output and cut rural incomes (World Bank, 2020a).

The Kenyan banking sector is also expected to suffer from the effects of the pandemic, owing to the collapse of businesses in various sectors. As a result, banks have cut credit to micro, small, and medium sized enterprises (MSMEs) and corporates, which are typically in high-risk sectors exposed to climate risks, such as agriculture and large green energy projects. To ease the burden on banks and businesses, the Central Bank of Kenya has relaxed regulations

on loan provisions by allowing banks to restructure loans for their customers whose businesses have been affected by the pandemic.

This economic impact will limit the openness of banks and businesses to enter new sectors and make up-front investments in new technologies. This could impact climate-related investments and should be a consideration for the Government of Kenya when investing their stimulus package, as well as international development finance. It is vital that support for the private sector from GoK and international partners is aligned with climate objectives to mitigate climate related risks and to ensure longer term development is not compromised by the short-term consequences of COVID-19. If successful, this could present a huge opportunity to boost the green economy alongside economic recovery.

Box 6: Approach to tracking private finance

Kenya's targets under the NDC and NCCAP will require significant resources and investment by the private sector from local and international sources. The International Finance Corporation estimated that climate-smart sectors represent a USD 81 billion opportunity for Kenyan companies and investors between 2016 and 2030 (Table 4).

Table 4: Kenya's climate-smart investments potential 2016 - 2030

Sector	Investment	Investment potential (USD billion)
Agriculture	Agriculture	59.6
Renewable energy	Small hydro	1
	Geothermal	7
	Wind	2
Urban infrastructure	Transport	11
	Waste	0.04
	Buildings	1

Source: IFC, 2016.

Kenya's private sector potential can also be realized with a conducive enabling environment through development of ambitious climate policies, supportive regulations and subsidy as well as targeted public financing. As seen in Box 1 the majority of supportive policies and subsidies have targeted the energy sector, which has translated to the greatest volume of private investment in this sector.

Currently, the major challenges that hinder Kenya's private sector from achieving long-term climate action and sustainable development are i) a lack of awareness of existing opportunities, ii) low inclusion of private sector in the national and international climate change effort, iii) the high cost of financing for climate related initiatives by financial institutions in Kenya (IIED-ADA, 2019)

The Government of Kenya has introduced several policies and engagement mechanisms in recent years. The Ministry of Environment and Forestry, for example, has developed a private sector engagement framework which facilitates continuous dialogue with the private sector in policy development and access to private sector investments in climate change actions (UNDP, 2019). The National Treasury has developed the National Climate Finance Policy 2017 (GoK, 2016) which is expected to be revised every three years and focuses on attracting external climate finance and enhancing private sector investments aligned Kenya's vision 2030.

Kenya is also developing a policy on Incentives for Green Technologies and Services and a Climate Change Fund to encourage private investment in climate related projects.

Box 7: Kenya's enabling environment for private investment

Private sector investments are challenging to track. Mostly just larger companies have the internal capacity and resources needed to implement climate-projects, with a few publishing their activities in their annual reports.

Using several different approaches, this report has attempted to track climate investment from private sector companies for the first time, providing an initial, yet indicative, quantification of climate-related investment in 2018. The effort was important to gauge the sector's awareness around climate change as well as their response.

Most of the quantitative and qualitative data analyzed in this study was gathered through surveys and desktop research of sustainability reports for corporates, banks, and Civil Society Organizations (CSOs). Kenyan associations and partners were crucial to obtaining the information and will support: i) capacity building for businesses to identify opportunities and risks associated with climate change; ii) identifying potential investment gaps in line with priorities highlighted in the NCCAP and propose feasible investment structures; and iii) informing and aligning development of policies to enhance climate investment. Some of their work is reviewed below:

Kenya Private Sector Alliance (KEPSA): Is the national apex body for business membership organizations' (BMOs) for private sector associations and corporate bodies in all sectors of the economy. It has more than 500,000 members. It plays a critical role on behalf of its members as a stakeholder with government and has been involved in the development of the legal and policy framework for climate change. KEPSA members were engaged through an initial workshop in January 2020 followed by an online survey to 800 of its member companies. More details about the survey response are available in Annex III.

Nairobi Security Exchange (NSE): NSE is Kenya's only securities exchange with 61 companies listed. It is a partner exchange in the United Nations-led Sustainable Securities Exchange (SSE) Initiative. In 2019, the NSE listed the first Green Bond of Kenya, which raised KES 4.3 billion (USD 43 million) and was also cross-listed in the London Stock Exchange. The report reviewed annual reports and available information from 24 NSE-listed companies controlling 80% of the market, with significant exposure of their activities to climate change or because they significantly contribute to carbon emissions.

Kenya Bankers Association (KBA): A member of KEPSA, KBA is an umbrella body for banks and deposit-taking microfinance institutions in Kenya with 46 members. KBA helps to develop banking best practice standards and coordinates the banking sector while reinforcing the financial industry's ability to be a primary driver of the Kenya economic development. Through the Sustainable Finance Initiative (SFI), KBA leads the development of Sustainable Finance Principles in the Kenyan banking and financial services industry in Kenya. KBA is also the Secretariat of the Green Bond program. This study collected qualitative and quantitative from KBA members through a dedicated survey, interviews, and review of the Annual Integrated and Sustainability reports for those banks with a total asset base of above KES 150 Billion.

Civil Society Organizations (CSOs): data and information on climate related projects by 43 CSOs was gathered from their published financial statements and project reports. Out of the 43 CSOs whose reports were scrutinized, only 17 had explicit information on climate related projects implemented in the period between 2018 and 2020.

5.1.3 CASE STUDY: KENYA COMMERCIAL BANK GROUP (KCB)

KCB is the largest bank in Kenya with an asset base of KES 953 billion (USD 8.8 billion) and the largest network within the Eastern African region²⁰. The Bank is also at the forefront in spearheading sustainable banking and the adoption of global best practices in environmental and social management systems.

²⁰ As of December 2019.

The bank has adopted nine of the UN Sustainable Development Goals (SDGs) in its corporate operational goals and in the development of products and services. On an annual basis the bank tracks, measures, and reports its performance on the SDGs using the Global Reporting Initiative (GRI)²¹. In 2019, KCB became one of the 30 global banks signatories of the UNEP Principles for Responsible Banking, and a signatory of the UN Global Compact Initiatives and Kenya's Sustainable Finance Initiatives.

In November 2020, KCB became the first financial institution in Kenya to be accredited by the Green Climate Fund (GCF), allowing it to receive GCF funding for on-lending to green and climate-friendly projects in Kenya worth between KES 5 and 25 billion (KCB, 2020a).

The KCB's strategy for the 2020-2025 period includes two main climate-related commitments: i) the development and incorporation of carbon accounting standard methodologies in the bank's lending processes; ii) the assessment and disclosure of greenhouse gas emissions related to the Bank's lending portfolio in order to identify and manage climate change related risks.

KCB has introduced several targets, including:

- **Net-Zero target:** KCB aims to become carbon neutral by 2028, cutting its own carbon emissions and emissions from its customers. The specific actions undertaken to reduce its carbon footprint are detailed in the bank's Green Agenda (KCB, 2018) and are articulated around two main areas: improving resource usage efficiencies of energy, water, paper, and waste and adopting clean energy. In 2019, the bank commissioned the first fully solar hybrid-powered branch at Masai Mara. In 2018, the bank had reduced its carbon footprint by 23% and in 2019 by 7%.
- **Increased green lending:** In 2018, KCB's stated that it aims to increase the green lending portfolio by 5% annually for the next three years, while stopping lending to businesses and projects that pollute the environment in 2019 (KCB, 2018 & 2020). In 2018, the bank identified KES 23.35 billion of climate-related investments for energy efficiency solutions in the manufacturing sector, waste programs and low-carbon technologies (Table 5).

Table 5: KCB Group Climate- Related Loan Portfolio

Sector	2018 Loan Portfolio (KES million)	Details
Energy Efficiency	10,000	Wide range of energy-efficient solutions for the manufacturing sector.
Low-Carbon Technologies	9,000	Solar installation for lighting and water heating, wastewater management in the hospitality industry
Waste water Management	4,147	Waste Programme
Agriculture, Forestry, Land Use	203	Mobigrow Programme and Mifugoni Mali Product
Total	23,350	

Source: survey conducted by the authors with KCB.

²¹ Launched in 2016, the Global Reporting Initiative (GRI) is an international independent standards organization that helps businesses and governments understand and report their impacts on climate change, human rights, and other goals.

On top of its climate-related lending, the bank has invested in technologies to monitor and improve its operational resource usage to reduce carbon emissions and operational costs as shown in Table 6. The uptake of sustainable products such as the Mobigrow (Smart Agriculture) product grew almost fourfold, from 110,000 in 2018 to 400,000 in 2019.

Table 6: KCB Group Measured Impacts

Operational Efficiencies to cut carbon Footprint	2018	2019
Reduction in electricity use	13%	3%
Reduction in paper consumption	12%	3%
Reduction in fuel consumption	29%	11%
Reduction in Water consumption	20%	24%
Impacts	2018	2019
No. of Mobigrow Accounts (Smart Agriculture)	110,000	400,000
Amount of Mobigrow loans	KES 123 million	KES 130 million
Financial results		
No. of customers Impacted	17.4 million	20.8 million
Total revenues	KES 72 billion	KES 84 billion

Source: survey conducted by the authors with KCB and KCB reports.

The bank regularly carries out environmental and social due diligence (ESDD) for all its corporate and SME lending using science-based target models, screening 90% (KES 127 billion) of its loans and advances in 2018 for environmental, social and governance (ESG) risks, and KES 320 billion of loans in 2019. To build capacity on ESG screening among its staff, the bank provided training on sustainability awareness in Environmental and Social Risks Assessments (ESRA) and ESDD to 250 employees in 2018, and 5,000 in 2019.

+KCB Group's commitment to sustainable banking and ambitious goals for cutting carbon emissions have not only had positive social and environmental impacts but also contributed to increasing the bank's financial strength. Following the lead of KCB, other banks in Kenya can improve their practices and achieve better results by integrating sustainability in their business strategies, setting measurable targets of lowering their carbon footprint and developing innovative green loan products that can assist them attract additional external funding.

5.1.4 CASE STUDY: SAFARICOM

Safaricom Plc is the largest telecommunications company in Kenya and one of the most profitable companies in East and Central Africa. As of 2019, it had over 31 million subscribers and controlled over 62% of the telecommunications market in Kenya. The company created a value added for the Kenyan economy of KES 601 billion in 2019, corresponding to 6.3% of the GDP.

Since 2016, Safaricom has started integrating nine SDGs into its business strategy, periodically tracking progress in the sustainability and integrated annual reports through several targets and metrics, including a Net-Zero Target by 2050. To reduce emissions over time, Safaricom has transitioned 246 (3.7%) of network sites to renewable energy sources and through a partnership with M-KOPA over 500,000 household now have access to solar

energy. The company has also admitted that it will be difficult to achieve the target in the medium term and plans to offset what cannot be eliminated by planting one million trees in partnership with Kenya Forest Service.

In 2018, Safaricom invested KES 1.15 billion in climate-related initiatives, including renewable energy and energy efficiency (Table 7).

Table 7: Safaricom Climate-Related Investments in 2018

Climate Related Activity	Invested Amount in 2018 (KES million)	Details
Renewable Energy Generation	370	Solar projects
Energy Efficiency	155	High efficiency rectifiers
Low-Carbon Technologies	400	Hybridized solutions (Li-ion integrated batteries)
Other	230	Batteries for deep cycling
TOTAL	1,155	

Source: Survey conducted by authors, integrated with 2018 Safaricom Sustainability Report

The company has also put in place a robust climate risk assessment mechanism that enables it to control the risks that may affect the sustainability of the business and ensures environmental regulatory compliance. In 2018, the company carried out 590 Environmental Impact Assessments (EIAs) and 458 Environmental Audits (EAs) as part of their monitoring and evaluation of their environmental impact from existing, new, and proposed infrastructural developments.

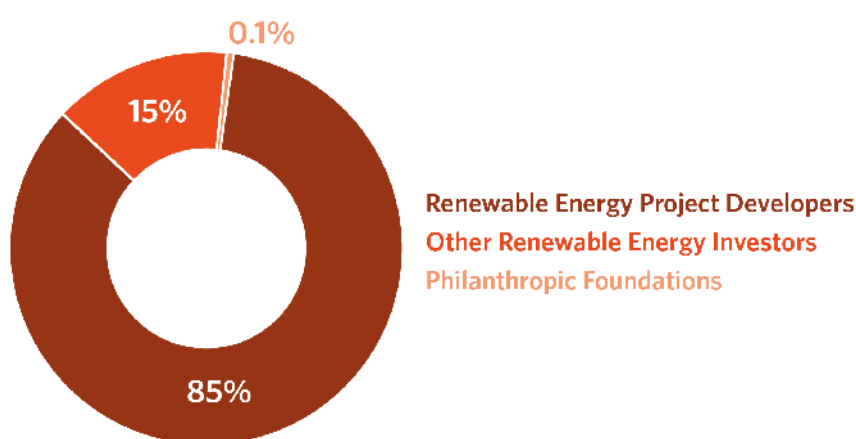
Since 2016, Safaricom has promoted sustainable energy and waste management practices throughout its operations, reducing operating expenses (such as energy costs) and the company's reliance on the grid and diesel energy. This has contributed to increasing Safaricom's market value (from KES 234 billion in 2018 to KES 250 billion in 2019) as well as improving its resilience.

5.2 INTERNATIONAL PRIVATE FINANCE

As Kenya's economy has grown so has its private sector, with Nairobi becoming a hub for business. The Kenyan government has been implementing reforms to attract foreign investment, improving its ranking in the "Doing Business" report of the World Bank by 80 places in just five years, from the 136th position in 2015 to 56th in 2020 (World Bank, 2020c).

In 2018, foreign private sector actors invested KES 64.9 billion (USD 643 million) of climate-related capital in Kenya, predominantly in renewable energy projects (99.7% of the total). A thriving solar on-grid market and the various development phases of large-scale grid connected plants, like the Lake Turkana wind power and the Olkaria geothermal power plants²² have attracted significant private capital into Kenya for several years, with a 2018 amount estimated in KES 64.7 billion.

Figure 25: Providers of international finance to Kenya



Beyond renewable energy, philanthropic foundations are the only international private actors that have invested in other climate sectors, in particular supporting adaptation, health, and water projects in Kenya. Philanthropies have provided USD 3.4 million (KES 347 million) to Kenya, mostly through grants and low-cost loans, but this is most likely an underestimate of their real contribution due to lack of detailed information on the activities financed.²³

An alternative way to quantify international private investment into Kenya is to refer to **Foreign Direct Investment (FDI)** statistics, bearing in mind that these represent all sectors, not just those that are climate friendly. Kenya is among the largest recipient of FDI in Africa, with FDI inflows increasing since 2010 and estimated at over USD 1.6 billion in 2018 (UNCTAD 2020).²⁴

Another indicator that Kenya is a key destination for international sustainable investment in Sub-Saharan Africa are impact investments. Between 2005 and 2015 more than USD 650 million of private impact investment capital and more than USD 3.6 billion of DFI capital was

²² More information about the financing arrangements for the Olkaria III plant available from Micale et al, 2015.

²³ This report tracked USD 143 million of total philanthropic capital disbursed to Kenya in 2018 towards activities focused on improving people's lives and achieving various Sustainable Development Goals. However, only 2% of them was Rio Marked in the OECD-CRS database, which does not seem a realistic case.

²⁴ FDI figures were not included in the numbers, as the report tracked only finance flows that correspond to the deployment of low-carbon and climate-resilient projects. As FDI data is not available at the project-level, it was not possible to disaggregate these flows in a way that is comparable with the report's methodology (i.e., capturing private project financing data only).

invested in Kenya, representing nearly half of all impact investments disbursed in East Africa in the period. More than 95 private impact investors (excluding DFIs) are currently active in Kenya, managing over 136 impact capital vehicles (GSG, 2019).²⁵

²⁵ Impact investment have realistically increased since 2015, but data for recent years is not yet available (GSG, 2019).

6. CONCLUSIONS AND RECOMMENDATIONS

This report has shown that finance is flowing to climate activities in Kenya, with a significant contribution from the domestic sector. There has also been strong participation from the private sector, shown by data availability and engagement, with some sectors exceeding expectations.

Kenya has attracted significant finance for renewable energy, however, there is a need for more finance in all other mitigation sectors, with a particular need for increasing finance for forestry. Most of the mitigation finance supported the energy sector, increasing Kenya's capacity of renewable energy. This is likely to have a significant impact on Kenya's achievement of the NDC given that most of the new emissions incorporated into the baseline (2015 – 2030) will come from the energy sector. This is largely due to the planned construction of two coal power plants. If this significant investment in renewable energy displaces some fossil fuel generation then this finance will have a vital impact on the achievement of the NDC.

According to the NCCAP, the largest mitigation potential is in the forestry sector. The Government of Kenya's strategy for achieving and maintaining a 10% tree cover by 2022 is estimated to cost KES 48 billion for both the public and private sector (GoK, 2019d). Yet, this analysis shows that investment in the forestry sector is low, with only KES 540 million spent on the forestry sector in 2018. Therefore, significantly more financial support will be needed for the mitigation potential to be achieved and for Kenya to increase its forest cover from 5.9% to 10% (MOEF, 2019). If the emissions reductions are above the NDC targets, Kenya will have opportunities to financially benefit from this over-achievement through participation in International Transfer of Mitigation Outcomes (ITMOs).

The transport sector in Kenya was responsible for 11% of the country's emissions in 2016 (Climatewatch, 2020), and is projected to increase its share of the emissions. However, this report tracked almost no climate finance in the low-carbon transport sector in 2017/18. Several of the major transport projects in the NCCAP, such as electrification of the SGR and development of a Bus Rapid Transit System in Nairobi, are yet to start operations.

The renewable energy sector has attracted significant private finance due to supportive policies and direct subsidies. In order to attract more private finance into other sectors, there is a need for a more conducive enabling environment. For the forestry sector, it is recommended that the proposed incentive schemes in the national strategy for achieving and maintaining over 10% tree cover by 2022 are implemented. As well as continued subsidy for activities which avoid deforestation, e.g., clean cooking alternatives to reduce the reliance on fuel wood and charcoal for cooking, particularly in rural areas.

Overall, climate finance flows still fall short of what is needed to achieve the NDC, and this gap is mostly in the adaptation sector. Therefore, Kenya must scale-up finance for adaptation to meet its NDC targets and build a resilient economy. Given Kenya's

vulnerability to the impact of climate change and the economic fall-out from climatic events, such as drought and floods, it is clear that adaptation is Kenya's priority. This is reiterated in the NCCAP where the water sector has the highest estimated financial needs across all the sectors. However, the detailed review of the finance flowing in Kenya in 2018 shows that adaptation represents only 11.7% of all climate expenditures in Kenya and 46% of that was spent by the water sector. Almost 80% of the climate finance in Kenya supported the implementation of climate mitigation measures, predominantly for large-scale renewable energy generation projects.

The adaptation finance tracked represents a partial estimate due to definitional issues and data limitations (all government expenditures were reviewed manually and often lacked sufficient details to accurately assess their adaptation relevance). However, it is undeniable that implementing an adequate pipeline of adaptation projects and obtaining the financing needed remains a major challenge, particularly for the private sector.

There was also a bias towards mitigation in international public finance. Only 19% of international public finance was delivered through grants, which is the main mechanism for adaptation finance. To achieve greater impact, more international public finance is needed to unlock more challenging sectors and trying to catalyze private investment into adaptation. According to the recent NDC update submitted to the UNFCCC in December 2020, implementing Kenya's NDC requires that international partners will sustain at least 87% of the USD 62 billion needed by 2030, a level not met in 2018.

It is globally recognized that there is a need to scale up adaptation finance. Kenya is well placed to be at the forefront of responding to this challenge and looking at new and innovative ways to attract finance to adaptation. Kenya's first focus should be on the water and forestry sectors, as the greatest climate impact is from drought and flooding.

Climate finance must be mainstreamed into public investment management and expenditure. The Government of Kenya spent approximately 3% of the budget on climate-related activities. This demonstrates that the Government has managed to mainstream climate change considerations into its policies and long-term plans. However, with finance still below what is required to achieve the climate targets and with the opportunity cost of not investing in climate-resilient infrastructure being so high, more work needs to be done. One of the most effective ways to ensure 'green growth' is to mainstream climate considerations into most investment decisions and align investment decisions according to the country's climate ambitions. This study found significant opportunity for some of the ministries with large infrastructure investments which still have a relatively low proportion of climate-related expenditure, such as the State Department responsible for infrastructure.

Kenya understands the importance of accurate and comprehensive data and has made important efforts to lay the foundations for tracking climate expenditures in its centralized accounting system, and some final adjustments are needed to make it fully operational. The National Treasury has been working on tracking climate related inputs and outputs in its Integrated Financial Management Information System (IFMIS). There will be an additional element to code and track climate-expenditures included in the Standard Chart of Accounts (provisionally called "Segment 8"). This would significantly improve Kenya's ability to mobilize resources and enhance transparency of support provided and received for climate action. In the absence of Segment 8, climate-expenditures were tracked manually to generate this report, with challenges of double counting and conflicting information.

The Kenyan Government should prioritize the implementation of this new system, as the conclusion seems within reach. As a first step in this direction, The National Treasury has started requiring all its Ministries, agencies and county-level government entities to report quarterly on their climate-related investments. This is an opportunity to keep a detailed check on progress against investments in particular sectors. In parallel, capacity building and coordination are needed to ensure the information reported is clear, informative and not conflicting. If there is a consistent approach, then reporting will be more efficient and the data more reliable.

The private sector needs to direct more money to climate-related investment, and incentives need to be put in place to encourage this. Of the total of KES 98.9 billion (USD 979 million) of private climate finance, KES 79.4 billion was invested in renewable energy. Almost the entirety of international private investment financed renewable energy projects, Kenyan private finance was slightly more diverse, also supporting energy efficiency, waste and agriculture projects.

The IFC estimated Kenya's climate-smart investments potential between 2016 – 2030 and the greatest potential was in the transport and agriculture sectors. It is really encouraging that there is a high participation in the energy sector but there is a need to learn from this success to attract private investment into the other sectors.

The use of public sector instruments and well-crafted supportive policies and regulations can encourage additional private sector investments, reducing the perceived risk of investing in Kenya's clean projects. For example, targeted incentives for investments in 'high risk' sectors (e.g. low-carbon sectors excluding renewable energy), such as government guarantees and tax exemptions, help minimize the risks associated with low-carbon and climate-resilient investment.

The Kenyan private sector can profit from the opportunities available in low-carbon infrastructure and reduce business risk. This study has provided a snapshot of how the Kenyan private sector is responding to climate change, shed light on opportunities for unlocking additional investments, and highlighted the challenges and barriers that the private sector stakeholders were experiencing that hindered further investments.

For example, capacity building can increase the ability of Kenyan companies to identify opportunities arising from climate change and implement solutions to preserve their business operations through adverse climate conditions.

Capacity building would also benefit financial institutions in Kenya, increasing their capacity to review climate-related lending opportunities, and access concessional capital from development finance institutions for green lending to their customers. Corporates and MSME's face difficulties in accessing finance from domestic commercial banks whose risk aversion and limited understanding of low-carbon opportunities result in high interest rates as well as high collateral requirements.

Public-private partnerships (PPPs) are another effective solution to encourage private sector participation in climate projects.

Finally, Kenyan private sector associations like KEPSA are an effective vehicle for creating awareness and providing information on climate change to their members. They should be

facilitated and perhaps formalized as an official avenue to collect information on private sector climate-expenditures.

There are opportunities to align post-COVID investment and economic recovery with green growth. COVID-19 has had a significant impact on the Kenyan economy. However, these economic shocks also present opportunities. With domestic and international public finance looking at ways to stimulate the economy there is an opportunity to align this with green growth.

RECOMMENDATIONS

Adaptation. There is an urgent need to increase finance for adaptation in Kenya, particularly in the water, disaster risk management, and forestry sectors. This should be the priority of the public sector given the unique challenges in financing adaptation, and the focus of both domestic and international public finance.

Mitigation. While the renewable energy sector has been a success story in Kenya, there is a need to scale-up investment in most of the key mitigation sectors, namely transport and forestry (which is cross-cutting with adaptation).

Subsidies and incentives for private sector. The private sector has a key role closing Kenya's investment gap. Implementation of incentives and subsidies to create a more attractive enabling environment for private investment in the transport, forestry, water, land use, and waste sectors are therefore of critical importance. For example, implementation of the proposed incentive schemes in the national strategy for achieving and maintaining over 10% tree cover by 2022.

International public finance. There is a need for international public finance to focus on more challenging sectors which are not receiving private finance at scale. For example, using innovative financing to mobilize investment into key underfunded sectors, such as forestry, transport, and water.

Coordination among actors. Climate finance should be used more effectively to increase its impact. This will require improved coordination and reporting between Kenyan actors at all levels: Ministries, agencies, county-level government entities, international development partners, and private sector stakeholders.

Climate finance tracking and reporting. To better understand whether finance is meeting Kenya's climate needs and how to scale-up investment, there is a need for regular reporting from Ministries to the National Treasury on climate-related expenditure. This can be implemented through the new segment 8 component of the Integrated Financial Management and Information System (IFMIS). Once in place, the National Treasury should annually monitor the climate finance flows relative to the need to monitor progress and respond to short falls.

7. REFERENCES

1. Adaptation Consortium, 2020. Mainstreaming Climate Change into County Planning and implementation. Available at <https://www.adaconsortium.org/index.php/county-climate-change-fund>
2. African Development Bank, 2013. State of Kenya's Private Sector. Available at: https://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/The_State_of_Kenya_s_Private_Sector.pdf
3. Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED), 2020. Early Outcomes of Climate Finance in Kenya. Working Paper, June 2020. Available at: <http://www.braced.org/resources/i/Early-outcomes-of-climate-finance-in-Kenya/>
4. Buchner et al. (CPI, 2019). Global Landscape of Climate Finance 2019. Climate Policy Initiative. At: <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2019/>
5. Bloomberg New Energy Finance (BNEF), 2020. "Renewable energy projects and Asset finance databases [Internet]". At: <https://www.bnef.com/projects/search> and <https://www.bnef.com/assetfinancing/> (registration required).
6. CPI, 2019b. Global Landscape of Climate Finance 2019 – Methodology. Climate Policy Initiative. At: <https://climatepolicyinitiative.org/wp-content/uploads/2019/11/GLCF-2019-Methodology-Document.pdf>
7. Central Bank of Kenya (CBK), 2018. The Kenya Financial Sector Stability Report 2018. Available at: https://www.centralbank.go.ke/uploads/financial_sector_stability/KFSSR2018_sept_issue_no.10.pdf
8. Climate Action Tracker, Kenya Country Summary. Available at: <https://climateactiontracker.org/countries/kenya/>
9. CPEBR, 2016. Climate Public Expenditure and Budget Review in Kenya. Available at: https://www.ke.undp.org/content/kenya/en/home/library/environment_energy/kenya-climate-public-expenditure-and-budget-review.html
10. Climatewatch, 2020. Kenya: Greenhouse Gas Emissions and Emissions Targets. Available at: <https://www.climatewatchdata.org/countries/KEN>
11. Deloitte, 2020. Economic Impact Covid-19 Pandemic on East African Economies. Available at: <https://www2.deloitte.com/ke/en/pages/finance/articles/impact-of-covid19-on-ea-economies.html>
12. Food and Agriculture Organization of the United Nations (FAO). 2020. Global Forest Resources Assessment, Kenya. Available at: <https://fra-data.fao.org/KEN/>
13. Government of Kenya. 2009. The Government Financial Management Act. Available at: <http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/GovernmentFinancialManagementfinal.pdf>

14. Government of Kenya (2010) National Climate Change Response Strategy. Available at: <http://www.environment.go.ke/wp-content/documents/complete%20nccrs%20executive%20brief.pdf>
15. Government of Kenya, 2012. "Kenya Post Disaster Needs Assessment (PDNA): 2008-2011 drought". With technical support from the European Union, United Nations and World Bank. Available at: <https://reliefweb.int/report/kenya/post-disaster-needs-assessment-pdna-2008-2011-drought>
16. Government of Kenya, 2013. National Climate Change Action Plan (Kenya) 2013-2017, <https://cdkn.org/wp-content/uploads/2013/03/Kenya-National-Climate-Change-Action-Plan.pdf>
17. Government of Kenya, 2015a. Kenya's Intended Nationally Determined Contribution (INDC). Available at: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya_NDC_20150723.pdf
18. Government of Kenya, 2015b. Kenya Second National Communication to the United Nations Framework on climate Change, Available at <https://unfccc.int/resource/docs/natc/kennc2.pdf>
19. Government of Kenya, 2015c. Makueni County Climate Change Fund Regulations. Government of Kenya, Nairobi
20. Government of Kenya, 2016a: Addressing Climate Change: Success Stories from Kenya. <http://www.starckplus.com/documents/ta/climateact/Addressing%20Climate%20Change%20-%20Success%20Stories%20from%20Kenya.pdf>
21. Government of Kenya, 2016b. Green Economy Strategy and Implementation Plan 2016 – 2030. A low carbon, resource efficient, equitable and inclusive socio-economic transformation. Available at: http://www.environment.go.ke/wp-content/uploads/2018/08/GESIP_Final23032017.pdf
22. Government of Kenya, 2016d. National Policy on Climate Finance, The National Treasury. Available at <http://www.environment.go.ke/wp-content/uploads/2018/05/The-National-Climate-Finance-Policy-Kenya-2017-1.pdf>
23. Government of Kenya, 2016e. Environmental Protection, Water and Natural Resources Sector Report. Medium Term Expenditure Framework (MTEF) Budget For the Period 2017/18-2019/20. Available at: <https://treasury.go.ke/component/jdownloads/send/211-sector-reports/1498-environment-protection-water-natural-resources-sector-report-draft.html>
24. Government of Kenya, 2017a. Kenya Climate Smart Agriculture Strategy-2017-2026. Ministry of Agriculture, Livestock and Fisheries in collaboration with the Ministry of Environment and Natural Resources with support from the World Bank, the United Nations Development Programme (UNDP) and the Food and Agriculture Organization of the United Nations (FAO). Available at: https://www.adaptation-undp.org/sites/default/files/resources/kenya_climate_smart_agriculture_strategy.pdf

25. Government of Kenya, 2017b. Kenya's Nationally Determined Contribution (NDC) Update of Kenya's Emission Baseline Projections and Impact on NDC Target
26. Government of Kenya, 2017c. Nationally Determined Contribution (NDC) Sector Analysis Report: The Evidence Base for Updating Kenya's National Climate Change Action Plan, Nairobi: Ministry of Environment and Natural Resources.
27. Government of Kenya, 2018a. Budget Review and Outlook Paper 2018. The National Treasury of Kenya, September 2018. Nairobi, Kenya. Available at: https://www.cabri-sbo.org/uploads/bia/Kenya_2018_Approval_External_BudgetReview_NatTreasury_COMESACEN-SADEACIGAD_English.pdf
28. Government of Kenya, 2018b. County Governments Budget Implementation Review Report (CBIRR) for FY 2017-18, Office of the Controller of Budget (OCOB). Available at: <https://cob.go.ke/reports/consolidated-county-budget-implementation-review-reports/>
29. Government of Kenya, 2018c. National Climate Change Action Plan (Kenya) 2018-2022. Ministry of Environment and Forestry, Nairobi, Kenya. Available at: <http://www.environment.go.ke/wp-content/uploads/2020/03/NCCAP-2018-2022-v2.pdf>
30. Government of Kenya, 2018d. National Government Budget Implementation Review Report For FY 2017/2018. Office of the Controller of Budget (OCOB). Available at: <https://cob.go.ke/reports/national-government-budget-implementation-review-reports/>
31. Government of Kenya, 2018e. Third Medium Term Plan 2018 – 2022; Transforming Lives: Advancing socio-economic development through the “Big Four”. Available at: <https://planning.go.ke/wp-content/uploads/2018/12/THIRD-MEDIUM-TERM-PLAN-2018-2022.pdf>
32. Government of Kenya, 2019a. County Governments Budget Implementation Review Report (CBIRR), Office of the Controller of Budget (OCOB). Available at: <https://cob.go.ke/reports/consolidated-county-budget-implementation-review-reports/>
33. Government of Kenya, 2019b. Government of Kenya (2019). Transport Sector Climate Change Annual Report: Performance and Implementation of Climate Change Actions. Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works. Nairobi, Kenya. Available at: https://www.international-climate-initiative.com/fileadmin/Dokumente/2020/2019_Transport_Sector_Climate_Change_Annual_Report_Kenya.pdf
34. Government of Kenya, 2019c. Kenya Population and Housing Census, 2019; Counting our People for Sustainable Development and Devolution of Services. Available at: <https://www.knbs.or.ke/?wpdmpo=2019-kenya-population-and-housing-census-volume-i-population-by-county-and-sub-county>
35. Government of Kenya, 2019d. National Strategy for Achieving and Maintaining Over 10% Tree Cover By 2022. Ministry of Environment and Forestry. Nairobi, Kenya. Available at: <http://www.environment.go.ke/wp-content/uploads/2019/08/Strategy-for-10-Tree-Cover-23-5-19-FINAL.pdf>

36. Government of Kenya, 2020a. County Governments Budget Implementation Review Report (CBIRR), Office of the Controller of Budget (OCOB). Available at: <https://cob.go.ke/reports/consolidated-county-budget-implementation-review-reports/>
37. Government of Kenya, 2020b. 2019/20 Supplementary Estimates II Programme Based Budget. Available at: https://treasury.go.ke/component/jdownloads/send/217-supplementary-budget-books/1581-pbb-supplementary-iii-fy-19-20.html?option=com_jdownloads
38. Government of Kenya, 2020c. Recent Economic Developments and Macroeconomic Outlook: FY 2021/22 - FY 2023/24 Medium Term Budget Available at: <https://www.treasury.go.ke/component/jdownloads/send/221-2021-2022/1663-presentation-by-ps-national-treasury-on-recent-economic-developments-and-macroeconomic-outlook.html>
39. Government of Makueni County (GoMC), 2018a Makueni County Climate Change Fund Inventory Adaptation Investments 2013-2017. Available at https://www.adaconsortium.org/images/downloads/Makueni_Inventory_170818-2.pdf
40. Government of Makueni County (GoMC), 2018b. Makueni County Integrated Development Plan (CIDP) 2018-22. Available at <https://makueni.go.ke/documents/cidp-2018-2022/>
41. GSG, 2019. Kenya Impact Investment Landscape. Produced by Intelicap, with support from UK Aid. At: <https://gsgii.org/reports/kenya-impact-investment-landscape/>
42. International Institute for Environment and Development (IIED), The Adaptation (ADA) Consortium, 2019. Climate Finance in Kenya: Review and Future Outlook. Available at: <https://www.ash-net.org/wp-content/uploads/2019/08/Kenya-climate-finance-paper-.pdf>
43. Kenya Commercial Bank (KCB) Group, 2018. Inclusive Progress. 2018 Report to Society. Available at: <https://kcbgroup.com/wp-content/uploads/2019/06/KCB-Sustainability-report-2018-1.pdf>
44. Kenya Commercial Bank (KCB) Group, 2020. 2019 Integrated Report and Financial Statement. Available at: <https://kcbgroup.com/wp-content/uploads/2020/05/KCB-Group-Plc-2019-Integrated-Report-and-Financial-Statements.pdf>
45. Kenya Commercial Bank (KCB) Group, 2020a. KCB Receives GCF Accreditation to Fund Green Projects. Available at: <https://ke.kcbgroup.com/about-us/news-room/business/kcb-receives-gcf-accreditation-to-fund-green-projects>
46. Kenya National Bureau of Statistics (KNBS), 2020. Economic Survey 2020. Available at: <https://www.knbs.or.ke/?wpdmprom=economic-survey-2020>
47. Micale V., Trabacchi C. And Boni L. 2015. "Using Public Finance to Attract Private Investment in Geothermal: Olkaria III Case Study, Kenya". Venice: Climate Policy Initiative (CPI). June 2015. At: <http://climatepolicyinitiative.org/publication/using-public-finance-to-attract-privateinvestment-in-geothermal-olkaria-iii-case-studykenya/>
48. Ministry of Environment and Forestry (MOEF) Website. Paris Agreement Ratification. Available at: <http://www.environment.go.ke/?p=3001>

49. Ministry of Environment and Forestry (MOEF), 2019. The National Forest Reference Level for REDD+ Implementation. Available at: https://redd.unfccc.int/files/national_frl_report_for_redd_in_kenya.pdf
50. Ministry of Agriculture, Livestock and Fisheries (MoALF). 2016. Climate Risk Profile for Makueni. Kenya County Climate Risk Profile Series. The Kenya Ministry of Agriculture, Livestock and Fisheries (MoALF), Nairobi, Kenya.
51. United Nations Office for the Coordination of Humanitarian Affairs (OCHA), 2018. Floods in Kenya, Flash Update 10 May 2018. Available at: https://reliefweb.int/sites/reliefweb.int/files/resources/ROSEA_180510_Kenya%20Flash%20Update%20%235_final.pdf
52. Odhiambo, Joab & Okungu, Jacob. (2020). Impact of Covid-19 to the Kenyan Economy. Available at: https://www.researchgate.net/publication/342397462_Impact_of_Covid-19_to_the_Kenyan_Economy
53. Organisation for Economic Co-operation and Development (OECD) 2016. "OECD-DAC Rio Markers for Climate: Handbook". Paris, OECD. At: http://www.oecd.org/dac/environment-development/Revised%20climate%20marker%20handbook_FINAL.pdf
54. Organisation for Economic Co-operation and Development (OECD). 2020a. "Climate Related Development Finance at the activity level". Paris: OECD's Development Assistance Committee (DAC). At: <http://www.oecd.org/dac/stats/climate-change.htm>
55. Organisation for Economic Co-operation and Development (OECD). 2020b. Guidance Table for Climate Change Rio Markers. At: <http://www.oecd.org/dac/stats/climate-change.htm>
56. Republic of Kenya, the National Treasury and Planning & United Nations Development Programme (GOK/UNDP, 2015). "Developing Climate Change Budget Codes for National Planning and Budgeting".
57. Republic of Kenya, the National Treasury and Planning & United Nations Development Programme (GOK/UNDP, 2016). Kenya Climate Public Budget Expenditure Review. At: https://www.undp.org/content/dam/kenya/docs/energy_and_environment/2016%20CPEBR%20Report.pdf
58. Republic of Kenya, the National Treasury and Planning & United Nations Development Programme (GOK/UNDP, SNV, 2020). Projects database. Available at <https://snv.org/projects>
59. 2019. "Kenya's Training Handbook on Climate Finance: Budget Coding, Tracking and Reporting". September 18, 2019. At: https://www.ndcs.undp.org/content/ndc-support-programme/en/home/impact-and-learning/library/kenya_s-training-handbook-on-climate-finance--budget-coding--tra.html
60. Stockholm Environment Institute (SEI), 2009. Economics of Climate Change in Kenya. Available at: <https://mediamanager.sei.org/documents/Publications/SEI-ProjectReport-Downing-EconomicsOfClimateChangeKenya-2009.pdf>

61. Sustainable Energy for All (SEforALL) and the African Development Bank, 2017. "Missing the Mark – Gaps and lags in disbursement of development finance for energy access". SEforALL, Washington, DC. License: Non-Commercial-No-Derivatives 4.0 International (CC BY-NC-ND 4.0). Available at: https://www.seforall.org/sites/default/files/2017_SEforall_FR1.pdf
62. United Nations Conference on Trade and Development (UNCTAD). 2019. World Investment Report 2019. Available at: https://unctad.org/en/PublicationsLibrary/wir2019_en.pdf
63. United Nations Development Programme (UNDP), 2013. Climate Risks, Vulnerability and governance in Kenya: a review. Available at: http://www.iisd.org/pdf/2013/climate_risks_kenya.pdf
64. United Nations Development Programme (UNDP), 2019. Kenya Private Sector Framework. Available at: <https://www.ndcs.undp.org/content/ndc-support-programme/en/home/impact-and-learning/library/kenya-private-sector-framework.html>
65. United Nations Development Programme (UNDP), 2020. Kenya's financing strategy for Nationally Determined Contributions. Available at: <https://www.undp.org/content/dam/LECB/docs/pubs-reports/undp-ndcsp-Kenya-NDC-Finance-Strategy.pdf>
66. United Nations Framework Convention on Climate Change (UNFCCC), Submission of Kenya's Updated NDC 24th December 2020. Available at: [https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya%27s%20First%20%20NDC%20\(updated%20version\).pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya%27s%20First%20%20NDC%20(updated%20version).pdf)
67. UNICEF. 2019. Improving water, sanitation and hygiene in Kenya. Available at: <https://www.unicef.org/kenya/water-sanitation-and-hygiene>
68. World Bank, 2020a. Covid-19 Dampens Kenya's Economic Outlook as Government Scales up Safety Net Measures. Available at: <https://www.worldbank.org/en/news/press-release/2020/04/29/covid-19-dampens-kenyas-economic-outlook-as-government-scales-up-safety-net-measures>
69. World Bank, 2020b. The World Bank in Kenya Overview. Available at: <https://www.worldbank.org/en/country/kenya/overview>
70. World Bank, 2020c. Doing Business 2020, Comparing Business Regulation in 190 Economies. Available at: <http://documents1.worldbank.org/curated/en/688761571934946384/pdf/Doing-Business-2020-Comparing-Business-Regulation-in-190-Economies.pdf>

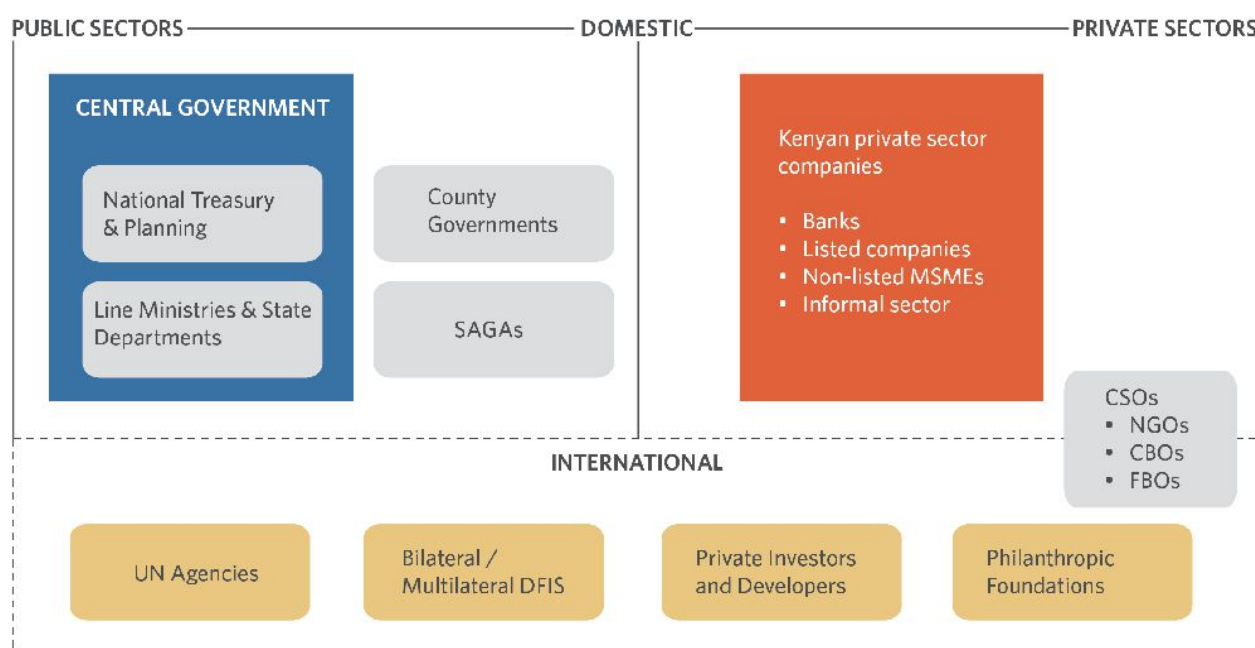
8. ANNEX I: METHODOLOGY

This report builds on previous climate finance tracking experiences from the National Treasury of Kenya, and uses the methodology and approach developed by Climate Policy Initiative's in its Global Landscape of Climate Finance reports (CPI, 2019).

The scope of the study is to provide a comprehensive overview of climate-relevant expenditures in Kenya disbursed in the year 2018 by domestic and international, public and private actors (visualized in Figure 26).

The data was obtained through tracking expenditures and disbursements rather than cumulative pledges or commitments. As opposed to commitments²⁶, finance disbursements are funds that are actually transferred to a project after a commitment is made and represent in a more realistic manner the amount of finance reaching projects on the ground in Kenya.

Figure 26: Overview of key providers of climate finance in Kenya



The Landscape of Climate Finance in Kenya is based on empirical data collected from a wide range of sources. For collection, preparation and analysis of the data, an operational definition of climate finance and specific approaches has been adopted in order to ensure comparability across data and avoidance of overlaps, to the fullest extent possible. This Annex outlines the full methodology used in the report.

²⁶ Commitments represent a firm pledge to provide funds to a specific investment project with the expectation that project will go ahead. Committed finance is not often disbursed immediately and there can be a significant time lag between the commitment date, the disbursement schedule and when the financed asset becomes operational (SEforALL and AfDB, 2017).

8.1 DEFINITIONS

The CPI working definition of climate finance is aligned with the recommended operational definition of the UNFCCC Standing Committee on Finance, which states: “Climate finance aims at reducing emissions, and enhancing sinks of greenhouse gases and aims at reducing vulnerability of, and maintaining and increasing the resilience of, human and ecological systems to negative climate change impacts.”

This report is limited to primary capital flows directed toward low-carbon and climate-resilient development interventions with direct or indirect greenhouse gas mitigation or adaptation benefits.

Mitigation: Human interventions to reduce the sources or avoiding GHG emissions (including gases regulated by the Montreal Protocol); or to maintain or enhance the sinks of greenhouse gases and reservoirs. Examples of mitigation projects include installation of solar photovoltaic systems; introduction of practices to use fossil fuels more efficiently for industrial processes or electricity generation; improving the insulation of buildings; and expanding forests and other “sinks” to remove greater amounts of carbon dioxide from the atmosphere. “Mitigation finance” or “mitigation investment” are resources directed to the implementation of these activities.

Adaptation: Are adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts. Adaptation finance is therefore resources directed to activities aimed at reducing the vulnerability of human or natural systems to the impacts of climate change and climate-related risks.

Cross-cutting finance: as resources directed to activities contributing to both “climate change mitigation” and “climate change adaptation” and meeting the respective criteria for each category.

8.2 DATA COLLECTION AND TREATMENT

The report collected and aggregated data from multiple data sources, Table 8 provides an overview of the data sources used in this report.

National budget expenditures tracked refer to the fiscal year 2017/18, while private sector finance and some international public finance flows refer to the calendar year 2018. For simplicity this report refers to finance disbursed in 2018.

Throughout this report, unless otherwise stated, the average 2018 exchange rate of KES 101.01/USD has been used to convert United States dollars (USD) to Kenyan Shillings and vice-versa.

Table 8: Data sources

Block	Source	Information contained
National budget expenditures	<ul style="list-style-type: none"> Kenya's Integrated Financial Management Information System (IFMIS) Complementing qualitative information from sector reports and votebooks, surveys and desk based research. 	<ul style="list-style-type: none"> Kenyan national budget expenditures International public finance, including ODA and flows from non-OECD donors (eg. China) Fiscal year 2017/18
SAGAs and counties	<ul style="list-style-type: none"> Surveys 	<ul style="list-style-type: none"> Expenditures of SAGAs and counties Fiscal year 2017/18
Kenyan private sector	<ul style="list-style-type: none"> KEPSA Surveys KBA surveys Desk based research of sustainability reports Interviews and workshops 	<ul style="list-style-type: none"> Domestic private sector expenditures Financing received from international public and private partners Government support to private companies Calendar year 2018
Public and commercial databases	<ul style="list-style-type: none"> OECD-DAC Creditor Reporting system Bloomberg New Energy Finance IJ Global CPI's Global Landscape of Climate Finance data 	<ul style="list-style-type: none"> International public finance, including ODA and OOF International flows from philanthropic foundations Financing for renewable energy projects (large and small scale), from domestic, international, public and private sources. Calendar year 2018

8.2.1 KENYAN PUBLIC SECTOR EXPENDITURES

The IFMIS database captures expenditure from the following entities: the National Treasury, line ministries, government agencies, state owned enterprises and international development partners.

Data collected from the Integrated Financial Management Information System (IFMIS), part of the National Treasury, includes project titles, actual project expenditure, name of the international development partner institution, and financial instruments.

Secondly, project descriptions, project rationale, project objectives and implementing entities are captured from concept notes, that are part of the State Department of Planning dedicated sector reports. Finally, all missing project information are retrieved from the line ministries' votebooks and complemented with surveys with Ministries and State Department.

Development expenditure²⁷ were collected from IFMIS, representing a total of 742 projects in the fiscal year 2017/18, related to 11 selected Ministries and 22 of their State Departments. Table 9 presents the Ministries and State Departments analyzed, providing their current name and their name in the financial year 2017-18.

²⁷ Recurrent expenditures were not collected

Table 9: Overview of expenditures collected and Ministries

State Department	Ministry (2017/18 name)	Ministry (2019/20 name)	Development Projects tracked
State Department for Devolution	Ministry of Devolution and Planning	Ministry of Devolution and the Arid and Semi-Arid Lands (Ministry of Devolution and ASALs)	4
State Department for Special Programmes	Ministry of Devolution and Planning	Ministry of Devolution and the Arid and Semi-Arid Lands (Ministry of Devolution and ASALs)	8
State Department for Planning & Statistics	Ministry of Devolution and Planning	The National Treasury and Planning	30
The National Treasury	The National Treasury	The National Treasury and Planning	36
Ministry of Health	Ministry of Health	Ministry of Health	40
State Department for Infrastructure	Ministry of Transport and Infrastructure	Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works	244
State Department for Transport	Ministry of Transport and Infrastructure	Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works	18
State Department of Housing & Urban Development	Ministry of Transport and Infrastructure	Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works	28
State Department for Public works	Ministry of Transport and Infrastructure	Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works	7
State Department for Water Services	Ministry of Environment, Water and Natural Resources	Ministry of Water and Sanitation	87
State Department for Irrigation	Ministry of Environment, Water and Natural Resources	Ministry of Water and Sanitation	14
State Department for Environment	Ministry of Environment, Water and Natural Resources	Ministry of Environment and Forestry	31
State Department for Natural Resources	Ministry of Environment, Water and Natural Resources	Ministry of Environment and Forestry	27
Ministry of Lands and Physical Planning	Ministry of Land Housing and Urban Development	Ministry of Lands and Physical Planning	9
State Department for Energy	Ministry of Energy and Petroleum	Ministry of Energy	56
State Department for Petroleum	Ministry of Energy and Petroleum	Ministry of Petroleum and Mining	4
State Department for Agriculture	Ministry of Agriculture, Livestock and Fisheries	Ministry of Agriculture, Livestock and Fisheries	26
State Department for Livestock	Ministry of Agriculture, Livestock and Fisheries	Ministry of Agriculture, Livestock and Fisheries	29
State Department for Fisheries & Blue Economy	Ministry of Agriculture, Livestock and Fisheries	Ministry of Agriculture, Livestock and Fisheries	8
State Department for Investment and Industry	Ministry of Industrialization and Enterprise Development	Ministry of Industry, Trade and Cooperatives	18
State Department of Mining	Ministry of Mining	Ministry of Petroleum and Mining	15
State Department for Gender	State Department for Public Service, Youth Affairs, & Gender	Ministry of Public Service and Gender	3
TOTAL			742

CLIMATE-TAGGING PROCESS

In order to identify which expenditures from each Kenyan Ministry and State Department reviewed contributed to climate mitigation and adaptation outcomes, this report have applied the OECD-DAC Rio Markers methodology (OECD, 2016) to screen, identify and tag climate-related expenditures. For certain sectors and activity types, this report has deviated from the Rio Markers methodology and taken different considerations and assumptions.

The accuracy of the tagging was highly influenced by the availability of detailed project descriptions/rationale and objectives. Nearly half of the expenditures reviewed lack of project descriptions and the tagging had to rely only on the expenditure name and sector.

Government expenditures were “marked” as either:

1. targeting mitigation and/or adaptation outcomes as a **“principal”** objective, if climate change mitigation or adaptation was fundamental in the design of, or the motivation for, the activity, which would not have been funded (or designed that way) but for that objective. Promoting climate objectives had to be stated in the project description, objectives or rationale. These expenditures were counted as 100% climate-related.
2. as a **“significant”** objective, if the climate change mitigation or adaptation objective was either i) explicitly stated in the project description, objectives or rationale but it is not the fundamental driver or motivation for undertaking it (the activity has other prime objectives but it has been formulated or adjusted to help meet the relevant climate concerns), or ii) the climate objective was not stated due to lack of details, but it was possible to infer the climate-relevance from project name and sector. These expenditures were counted as climate-relevant for 40% of their transaction value, an approach discussed and validated with the National Treasury of Kenya.
3. The expenditure was not found targeting any climate objective.

8.2.2 SAGAS AND COUNTIES

This report made an effort to collect data on climate-expenditures from Counties and Semi-Autonomous Government Agencies (SAGAs). As these key public sector entities are not required to report their expenditures through the IFMIS system, stakeholders were contacted directly with tailored surveys. The details are reported below:

Counties: letters with data requests were disbursed to all the 47 Counties of Kenya. Two out of 47 Counties (Makueni and Uasin Gishu) have replied submitting their climate-related expenditure data.

SAGAs: letters with data requests were disbursed to 52 SAGAs. As of October 13th, 33 of them have submitted their climate related expenditure data (corresponding to 128 projects).

8.2.3 KENYAN PRIVATE SECTOR

Scope: The study focused on all climate relevant investments (mitigation and adaptation) by the private sector in Kenya in 2018 for businesses in the four focus economic sectors as defined by CPI: Transport, Water, Land Use and Forestry and Energy.

Data Collection Sources: Prior to collecting data from the private sector, a mapping of the private sector stakeholders was done to identify the key players. From the exercise, Kenya Private Sector Alliance (KEPSA) the apex body of the private sector in Kenya with over 500,000 members organized through Business Membership Organizations (BMOs) and Corporate members was selected as a pivot for reaching the corporates. Among the Business Membership Organizations in KEPSA are Kenya Bankers Association, Kenya Association of Manufacturers, Kenya Renewable Energy Association etc. which represent the largest corporates in Kenya with significant contribution to Kenya's GDP and by extension significant contributors to carbon emissions and also likely to have the largest climate-related investments.

Face to face interviews were done with KEPSA to collect views on the level of awareness of climate change and level of adoption of climate- relevant strategies and initiatives by private companies to mitigate and adapt to climate change in Kenya. From the interview, nine (9) KEPSA sector boards most relevant for the study were identified; Agriculture, Livestock and Fisheries, Energy & Extractives, Environment, Water & Natural Resources, Trade, Industrialization and Enterprise Development, Land & Physical Planning, Transport and Infrastructure and Public Finance.

An **introduction workshop** with the members of the KEPSA was held in January 2020. The participants were thirty (30) companies that included representation by Kenya Bankers Association.

The study involved collection of empirical data from a wide range of primary and secondary data sources.

For **primary data**, the study used an **online survey** administered through KEPSA and KBA to their members to collect quantitative and qualitative data of aggregated and/or project level climate - relevant investments.

Secondary data was gathered through **in-depth desk reviews** of published annual integrated, sustainability reports and media reports of mapped Nairobi Securities Exchange(NSE) listed companies, a select non-listed large corporates and Tier 1 banks (with a total asset base of above KES 150 billion and who control over 76% of the banking industry).

From the desk review, climate-relevant quantitative and qualitative data of aggregated and/or project level investments was extracted into a framework. The data extracted from the corporates was found to be very beneficial and quite comprehensive however, majority of the corporates with climate relevant projects/initiatives had not disclosed the monetary value of these projects/initiatives. This necessitated the need to circularize another survey to select corporates with projects/initiatives identified to collect the missing monetary data.

The interim findings were then presented for **validation** to a group of stakeholders representing government and the private sector.

8.2.4 DOUBLE COUNTING

Aggregating data from different sources presents numerous challenges. There are significant overlaps between datasets as frequently the same flows are recorded several times or reported from different angles – donor to intermediary, and intermediary to final beneficiary.

Based on the reliability and comprehensiveness of the source, only the highest quality entries for each overlapped transaction were selected in order to avoid double counting.

The main double counting issues encountered in the production of this report are the following:

- IFMIS data on external resources received (called “Appropriation in Aid”) and Official Development Assistance (ODA) flows reported in the OECD-CRS.
- Expenditures from Ministries and State Department and information reported from Kenyan Counties and SAGAs (often the implements of these projects).
- Private finance flows collected from direct surveys and international private and public finance flows reported in other databases.

The report has also excluded risk management instruments like guarantees and insurance, since actual disbursements from these instruments are contingent upon uncertain future events

8.2.5 UNCERTAINTIES AND TRACKING CHALLENGES

During the preparation of the report there were several challenges and uncertainties related to the availability, quality and robustness of data collected, with the main ones reported below. As visualized in Figure 5, data coverage differs across sectors and sources of finance (international, domestic, public and private). Future efforts to track climate finance in Kenya take these into account and gradually improve them.

- **Reconciliation of data from different sources.** In several instances, investment data related to specific projects was collected from multiple data sources, making a reconciliation of project names and values often very challenging. Significant uncertainties were experienced around the following areas: 1) national budget's expenditures collected from IFMIS and expenditures reported by Counties and SAGAs through surveys, 2) Official Development Assistance (ODA) flows reported by donors in the OECD-DAC database and financing received by the Treasury recorded through IFMIS (this “provider versus recipient perspective” issue is described in Section 7.4).
- **Limited information on private sector finance/Low response rate.** The Kenyan private sector associations supported the gathering of information from many climate-related projects implemented by Kenyan companies and banks (see Box 6 for more details). However, the financing was often obtained by external organizations (international donors or Government agencies), and therefore often excluded to limit double counting with other flows tracked in the report. Additionally, financing from international private investors and implementers was not available beyond the renewable energy sector, and there was a low response rate to our surveys.

- **Temporal inconsistencies.** The study year is 2018, the most recent year for which comparable data was available for domestic and international public finance. However, national budget expenditures tracked refers to the fiscal year 2017/18, while private sector finance and some international public finance flows refer to the calendar year 2018. For simplicity this report refers to finance disbursed in 2018 throughout.
- **Coverage of forestry, land use and adaptation.** Detailed descriptive information is necessary to accurately identify climate-related expenditures within any given database of financial transactions, and it is usually found in the description, rationale and objectives of a project or transaction's documentation. During the analysis of the Kenya's national budget expenditures, detailed descriptive information was only obtained for a portion of the data, making the identification of climate-related expenditures very challenging, in particular for forestry, land use and adaptation activities. This situation can be improved by enhancing the collaboration between government entities or by expanding the scope of the IFMIS system, in order to incorporate more qualitative information or simply link to the original documentation.

8.2.6 SECTORAL COVERAGE

The table provides a comparison between the sectors and priority actions used in the NCCAP 2018-22, and the sector classification of the Global Landscape of Climate Finance (GLCF). The report uses both classifications.

Table 10: Conversion table for the sectors covered in the report

Sector Classification NCCAP	Priority Actions	GLCF Classification	Project types	Climate relevance
Disaster (Drought and Flood) Risk Management	Reduce risks to communities and infrastructure resulting from climate-related disasters such as droughts and floods	Disaster risk management	<ul style="list-style-type: none"> - Early warning / emergency response systems to adapt to increased occurrence of extreme events by improving disaster prevention, management and reducing potentially related losses and damage - Construction or improvement of drainage systems or barriers to adapt to an increase in the frequency or severity of floods - Preparation of company-wide climate change vulnerability assessment 	Adaptation
Water and the Blue Economy	Enhance resilience of the water sector by ensuring access to and efficient use of water for agriculture, manufacturing, domestic, wildlife and other uses	Water and wastewater management	<ul style="list-style-type: none"> - Demand side management activities reducing water consumption or increasing water use efficiency and supply side management activities enabling, e.g., the expansion of supplies, reducing water losses, or improving cooperation on shared water resources. - Installation of rainwater harvesting equipment and water storage where water supply is negatively affected by climate change 	Adaptation
		Coastal and riverine infrastructure	<ul style="list-style-type: none"> - Building of improved or new dykes to protect infrastructure and to enhance the climate resilience to increased storms and coastal flooding, and sea level rise - Mangrove planting to build natural barriers to adapt to increased coastal erosion and to limit salt water intrusion into soils caused by sea level rise; - Additional or improvements in coastal and riverine infrastructures (including built flood protection infrastructure) in response to increased flood risks. 	Adaptation

Food and Nutrition Security	Increase food and nutrition security through enhanced productivity and resilience of the agricultural systems in as low-carbon manner as possible.	Agriculture, Forestry, Land Use and Natural Resources Management	<ul style="list-style-type: none"> - Provision of information on crop diversification options to farmers - Increased production of fodder crops to supplement rangeland diet affected by climate change - Improved management of slopes and basins to avoid/reduce the impacts caused by increased soil erosion - Identification of protected areas and establishment of migration corridors to maintain or increase climate resilience of ecosystems; 	Adaptation
Forestry, Wildlife and Tourism	Increase forest cover to 10% of total land area; rehabilitate degraded lands, including rangelands; increase resilience of the wildlife and tourism sector		<p>This category includes only projects where sector knowledge indicates likely GHG emissions reductions compared with a technically and economically viable alternative.</p> <ul style="list-style-type: none"> - Agriculture: Agriculture projects that do not deplete and/or improve existing carbon pools ; Rehabilitation of degraded lands ; Reduction in energy use in traction (e.g., efficient tillage), irrigation, and other agricultural processes ; Livestock projects that reduce GHG emissions (e.g., manure management with biogas digesters producing biogas for heating or cooking) - Afforestation & reforestation (other land-use): Afforestation on non-forested land ; Reforestation on previously forested land; Sustainable forest management and conservation of forests ; Enhancement of carbon stocks; Reducing emissions from deforestation and degradation 	Mitigation ; Adaptation
Health, sanitation, and human settlements	Increase resilience of health sectors, human settlements and improve waste management	Health	<ul style="list-style-type: none"> - Health systems' adaptation to changes in disease vectors or other climate change health impacts (e.g., development of a national response plan for diseases outbreaks). - Monitoring of disease outbreaks and development of a national response plan (to adapt to changing patterns of diseases that are caused by changing climatic conditions). 	Adaptation
		Waste and wastewater	<p>Mitigation-relevant projects with demonstrated GHG emissions reductions compared with a technically and economically viable alternative:</p> <ul style="list-style-type: none"> - Waste management that reduces methane emissions (e.g., shifting from open dumps and lagoons to municipal / industrial waste (water) treatment, including switching to composting, waste incineration, landfill gas capture and flaring/power production, etc.) - Waste recycling measures with a demonstrated net mitigation benefit 	Mitigation

Manufacturing	Improve energy and resource efficiency in the manufacturing sector	Low-Carbon Technologies	Projects producing components, equipment, or infrastructure dedicated for the renewable and energy efficiency sectors.	Mitigation
		Energy Efficiency	<p>Demand-side energy efficiency in buildings and industry, with substantial demonstrated GHG emissions reductions compared with a technically and economically viable alternative.</p> <ul style="list-style-type: none"> - Industry: Industrial energy-efficiency improvements through the installation of more efficient equipment, changes in processes, reduction of heat/ hot water losses, and/or increased waste heat recovery - Existing buildings: Energy-efficiency improvements in lighting, appliances and equipment, including more efficient use of hot water; Substitution of existing heating/cooling systems in buildings with cogeneration plants that generate electricity in addition to providing heating/cooling ; District heating systems: Waste heat recovery improvements ; Retrofit of existing buildings - Greenfield: Use of highly efficient architectural designs or building techniques that enable reduced energy consumption for heating and air conditioning, exceeding available standards and complying with high energy efficiency certification or rating schemes. <p>This category excludes efficiency improvements to fossil fuel-fired power plants.</p>	Mitigation
		Non-Energy GHG Reductions	<ul style="list-style-type: none"> - Industrial process emissions: Reduction of GHG emissions resulting from industrial process improvements and cleaner production (e.g., cement, chemical, etc.) - Air conditioning and refrigeration: Retrofitting of existing industrial, commercial, and residential infrastructure to switch to cooling agents with lower global warming potential - Fugitive emissions: Reduction of gas flaring or methane fugitive emissions in the oil and gas industry, coal mine methane capture and storage, etc. Carbon capture and storage (CCS) projects 	Mitigation
		Infrastructure, energy and other built environment	<ul style="list-style-type: none"> - Adaptation components in projects to improve the climate resilience of existing infrastructure e.g., transport infrastructure, energy infrastructure, riverine infrastructure and human settlements (e.g., housing – if not part of a wider disaster risk management strategy). Building resilience into infrastructure such as protection systems for dams to reduce vulnerability to extremes caused by climatic changes. - Manufacturing (e.g., design of climate-resilient equipment); Increased cooling requirement in food processing distribution & retail resulting from more extreme heat events (e.g., increased water-efficiency in processing), Climate resilience investments or programs in extractive industries (oil, gas, mining, etc.) 	Adaptation
Energy	Climate-proof energy infrastructures; Increase renewable energy generation; increase uptake of clean cooking solutions	Renewable Energy Generation	Electricity or heat production from: Biomass and biogas power ; Solar including PV, CSP, and solar heating systems (e.g. solar water heaters); Geothermal ; Hydropower ; Wind, including onshore and offshore ; Other technologies such as biofuels (including bioethanol) and ocean renewable energies (e.g., wave, tidal, ocean currents, salt gradient, etc.). This category does not include nuclear.	Mitigation
		Transmission and Distribution systems	<ul style="list-style-type: none"> - New electricity transmission systems or new systems (e.g., new information and communication technologies, storage facilities, etc.) to facilitate the integration of renewable energy sources into the grid - Transmission energy efficiency improvements (e.g. retrofit of transmission lines, distribution systems, or substations to substantially reduce energy use or losses). 	Mitigation

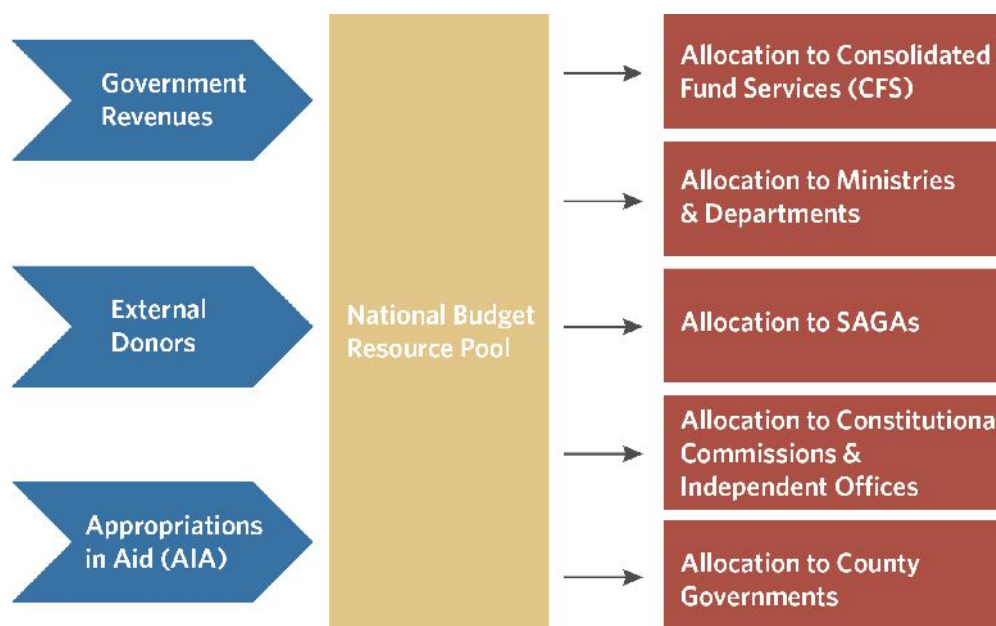
Transport	Climate-proof transport infrastructures; develop an affordable, safe and efficient public transport	Low-Carbon Transport	<p>This category includes transport projects where a modal shift away from road and air is deemed to result in demonstrated GHG emissions reductions compared with a technically and economically viable alternative.</p> <ul style="list-style-type: none"> - Urban transport modal change: Non-motorized transport (bicycles and pedestrian mobility) - Urban mass transit Urban development: Integration of transport and urban development planning (dense development, mixed-use zoning, walkable communities, transit connectivity, etc.), leading to a reduction in the use of private passenger cars; Transport demand management measures to reduce GHG emissions - Inter-urban transport modal change (excluding projects for new or upgraded highway; or new airports even when net GHG emissions reductions can be demonstrated): Railway transport resulting in a modal shift for freight and/or passengers ; Waterways transport resulting in a modal shift for freight and/or passengers ; Vehicle energy-efficiency fleet retrofit - Retrofit or replacement of existing vehicles, rail, or boat fleet, achieving a substantial increase in energy efficiency (including the use of lower-carbon fuels, electric or hydrogen technologies, etc.). 	Mitigation
Enabling Environment / Others	Crosscutting enabling actions required to implement the priority adaptation and mitigation actions.	Policy and national budget support and capacity building	- Dedicated budget support to national or local authorities for implementation of climate change policies; and other technical assistance activities, including awareness raising and capacity building (if not included elsewhere).	Adaptation ; Mitigation
		Others / cross-sectoral	- Other eligible activities that cannot be classified in the above categories for example: cross-sector activities such as financial services like incorporation of climate risk assessment in ministerial investment appraisal processes (if not included in the categories above); Provision of dedicated microfinance or credit lines for renewable energy generation, energy efficiency, sustainable agriculture or other climate-related activities ; Other awareness-raising and technical assistance activities	Adaptation ; Mitigation

9. ANNEX II: THE KENYAN BUDGETING PROCESS

The budget process is defined by the Constitution of Kenya and described in the Public Finance Management (PFM) Act of 2012. Ministries, departments, and agencies (MDAs) of the national and county governments develop budgets following guidelines, which are then approved by the respective legislative bodies (Parliament and county assemblies for national and county governments respectively). According to the PFM Act 2012, the National Treasury develops indicative, aggregate budget proposals for national spending based on the economic outlook and expected revenues, other monies anticipated as appropriations in aid, and fixed commitments of consolidated funds. All monies raised or received on behalf of national government are paid into the Consolidated Fund, the main income categories in FY 17/18 include: commercial loans, tax income, non-tax income, net domestic borrowing and other sources (GOK, 2018d). The aggregate budget, which is composed of government revenues, donor resources, and revenues generated by operating units, is then shared between national and county governments and other independent constitutional bodies, based on agreed proposals made by the Intergovernmental Economic and Budget Council and approved by Parliament.

The national and county governments are given indications for the amounts they can allocate for their sectors and institutions. Inter-county allocations are determined by a formula developed by the Commission on Revenue Allocation (CRA) and approved by Parliament every five years. The CRA prepare the annual division of Revenue Bill and the County Allocation of Revenue Bill after considering the recommendations of the Intergovernmental Budget and Economic Council.

Figure 27: Kenya's Financial Resources Sharing Framework



The process of budget allocation to the respective sectors is the same at the national and county levels. The national and county treasuries communicate the indicative budget ceilings to the various sectors through the Budget Review and Outlook Paper or the County Budget Review and Outlook Paper (national and county governments respectively) which is released in September and approved by the Cabinet and legislative assembly at each level of government. The Budget Review and Outlook Paper gives the first indication of how much each sector will receive.

Upon approval of the budget by the legislative assemblies, an appropriation bill is presented to the assembly which once passed is signed into law to allow utilisation of the budget from the consolidated funds as follows:

- **Ministries Departments and Agencies:** All transfers to government ministries and departments are captured in IFMIS. The MDAs (Ministries, Departments and Agencies) are obliged to use IFMIS for expenditure of their resources - this means that all transfers from consolidated fund to MDAs and their expenditures can be tracked from reports generated by IFMIS.
- **Semi-Autonomous Government Agencies (SAGAs):** Transfers to SAGAs responsible for budget implementation are done through the Ministries, Departments and Agencies (MDAs) (GOK, 2018d) and are included in both recurrent and development expenditure, marked as "current transfers to SAGAs". The SAGAs have different budget systems and are not obliged to use IFMIS.
- **County Governments:** The 47 county governments are independent in terms of revenue collection, budget allocation and expenditure at their level. County governments are mandated by the Constitution to establish County Revenue Funds where fees and rates, collected on behalf of the county government, are deposited. Their main source of revenue is the equitable share from the National Government. Other sources consist of conditional grants from the National Government (for example road maintenance fuel levy fund and leasing of medical equipment), loans and conditional grants from development partners through the National Government, and revenues generated from own sources, such as fees levied and collected by county governments. County governments use IFMIS to expend their resources. However, reports from the Office of the Controller of Budget (OCoB) indicate that many counties have discrepancies and reconciliation issues between the budget implementation reports generated from IFMIS and progress reports on budget implementation.

Finally, the OCoB is mandated by the constitution to oversee implementation of the budgets of the National and County Governments. It does so by authorising withdrawals from the consolidated fund and the county revenue funds to the operational accounts. The OCoB also has the mandate to report to parliament on how the funds have been utilised.

All the public entities (Ministries, Departments, SAGAs, constitutional commissions and independent offices, and county governments) are required by law to prepare and present their financial statements to the office of the Auditor General annually for audit. The auditor general can appoint a private audit firm to audit any public entity.

10.ANNEX III: ADDITIONAL INFORMATION FROM KENYAN PRIVATE SECTOR SURVEYS

Table 11: A summary of Qualitative data findings from Private Sector main stakeholders: KEPSA, NSE and KBA members.

Kenya Private Sector Alliance (KEPSA)		Nairobi Stock Exchange (NSE)	Kenya Bankers Association (KBA)
No. of companies surveyed	24 (excludes NSE listed corporates and KBA members)	24 (NSE data excludes listed banks)	12
Governance and policies	<p>i. Relatively higher awareness of climate relevant strategies and policies among larger businesses compared to MSME's.</p> <p>ii. Adoption of sustainability strategies/frameworks and policies noted higher among the larger businesses. E.g. adoption of SDG 7 and 12, Environmental and Social Management Systems (ESMS), energy, water and waste management policies.</p> <p>iii. No mention of companies' board involvement.</p>	<p>i. 92% of the listed companies have sustainability strategies, like ESMS and CSR</p> <p>ii. A few of the companies had a sustainability governance structure lead by the board of directors.</p> <p>iii. 42% of the companies, majority of them with foreign ownership in Agriculture, Construction, Manufacturing, energy sectors published annual Integrated reports in compliance with the Global Reporting Initiative (GRI) standards.</p>	<p>i. 88% of Tier 1 banks had internal sustainability strategies, like ESMS</p> <p>ii. some banks' boards' are charged with ensuring the sustainability strategies are integrated in the business strategies. The sustainability strategies were aligned to the SDGs, SDG 7, SDG 12 and SDG 13.</p>

Strategies and Targets	<p>i. Few businesses have set climate related targets e.g. reducing carbon emissions, energy efficiency, water and waste management.</p> <p>ii. Challenges cited: lack of knowledge on climate related risks, lack of capacity and no mandate and regulatory obligation.</p>	<p>i. Most listed companies had Sustainability strategies aligned to national development goals and the SDGs (UN Global Compact initiative has 151 members in Kenya)</p> <p>ii. Agricultural sector companies had strategies on protecting river banks, prevention of soil erosion and soil conservation which informed their climate related investments.</p> <p>iii. Companies in Manufacturing, Construction, Telecommunication and energy sectors, among the largest contributors to carbon emissions in Kenya, had strategies that enabled them to mitigate/reduce their carbon footprint by investing in clean energy.</p> <p>iv. 83% of the companies were signatories to national and International agreements or declarations (e.g. UN Global Compact, ISO certifications).</p> <p>v. Some had received recognition and awards from International bodies for climate-related initiatives and projects (e.g. Global 500 roll of honor award to a Kenyan construction company, Climate Change Adaptation Trophy to an agricultural company).</p> <p>vi. 58% of the companies had climate relevant targets e.g. becoming carbon neutral by the year 2050, going plastic free, water and waste management.</p>	<p>i. The banks had integrated sustainable strategies in their lending processes/policies and other business operations to address own and their customers' climate related risks.</p> <p>ii. Some banks were signatories to National or international agreements or declarations such as KBA's Sustainable Finance Initiatives which had 100% of banks as signatories, the Equator Principles, UNEP Financial Initiative, UN Global Compact Initiatives.</p> <p>iii. 50% of the banks had climate relevant targets, for example the largest bank had a target of being carbon neutral by 2030, others had an annual target to reduce their carbon footprint, energy, water and fuel consumption year on year.</p> <p>iv. Other targets to grow their green lending portfolio</p>
Risk and risk management	<p>i. Many of the large corporates classified climate-related risks as having a low to moderate impact on the business.</p> <p>ii. Direct or indirect impact of climate risk experienced in 2018 following losses and damages associated from the increased frequency and severity of extreme weather events.</p> <p>iii. Climate risk related losses mainly include: destruction of infrastructure by floods and low crop harvest due to drought</p>	<p>i. Majority of listed corporates had implemented climate risk assessment, management and monitoring mechanisms.</p> <p>ii. The major motivation was local regulatory requirements (NEMA) and compliance with international sustainability standards (for exporters)</p> <p>iii. Climate risk related losses were experienced more intensely by agricultural companies. Non-agricultural companies mainly reported infrastructural damages due to flooding.</p>	<p>i. 63% of the banks had a climate-related risk assessment, management and monitoring mechanisms.</p> <p>ii. Some banks had integrated Social and Environmental Management System (SEMS) into their credit systems, to ensure continuous social and environmental due diligence.</p>

Opportunities	<p>i. Very few companies reported benefits of business partnerships arising from climate related investments e.g. increased market share, sales growth and profitability.</p> <p>ii. Kenyan Association of Manufacturers (KAM)'s promoted energy efficiency in the manufacturing sector through an award system and capacity building.</p> <p>iii. AFD (through local commercial banks) offered financial support to KAM members investing in solar projects. Renewable energy investments are capital intensive and considered unviable without access to concessional funding.</p>	<p>i. 77% of companies reported financial and environmental benefits from climate related investments</p> <p>ii. Manufacturing, construction and telecommunication sector companies reported reduced carbon footprint and lower operating costs arising from improved energy, water and waste management practices.</p>	<p>i. 75% of the banks reported reduction in operational costs associated with energy use and efficiency, water and waste management costs as benefits accrued from investing in climate related projects/portfolios. From green and other loan portfolio's the banks reported better loan portfolio performance arising from integrating SEMS into the credit process.</p>
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