Aligning Kenya's Financial System with Inclusive Green Investment

Current Practice and Future Potential to Mobilize Investment in a Sustainable Economy

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Inquiry: Design of a Sustainable Financial System

IFC International Finance Corporation WORLD BANK GROUP

About the Report

This report was developed through a partnership between the International Finance Corporation (IFC) and the UNEP Inquiry into the Design of a Sustainable Financial System (UNEP Inquiry).

IFC's engagement in this initiative has been in partnership with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on behalf of the German Ministry for Economic Cooperation and Development (BMZ).

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ABOUT IFC

IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector. Working with private enterprises in about 100 countries, we use our capital, expertise, and influence to help eliminate extreme poverty and boost shared prosperity. In FY14, we provided more than $22 billion in financing to improve lives in developing countries and tackle the most urgent challenges of development. For more information, visit www.ifc.org.

ABOUT UNEP INQUIRY

The Inquiry into the Design of a Sustainable Financial System has been initiated by the United Nations Environment Programme to advance policy options to improve the financial system's effectiveness in mobilizing capital towards a green and inclusive economy—in other words, sustainable development. Established in January 2014, it published its final report in October 2015. More information on the Inquiry is at: www.unepinquiry.org.

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ACRONYMS

BMZ	German Ministry for Economic Cooperation and Development
ESG	Environmental, social, and governance
FDI	Foreign direct investment
GDP	Gross domestic product
G20	Group of 20
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IFC	International Finance Corporation
MTP2	Second Medium Term Plan
MW	Megawatt
PPP	Public-private partnership
UN	United Nations
UNEP	United Nations Environment Programme

Executive Summary

ABOUT THIS REPORT

This report aims to promote inclusive green investment in Kenya. It focuses on policy, structural, and investment innovations across the economy and financial sector that would increase capital flows that support sustainable development.

Inclusive green investment forms an important part of the broad environmental, social, and governance (ESG) considerations that underpin sustainable investment. "Green" investment supports economic growth in a clean, resilient, and sustainable manner – such as initiatives to encourage more efficient use of resources, reduce pollution, and mitigate environmental damage. "Inclusive" investment serves not only investors, but the broad interests of society, particularly low-income segments of the population.

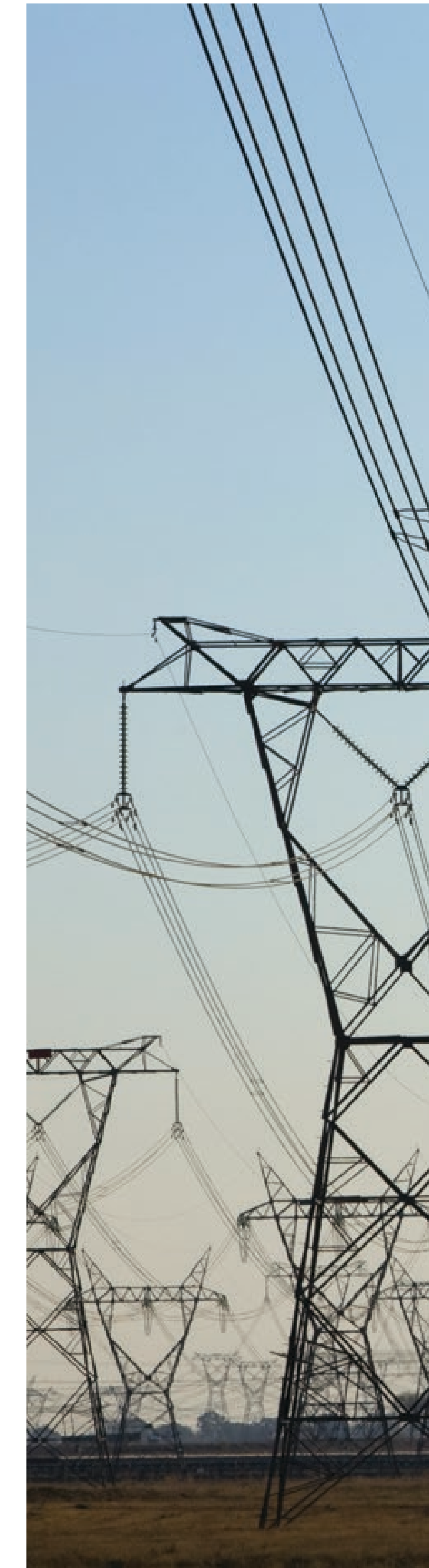
The report is a product of a global collaboration involving the International Finance Corporation (IFC) and the United Nations Environment Programme Inquiry into the Design of a Sustainable Financial System (UNEP Inquiry), with support from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on behalf of the German Ministry for Economic Cooperation and Development (BMZ). It is based on broad-based research, which included extensive interviews and dialogues with stakeholders across Kenya's investment value chain.

MAIN FINDINGS

Kenya's fast-growing economy is the largest in East Africa, and serves as a trade and investment hub for East and Central Africa. While the economy is diversifying, it remains largely dependent on natural resources. Agriculture and tourism account for nearly half of gross domestic product (GDP).

> Kenya is highly vulnerable to the effects of climate change, environmental shifts, and associated social effects.

According to the Kenya National Climate Change Action Plan 2013-2017, extreme climatic events could cost the economy as much as $500 million a year, equivalent to about 2.6 percent of the country's GDP in 2013.[1] Aggregate models project that these economic costs will increase in the future, with some sources suggesting they could reach the equivalent of 7 percent of GDP by 2020. Such losses could result from lower crop and livestock yields, forest fires, damage to fisheries, reduced hydropower generation, lower industrial production, and reduced water supply. In addition to the effects of climate change, Kenya also faces costs from environmental pollution, which adversely affects human health and raises the risk of epidemics.



To counter these trends, Kenya requires increased investment in areas such as sustainable agriculture, and green resilient infrastructure for transport, water, and waste management. Green resilience refers to the ability of a system to continue operating as external conditions change, and to adapt to changes in temperature, precipitation, and other variables. In the context of climate change, green resilient infrastructure would be able to operate at its design capacity despite sharply changed climatic conditions. This means making a conscious shift away from a business-as-usual approach, in which capital flows to non-sustainable polluting industries, practices, and technologies.

Kenya has a wealth of potential green investment opportunities, particularly in infrastructure, agribusiness, tourism, and manufacturing.

The country is also home to some of Africa's largest private sector-funded renewable energy projects, such as the $870 million Lake Turkana wind power project and the $620 million OrPower 4 (Olkaria III) geothermal power plants. To date, however, domestic financial sector participation in these investments has been limited.

The Kenyan government articulates a strong high-level policy commitment to inclusive green economic growth and investment. This is expressed clearly in the country's Constitution, its Vision 2030, and the Second Medium Term Plan (MTP2). But the necessary links to sectoral strategies, including those of the domestic financial sector, are a work in progress.

Kenya's aspiration to become a middle-income country based on sustainable development is premised on strong investment growth. The government targets investment growing from 24.7 percent of GDP in 2013-2014 to 30.9 percent of GDP by 2017-2018.[2] The current level of public sector investment of between 8 percent and 10 percent is expected to be sustained throughout the period, with the bulk of the increase in overall investment expected from the private sector. Policy commitments across a range of institutions envision a vibrant and globally competitive Kenyan financial sector that serves as a regional hub, creating jobs and contributing to a higher domestic savings rate. Kenya's financial system would have a fundamental role to play in allocating capital to a more inclusive, greener economy, and creating general awareness about this shift.

The financial sector in Kenya has grown significantly in recent years, with strong domestic, regional, and global integration supported by a broad market infrastructure that includes the Nairobi Securities Exchange.

The total value of assets held by banks, pension funds, insurers, and credit cooperatives was equivalent to 108 percent of GDP in 2013, up from 96 percent of total assets (excluding capital markets) in 2012. The total value of equity market capitalization amounted to 51 percent of GDP in 2013.[3] Within the financial sector, pockets of leadership are supporting inclusive green investment – and banks, insurance companies, pension funds, and capital market participants have all expressed strong interest in this approach. Existing levels of investment, however, are relatively small.

In summary, the main barriers to inclusive green investment are as follows:

- A short-term outlook prevails across all levels of the investment value chain. The main indicator is short-term financial success; long-term economic value creation is rarely recognized and goes unrewarded by major stakeholders.
- The institutional investor market is fragmented and does not allow for economies of scale, or the time and effort needed to invest in strategic product development and innovation. The fragmented structure of the pension fund sector in particular constrains the flow of capital toward alternative assets.
- High returns on government bonds tend to "crowd out" investments in other asset classes, while lending to established sectors is supported by a better risk-return profile.
- A lack of experience and expertise limits the structuring of new investment vehicles that can form a pipeline of inclusive green projects.
- Policy, fiscal, and regulatory incentives to promote inclusive green investment remain limited. Government's high-level policy commitment has not yet been matched by sector-specific implementation plans, which remain a work in progress.

Based on the research conducted and the recommendations of market participants, this report suggests that promoting inclusive green investment in Kenya requires the following:

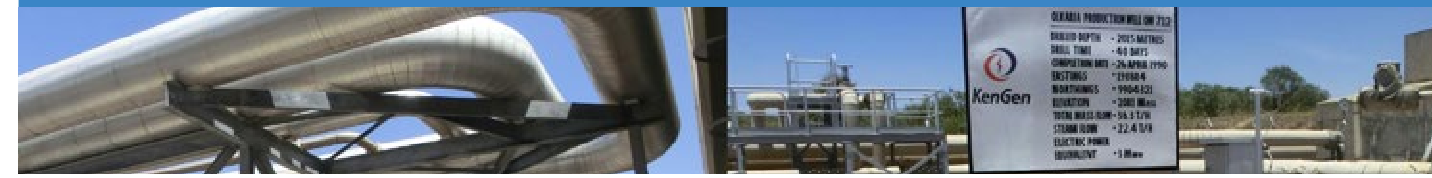
- Developing cohesive, market-wide policy and regulation. In particular, this requires coordination across the financial services sector to agree on high-level policies and principles for long-term sustainable investment. Fiscal incentives supporting inclusive green investment could serve as an important catalyst in this process.
- Effective enforcement of the market-led Sustainable Finance Principles in the banking sector, and a clear timetable to move from capacity building to direct regulation.

- Consolidating the pension and insurance sectors, and pooling of assets.
- Providing structured market support to develop institutional investment vehicles.
- Raising awareness and increasing technical training across the financial services sector.
- Building on the broad interest in collaboration across the banking, pension, and insurance sectors, which can support joint financing of short-, medium-, and long-term projects.
- Addressing gaps in existing environmental and social regulation.
- Raising public awareness of the need for inclusive green investment.
- Aligning foreign direct investment (FDI) objectives with the green growth agenda.

The risks for Kenya and its financial sector of not addressing sustainability issues are potentially enormous.

The government and the market have taken some important steps to promote inclusive green growth through public-private investment in renewable energy and sustainability initiatives led by the banks and capital markets. But focused efforts are needed at all levels of the financial services sector to reach the scale and targets articulated in Vision 2030.

Chief executive officers consulted during the development of this report expressed the clear view that Kenya has both pools of money for financing and viable inclusive green projects. The question is how to connect the two. Initial suggestions include identifying leaders and champions to lead this process; forming a working group to focus on increasing investments in the inclusive green economy; and establishing a sector-wide implementation roadmap.



Chapter 1: Introduction

MOBILIZING CAPITAL FOR AN INCLUSIVE GREEN ECONOMY

There is growing recognition that the global financial system needs to actively contribute to sustainable development. Poverty and inequality, alongside accelerated climate change, loss of natural capital and biodiversity, depletion of non-renewable resources, water stress, and soil erosion are serious concerns that "indicate structural weaknesses and risks which remain unresolved."[4] Yet, at the same time, new opportunities are emerging to mobilize the innovative capacity of the financial system to better meet the long-term needs of the real economy in a sustainable manner, such as inclusive green investment.

The premise of this report is that Kenya's financial system can play a fundamental role in mobilizing capital to promote a greener economy, and in establishing general awareness about the importance of this shift and the opportunities it creates. Moving towards inclusive green investment means departing from business as usual – in which capital at a global level is deployed to environmentally and socially unsustainable uses and practices – to sectors and projects in line with long-term sustainable development and economic growth. Such a shift potentially requires changes in macroeconomic policy, financial services regulation, private sector practices, and consumer awareness. It can touch on a wide range of issues, from international taxation, money laundering, and corruption to financial inclusion, health, education, employment, and environmental protection.

The Climate Policy Institute's *Global Landscape of Climate Finance* indicates that nearly three-quarters of total global climate finance flows were invested in their country of origin in 2014. Private actors had a strong domestic focus, with 90 percent of their investments remaining in the country of origin. In-country investments are more familiar and perceived to be less risky than international investments, highlighting the importance of domestic policy frameworks in increasing climate finance flows.[5]

Since 2012, the G20 Development Working Group has been focusing on inclusive green growth, and has asked IFC to support its efforts to mobilize private investment, including from institutional investors. In Partnership with GIZ on behalf of BMZ, IFC is working with the G20's GreenInvest Platform to create an enabling environment and encourage domestic investors across a range of countries to support this agenda. UNEP recently initiated an "Inquiry into the Design of a Sustainable Financial System" to advance design options that would deliver a step change in the financial system's effectiveness in mobilizing capital for an inclusive green economy. Working in partnership, IFC and UNEP are exploring this topic in Kenya.

RISKS AND OPPORTUNITIES FOR KENYA'S FINANCIAL SECTOR

Kenya's dynamic, fast-growing economy is the largest in East Africa, serving as a trade and investment hub for East and Central Africa. Although the economy is diversifying, it remains largely dependent on natural resources. Agriculture and tourism account for nearly half of GDP. As a result, Kenya is highly vulnerable to the effects of climate change, environmental shifts, and the associated social effects.

For the financial sector, these risks also present potential investment opportunities. Government initiatives have identified various sectors that are likely to be most affected by climate change. These include water and forestry, agriculture, livestock and fisheries, trade, extractive industries, energy, physical infrastructure, tourism, and health. Kenya's National Climate Change Action Plan[6] also identifies subsectors that can play a significant role in innovative adaptation and mitigation initiatives. These areas potentially also represent investment opportunities that can boost employment growth, crucially among youth: 75 percent of Kenya's population is below the age of 30.[7]

Given its recent record of innovation, Kenya has a historic opportunity to develop competitive advantage based on an inclusive green growth strategy. Taking financial inclusion as an example, the country is home to some world-renowned innovations, such as M-Pesa (a mobile money transfer system launched in 2007),[8] M-Shwari (a micro-savings and lending product launched in 2012),[9] and M-Kopa (a renewable energy payment system focusing on rural households, launched in 2012),[10] which have successfully demonstrated how the private sector, with support from an engaged and pragmatic regulator, can profitably provide solutions to pressing societal needs.

Although Kenya has reasonably sophisticated financial institutions and markets, to date there has been little systematic research into the specific features and flows of inclusive green finance, especially from private capital markets and institutional investors.

This document aims to promote additional exploration of inclusive green investment in Kenya, within the context of the broader economy and financial sector. It focuses on policy, structural, and investment innovations across the economy and financial sector that would increase capital flows to encourage sustainable development.

RESEARCH METHODOLOGY

This report reviews the current state of inclusive green investment in Kenya, providing an overview of stakeholders, financial categories and volumes, and current and planned financial policies, regulations, and standards. The report then identifies barriers to green investment and discusses how these might be overcome.

The research methodology combined extensive desktop research, a wide-ranging series of interviews, and roundtable workshops. The authors interviewed 25 representatives covering all components of the investment value chain, including representatives of the National Treasury; regulatory bodies (the Capital Markets Authority and the Retirement Benefits Authority); the Nairobi Securities Exchange; companies listed on the securities exchange; pension fund trustees and asset managers; brokers; analysts; financial advisors; consultants; and industry associations.

The outcome of the interviews laid the basis for two roundtable sessions with the Kenyan financial sector in February 2015: A CEO roundtable and a technical experts' roundtable to discuss risks, opportunities, and potential initiatives to promote inclusive green investment. The two meetings resulted in proposed next steps that are outlined in Chapter 5.

A list of interviewees and roundtable participants is contained in Annexure B.

REPORT STRUCTURE

The structure of the report is as follows:

- Chapter 2 provides an overview of the Kenyan economy and discusses the relevance of the inclusive green growth agenda. It outlines the high-level policy landscape and describes existing regulatory incentives, analyses the country's investment needs, and reviews examples of inclusive green investments to date.
- Chapter 3 provides an overview of the financial and capital markets sectors, and analyses industry structures and incentives that either encourage or constrain inclusive green investment.
- Chapter 4 highlights key barriers to inclusive green investment, and potential solutions.
- Chapter 5 sets out conclusions and proposed next steps.

A NOTE ON DEFINITIONS AND APPROACH

A glossary of terms is provided in Annexure A. However, it is useful to define several terms at the outset.

"Green" investment supports economic growth in a clean, resilient, and sustainable manner – such as initiatives to encourage more efficient use of resources, reduce pollution, and mitigate environmental damage. "Inclusive" investment serves not only investors, but the broad interests of society, particularly low-income and underserved segments of the population. Inclusive green investment is an important part of the broader ESG considerations that underpin sustainable investment at the global level.

Many of this report's systemic-level recommendations concern not only inclusive green investment, but also promote a broad sustainable development agenda. Kenya's green investment agenda lags behind other areas of ESG investment considerations, such as financial inclusion. In the Kenyan context, the link between green investment and to social issues such as food security, poverty reduction, health, and unemployment needs to be clearly delineated.

"Green resilience" refers to the ability of a system to continue operating as external conditions change, adapting to changes in temperature, precipitation, and other variables. In the context of climate change, green resilient infrastructure would be able to operate at its design capacity despite sharply changed climatic conditions.

All exchange rates provided are taken from source documents.

Chapter 2: Overview of the Kenyan Economy and Inclusive Green Growth

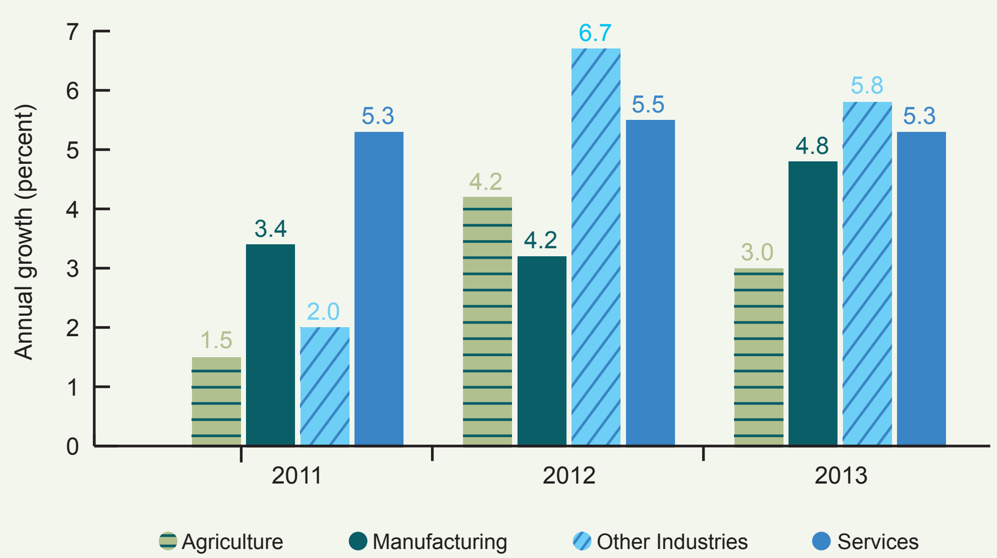
Kenya plays a central role in East and Central Africa. Its economy is diversifying and its financial sector is strong, with deep and developed domestic debt markets. GDP growth was 5.7 percent in 2013, averaging 5.5 percent between 2003 and 2013,[11] and the World Bank projects GDP growth of 7 percent by 2017.[12] Inflation stood at 5.7 percent in 2013 and 6.9 percent in 2014, down from a peak of 26 percent in 2008.[13]

Kenya also has a young population – 75 percent of its 44 million people are below 30 years old.[14] In 2009, the overall unemployment rate was 8.7 percent, but the rate of youth unemployment was 14.2 percent, according to the Kenya National Bureau of Statistics' last published data.[15] Recent, non-bureau sources indicate higher overall unemployment rates of 40 percent,[16] and data quoted in the MTP2 suggests that 60 percent of the country's youth are without work.[17]

Despite progress in diversification, Kenya's economy remains highly dependent on its natural resource base. The Kenya National Bureau of Statistics' 2013 Economic Survey reported that more than 50 percent of the country's GDP is derived from natural-resource-based sectors (agriculture, mining, forestry, fishing, and tourism).[18] In aggregate, these sectors are estimated to account for 70 percent of total employment,[19] with small-scale agriculture and pastoralism alone accounting for 42 percent of total employment.[20] Agriculture is the largest foreign exchange earner and accounts for 65 percent of total exports, followed by tourism, which has been worth about 95 billion Kenyan shillings ($1 billion) annually for the past three years.[21]

Economic growth in Kenya is broad-based (see Figure 1). Over the past three years, industry and services have experienced the most rapid growth.

FIGURE 1: BROAD-BASED GDP GROWTH IN KENYA



SOURCE: World Bank (2014),[22] Economic Update Kenya. Based on data from the Kenya National Bureau of Statistics

TABLE 1: BREAKDOWN OF LARGEST ECONOMIC SECTORS – SHARE OF GDP

LARGEST ECONOMIC SECTORS PERCENTAGE CONTRIBUTION TO GDP BY ACTIVITY IN 2014	PERCENTAGE
Agriculture, fishery, and forestry	27.3
Manufacturing	10
Transport and storage	8.3
Wholesale and retail trade	8.2
Real estate	7.8
Financial and insurance activities	6.7
Percentage of GDP	68.3

SOURCE: Kenya National Bureau of Statistics (2015), Economic Survey

The success of Kenya's economic sectors, including those exploiting new sources of energy and minerals, depends significantly on whether they are able to respond effectively to environmental and social challenges and risks, including adapting to climate change, addressing youth unemployment, and addressing conflict over land and water resources.

Although the country bears little responsibility for global climate change, it is highly vulnerable to its effects. According to the Kenya National Climate Change Action Plan 2013–2017, extreme climatic events could cost the economy as much as $500 million a year, equivalent to about 2.6 percent of the country's GDP in 2013. Aggregate models project that these economic costs will increase, reaching up to 7 percent of GDP by 2020.[23] Such losses would be due to declining crop and livestock yields, forest fires, damage to fisheries, reduced hydropower generation, lower industrial production, and reduced water supply. In addition to the effects of climate change, Kenya also faces costs from environmental pollution, which is adversely affecting human health and raises the risk of epidemics.

Countering these trends requires more investment in sustainable agriculture and green resilient infrastructure, which would enable the country to shift from a business-as-usual approach to sustainable industries, practices, and technologies.

At the macroeconomic level, environmental and social considerations can have direct and indirect effects on growth. In a natural resource-integrated economy such as Kenya's, failing to deal with environmental and social challenges can put economic growth at risk.

This situation presents considerable investment opportunities. Inclusive green investment can play an important role in mitigating the effects of climate change and supporting sustainable development, while boosting economic growth. For example, a UNEP scenario modeling exercise[24] comparing economic growth in a green-growth scenario and a business-as-usual scenario for selected sectors showed that, in the long term (2010 to 2030), the green-economy scenario would result in faster economic growth and more opportunities to create wealth. In the green scenario, real GDP was projected to outstrip the business-as-usual approach by 12 percent by 2030.

2.1 National Constitution and Strategy

Governments play an important role in creating enabling conditions for sustainable private sector investment. Kenya is ranked relatively low in the World Bank's Doing Business report (137 in 2013 and 136 in 2014 out of 189 countries),[25] but the government is working to improve the ease of doing business and investing, aiming to feature in the top

50 rankings in the annual survey by 2017.[26] In 2014, it established a Business Environment Delivery Unit to address challenges facing investors in the country.

The Kenyan government has made strong, high-level policy commitments to green and inclusive investment and growth through the Constitution of Kenya, Vision 2030, and the MTP2. The process of devolution from a centralized federal system to a two-tier decentralized system of government, consisting of a national government and 47 county governments, is also a potentially important step for sustainable development. As power, representation, and resources are devolved to local level, various laws have been enacted to ensure better access to basic services such as healthcare and education, and more meaningful public consultation on new project development.[27]

Table 2 summarizes national policy documents that touch on an inclusive green economy.

TABLE 2: NATIONAL DEVELOPMENT POLICY DOCUMENTS ON INCLUSIVE GREEN GROWTH

NATIONAL POLICY/ STRATEGY DOCUMENT	PROVISIONS	MAIN IMPLEMENTATION AGENCY
The Constitution of Kenya (2010)[28]	The new Constitution brought the critical issues of sustainable development to the core of the country's legislature. It sets out a commitment to an ecologically sustainable development and a clean, safe environment for all.	Government of Kenya
Kenya's development master plan: Vision 2030 (2006)[29]	Under its three pillars, economic, social, and political, Kenya sets out its aspiration to become a middle-income country by 2030, aiming to increase the annual GDP growth rate to 10 percent. Integral to this is the vision of developing a "just and cohesive society enjoying equitable social development in a clean and secure environment."[30]	Ministry of Devolution and Planning
MTP2 (2013–2017)	The MTP2 of Vision 2030 lists six priority growth sectors to help achieve the GDP growth target: tourism; agriculture, livestock, and fisheries; trade; manufacturing; business process outsourcing and information technology-enabled services; and oil and other minerals. It also commits to increasing public spending to expand and modernize infrastructure (railways, roads, ports, airports, energy, water, and information and communication technology). Public-private partnerships (PPPs) are seen as the key to successfully achieving this goal. MTP2 also commits to creating 1 million new jobs (including "green jobs") annually to address unemployment.	Ministry of Devolution and Planning is the lead agency, with 20 sector-based working groups developing the action plans[31]
National Green Economy Strategy and Implementation Plan for Kenya (2015)	Based on Vision 2030 and the MTP2, the strategy gives policy options to enable integrated green growth strategies for the following priority sectors: Agriculture, forestry, and fisheries; water and sanitation: waste management; energy; trade manufacturing and industry; land and ecosystems management; tourism and wildlife management; building and construction; transport; oil, gas, and mining; information and communications technology; disaster risk management; and education.	Government of Kenya

Kenya took part in the UN Conference on Financing for Development, held in Addis Ababa in July 2015, where heads of state approved an accord on financing sustainable development. The country also co-chairs the process to facilitate consensus among the 193 UN member states on the new Sustainable Development Goals that will succeed the Millennium Development Goals.

FISCAL AND FINANCIAL SECTOR POLICY AND REGULATION

Financial and capital market regulation can promote investment incentives that are fully aligned with long-term performance and sustainability indicators, creating a strong impetus for increased awareness, focus, innovation, and transformation. As the maker of fiscal policy and the overall policy holder for the financial services sector, Kenya's National Treasury – along with financial sector regulators – plays a critical role in incentivizing inclusive green growth and investment. Other areas of fiscal policy that aim to increase the government's budget and draw in more private investors will also affect the availability of funding for green and inclusive projects.

Areas of financial policy where Kenya has made notable progress in recent years are outlined in Table3.

TABLE 3: FINANCIAL POLICY AREAS THAT AIM TO RETAIN/INCREASE NATIONAL BUDGET REVENUE

FINANCIAL POLICY/ STRATEGY	OBJECTIVE	IMPLEMENTING AGENCY/ STATUS OF IMPLEMENTATION
Tax reforms	Extensive efforts have been made to improve tax collection and broaden the tax base, with government revenue at above 20 percent of GDP.	Kenya Revenue Authority
Government anti-corruption strategies and control of money laundering and tax evasion: Anti-Money Laundering Act (2012); Public Officer Ethics Act (2006); Anti-Corruption and Economic Crimes Act (2003)	An estimated $50 billion leaves Africa every year in illicit outbound financial flows through tax evasion (domestic and international) and corruption (roughly the same as official development assistance). These outbound flows reduce tax revenues and finance for development.[32] The government aims to use regulation and international cooperation to combat illicit financial flows and ensure that all payments to governments from large companies are fully transparent.	National Treasury; Kenya Revenue Authority; Anti Money Laundering Agency; Cabinet Committee on Anti-Corruption
PPP Act (2013); Business Regulatory Reform Bill; Special Economic Zones Bill	Provides regulatory framework for private sector investment in infrastructure development and other social services, and is expected to facilitate private sector investment in infrastructure and other areas of the economy.	National Treasury
Income Tax Act and Finance Act (2014)	Amendments include tax breaks for capital market instruments covering infrastructure and other social services.	Kenya Revenue Authority. The tax breaks are implemented, but the market is still waiting for tested examples of their application to actual investment vehicles.
Competition Commission Act (2012)	The act aims to protect investor interests in terms of intellectual property rights.	Ministry of East African Affairs, Commerce, and Tourism
Public Financial Management Act (2012) and Integrated Financial Management Information System	An overarching priority for Kenya's Finance Ministry over the past five years has been the transfer to the devolution system, in line with the new Constitution. As part of this process, the Integrated Financial Management Information System aims to provide technical capacity, financing, and better tracking of budgets and spending to support county governments.[33]	National Treasury
National Payment System Act (2010) and National Payment System Regulation (2014)	This legislation allows agency banking, which has led to Kenya's success in mobile payment systems and high rates of financial inclusion. M-Pesa is a globally renowned example of how market innovation and pragmatic regulation can allow the private sector to profitably address a social need. The Kenyan diaspora is the largest in size from the African continent and remittances are a significant financial resource for households. Remittances are integrated into Kenya's national financial inclusion strategy and the cost of remittances has been kept at competitive rates.	Central Bank of Kenya

New policy and regulatory implementation traditionally works well in Kenya when the private sector initiates an innovation, typically followed by, or in conjunction with, pragmatic and supportive policy and regulation. For example, financial inclusion rates improved from 27 percent in 2006 to 67 percent in 2013[34] through private sector innovation (the piloting and subsequent launch of the M-Pesa mobile payment system in 2007), supported by pragmatic policy and regulation (the passage of the National Payment System Act in 2010 and its regulation in 2014, following public consultation).

There is increased interest in the design of financial sector policies and regulations that will further support cost-effective and scalable innovation. Various policies and regulations supporting inclusive green growth in a number of sectors, including energy, agriculture and forestry, the environment and wildlife, transport, and climate-change mitigation, have already been implemented or are at an advanced stage. Recent examples include feed-in tariffs for renewable energy, the Energy Management Regulations, the Wildlife Conservation and Management Act (2013) and the Integrated National Transport Policy (for an overview of these policies and regulations in the real sector, see Annexure D).

Although there are financial products and regulatory frameworks for inclusive products and investment, particularly in the banking sector, further development and innovation are still needed in other parts of the financial services sector to promote green investment.

Cohesive financial sector regulation can help incentivize and support inclusive green innovation and investment. Below are suggestions put forward by participants in the interviews and roundtable meetings, with examples and discussion by the authors:

- **Cohesive market-wide policy on sustainable finance:** The implementation of the MTP2's inclusive green growth commitments into sectoral policies and strategies is a work in progress. For example, the Capital Market Master Plan, a Vision 2030 flagship project, sets out a strategic direction for the Kenyan capital market over the next 10 years, but does not cover environmental and social risks and opportunities. The Central Bank of Kenya's Financial Stability Report shows the country's significant progress in inclusive finance, but it does not analyze risks such as climate change in any depth.

  Introducing a cohesive market-wide policy in Kenya could help ensure that all parts of the financial sector value chain are working towards the same green and inclusive measures, which are kept at the top of the agenda. Such a cohesive, high-level policy could also increase the efficiency and scale of emerging individual efforts. South Africa, for example, has successfully implemented a financial sector charter, developed in 2003, which focuses on broad-based black economic empowerment, financial inclusion, and directing investment and commerce into targeted economic sectors. It relies partially on a point-based reward system to incentivize and enforce compliance with its objectives.[35]
- **Green credit policies for banks; ESG integration and/or developmental mandates for institutional investors:** Inclusive green investment could be promoted by introducing mandates that require institutional investors to consider and integrate ESG risks and opportunities into investment decisions; enforcing a minimum asset allocation to environmentally and socially sustainable and inclusive sectors and projects; and introducing green credit policy guidelines in the banking sector. Similar measures have been put in place in South Africa and Namibia. The Government Employees Pension Fund of South Africa and the Government Pension Fund of Namibia, both of which are significant investors in their markets and across the continent, have both increased their inclusive green investments.
- **Sustainable listing/reporting requirements:** ESG considerations can be made part of listing requirements or other means of highlighting sustainability performance (such as a sustainability index) and/or mandatory integrated reporting for listed companies. The Johannesburg, Brazil, Hanoi, Shanghai, London, and New York stock exchanges have all implemented similar measures. ESG reporting for companies listed on the Nairobi Securities Exchange is voluntary.
- **Environmental taxation and fiscal incentives for green industries:** A few interviewees, such as the National Environment Management Agency and KenInvest, suggested that a combination of taxation, regulation, and other measures will generate revenue that can be used to incentivize and promote inclusive green sectors. Natural capital accounting – the process of calculating the total stocks and flows of natural resources such as air, water, land, and biodiversity – would improve transparency and highlight the real long-term economic cost/benefits of environmental taxation. Lessons can be drawn from the European Union, where environmental taxation has been implemented in 30 member countries,[36] and South Africa, where the government has announced that a carbon tax will be implemented in January 2016.[37]
- **Compliance with environmental and social regulation, the polluter-pays principle, and lender liability:** On paper, Kenya's environmental and social regulation is comprehensive, but stronger enforcement of regulations is needed. This could include increased application of the polluter-pays principle set out in the Environmental Management and Coordination Act (1999).[38] Lender liability, suitably framed to provide a safe haven when adequate due diligence can be demonstrated, extends the liability for sustainability impacts, and introduces lender and investor liability. This can improve environmental outcomes, as demonstrated in the case of US lender liability for land contamination. Brazil and China are also considering introducing liability regimes.[39]

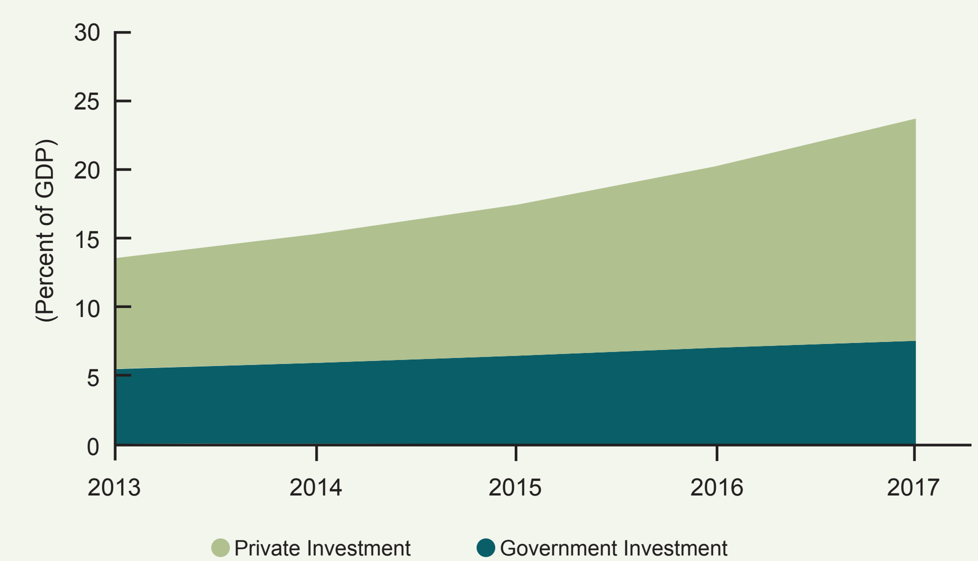
These areas are also discussed in more detail in subsequent chapters. However, further research and detailed consideration of suitability and adaptation to the Kenyan context is needed.

2.2 Investment Need and Sources of Capital

Kenya's goal of becoming a middle-income country based on sustainable development is premised on investment growth. The government is targeting an increase in investment from 24.7 percent of GDP in 2013-2014 to 30.9 percent of GDP by 2017-2018.[40] The current level of public sector investment of between 8 percent and 10 percent is expected to be sustained throughout this period, with the private sector financing the bulk of the increase.

The MTP2 targets about $58 billion in private investment between 2013 and 2017. Priority sectors are tourism, agriculture, livestock and fisheries, trade, manufacturing,

FIGURE 2: INVESTMENT TARGETED BY MTP2 ($ BILLION)



SOURCE: Government of Kenya. Based on targets in MTP2 2013–2017 and World Development Indicators

MTP2 ENVIRONMENT, WATER, AND SANITATION FLAGSHIP PROJECTS (UNDER THE SOCIAL PILLAR)	
• Strengthening environmental governance • Waste management and pollution control • Rehabilitation of urban rivers • Modernization of meteorological services • Advertent weather modification program • Rehabilitation and protection of the water towers • Forest conservation and management • Forestry research and development • Wildlife conservation and management • Promoting and piloting of green energy • Carbon credit trading • Rehabilitation of storm water drainage systems in selected towns	• Digitization of urban plans • Water resource management program • Trans-boundary waters • Water harvesting and storage program • Marine resources and fisheries • Urban and rural water supply sub-program • Operationalization of water research and resource center program • Provision of water to poor, unserved areas, including informal settlements • Irrigation and drainage infrastructure • Land reclamation

business process outsourcing and information-technology-enabled services, and oil and other minerals. One focus of the plan is to expand and modernize Kenya's infrastructure (railways, roads, ports, airports, energy, water, and information and communication technology).

Based on the projected investment budget in the MTP2, the largest investment projects for the five-year period are in infrastructure (transport and energy), with a total (public and private sector) projected investment budget of about 7.6 trillion Kenyan shillings ($83.2 billion); information and communication technology, with an investment budget of 51 billion Kenyan shillings ($0.6 billion); and manufacturing, with a budget of 110 billion Kenyan shillings ($1.2 billion).[41] The government has allocated about 20 percent of its budget annually to energy and transport infrastructure,[42] and identified a further infrastructure funding gap of between $2 billion and $3 billion per year over the next 10 years.[43]

As demonstrated in the above text box, the MTP2 recognizes that climate change is one of its main implementation risks. It states that "environmental conservation and management of natural capital is pivotal to the socio-economic development of the economy."[44]

The plan also identifies flagship projects relating to the environment, water, and sanitation, with a combined budget of 655 billion Kenyan shillings ($7.2 billion).[45]

There are, however, gaps between policy commitments, coordination, and implementation. The flagship water, sanitation, and environmental projects are not incorporated into the MTP2's economic pillar and priority sector programs. And while the government has recently developed a National Green Economy Strategy and Implementation Plan for Kenya to integrate green and inclusive growth strategies into priority sectors,[46] the strategy does not include a focus on the role of the domestic financial services sector.

The National Climate Change Action Plan, also drafted in 2013, estimates that the total investment required for climate-change mitigation up to 2030 is between 1.4 trillion and 1.8 trillion Kenyan shillings ($15 billion and $19 billion). It says another 638 billion Kenyan shillings ($7.5 billion) is needed for adaptation measures in the five-year period of 2013–2017 alone.[47] The plan identifies priority mitigation actions and priority adaptation sectors for this investment (see tables).

TABLE 4: ADAPTATION COSTS FOR A FIVE-YEAR PERIOD AS PROVIDED BY SECTOR AGENCIES

SECTOR	ESTIMATED COST FOR FIVE YEARS (KSH BILLION)
Agriculture	44.9
Livestock	27.1
Water & sanitation	278.8
Environment	115
Infrastructure related to roads in arid and semi-arid lands	107
Sustainable livelihoods related to arid and semi-arid lands	59
Energy infrastructure	5.3
Tourism	1.3
Total KSh for next five years	638
Total US$ equivalent for five years	7.5 billion

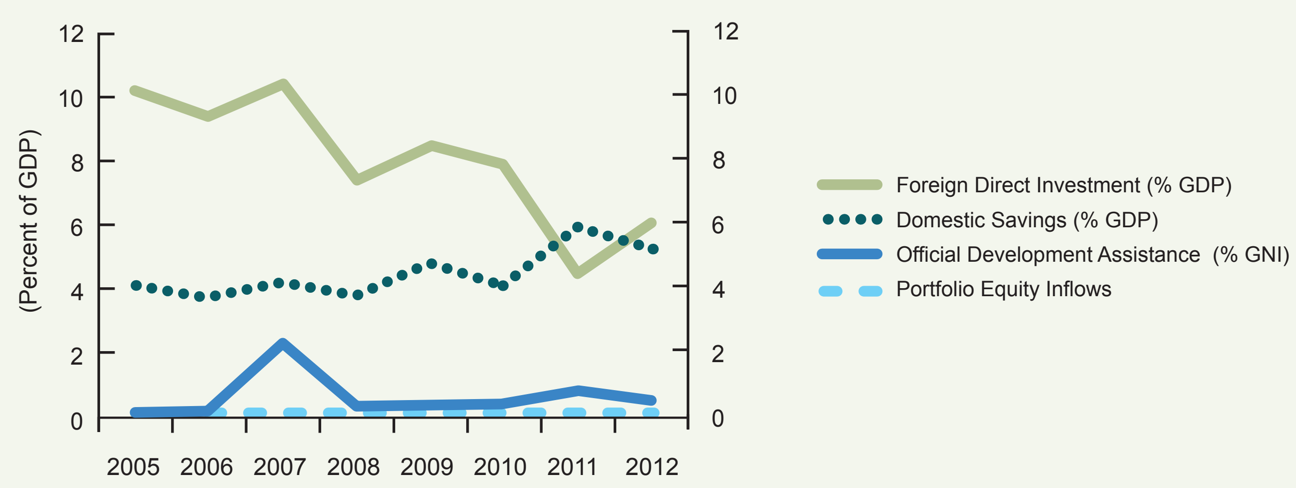
SOURCE: Government of Kenya (2013), National Climate Change Action Plan

TABLE 5: PROJECTED INVESTMENT COST FOR PRIORITY MITIGATION ACTIONS

ACTION	ESTIMATED COST TO 2030 (KSH BILLION)
Restoration of forests on degraded lands	186-290
Geothermal	877-1,115
Reforestation of degraded forests	48-61
Improved cookstoves and LPG cookstoves	20
Agroforestry	70-117
Bus rapid transit and light rail corridors	170
Development of greenhouse gas inventory and improvement of emissions data	0.04
Measuring, reporting on & monitoring forestry emmisions & sinks	.62
Mainstreaming of low-carbon development options into planning	0.02
Total cost Ksh	1372-1774
Total Ksh equivalent for next five years (US$4,596-5,815 million equivalent)	391-495
Total US$ equivalent to 2030	16-22 billion

SOURCE: Government of Kenya (2013), National Climate Change Action Plan

FIGURE 3: SOURCES OF INVESTMENT CAPITAL



SOURCE: World Bank (2013), World Development Indicators[50]

SOURCES OF CAPITAL

Vision 2030 seeks to mobilize additional and more effective investment using a higher domestic savings rate. As per the MTP2, the government will continue to borrow from domestic and external sources, with the latter being largely on concessional terms, targeting a 30:70 domestic:external ratio.[48] Kenya successfully issued domestic infrastructure bonds, with significant uptake in 2008, 2009, and 2012 at a total value of 90 billion Kenyan shillings ($1 billion). In 2014, the government launched its first Eurobond, successfully raising $2 billion for flagship projects in transport, energy, and agriculture.

Although the majority of capital is expected to come from external sources, domestic savings are important. Kenya's domestic savings are low, standing at about 6 percent of GDP in 2013.[49] This suggests potential for savings growth. Domestic investors have a stronger stake in the country's development, and may have a longer-term outlook and deeper appreciation of local challenges and opportunities than their external counterparts. In addition, domestic investment is not as vulnerable to short-term shifts in global risk appetite.

2.3 Green and Inclusive Investments in Kenya

INCLUSIVE GREEN SECTORS

Kenya does not have a central comprehensive source of information on inclusive green investments or a project pipeline across all asset classes. Of the priority sectors set out in the MTP2 (agriculture, livestock, and fisheries; trade; manufacturing; business process outsourcing and information-technology-enabled services; oil and other minerals; and infrastructure), the largest planned investment projects are in infrastructure, followed by information and communications technology, and manufacturing. Most of these sectors are also identified in the National Climate Action Plan as sensitive to the effects of climate change, making them priorities for inclusive green development.

To date, the Kenyan government has focused on incentivizing the development of renewable energy, with a focus on geothermal, wind, and biomass.[51] By 2030, it aims to increase total installed capacity to 20,000 megawatts (MW), half of which will come from renewable sources and about a quarter each from non-renewable sources and nuclear.[52] Kenya was the first African country to tap geothermal power and the largest producer of geo-energy on the continent, initially spurred by the upfront investment of $1 billion by the state's Geothermal Development Company.[53]

Other incentives for renewable energy include feed-in tariffs, the Energy Management Regulations, and Solar Water Heating Regulations. Some of the green energy developments already under way include the 300MW Lake Turkana Wind Power Project, the largest wind farm in Africa and the single largest private investment in Kenya's history,[54] and the Olkaria geothermal power plants (I, II, III, and IV), with about 300MW in total capacity.[55] Project investors include government, development banks, foreign banks, and private equity funds. In many cases, concessional funding has been used to reduce risks for investors and allay concerns about development partners' lack of track record and high initial costs (see case study in Annexure E). A list of additional investment projects (green and non-green) approved by the government's PPP Unit appears in Annexure F.

ADDRESSING THE FUNDING GAP

Participation by both domestic banks and institutional investors in the infrastructure sector, green or otherwise, has been limited. Globally, investors have traditionally been exposed to infrastructure through government bonds, listed equities, company bonds (construction, utility, and telecommunications), or infrastructure private equity funds. However, it is increasingly suggested that infrastructure projects need direct investment through participation in project finance, PPPs, and other investment vehicles.[56,57]

To date, international banks have been the most prominent providers of private capital in infrastructure investments globally,[58] but institutional investors and domestic banks have the potential to become significant sources of capital in this area, including for resilient green infrastructure. This is particularly important in the wake of the global financial and economic crisis, as investment flows from other sources have slowed, government finances have become more stretched, and some multilateral development banks are reaching their capacity to intervene.[59]

To address the infrastructure funding gap, all types of investment need to be tapped to create appropriate vehicles that can compete with the traditional sector in terms of risk profile and returns. Bringing together capital and know-how from the public and private sectors will be important, particularly for large-scale infrastructure projects. The PPP Act established a new legal framework to enable PPPs in infrastructure to be pursued. As of May 2015, the government's PPP Unit had approved 71 priority PPP infrastructure projects (see Annexure F).

Apart from the geothermal and large-scale wind power sectors, green projects in other industries are limited, and existing investment opportunities are not sufficiently supported or promoted. For domestic inclusive green industries to develop, and for existing industries to become more environmentally sustainable, all sectors and companies, from start-ups to large corporations, need to innovate and invest.

The private sector and the Kenyan government, through various sources of international funding, are supporting business development centers such as the Climate Innovation Center at Strathmore University and the Cleaner Production Center hosted by the Kenya Industrial Research and Development Institute. The Greening Kenya Initiative (a flagship Vision 2030 program) and the National Environment Management Agency, the state agency responsible for environmental management in Kenya, are promoting local green business innovation and job creation. However, long-term funding at scale is needed for such critical incubators to be sustainable (see Annexure G for a list of potential inclusive green investment themes across sectors).

Barriers to identifying/scaling up inclusive green sectors, as suggested by interviewees and roundtable participants, include the following:[60]

- **Comparatively better returns in established sectors:** Investors look for investments with good returns. Traditional sectors typically offer more attractive returns than green projects, which tend to be in new sectors that have no track record, are associated with higher risk, and require longer investment horizons.

- **Limited investment-ready green pipeline:** Green inclusive projects typically need more work before they are investment-ready because they are in new sectors and often led by less-established entrepreneurs. Deals are often not packaged and presented appropriately to investors, and there is limited capacity and expertise to do so in the market.
- **No inclusive green pipeline database:** The lack of comprehensive database makes it difficult to assess the size, type, and financing needs of potential projects in Kenya.

Interviewees and roundtable participants suggested a range of possible solutions, including the following:[61]

- **Build on experience** in the geothermal and wind sectors, where incentives were offered to promote new projects, and replicate these to encourage inclusive green development in other sectors.
- **Ensure that the cost of environmental degradation and social impact is accounted for through taxation and regulation,** such as environmental taxation and increased application of the polluter-pays principle in the Environmental Management and Coordination Act. This funding can be used to incentivize and promote an inclusive green economy.
- **Create additional fiscal incentives** to channel capital to the inclusive green economy, such as guarantees backed by the government (the Central Bank of Kenya) and international development banks, and regulatory support for a lower risk weighting/adjustment to capital adequacy requirements for such projects.
- **Continue to tap public and international funding** to commercialize inclusive green start-up companies and provide support for entrepreneurs (such as business plan writing and investor pitches) to make them investor-ready.

COMPLIANCE WITH EXISTING ENVIRONMENTAL AND SOCIAL REGULATION

Given the volume and scale of proposed infrastructure development, and Kenya's targets for economic growth across all sectors, basic compliance with existing environmental and social laws and regulations is critical.

According to banks surveyed in a recent research paper by the Kenya Bankers Association, the lack of consistent enforcement of environmental and social laws is the second most important constraint to sustainable banking.[62]

Kenya's environmental and social legal and institutional framework is robust on paper, but implementation and enforcement weaknesses mean that there is often a gap between statutory requirements and operational practices. This represents a risk for investors.[63] The framework's main elements include the Environmental Management and Coordination Act; subsidiary legislation in the areas of water quality, waste management, controlled substances, biodiversity, wetlands, rivers, and seashores; environmental impact assessment regulations; the Occupational, Safety, and Health Act (2007); the Wildlife Management Act (2014); and the specialized Environment and Land Court.

Studies conducted[64] suggest that reasons for weak enforcement of environmental and social obligations include:

- Light penalties that have not acted as deterrents.
- Lack of enforcement capacity and funding in relevant agencies, which in turn has hampered the effectiveness of environmental impact assessments and annual audits.
- Lack of public awareness/engagement, and a weak civil society movement that does not help bring public interest cases to court.

The studies cited above discuss a range of potential solutions, including:

- **Strengthen enforcement of environmental and social regulation,** such as increased application of the polluter-pays principle under the Environmental Management and Coordination Act,[65] which may increase investor focus on potential liabilities. Regulatory developments in emerging markets are making banks and investors liable for the environmental and social consequences of their investments, creating strong incentives to incorporate sustainability considerations into risk assessments.
- **Extend liability for sustainability impacts** such as pollution to lenders and investors.
- **Encourage financiers to help companies shift their focus from tick-box compliance to developing a business case for environmental and social management,** where gaps and potential improvements in their processes are identified. Banks could offer related products such as energy-efficiency loans to support implementation.
- **Create support for public consultation and awareness campaigns** to increase awareness of environmental and social issues. Kenya's new Constitution emphasizes the importance of consulting with communities on new developments and raising awareness of environmental and social risks and opportunities.
- **Coordinate with the National Environment Management Authority and other relevant agencies and ministries on data.** A number of emerging countries have adopted mechanisms to coordinate environmental and finance ministries, and banking regulators, to ensure information exchange, and to provide mutual support in the investigation and enforcement of environmental regulations.

Chapter 3: The Kenyan Financial Sector

Kenya's financial sector has grown significantly and is integrated into the regional and international economy. Its subsectors include banking, capital markets, insurance, pensions, safety nets, and resolution institutions (such as the Kenya Deposit Insurance Corporation), financial markets infrastructure (such as the Nairobi Securities Exchange, stock brokers, and rating agencies), and savings and credit cooperatives. The financial sector is regulated by the Retirement Benefits Authority, the Insurance Regulatory Authority, the Capital Markets Authority, the Central Bank, and the Savings and Credit Cooperative Societies Regulatory Authority, and work is under way to create a financial services "super regulator." The total value of assets held by banks, pensions, insurance, and credit cooperatives accounted for 108 percent of the value of GDP in 2013, up from 96 percent of total assets excluding capital markets in 2012. The total value of equity market capitalization amounted to 51 percent of GDP in 2013.[66]

Although banking dominates the financial sector, accounting for 71 percent of total assets excluding capital markets,[67] pension and insurance funds have grown significantly and are emerging as potential important investors in the Kenyan economy.

Kenya's Vision 2030 envisions a vibrant and globally competitive financial sector that creates jobs and promotes a higher savings rate. Establishing the country as a regional financial hub is a key strategic objective for the government, as articulated in Vision 2030, the MTP2, and the strategic plans of the Central Bank and the Capital Markets Authority. Pushing for green and inclusive financial and capital markets will help the country meet these goals and sustain regional leadership over the long term. Kenya's financial system has a fundamental role to play in allocating capital to a more inclusive green economy and creating awareness about this shift.

TABLE 6: THE FINANCIAL SECTOR'S SHARE OF GDP

GDP/SUB-SECTOR ASSETS	2012		2013	
	Million Ksh	Share of GDP	Million Ksh	Share of GDP
Nominal GDP	3,403,547	N/A	3,797,988	N/A
Banking assets	2,330,335	68.47%	2,703,394	71.18%
Pension assets	548,700	16.12%	696,680	18.34%
Insurance assets	311,000	9.14%	366,252	9.64%
Savings and credit cooperative organizations assets	93,765	2.75%	335,437	8.83%
Total	3,283,800	96.48%	4,101,763	108.00%
Equities market capitalization	1,272,002	37.37%	1,920,719	50.57%

SOURCE: Central Bank of Kenya (2013), Kenya Financial Stability Report 2013

3.1 Banking Sector

MARKET COMPOSITION

The Kenyan banking sector is sophisticated, competitive, and diversified, making it fertile ground for innovation and product development. The top commercial banks' services include traditional commercial banking, investment banking, insurance services, microfinance, custodial services, private equity ventures, and engagement with capital markets to raise long-term funding.

As of December 2014, the sector comprised the Central Bank of Kenya as the regulatory authority, 44 banking institutions (43 commercial banks and one mortgage finance company), eight representative offices of foreign banks, nine microfinance banks, two credit reference bureaus, 13 money remittance providers, and 87 foreign exchange bureaus. Of the 44 banking institutions, 30 banks are locally owned (three with public shareholding and 27 privately owned), while 14 are foreign owned.[68]

The sector is fairly stable and performance continues to improve, with the size of net assets increasing from 2.7 trillion Kenyan shillings ($28 billion) in December 2013 to 3.2 trillion Kenyan shillings ($30 billion) in December 2014.[69] Although Central Bank interest rates have been kept relatively stable and low at about 8 percent, this has not fully been passed on to the consumer, and lending interest rates remain relatively high, with commercial bank prime rates of about 18 percent over the past five years.[70] Banking institutions' market shares continued to be dominated by the 10 largest commercial banks, which accounted for about 70 percent of net assets held by banking institutions as of December 2013.[71] A list of the 10 largest banks as of December 2014 is included in Annexure H.

INCLUSIVE GREEN FINANCE IN THE KENYAN BANKING SECTOR

Kenya's banking sector is affected by the global regulation of capital adequacy requirements (Basel II, III), which drives a short-term lending focus.[72] This is an issue for long-term financing in general and for green inclusive projects in particular. These projects are typically new types of investments with no track record and a higher level of risk, potentially requiring a longer investment horizon. A compounding factor in the Kenyan market is that the corporate debt market is still underdeveloped and long-dated corporate debt issuances are less common (corporate debt market capitalization was only 2 percent of GDP in 2014).[73] As a result, listed companies, including banks, rely on short-term debt, which is relatively expensive and tends to create a short-term outlook.

Product innovation

The Kenyan banking sector has led the way for mobile money transfer systems, which has contributed to the dramatic increase of financial inclusion rates in Kenya (67 percent of the adult population in 2013 used some form of formal financial services, compared to 27 percent in 2006).[74] The industry has evolved since the successful mobile payment system M-Pesa was launched in 2007, and today mobile money platforms are being used to offer medical insurance and microloans; transfer money to a prepaid credit card; and pay parking, electricity, and water bills. This demonstrates the Kenyan banking sector's innovative nature and the financial market's ability to make rapid policy changes.

Commercial green lending is limited but emerging, with CFC Stanbic and Cooperative Bank providing green credit lines worth 3.3 billion Kenyan shillings ($33 million) for energy and resource-efficiency projects[75] and Housing Finance's green mortgage credit line of 1.75 billion Kenyan shillings ($20 million).[76] Green lending also occurs as part of mainstream lending, but it may not be specifically defined as such and is therefore not separately quantified at present. Other emerging areas of product development include financing for climate-change mitigation and adaptation projects, green infrastructure projects, micro-lending, and lending to small-scale farmers and small businesses.

Although the largest banks have a long history of providing financial contributions in areas critical to social and environmental sustainability in Kenya, this has typically not been part of their mainstream financial products, but rather as charitable contributions through the banks' foundations or their corporate social responsibility budgets. For example, Barclays Bank of Kenya spent 26 million Kenyan shillings ($260,000) in 2014 on moving more than 100,000 rural establishments to solar energy. Equity Bank, National Bank, and Kenya Commercial Bank have supported important environmental conservation in partnership with local communities and Equity Bank has supported small-scale farmers' investments in biogas technology.[77]

Many Kenyan banks have also made strides in their internal sustainability management systems and sustainability risk assessments.[78] This indicates that with the right supporting market and regulatory framework, banks could also move quickly to develop new green investment products. Banks participating in the interviews and roundtable discussion expressed that a potential business opportunity is emerging to create commercial inclusive green lending products, moving these efforts that were previously part of banks' corporate social responsibility into their mainstream commercial business activities. However, this is currently taking place in the form of isolated events and not at the scale required to help the Kenyan inclusive green economy grow.

Risk assessment

The Kenyan economy is highly dependent on natural resources, which increasingly exposes banks to financial and economic risks associated with environmental and social effects across their portfolios. Apart from personal loans, the largest proportion of banking industry loans and advances were channeled through the trade (which is dominated by agricultural exports), manufacturing, and real estate sectors,[79] all of which are sensitive to environmental and social effects.

TABLE 7: SECTORAL DISTRIBUTION OF GROSS LOANS, DECEMBER 2014

SECTORS	GROSS LOANS (MILLION KSH)	% OF TOTAL
Agriculture	80,195	4.1
Manufacturing	236,962	12.2
Building and construction	84,559	4.4
Mining and quarrying	18,783	1
Energy and water	88,692	4.6
Trade	375,525	19.3
Tourism, restaurants, and hotels	34,249	1.8
Transport and communications	150,488	7.8
Real estate	282,396	14.6
Financial services	72,612	3.7
Personal/household	516,320	26.6
Total in Ksh million	1,940,781	100
Total in $ million	21,564	

SOURCE: Central Bank of Kenya (2015)

Banks use diverse frameworks and methodologies for their sustainability risk assessments. These frameworks depend on the individual banks' policies, unless they have development finance institution investors, in which case adherence to standards such as the IFC environmental and social performance standards would be in place. Kenya's foreign-owned banks have signed the Equator Principles (Barclays PLC Citigroup Inc., Standard Chartered Bank PLC, and HSBC Holdings PLC), but no Kenyan incorporated bank has subscribed to the Equator Principles or signed other international initiatives such as the UNEP Finance Initiative. Adopting a market-wide cohesive risk assessment framework would create consistency and a level playing field. Because sustainable finance is a new focus, banks will need to build their expertise and capacity in this area.

POLICY AND REGULATION

Financial sector sustainability leaders see supportive policy and regulation as critical for the success of sustainable inclusive green finance. To establish a cohesive approach to sustainability across the banking sector, the Kenya Bankers Association and the commercial banks in Kenya have developed a set of universal principles that will guide banks in balancing their immediate business goals with the economy's future priorities and socio-environmental concerns (see box on Sustainable Finance Principles). These principles are the first, industry-led sustainable finance guidelines in Africa. They provide much-needed guidance on environmental and social credit policy, appraisal and risk assessment, and product innovation.

Kenya's progress on financial inclusion has been the result of private sector innovation, supported by pragmatic policy and regulation. Similarly, private sector innovation is emerging in the sustainable finance/risk assessment space, but there is no specific regulation in place at present. The discussion around regulatory change is emerging in two main areas:

- The Central Bank of Kenya and the Kenya Bankers Association are forming a partnership to promote the effective implementation of the market-led Sustainable Finance Principles and have also recently joined the global Sustainable Banking Network supported by IFC.80 In the interviews and roundtable meetings, both the Central Bank and the Bankers Association stated that implementing and enforcing the principles would ideally be done through a step approach, starting with overseeing the initial process of capacity building and internalizing the principles, followed by implementation and direct regulation (on credit policy, risk assessment, and directed lending) over time. This will allow the banks to build the required capacity for effective and meaningful implementation. It will also give the regulator time to build the internal capacity of its supervision arm.
- In its role as an enabler of investment in green sectors such as renewables (and large-scale infrastructure in general), the Central Bank of Kenya is open to a discussion with the market on how to implement suitable measures on a more systematic basis to allow for greater participation by Kenyan banks in such investments. In addition, the National Treasury Finance Bill has proposed increased capital levels/consolidation to strengthen the banking sector and allow for greater participation in large-scale infrastructure projects.

BARRIERS AND PROPOSED SOLUTIONS

Innovation in Kenya is currently isolated and ad hoc. Policies and regulations are needed to address market gaps and encourage systemic market innovation, consistent assessment frameworks, and awareness building. Proposals from the interviews and roundtables include:

- Effective regulatory enforcement and monitoring of the market-led Sustainable Finance Principles, including establishing risk assessment frameworks for real risk-adjusted returns. This will ensure that the environmental and social risks of a project are taken into account.
- Ensuring that the process from capacity building to the adoption of the principles is clear, time-bound, and enforceable. Effective enforcement is critical – very few market-led principles globally have been successful in terms of implementation and credibility, because they lack an effective enforcement mechanism.

- Shifting the current focus on environmental and social sustainability as part of corporate social responsibility to commercial product development.
- Developing and using risk-guarantee products and insurance to allow for investment in new sectors with higher perceived risk.
- Coordinating across the financial services sector to agree and establish high-level policies and principles for long-term sustainable investment. South Africa, for example, has incorporated inclusive green sustainability into its sector programs and established a sector-wide Financial Sector Sustainability Charter, enforced by the National Treasury.
- Looking at the regulation and enforcement of environmental laws and policies, at both national and local government level, so that the government is equipped to enforce county bylaws and business and social policies that create an enabling environment for investment. Policy makers and regulators could also consider the advantages of extending liabilities for sustainability effects to financiers through lender liability regulation. This is discussed further in section 2.3.

Sustainable Finance Priorities (as taken directly from the Kenya Bankers Association)

1. COMPREHENSIVE RISK MANAGEMENT
While utilizing capital responsibly to create economic value and deliver returns to shareholders, sector players should be effective at the management and mitigation of economic and associated risks in both the short run and long term period.
Economic risk: As custodians of capital, anticipating and responding to the impact of macroeconomic conditions, including fiscal and monetary policy, government regulation, political stability, and circumstances across all economic sectors, is core to the viability of the institution, as well as the sector at large.
Associated risk: Through policies and risk assessment procedures, firms should seek to mitigate social and environmental risks associated with their financing activities.
2. BUSINESS PRACTICE, LEADERSHIP AND GOVERNANCE
Ethical conduct reinforced by corporate values is the foundation of any financial service firm.
• The leadership, mainly the Board and the Chief Executives, should set the tone and actively oversee business practices. • A robust framework should be in place to underpin the implementation of ethical conduct. • Reporting is a key component. Firms should work to publicize the positive impact of sustainability initiatives that institutions are advocating and achieving in their day-to-day activities.
Organizations that openly disclose and embed their core values and priorities tend to have better run institutions.
3. GROWTH THROUGH INCLUSIVITY AND INNOVATION
Increasingly competition within the sector and from competing sectors is driving financial service players to continually innovate and leverage on existing and emerging technology to respond to and anticipate dynamic market needs.

Sustainable Finance Principles (as taken directly from the Kenya Bankers Association)

PRINCIPLE 1: FINANCIAL RETURNS VERSUS ECONOMIC VIABILITY
Financial institutions should consider both the financial returns and economic viability of their activities. Economic viability should be factored into the decision making process, particularly in the financing of commercial activities. The Guiding Principle is that financial viability is a necessary but not a sufficient condition for sustainable economic development that would increase commercial opportunities and hence promote long-term growth prospects.
PRINCIPLE 2: GROWTH THROUGH INCLUSIVITY AND INNOVATION
Financial sector players seek to grow and enhance service delivery for the markets they currently serve, as well as reach out into diversified markets, thereby promoting financial deepening within untapped segments with economic potential. The Guiding Principle is that financial institutions in pursuit of growth should innovate and leverage on existing and emerging technology to reach potential markets while economically empowering communities.
PRINCIPLE 3: MANAGING AND MITIGATING ASSOCIATED RISKS
Economic development is intertwined with social and ecological concerns; therefore, financiers are materially affected by these concerns despite the fact that these risks may be considered as indirect. The Guiding Principle is that firms should seek to mitigate social and environmental risks associated with their financing activities through client engagement and effective policies and risk assessment procedures; and in addition, firms should actively measure and report on the financial impact of these risks to their business performance.
PRINCIPLE 4: RESOURCE SCARCITY AND CHOICE
In meeting present needs, financial institutions should ensure optimal management of resources, including financial resources and natural capital, to avoid compromising future generation needs. The Guiding Principle is that optimal resource management is realized through productivity and efficient utilization of resources guided by comprehensive opportunity cost assessment.
PRINCIPLE 5: BUSINESS ETHICS AND VALUES
Promoting enhanced oversight of business practices at both the Management and Board levels contributes toward effective, resilient organizations. The quest for ethical practice, efficiency, productivity, and waste minimization should be fostered from the leadership and enabled by adequate governance structures. The Guiding Principle is that the leadership of financial institutions should ensure the organization to deliver returns in the long term, and in a responsible manner that sees optimal utilization of resources toward achieving positive externalities.

3.2 Retirement Funds

MARKET COMPOSITION

As noted previously, the Kenyan financial sector is led by banks, which are restricted in their ability to finance the inclusive green economy due to global regulation on capital adequacy requirements (Basel II, III). As a result, banks are driven by a short-term lending focus and are unable to meet the financing needs of the inclusive green economy on their own. The pension and insurance industries ($9 billion and $3 billion in assets under management respectively)[81,82] are both growing by about 20 percent per year and are emerging as potential important long-term investors in the Kenyan economy.

Kenya has the third largest pension fund market in Sub-Saharan Africa after South Africa and Nigeria. The market is relatively sophisticated and is regulated by the Retirement Benefits Authority under the Retirement

Benefits Act (1997). The top 20 pension funds represent about 50 percent of total pension fund assets (see Annexure I). The largest fund is the National Social Security Fund, with $1.5 billion in assets under management. In addition to the top 20 pension funds, the sector has more than 1,500 registered retirement funds, the majority of which are small and have an asset base of less than 5 billion Kenyan shillings ($55 million).[83] This means that each fund has limited capacity to build expertise and invest in asset classes beyond the current focus on government securities. The sector is moving towards consolidation – a current proposal in the Finance Bill (2015) aims to consolidate the 47 existing pension schemes into one scheme for the counties. In addition, some funds are already moving to umbrella schemes.

Compared to other markets, such as South Africa, Kenya has a large number of fund managers and other service providers, including asset consultants, custodians, and administrators, relative to the size of the institutional asset base. The sector is regulated by the Capital Markets Authority under the Capital Markets Act (1989) and the Central Depositories Act (2000). The table below segments the market into the different players who service the country's retirement funds[84] and the insurance companies in the market (see Annexure J for a list of the 10 largest fund managers). A challenge cited during several interviews with fund managers and administrators was that the fragmented and somewhat under-regulated service provider market, as well as the prevailing practice of "undercutting" and extremely low fees, does not foster innovation, sustainability, and long-term thinking among service providers.

TABLE 8: LIST OF REGISTERED SERVICE PROVIDERS AS OF DECEMBER 2013

STAKEHOLDER	NUMBER
Fund managers	16
Custodians	10
Administrators	32
Total	58

SOURCE: Retirement Benefits Authority (2014). Annual Financial Statements

INCLUSIVE GREEN FINANCE IN THE RETIREMENT FUND SECTOR

Kenya is among the emerging markets that are leading efforts to increase coverage of pension savings, including in the informal sector. This was initiated under the most recent regulatory reform of the Retirement Benefits Act, initiated in 2013.[85] The Retirement Benefits Authority's 2014–2019 Strategic Plan aims to increase the working population's pension coverage (including informal sectors) from 15 percent to 20 percent by 2019.[86] In light of this, recently established pension funds offering "micro-pensions" in informal sectors include the Mbao Pension Fund launched by the Retirement Benefits Authority, as well as M-Pension launched by a subsidiary of the Local Authority Pension Trust Retirement Fund. Individual membership in retirement benefits plans has grown remarkably over the past few years, increasing by 250 percent from 25,289 members in June 2010 to 88,509 members in December 2012,[87] leading to a fast-growing asset base. This is an area of product development that is well under way and supported by regulatory reform.

There has been limited participation by retirement funds in inclusive green investments to date, even though there are no macro-regulatory barriers hindering their participation. The Retirement Benefits Authority's investment policy guidelines allow for broad asset allocation/diversification, including investment in alternative asset classes such as private equity, asset-backed securities, real estate investment trusts, collective investment schemes, and green bonds. These investments are already incentivized through capital market guidelines and tax breaks (see further detail in Section 3.4).

Many inclusive green economy investments are likely to fall under alternative asset classes, including private equity infrastructure funds, private equity cleantech funds, or securitization of inclusive green assets. But, in reality, the majority of assets are invested in government bonds (about 33 percent at the end of 2013), with almost none in alternative asset classes such as private equity.

Given Kenya's rapidly growing asset base, the need for increased asset diversification will likely be one of the key drivers for new green and inclusive product development. Fund managers are expected to become critical enablers in the development and management of investments in the inclusive green space, because individual pension funds may not have the size and capacity to evaluate and make such investments on their own, but would invest using funds and other investment instruments.

There are some limited examples of green and low-income housing investments in pension fund portfolios, but they are incidental rather than strategic and systematic. One of the few examples is the Local Authority Pension Trust's investment in solar street lighting (see case study below) and the significant investment by the Kenya Power and Lighting Pension Fund and the Nation Media Group in a new East Africa-focused fund manager.[88]

TABLE 9: REGULATORY INVESTMENT POLICY GUIDELINES

ASSET CLASS	MAX LIMITS
Domestic fixed income	40%
Domestic equities	30%
Offshore (global listed equities)	10%
Alternatives (private equity, property, infrastructure, derivatives)	10%
Cash	10%
Total	100

SOURCE: Retirement Benefits Authority (2014)

TABLE 10: AVERAGE PENSION FUND ASSET ALLOCATION HELD BY FUND MANAGERS AS AT DECEMBER 2013

ASSET CLASS	MILLION KSH	% OF TOTAL ASSETS
Government security	217,166	38
Quoted equity	150,299	27
Guaranteed	71,475	13
Immovable (property)	38,959	7
Fixed deposits	33,139	6
Fixed income	29,785	5
Offshore	15,290	3
Cash, demand call	6,361	1
Unquoted equity	2,364	0
Total	564,838	100

SOURCE: Retirement Benefits Authority (2013)

Lighting Kenya's counties: Pension fund investment in green energy

The Local Authority Pension Trust is the second largest pension fund in Kenya, with assets of 28 billion Kenyan shillings ($280 million). The Local Authority Pension Trust retirement fund and the Kenya county councils have formed a pioneering joint venture to finance and develop green street lighting across 19 counties. GIZ is providing technical support for this project.

As Kenya transfers administrative power from the federal government to local government, it is also working to improve local infrastructure, schools, hospitals, and other sectors. Among other things, the counties are working to improve local security and accessibility by improving street lighting in cities. In many cases there is no street lighting at all. In doing so, the county governments are trying to move away from traditional energy sources, and are exploring the feasibility of green technology, both in terms of environmental sustainability, reliability of supply, and long-term cost efficiency.

The counties, through their umbrella organization, identified the Local Authority Pension Trust as their partner for this venture. To date, one county, Narok, has installed street lighting as a test case, with the Local Authority Pension Trust paying the upfront costs using its corporate social responsibility budget (about 250,000 Kenyan shillings per pole). The revenue model is based on selling commercial advertising space on the lamp poles and the return on investment has been above market rate. Based on this successful test case, the Local Authority Pension Trust and the county councils are developing a joint financing model to scale up this investment across the counties.

POLICY AND REGULATION

According to the Retirement Benefits Authority's 2014-2019 Strategic Plan, pension savings are expected to increase from 17 percent to 30 percent of GDP by 2019, playing an important role in raising institutional capital to increase Kenyans covered by pension savings, deepening the financial markets, and contributing to funding the country's development needs.[89] The 30 percent projection is still below the average rate of developed market pension savings to GDP (the Organization for Economic Cooperation and Development country average is 70 percent),[90] but it continues on an upward trajectory and is an important indicator of a country's ability to invest in infrastructure and other developmental projects.

Policy and regulation can be used to drive consolidation and enable fund managers and retirement funds to move capital into the green and inclusive economy. Retirement funds are achieving high real returns – between 4 percent and 6 percent above inflation – through investments in traditional debt instruments (treasury bills, treasury bonds, and corporate debt). During the interview process it was suggested that the pension industry should engage with policy makers to lower the real interest rate on traditional debt assets to encourage proper diversification and channel more capital into the inclusive green economy.

There is currently no provision in the pension policy or regulation on the relevance of ESG factors in investment decision making. Environmental risk factors are briefly covered in the Retirement Benefits Authority's Strategic Plan 2014-2019, but the plan does not make the link to investment management: "Environmental (ecological) factors: The effects of climate change affect food production in Kenya as elsewhere. Coupled with risks arising from pollution, life expectancies and consequently saving for retirement will be adversely affected. National Environmental Policy requires institutions to conserve the environment and address adverse effects of climate change. In this regard, Retirement Benefits Authority will consider environmental conservation initiatives, including but not limited to tree planting and use of green technology." In addition, there are currently no pension funds with an investment policy statement that includes a consideration of ESG factors, and there are no signatories to relevant international initiatives such as UNEP finance Initiative's Principles for Responsible Investment.

BARRIERS AND POTENTIAL SOLUTIONS

As stated above, fragmentation and short-term barriers in the retirement and fund management sectors lead to a short-term investment outlook, which hinders a longer-term product development. Regulatory reform to consolidate the pension industry will be a key driver for change. Market stakeholders have made the following suggestions:

- Continue to consolidate the pension fund industry at two levels. Small funds (about 1,500 plans with less than $55 million in assets under management) should move from standalone funds to umbrella funds. The top 20 largest funds should retain individual pension funds, but move their segregated money into pooled investment vehicles. At both levels, this will address the prevailing short-term reporting requirements and lack of skill and capacity, because fund managers would be more autonomous and able to reach economies of scale.
- Improve the efficiency of the training and professionalization of trustees as fund operations reach economies of scale during the consolidation. At present, trustees lack investment expertise. ESG could be an integral part of the training.
- Engage with policy makers on the interest rate policy adjustment to lower the high returns (returns of 12 percent, compared to inflation of less than 6 percent) on government bonds to encourage diversification and channel capital to the inclusive green economy.
- Create a regulatory requirement for ESG integration into the investment process and set a minimum required allocation for developmental mandates to improve awareness and expertise in inclusive green investment. The largest 20 pension funds could act as champions and lead the implementation using their internal capacity.

TABLE 11: EXAMPLE OF INCLUSIVE GREEN INVESTMENT THEMES IN AN INSTITUTIONAL INVESTMENT PORTFOLIO

ASSET CLASSES	EXAMPLES OF POTENTIAL SUSTAINABLE/ GREEN INVESTMENT THEMES
Cash	N/A
Fixed income	Green bonds, development bonds, infrastructure bonds
Equities	Broad ESG integrated funds, clean energy funds, sustainable agriculture funds
Alternative investments (private equity, infrastructure, property, hedge funds)	Private equity/venture capital funds targeting small businesses, cleantech entrepreneurs, women entrepreneurs
Commodities	Fairtrade
Property (immovable and shares)	Green buildings, low-income housing
Developmental mandate	Responds to investment opportunities arising from the developmental agenda, e.g., green infrastructure, small business and green job growth

SOURCE: Adapted from the Responsible Investment and Ownership Guide – A Guide for Pension Funds in South Africa (2013)

Pension fund ESG regulation in South Africa and Namibia

ESG integration and ESG mandates are two separate measures that can operate in conjunction with each other.

ESG integration refers to the integration of environmental, social, and governance criteria into investment analysis based on the belief that ESG issues drive financial returns.

South Africa has implemented policies and regulations that aim to achieve this for pension funds. The preamble of Regulation 28 of the Pension Funds Act (1956) states that "a fund has a fiduciary duty to act in the best interest of its members whose benefits depend on the responsible management of fund assets. This duty supports the adoption of a responsible investment approach to deploying capital into markets that will earn adequate risk adjusted returns suitable for the fund's specific member profile, liquidity needs and liabilities. Prudent investing should give appropriate consideration to any factor which may materially affect the sustainable long-term performance of a fund's assets, including factors of an ESG character. This concept applies across all assets and categories of assets and should promote the interest of a fund in a stable and transparent environment."

The regulation came into force in July 2011, with phased implementation over a number of years. Its effect on investment in the inclusive green economy is still a work in progress.

Developmental mandate refers to targeted financial investments into investments/projects that achieve specified developmental outcomes. Ideally, this should also be in line with the fund's strategic asset allocation and asset/liability profile, and subject to due diligence and other normal prudent investment standards.

In 2014, Namibia introduced a pension regulation that set out a minimum requirement for investment in unlisted equities, mandating all pension funds and long-term insurance organizations to place a minimum of 1.75 percent of assets in local unlisted investments.

In South Africa, the largest pension fund, the Government Employees Pension Fund ($120 billion in assets under management) has a developmental strategy that aims to place 5 percent of assets in developmental asset classes and an additional 5 percent in African unlisted investments. This has led to increased investment in these segments of the economy.

At the 4th Annual Africa Conference on investment in infrastructure, Arthur Moloto, Chairperson of the South African Government Employees' Pension Fund, said that the diversification of its investment portfolio was guided by its developmental investment policy, which rests on four pillars:

1. Investments in economic infrastructure.
2. Investments in social infrastructure (including health care, education, and affordable housing).
3. Investments in sustainability projects.
4. Investments in enterprise development and broad-based black economic empowerment.

3.3 Insurance Funds

MARKET COMPOSITION

Kenya had about 5,000 licensed insurance fund providers as of December 2013, including insurance companies, insurance intermediaries, and other service providers.[91] The industry's asset base has grown significantly, doubling in value from 150 billion Kenyan shillings in 2008 to 350 billion Kenyan shillings in 2013. A list of the largest insurance firms is included in Annexure K.

Similar to the pension fund asset base, the country's $3 billion insurance asset base has grown by about 20 percent annually for the last five years[92] and is emerging as an important long-term investor in the Kenyan economy, mainly supported by products with long-term capital such as life and retirement insurance. The sector has a large number of small firms and service providers, but, to a larger extent than in the pension sector, consolidation is already under way through a combination of company mergers and buy-outs. Recently, Old Mutual merged its insurance business with UAP's financial services, health, and insurance business. Following all regulatory and competition approvals, Old Mutual will own up to 60.7 percent of the UAP Group.[93] Furthermore, a proposed regulatory change for industry consolidation was put forward in June 2015 as part of the Finance Bill. The consolidation of the industry is an important precursor to enabling inclusive green investment. The average portfolio allocation of Kenyan insurance companies is similar to pension funds, with about 40 percent government securities, 15 percent equities, 16 percent property, 15 percent deposits, and 12 percent other.[94] No insurance funds in Kenya have an investment policy statement that considers ESG factors in asset management and investment activities.

INCLUSIVE GREEN INSURANCE

The insurance sector has an important role to play in developing insurance products that support the inclusive green agenda. Although insurance penetration stands at just 3 percent of GDP, covering 7 percent of the population, Kenya is East Africa's largest insurance market and among the top five insurance markets in Africa by penetration (after South Africa, Mauritius, Namibia, and Morocco).[95] The industry has primarily focused on the corporate and property market to date. Developing insurance products for low-income earners (micro-insurance), who make up the majority of the Kenyan population, is an emerging area for the industry. In response, the Insurance Regulatory Authority has drafted the Micro Insurance Policy Paper (2014) in preparation for the development of a legal and regulatory framework to adequately govern and allow for easy to understand, cost-effective products in this specialized market segment. In addition to micro-insurance in mainstream areas such as health and accidents, a small number of insurance firms provide new products in areas such as crop and livestock insurance for small-scale farmers (which helps farmers access bank credit), including insurance for nomad pastoralists for foliage availability, weather, warehouse facilities, and so on.

Micro-insurance products tend to focus on inclusivity, addressing issues such as disaster coverage, financial security, poverty reduction, economic growth, and improved access to health care for low-income households, which in many cases is intrinsically linked to green growth. For example, uplifting the financial status of small-scale farmers and pastoralists (it is estimated that small-scale farming generates 75 percent of Kenya's agricultural output and employs more than 50 percent of the rural population)[96] will help improve lives and protect the environment as the ability to invest in sustainable methods of farming and land use increases, and families can, for example, upgrade their energy sources from firewood (which, along with charcoal production, is one of the leading causes of deforestation in Kenya). Apollo Investment and Kilimo Salama are examples of East African insurance firms offering innovative insurance products for Kenyan farmers, including insurance of their inputs against drought and excess rain.

Insurance can also be a critical component in reducing risk in new areas of investment, such as green/infrastructure investments. For example, a leading Kenyan insurance company provided insurance for the exploration and drilling of geothermal wells in the Rift Valley.

BARRIERS AND PROPOSED SOLUTIONS

To support product development, market leaders have suggested the following focus areas:

- Insurance for small-scale farmers can unlock capital for this large but dispersed group in the Kenyan economy. A certain volume of business is needed for sales in this target market to be viable (for example, in the Indian market, at least 20,000 farmers are needed for it to be viable).[97] Expanding this product offering will require collaboration with banks and other financial institutions such as savings and credit cooperatives, microfinance institutions, and mobile money transfer providers to facilitate marketing, distribution, as well as premium collection and claims payment points.
- Developing feasible products in weather risk insurance will require massive investment in collecting weather data. The costs of this investment can be shared through collaboration between insurance firms and other potential users of such data (aviation, utilities, and mining sectors), in partnership with telecommunications companies (cell phone towers can host automated weather stations and transmit data).
- An appropriate policy framework is needed to ensure that the industry is regulated properly and that those selling financial products are not misleading customers who may be new to insurance products.
- New product development in emerging areas will require massive awareness-raising efforts in the target market. Better industry organization and collaboration between the largest insurance firms in Kenya and the Association of Kenyan Insurers is needed, with support from the Insurance Regulatory Authority in creating guidelines for appropriate and cost-effective products. The level of organization and coordination in the Kenyan banking sector, led by the Kenya Bankers Association, was highlighted as an example to follow.
- On the asset management side, continuing to consolidate the industry to achieve economies of scale, and introducing ESG and developmental investment mandates.

3.4 Capital Markets

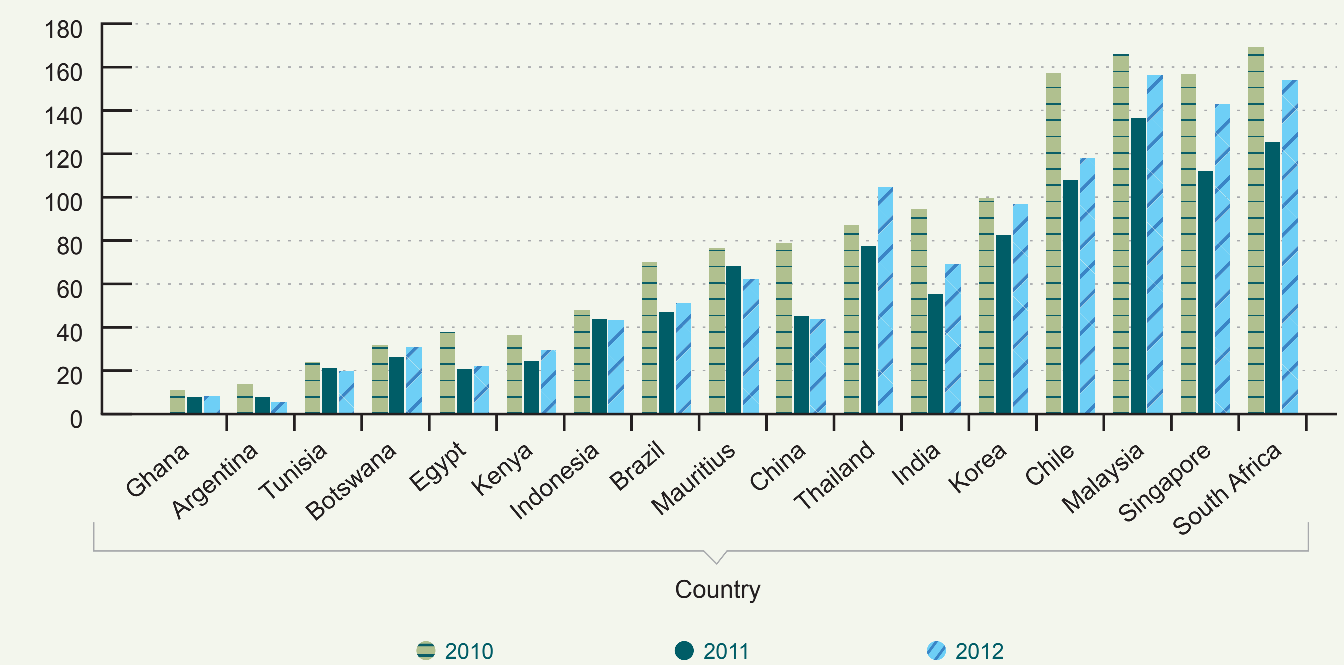
MARKET COMPOSITION

As of January 2014, the Capital Markets Authority regulated the Nairobi Securities Exchange (where the authority approves public offers and listings of securities traded), the Central Depository and Settlement Corporation, six investment banks, 13 stockbrokers, 18 investment advisors, eight fund managers, one credit rating agency, one capital venture fund, two collective investment plans, three authorized securities dealers, and four authorized depositories or custodians. The Nairobi Securities Exchange was de-mutualized (self-listed) in September 2014, becoming the second African stock exchange (after the Johannesburg Stock Exchange) to sell shares to investors.

Even though Kenya's capitalization is small compared to many high-income developing markets (see figure below), the Nairobi Securities Exchange is among the five largest exchanges in Sub-Saharan Africa and the largest in East Africa. It has market capitalization of $23 billion[98] and clear targets under Vision 2030 and the capital markets flagship program to become the gateway for businesses and investors in East and Central Africa.

As of December 2014, 61 companies are listed on the main exchange. The banking sector is the largest single sector, followed by large companies in general manufacturing and telecommunications. The exchange is fairly concentrated, with the top 10 listed companies representing about 50 percent of market capitalization. Foreign investors have increased steadily over the past five years and now represent about 50 percent of shares owned as of December 2014. In terms of the debt market, the share of government securities held by various investors has remained relatively unchanged over the past five years, with banks holding about 50 percent of the debt issued by government, followed by the local corporate retirement funds sector at 30 percent. In terms of stock composition, the domestic debt portfolio held in government securities included short-term debt in the form of Treasury Bills (26.8 percent) and long-term debt in the form of Treasury Bonds (73.2 percent). The return on government bonds has remained relatively high at 12 percent. The corporate debt market is comparatively shallow, particularly for long-term debt.[99]

FIGURE 4: STOCK MARKET CAPITALIZATION (PERCENTAGE OF GDP) OF SELECTED COUNTRIES



SOURCE: World Bank World Development Indicators (2015)

INCLUSIVE GREEN CAPITAL MARKETS

The Capital Markets Authority and the Nairobi Securities Exchange are progressive and sophisticated in their efforts to expand the capital markets as a percentage of GDP. The target, as articulated in the Capital Markets Authority's Master Plan,[100] is for equity market capitalization to increase from 50 percent in 2014 to 70 percent of GDP in 2030. Other targets include increasing the ratio of equity market capitalization to GDP from 50 percent in 2014 to 70 percent in 2030; increasing the ratio of corporate bond market capitalization to GDP from 2 percent in 2014 to 40 percent in 2030; increasing listings in the growth enterprise market segment from one at inception in January 2014 to 39 listings in 2023; and increasing assets under management in fund managers' collective investment plans in Kenya from $0.36 billion in 2014 to $1.97 billion in 2030. The share of infrastructure investment financed through the private capital markets (through listed equity, private equity, or bond issues) should increase from 4 percent (134 billion Kenyan shillings) as of January 2014 to 30 percent (2.4 trillion Kenyan shillings) by 2023). This will help ensure that Kenya continues to grow as a regional hub for local and international investors.[101]

POLICY AND REGULATION

In light of these expansion targets, the Capital Markets Authority and the Nairobi Securities Exchange have introduced reforms to increase the confidence of local, regional, and international investors, increase the diversity of investment opportunities, and bring in best practice governance and structures. Examples include:

- Harmonized rules for debt issuance across the East African region.
- Guidelines for the development of new investment vehicles, including tax breaks for such vehicles (asset-backed securities and, as recently proposed in the Finance Bill, tax breaks for green real estate investment).
- The small business listing segment, which launched in January 2014 (the growth enterprise market segment).
- The Nairobi Securities Exchange Leadership and Diversity Dialogue Series (see box on sustainable capital market initiatives).
- The Capital Markets Authority Corporate Governance Code (2014). Through an "apply or explain" framework, companies are recommended to report on their material environmental and social risks (see box on sustainable capital market initiatives).
- Work on the Stewardship Code for Institutional Investors (as a pillar of the Corporate Governance Code) was initiated in January 2015. The code aims to encourage institutional investors to responsibly manage and oversee assets by engaging with listed companies.
- The Nairobi Securities Exchange joined the UN-led Sustainable Stock Exchange Initiative in 2015.

Between 2005 and 2008, the government also put in place a number of fiscal incentives for issuers and investors in capital market instruments. These incentives focused on infrastructure and social services, with a maturity of three years or longer.[102] New inclusive green infrastructure investment instruments would qualify for the same tax breaks. For example, these fiscal measures include tax exemptions from investment income tax, withholding tax, and stamp duty, as well as infrastructure securities (asset-backed securities, infrastructure bonds, real estate investment trusts [including green trusts], and collective investment plans).[103]

While these tax incentives are potentially critical in the effort to channel capital to these types of investment vehicles, they have had limited impact to date, apart from infrastructure bonds (which have been oversubscribed). According to interviewees, the limited uptake is due to uncertainty regarding the Kenyan Revenue Authority's application of these tax breaks, resulting in uncertainty about the actual return profile of these investments. This, combined with reluctance among institutional investors to venture into new forms of investment, is why there is limited experience and expertise in structuring and approving such investment instruments.

BARRIERS AND PROPOSED SOLUTIONS

Given the fact that the green and inclusive growth agenda offers opportunities to support capital market growth targets, the following recommendations are made:

- Provide structured market support to bring new investment vehicles to market (asset-based securities, infrastructure bonds, and real estate investment trusts). While the Nairobi Securities Exchange and the Capital Markets Authority are ahead of the market, market players lack the expertise and structural incentives/support to develop these vehicles. These scalable products would allow domestic, regional, and international investors to channel capital to the inclusive green economy.
- Increase the uptake of integrated reporting and create a level playing field.
- Ensure that the Stewardship Code for Institutional Investors includes provisions for long-term risk assessment, investment horizons, and investment vehicles that actually move capital. Although the regulator and the Nairobi Securities Exchange are progressive in terms of market and product development, the risk from an inclusive green perspective is that environmental and social issues could become marginalized in new codes and standards, which would be a missed opportunity.
- As the Corporate Governance Code and the Stewardship Code have been developed as "apply or explain" frameworks, an important factor for success will be effective monitoring mechanisms, including provisions for integrated reporting, to assess progress on their implementation.

Sustainable capital market initiatives

The Nairobi Securities Exchange Diversity Series

Barclays Bank Kenya championed the Nairobi Securities Exchange Diversity Series, which engaged the chairs and company secretaries of all listed companies on the stock exchange in a series of dialogues and workshops. The initiative aimed to increase the diversity of company boards in terms of gender, age, disability, and expertise. At present, most board members have a background in law or accounting. The initiative has developed a Diversity Code of Conduct; a self-regulatory compact that is expected to be signed by all companies listed on the exchange in 2015.

The Capital Market Authority's Corporate Governance Code and Stewardship Code for Institutional Investors

The Corporate Governance Code, which will supersede the 2002 Corporate Governance Guidelines, was drafted after extensive engagement and rigorous input from listed companies, licensed intermediaries, government officials, academia, multinational and foreign investors, and global corporate governance experts. The code aims to address developments at national, regional, and international levels and strengthen the market against risks that threaten the financial system and stifle private sector dynamism, entrepreneurship, and ultimately, economic growth. The code also moves away from simple compliance and "box-ticking" towards an "apply or explain" approach.

The new code is organized into seven pillars: board operations and control; rights of shareholders; stakeholder relations; ethics and social responsibility; accountability, risk management, and internal control; transparency and disclosure; and supervision and enforcement. It proposes principles and makes recommendations under each pillar.

Under the "apply or explain" ethos, the Corporate Governance Code recommends that companies report on their material environmental and social risks; it is not strictly a listing requirement. The number of sustainability reports has been increasing, partly driven by the increased number of foreign investors on the Nairobi Securities Exchange. Of the 62 listed companies, about half produce some form of sustainability or Corporate Social Responsibility reports, although varying in quality, completeness, uniformity and reliability[104]. Two leading companies in the Kenyan market, Kenya Commercial Bank and Safaricom, are integrating ESG factors into their standard financial reports (integrated reporting). These companies are expected to be followed by others in the coming years.

The Institute of Certified Public Accountants also plays a leading role in moving towards an integrated reporting requirement for listed companies in Kenya. Its annual Corporate Reporting Awards (the FIRE Awards) in 2013 had the headline "Using integrated reporting to elevate your brand." In addition, the Global Reporting Initiative has established an African Chapter, operating out of South Africa.

One of the outcomes of the process of developing the Corporate Governance Code was to get the institutional investors of listed companies to engage on sustainability. A committee of pension, insurance, asset management funds, and listed companies was established in early 2015 to develop the Stewardship Code for Institutional Investors. The code was released for public comment in August 2015.

3.5 Private Equity

MARKET COMPOSITION

The Sub-Saharan African private equity market is dominated by South Africa, which has about $13 billion in assets under management. Investment activity contributed 0.13 percent to its GDP in 2013.[105] Although this is small in comparison to the United Kingdom and the United States, the South African private equity market is well established and significant in the region. It is also proportionally larger as a share of the overall economy than in China (0.07 percent of GDP) and Russia (0.01 percent of GDP).

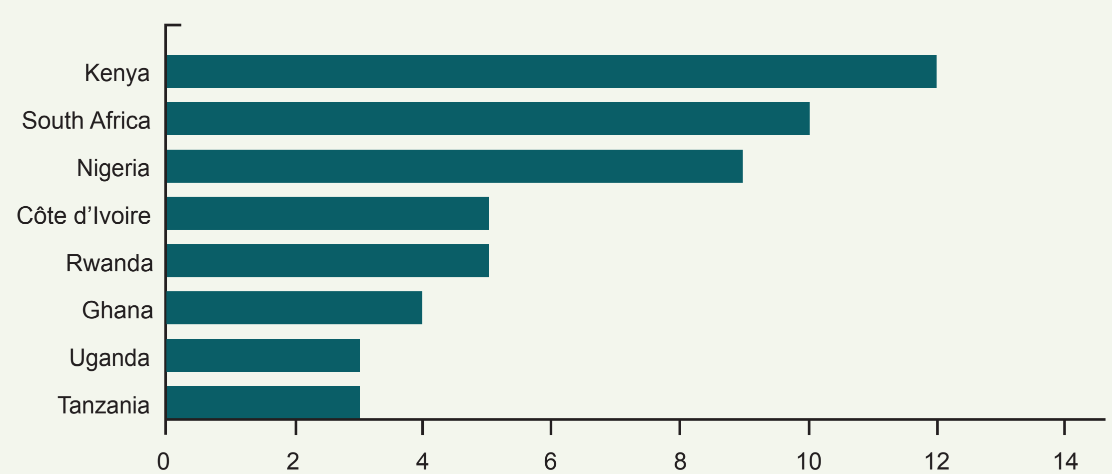
Similarly, interest in private equity investment in Kenya is steadily growing. In 2013, the country's private equity assets under management totaled 700 billion Kenyan shillings ($7 billion). In 2014, Kenya attracted more deals than any other country in sub-Saharan Africa.[106] According to Deloitte's Africa Private Equity Confidence Survey 2015, about 80 percent of survey respondents expect the private equity market in East Africa to grow further.[107]

Kenya has about 57 private equity funds with investment activities (see list in Annexure L). The funds invest in all sectors of the Kenyan economy, but most of the investments are in agribusiness, health care, and financial services. The largest deal in 2013 was an infrastructure investment of $70 million by Harith General Partners in the Lake Turkana Wind Project.[108]

Kenyan institutional investors' participation in private equity has been limited. The reasons for this, as stated in interviews with the East African Private Equity Association and fund managers themselves, are mainly due to lack of understanding of the asset class, particularly issues of liquidity, and preference for more familiar, low-risk/high-return government bonds and listed equities. There is also a perception that this asset class lacks transparency, and in some cases the share of financial benefits awarded to fund managers are out of proportion to overall returns. Increasing regional institutional investors' uptake largely depends on overcoming these barriers. Even though there are regulatory hurdles for pension funds when investing in private equity (for example, the Retirement Benefits Authority must approve the investments), this was not identified during the interviews as the main barrier preventing investment in the asset class. The Retirement Benefits Authority is reviewing proposals to remove the steps of regulatory approval and establish private equity as an asset class on its own under the Investment Policy Guidelines.

According to the Emerging Market Private Equity Association, private equity fund managers raised $4 billion for funds focused on Sub-Saharan Africa in 2014. This is the highest annual total since the association started tracking fundraising data in 2006 and nearly 1.5 times higher than the last record of $2.6 billion raised in 2006.[109] Most of the capital was raised from governments and development finance institutions in Europe and the United States.[110] But, according to the East Africa Venture Capital Association, interest from domestic institutional investors is increasing. Kenya Power and the Nation Media Group recently made a significant investment in a new East-Africa-focused fund manager.[111] Private equity funds and their association, the East Africa Venture Capital Association, are working to increase domestic investment. The association hosted its first conference in Nairobi in June 2015.

TABLE 12: PRIVATE EQUITY DEALS BY SUB-SAHARAN AFRICAN COUNTRIES (2013)



SOURCE: Deloitte (2014), East African Private Equity Confidence Survey

INCLUSIVE GREEN PRIVATE EQUITY INVESTMENTS

Private equity is an interesting asset class for inclusive green growth because it has a long-term investment horizon and a relatively high acceptance of risk. It invests in market segments with high inclusive green growth potential, such as small business growth across all sectors; capital-intensive and large infrastructure projects meeting national requirements (geothermal or wind projects supplying electricity into the national grid); and cleantech, start-ups, and social entrepreneurs (typically under a venture capital or impact investment mandate). Private equity funds' main areas of investment align with the MTP2's sector priorities.

Private equity fund managers are also closely involved in managing the business, contributing significant technical expertise and strategic guidance. Fund managers who are knowledgeable about green and inclusive measures can bring this expertise to the company's management. In line with this, each fund typically has stringent environment, social, and governance measures that are put in place at a portfolio level during the life of the investment, particularly if the fund is backed by development finance institutions.

The venture capital and private equity industry has been a significant investor in the green/cleantech sector globally,[112,113] but cleantech has attracted relatively little capital from fund managers in Africa to date. Europe, North America and Asia receive the bulk of these investments, while the rest of the world (including Africa) hovers between 0 percent and 6 percent, according to Prequin's research in 2012.[114]

There is no commercial private equity fund manager with an explicit green inclusive mandate in Kenya or the East African region. But there are a number of commercial cleantech/renewable energy funds with a pan-African mandate, including Inspired Evolution Investment Management ($100 million in assets under management, the recently closed Actis pan-emerging market energy fund ($1.15 billion), and Lereko Metier's Sustainable Capital Fund (closed in 2013 at $67 million). Vantage Capital Group launched its renewable energy debt fund with a target of 2.2 billion South African rand ($183 million) to invest in debt in renewable energy projects, with a focus on South Africa.

There are also a number of infrastructure-focused pan-African funds: Harith is a South African-based infrastructure fund with a pan-African mandate that has invested in green infrastructure in Kenya with African pension funds. Industry reports suggest that the greatest challenge for infrastructure funds is unreliable policy frameworks, which make it difficult to implement infrastructure projects in a timely and profitable way.[115]

Impact investment is gathering increasing interest among investors across Africa according to a recent Ernst & Young report.[116] Impact investing aims to have a positive social and/or environmental impact while generating a profit. ResponsAbility, Acumen, and LeapFrog Investments are examples of such funds with investments in Kenya. They have invested in micro-insurance companies, low-cost housing, manufacturers and distributors of cleantech equipment, and other social entrepreneurs.

For example, in 2015 ResponsAbility launched a new investment fund (current commitments of $30 million) dedicated to providing debt financing to companies that promote access to decentralized modern energy solutions, primarily in Africa and Asia.[117] LeapFrog is one of the world's largest private equity impact funds, with investments in financial services businesses, mostly insurance companies, in Africa and Asia. It successfully closed its second fund in 2014 with $400 million in commitments. LeapFrog investments in East Africa include Apollo Investment (one of the top three investment companies in East Africa) and Resolution Insurance.[118]

As a shareholder, LeapFrog, in addition to financing, has brought expertise in micro-insurance product development and supported the development and launch of micro-insurance products in East Africa.[119]

BARRIERS AND PROPOSED SOLUTIONS

Investment in private equity by institutional investors in Kenya is nascent. The sector's challenges are largely related to lack of understanding of the asset class and structure, and preference for more familiar and low-risk/high-return government bonds and equities.

The establishment of the East Africa Venture Capital Association in 2013 and the significant number of new managers entering the industry will help the industry develop and grow. The East Africa Venture Capital Association is developing a strong awareness-building agenda and training program for private equity investors, regulators, policy makers, and industry players.

Barriers for the private equity funds themselves in identifying inclusive green investments include:

- Relatively higher returns in traditional sectors.
- Entrepreneurs lack the experience needed to package and present themselves to investors.
- Policy uncertainty hinders investments in infrastructure funds.

3.6 Savings and Credit Cooperatives

MARKET COMPOSITION

Savings and credit cooperatives are emerging as important non-banking, micro-savings institutions in Kenya. The industry's total assets grew by 14 percent from 294 billion Kenyan shillings in 2012 to 335 billion Kenyan shillings in 2013. There were 1,955 active cooperatives in Kenya by the close of 2013.

Savings and credit cooperatives are different from banks in that they are nonprofit financial cooperatives (typically offering lower fees and interest rates than banks) owned by their members and governed by a board of directors elected by, and from among, those members. Usually there is a common bond among the members of a savings and credit cooperative, such as belonging to the same organization or living in the same area. They are easy to establish and can provide a critical source of funding for families, farmers, and other entrepreneurs that would not be able to access traditional bank loans. Membership in Kenya's cooperatives grew from 2.97 million in 2012 to 3.31 million in 2013.

In the past, these institutions were difficult to govern, but the Savings and Credit Cooperative Societies Regulatory Authority, established in 2010, has improved the sector's governance and supervision. The Savings and Credit Cooperative Societies Act (2008) and regulations stipulated prudential norms and operation requirements to enhance the financial stability of the deposit-taking cooperatives. Requirements include capital adequacy, asset quality, and liquidity. Profitability, while not a regulatory requirement, is implied to ensure the savings and credit cooperative's financial and operational sustainability.[120]

Savings and credit cooperatives are a rapidly increasing market segment that has proven critically important for inclusivity. Further engagement with this market segment is needed to determine ways to increase its effect on green development through collaboration with relevant agencies and organizations.

3.7 Other Sources of Capital: Foreign Direct Investment

MARKET COMPOSITION

Unlike other financial flows, FDI operates largely independently of domestic financial and capital markets, often emanating from multinational organizations. Such investment can make an important contribution to sustainable development if investors follow social and environmental standards of good corporate behavior. Kenya's domestic investment authority, KenInvest, has an important role to play in supporting the alignment of such investments with sustainable development.

FDI has the potential to play an important role in sustainable development, but it is not without its challenges. The Kenya Revenue Authority's 2013 audit of 40 multinationals uncovered widespread transfer pricing abuse (the practice of declaring losses that effectively disqualify them from paying income tax). Ten multinational companies were forced to rewrite their financial statements, turning losses of 8 billion Kenyan shillings ($78 million) into profits that have yielded 4 billion Kenyan shillings ($39 million) in tax revenues.[121]

FDI into Kenya has been low since the 1980s (below 1 percent of GDP) and is relatively small compared to other African countries, but it has been on an upward trajectory in the past five years, nearly doubling from $258 million in 2012 to $514 million in 2013.[122] Increased FDI is also one of the government's targets in Vision 2030. According to a 2015 report by PricewaterhouseCoopers, Nairobi is likely to become Africa's top investment destination. FDI inflows to Kenya are projected to average $1.3 billion annually between 2013 and 2018, placing Kenya on par with Tanzania and Uganda.[123]

The main sectors that attract foreign investment into Kenya are financial services, agriculture, real estate, manufacturing, retail, technology, and construction. This is market-seeking FDI, which capitalizes on the fast-growing domestic and regional market. However, resource-seeking foreign investment has also increased in recent years due to the discovery of commercially viable oil and gas. The government is working to put prudent legal frameworks (such as the Mining Bill of 2013) and a sovereign wealth fund in place to ensure the sector is governed properly, local content clauses are included, and funds are preserved for future generations.

The Kenyan government is working to attract FDI by improving regulatory frameworks and addressing challenges in the following areas: ease of doing business, reliable and affordable power supply, transportation infrastructure, and streamlined tax administration, as well as issues relating to corruption.[124] The government has introduced the PPP Act, the Competition Commission Act (2012), and a new draft National Investment Policy to update and ensure effective and coherent frameworks and incentives for investors.

INCLUSIVE GREEN FDI

All projects and companies in Kenya, whether foreign or national, have to comply with environmental and labor standards. Investors wanting to benefit from the available investment incentives have to go through an investment registration process that includes a health, safety, and environmental impact screening and an environmental impact assessment. The National Environment Management Authority is the principal environmental regulatory agency in charge of granting licenses and monitoring compliance. KenInvest and the Ministry of East Africa Affairs and Tourism are drafting a national investment policy document and a green investment guide, which will collate all the various regulations relating to the environment, water, air, climate adaptation/mitigation, wildlife, and other issues to make environmental and social requirements clearer for investors.

Many foreign-owned companies in Kenya go beyond regulatory compliance by applying international standards relating to business ethics, environmental policies, community development, and corporate governance. For example, in the financial sector, a recent report by the Kenya Bankers Association mentions foreign-owned Standard Chartered Bank as one of the leaders in sustainable finance in Kenya.[125] In cases where foreign companies do not comply with Kenya's national standards, KenInvest, the National Environment Management Authority, and other relevant agencies work together.

KenInvest aims to increase the number of investable green and inclusive investment projects for foreign investors. As of March 2015, it has between 60 and 70 investment-ready projects. Other than the geothermal and wind projects, very few are categorized as green and inclusive. Incentives are needed to ensure that inclusive green projects offer competitive returns.

BARRIERS AND PROPOSED SOLUTIONS

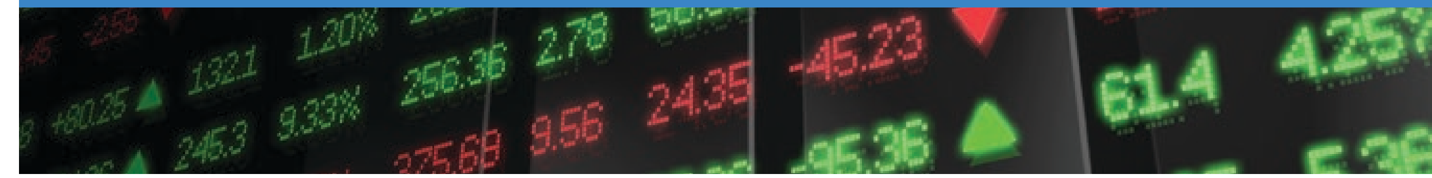
The barriers and solutions for aligning FDI with sustainable development and inclusive green growth are similar to those for promoting the growth of inclusive green sectors in general, as well as compliance with existing environmental and social regulations (see Section 2.3). Trade agreements and specific FDI tax incentives can be used to further support this alignment. Also helpful are the rules governing originating financial and capital markets; U.S. regulations such as the Foreign Corrupt Practices Act governing the international operations of U.S.-based corporations; Singapore's new legislation governing trans-boundary haze; and financial regulators with international footprints, such as the China Banking Regulatory Commission's Green Credit.

3.8 Overview of Current Inclusive Green Investment Products in Kenya

Inclusive green financing and investment is in its infancy in Kenya, but strong leadership and interest across the financial sector can increase the number of products and investments in this area. Kenya's green inclusive investment instruments are summarized in the table below.

TABLE 13: KENYA'S GREEN INCLUSIVE INVESTMENT INSTRUMENTS

FINANCIAL PRODUCT	AVAILABILITY IN THE KENYAN MARKET	COMMENT
Commercial green lending	Limited. About $50 million in total from CFC Stanbic, Cooperative Bank and Housing Finance. Can be compared to the total gross loan portfolio of Kenyan banks of $17 billion	Even though there are many examples of grant funding from Kenyan banks for green inclusive projects, the availability of commercial green credit lines is still limited. It is also difficult to quantify because funding may be in mainstream lending portfolios and not specifically defined as green financing. There is also limited participation by Kenyan banks in green infrastructure project financing. The only example identified as part of this research was CFC Stanbic acting as the lead advisor in a wind project
Green mutual funds	No green funds currently exist	Products have not been developed due to limited demand from the institutional and retail market
Green private equity funds	No commercial-level return green private equity fund focused specifically on the Kenyan market A number of pan-African general infrastructure and cleantech funds are available	There are a number of inclusive green "impact funds" in the Kenyan market, which may or may not be feasible investments for Kenyan institutional investors
Green bonds	No green bonds have been issued to date	The government has issued infrastructure bonds. Underlying investments include, for example, both geothermal and fossil-fuel-based power developments
Risk guarantees for new green sectors such as geothermal and wind	Available on an ad hoc basis	Central Bank of Kenya, IFC, and the African Development Bank provided such risk guarantees. Local insurance firms have provided insurance for geothermal well drilling
Direct green investment by pension and insurance funds	Limited	Only one example identified as part of this research: Local Authority Pension Trust green street lighting



Chapter 4: Barriers and Potential Solutions for Inclusive Green Investments in Kenya

4.1 Barriers

During the interviews and roundtable discussions, participants identified the following barriers to inclusive green investments across the financial services sector:

- **A short-term investment horizon** prevails across the value chain, which means that long-term considerations such as environmental and social sustainability are not factored into investment and strategic planning. Creating economic value over the longer term is rarely recognized and, more importantly, not rewarded by any stakeholders.
- **Fragmentation of the institutional investor market** prevents economies of scale, with little time and effort invested in product development and thought leadership. The fragmented structure of the pension fund sector (1,500 plans, most of which have less than 5 billion Kenyan shillings under management) constrains the flow of capital toward alternative assets. Even if appropriate green investment vehicles were developed, most pension funds would not be able to invest because they do not have the scale and capacity to understand and evaluate such new investments.
- **There are relatively higher returns in traditional sectors and asset classes.** The system rewards investments in safe and traditional assets (government bonds and listed equities). The high returns on government bonds could "crowd out" investments in other asset classes.
- **Lack of experience and expertise in structuring new investment vehicles** for the inclusive green pipeline. Kenya has a potential green infrastructure pipeline that presents opportunities for local banks and institutional investors to participate if investments are structured correctly upfront. This includes attaining an acceptable level of risk, and developing an analytical framework that shows the real risk-adjusted return for these investments (long-term environmental and social risks).
- **Limited policy and regulatory incentives, including fiscal incentives, to drive investment towards a sustainable finance model.** A number of high-level policy papers confirm the government's commitment to green and inclusive growth, but work to integrate such issues into sector-specific implementation plans is still under way. The Medium Term Plan's flagship programs are not integrated into the sector strategies, arguably resulting in less effective implementation. There is currently no public policy or regulation in the financial and capital markets that drives or incentivizes investments in the green economy.

4.2 Potential Solutions

The following proposals on ways to unlock capital to the green inclusive economy in Kenya are based on participants' recommendations during interviews and roundtable discussions, as well as suggestions developed during the research process:

- **Develop market-wide cohesive policy and regulation.** Coordination across the financial services sector is needed to agree and establish high-level policies and principles for long-term sustainable investment. Effective monitoring and evaluation mechanisms will be critical for successful implementation. As discussed in Section 3, South Africa and Namibia have successfully applied regulations in the institutional investor sector that require ESG integration and developmental mandates. Such regulation creates a level playing field and reduces the pressure on these asset classes to demonstrate short-term returns to compete with more traditional investments. Similar successful regulation in the banking sector can be seen in China and Brazil. The Kenya Bankers Association and the Central Bank of Kenya have already started discussing such measures.

- **Engage with policy makers on fiscal policy adjustments.** Ensuring that existing tax incentives (asset-backed securities, infrastructure bonds, and so on) are also applied to relevant green and inclusive investment vehicles. Fiscal incentives can further channel capital to the green inclusive economy, such as government (Central Bank) guarantees and regulatory support for lowering the risk weighting or adjusting capital adequacy requirements for such projects.
- **Implement an effective and stepped approach to regulatory enforcement of the market-led Sustainable Finance Principles in the banking sector.** This includes a clear timetable to move from capacity building to direct regulation. As the Kenyan financial sector is bank-led, successful implementation, including monitoring and enforcement systems, will have a significant knock-on effect, both in the banking sector and the broader financial sector.
- **Consolidate the pension and insurance sectors and pool assets.** The smaller funds could move from standalone funds to umbrella funds, while the largest funds move their segregated money into pooled investment vehicles to create economies of scale.
- **Provide structured market support to develop institutional investment vehicles.** In South Africa, the relevant industry associations used joint, cross-sectoral working groups to help banks and fund managers develop the investment instruments. Individual firms then finalized the competing products and put them on the market.
- **Raise awareness and provide technical training across the financial services sector.** To achieve the market shift, banks, fund managers, analysts, insurance, pensions, and companies need to upskill in areas of environmental and social/inclusive green investment strategies and techniques. The suggestion from the market was to identify how to pool resources in terms of expertise and capacity building to reduce this cost.
- **Seek opportunities to collaborate across the sector.** There are opportunities in the Kenyan financial market for the banking, pension, and insurance industries to collaborate and jointly finance projects in the short, medium, and long term. Sectors could work together to identify and review the inclusive green investment pipeline, and consider the best funding options for the short, medium, and long term. Potential participants in such a task force could include the government, investors (short and long term), project developers, and business incubators. The sectors could collaborate to develop new capital market and other investment vehicles; banks and insurance companies could work together to expand the micro-insurance market, as well as insurance for investment in renewable energy; and the government and relevant sectors could collaborate in the regulatory space to create cohesive market-wide policies that further enable such investments.

CHANGES NEEDED IN OTHER PARTS OF THE VALUE CHAIN

Addressing existing market gaps, not all of which are within the direct control of the financial sector, will also help develop the green inclusive economy. The following recommendations aim to address these gaps:

- **Address challenges with existing environmental and social regulation.** Weak environmental and social regulatory enforcement exposes investors and financiers to potential risks that may become future critical liabilities. As regulation in the financial sector becomes more advanced, financiers will emerge as increasingly important enforcement stakeholders. Increasing the focus on the business case for good environmental and social management for companies, as opposed to a box-ticking exercise, will be important. Policy makers and regulators should consider the advantages of extending liabilities for sustainability impacts to financiers, using lender liability regulation as a tool for increased focus in this area. Further collaboration with the National Environment Management Authority may also be an advantage.
- **Conduct awareness-raising campaigns for the public and media.** For many of the suggested step changes to be effective, increased public awareness on the relevance of ESG issues and support for civil society groups is needed to galvanize interest. This could, for example, include pension plan members, who are already actively querying the investments of pension funds in Kenya. National sensitization campaigns will also help give legitimacy to green growth businesses. Kenya Commercial Bank, for example, already supports journalist training in the area of sustainability.
- **Align FDI with the Kenyan inclusive green growth agenda:** As FDI flows into Kenya continue to grow, it will be important to ensure good sustainability practices and alignment with Kenya's inclusive green growth agenda for this source of capital. KenInvest is already playing an important role in this regard.

4.3 Suggested Actions

The framework presented here prioritizes the recommendations put forward, assessing each suggestion's relative level of effort, expected impact, and estimated timeline for implementation. Each recommendation set out in the previous section has been evaluated and the recommendations below require the least effort and are likely to have the most impact on increasing inclusive green investment in the domestic financial sector in Kenya.

RECOMMENDATION	COMPARATIVE LEVEL OF EFFORT	EXPECTED IMPACT	TIMELINE FOR IMPLEMENTATION	STAKEHOLDER
1. Structure market support to develop investment vehicles	Low	High	Short term	Cross-sectoral
2. Collaborate across the financial sector for project financing (short, medium, and long term), starting with the largest actors	Low	High	Short term	Cross-sectoral
3. Consolidate the pension and insurance industry	Medium	High	Medium term	Retirement Benefits Authority and pension industry
4. Enforce market-led Sustainable Finance Principles in the form of direct regulation	High	High	Medium to long term	Central Bank of Kenya, Kenya Bankers Association and banks
5. Develop a cohesive market-wide policy, such as a financial sector sustainability charter	High	High	Medium to long term	National Treasury in consultation with regulators and market stakeholders
6. Engage with policy makers on fiscal policy adjustments, including incentives for green inclusive investment vehicles	High	High	Medium to long term	Financial sector and National Treasury

Chapter 5: Conclusions and Next Steps

5.1 High-Level Commitment in the Kenyan Financial Sector

The Kenyan financial sector is rich with opportunities for inclusive green growth. During the CEO roundtable meeting, leaders in the sector voiced their interest in and commitment to promoting this type of growth:

Key messages from the CEO meeting

- **Sustainable finance cannot be achieved without financial inclusion:** Efforts to increase sustainability have to be framed within the local context. Financial inclusion, innovation, and sustainability should align with Vision 2030's development paradigm.
- **Collaboration is needed across the entire financial sector investment value chain:** Banks, pension, insurance, capital markets, advisors, regulators, and the government have an opportunity to work together to unlock capital for short-, medium-, and long-term financing of green and inclusive economic growth, while sustaining their core business. The abundant supply of capital and innovation in the Kenyan domestic financial sector needs to be matched with viable, existing sustainable investments.
- **A short-term outlook is no longer viable:** The financial sector and regulators collectively need to address systemic issues – structural, institutional, and financial instruments and incentives – that create a short-term investment focus.
- **Raising awareness and building capacity are essential:** The financial sector needs to raise awareness on the relevance of financing long-term inclusive green investments and available products, both internally and with potential clients across all segments of the value chain.
- **Partnerships, action plans, and outcomes are necessary:** A forum for financial industry-wide engagement, involving all relevant stakeholders, including regulators, will build cross-sectoral linkages and facilitate catalytic action. Broadening the discussion to include legislators and the wider political landscape will be an important next step.

5.2 Potential Next Steps

Participants in the CEO and technical group meetings proposed the following next steps:

- **Identify leaders and champions:** Identify individuals and institutions to lead this process at a policy, regulatory, and private sector level. In addition, industry associations and other participating organizations could nominate individuals for the steering committee and work streams. Where possible, capacity should be leveraged from existing financial sector initiatives, such as the Institutional Investor Stewardship Code.
- **Form a working group:** Establish a working group to focus on a collective "integrated" approach across the Kenyan financial sector to increase investments in the inclusive green economy. Coordinated action will ensure that the financial sector demonstrates success as a whole. Cross-collaboration would help identify the size and type of inclusive green pipeline needed and the funding required over the short, medium, and long term. This will pool capacity for more effective and efficient engagement with the financial sector policy maker. Coordination needs to happen with the right mix of people present, including regulators to ensure an appropriate enabling environment for such investments.

  The county governments will also need to be consulted to determine how they can help promote and implement inclusive green investment strategies at a local level, and integrate these strategies into the local governments' budgets and procurement processes.
- **Establish a sector-wide implementation roadmap:** Align the Kenyan financial sector with long-term inclusive green growth.

Areas where further research may be beneficial include:

- Lessons learnt from other markets in relation to certain sustainable investment measures that may be considered for Kenya and their suitability and tailoring to the local context.
- Baseline data on Kenyan banks' green lending.
- ESG training needs assessment for different actors in the financial sector.
- Targeted research on the inclusive green investment pipeline in terms of size, sectors, and financing needs.

Annexures

A. Glossary

Cleantech: Products, services, and processes that either directly reduce or eliminate ecological impact, or provide performance at least matching that of traditional alternatives while requiring less, or a different mix of, resource inputs. Cleantech is an investment theme rather than an industrial sector. It may include investments in agriculture, energy, manufacturing, materials, technology, transportation, and water. In 2005, cleantech was North America's fifth largest venture capital investment category, attracting more than $1.6 billion.

Climate change: Defined by the United Nations Framework Convention on Climate Change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods."

Climate risks: Risks stemming from climate change that may affect companies, industries, communities, and whole economies. The five key areas of business risk associated with climate change are regulatory, physical, litigation, competitiveness, and reputational.

Corporate governance: The procedures and processes according to which an organization is directed and controlled. Corporate governance structures specify the distribution of rights and responsibilities, including the board, managers, shareholders, and other stakeholders. They also lay down the rules and procedures for decision making. Best-practice corporate governance may be determined by both national and international standards.

Corporate social responsibility: A business approach that takes into account economic, social, and ethical effects to mitigate risk, decrease costs, and improve brand image and competitiveness. This approach may be implemented using a comprehensive set of policies and procedures relating to all levels of business activity, including corporate governance, employee relations, supply-chain relationships, customer relationships, environmental management, philanthropy, and community investment. Investors, including institutional investors like pension funds, can use their leverage (through responsible investments) to encourage companies to adopt corporate social responsibility practices. Such practices have been linked to improved financial performance.

Developmental investment: Targeted financial investment that prioritizes the allocation of capital to investments and projects that achieve specified developmental outcomes.

Developmental mandate: Discretionary investment of a proportion of assets in specialized strategies as part of a diversified portfolio consistent with the fund's strategic asset allocation and asset/liability profile, subject to due diligence and other prudent investment standards.

Economically targeted investment: An investment that aims to achieve a market return while improving economic conditions by, for example, providing private housing or employment opportunities.

Environmental, social, and governance (ESG): The environmental, social, and governance issues that investors consider in the context of corporate behavior, alongside traditional financial criteria in managing and selecting investments. No definitive list of ESG issues exists, but they typically:

- Are often considered non-financial or not material.
- Are medium- to long-term investments.
- Have qualitative objectives that are not readily quantifiable in monetary terms.

- Have externalities (costs borne by other firms or by society at large) that are not well captured by market mechanisms.
- Have a changing regulatory or policy framework.
- Are susceptible to unknown risk as patterns arise throughout a company's supply chain.
- Are a public concern.

ESG integration: The active investment management process that includes an analysis of environmental, social, and governance risks and opportunities.

Green bonds: The Green Bond Principles recognize four types of green bonds: green use of proceed bonds, green use of proceed revenue bonds, green project bonds, and green securitized bonds. Bond issues can be tailored to the needs of diverse financial market players and support a range of public and private sector projects. Bonds can be issued by municipal or federal government, as well as by private sector entities.

Green resilience: The ability of a system to continue operating as external conditions change. It is able to adapt to changes in temperature, precipitation, and other variables. In the context of climate change, green resilient infrastructure would be able to operate at its design capacity despite sharply changed climatic conditions.

Impact investing: Investing strategies that provide capital to companies working to generate a financial return along with significant social and environmental benefits.

Inclusive green investment: Green investment supports economic growth in a clean, resilient, and sustainable manner – such as initiatives to encourage more efficient use of resources, reduce pollution, and mitigate environmental damage. Inclusive investment serves not only investors, but the broad interests of society, particularly low-income and underserved segments of the population. Inclusive green investment is an important part of the broader ESG considerations that underpin sustainable investment at the global level.

Prescribed assets: Assets/capital that are required by regulation or policy to be directed into government-selected assets, sectors, or projects.

Short-termism: The bias of some investors towards short-term performance and share price appreciation rather than long-term investment performance. This may put pressure on fund managers, companies, and other service providers to make decisions that boost short-term accounting measures of profitability, rather than long-term sustainable economic profitability.

Socially responsible investments: Investments that seek to achieve social, environmental, and financial objectives.

Stakeholders: Individuals or organizations with an interest in the actions and effects of an organization. These may be customers, service providers, special interest groups, nongovernment organizations, regulators, policy makers, asset owners, financial institutions, members of the public, institutional investors, or labor.

Sustainable and responsible finance and investment: Investment processes and ownership practices that take environmental, social, and governance considerations into account in the belief that these can impact long-term financial performance.

SOURCE: IFC and POA (2013), *Responsible Investment and Ownership: A Guide for Pension Funds in South Africa*

B. Interviewees and Roundtable Participants

NAME	ORGANIZATION	POSITION
A.M Kariuki	KenInvest	Chief Compliance and Enforcement Officer
Abdalla Abdulkhalik	Gulf African Bank	Chief Executive Officer
Achim Steiner	UNEP	Executive Director
Aditi Maheshwari	IFC	Policy Officer
Alex Busisa	National Bank of Kenya	Country Credit Head
Andia Chakava	Alpha Africa Asset Managers	Managing Director
Arun Mathur	I&M Bank Limited	Chief Executive Officer
Ashok Shah	Apollo Insurance Company Ltd	Group Chief Executive Officer
Basilio Joshua	CPF Financial Services (Local Authority Pension Trust)	Head of Branch Network
Catherine Gachenge	KenInvest	Chief Analyst
Cecilia Bjerborn Murai	UNEP	Consultant
Charles Ogalo	Genesis Kenya Investment Management Ltd	Managing Director
Daniel Warutere	Capital Markets Authority	Assistant Manager, Regulatory Framework, Regulatory Policy & Strategy Directorate
Donald Ouma	Nairobi Securities Exchange	Head of Market and Product Development
Edgar Mokua	Bank of Africa	Head of Enterprise Banking
Edward Njoroge	Nairobi Securities Exchange	Chairperson
Edward Odundo	Retirement Benefits Authority	Chief Executive Officer
Edwin Induli	NIC Bank	Head of Risk Management and Compliance
Emma Caddy	Consultant	Kenya Bankers Association
Erastus Wahome	National Treasury	Chief Economist
Esther Muiruri	Equity Bank	General Manager
Fahima Zein	Genesis Kenya Investment Management Ltd	Chief Investment Officer
Felicity Perry	UNEP Inquiry	Coordinator
Fred Mburu	Apollo Asset Management	Chief Executive Officer
Gabriel Negatu	African Development Bank	Regional Director
Geraldine Kyalo	National Treasury	Policy Analyst
Gideon Chokah	Standard Chartered Bank Kenya Ltd	Director, Investors and Intermediaries, Transaction Banking
Gideon Kyengo	National Social Security Fund	Acting General Manager (F&I)
Grace Kibuthu Ogola	IFC	Securities Market Specialist
Habil Olaka	Kenya Bankers Association	Chief Executive Officer
Henry Ndede	UNEP	Coordinator, UNEP Kenya Country Program
Hosea Kili	Local Authority Pension Trust	Chief Executive Officer
Imran Khan	Britam	Senior Portfolio Manager
Jairus Muaka	Capital Markets Authority	Assistant Manager, Policy Analysis and Planning
James Ndwiga	Insurance Regulatory Authority	Assistant Manager, Actuarial Services
John Nzau	Commercial Bank of Africa	Assistant General Manager
Joshua Oigara	Kenya Commercial Bank	Group Chief Executive Officer
Judith Sidi Odhiambo	Kenya Commercial Bank	Director of Corporate Affairs

NAME	ORGANIZATION	POSITION
Kariuki Thande	IFC	Senior Investment Officer
Lydia Mwithiga	Jamii Bora Bank	Head of Investment Banking
Mahenau Agha	UNEP Inquiry	Head of Outreach
Manuel Moses	IFC	Regional Head
Margaret Osure	East and Central African Social Security Association	Secretary General
Martin Gitu	Central Bank of Kenya	Policy Analyst, Bank Supervision
Matu Mugo	Central Bank of Kenya	Assistant Director, Bank Supervision
Maurice Otieno	National Environmental Management Authority	Chief Environmental Planner
Morefu Barasa	EED Advisory	Principal
Moses Ikaria	KenInvest	Managing Director
Nahashon Wamugi	Cooperative Bank	Head, Corporate Credit Analysis
Nicholas Malaki	Pinebridge	Chief Investment Officer
Njuguna Ndung'u	Central Bank of Kenya	Governor
Nonnie Wanjihia	East Africa Venture Capital Association	Executive Director
Nuru Mugambi	Kenya Bankers Association	Director, Sustainable Finance Initiative
Patricia Kiwanuka	Association of Retirement Benefit Schemes	Chairperson
Patrick Huber	ResponsAbility Africa Ltd.	Regional Manager Africa
Patrick Mwangi	Habib Bank Limited	Chief Risk Officer
Patrick Obath	East African Business Council	Vice Chairperson
Paul Sigsworth	ICEA Lion Asset Management	Managing Director
Peter Ngeno	UAP Group	General Manager
Peter Odhengo	Greening Kenya Initiative	National Coordinator
Rajal Upadhyaya	Catalyst Principal Partners	Managing Director
Robert Kuloba	Insurance Regulatory Authority	Manager, Policy Research and Development
Rose Kinuthia	Kenya Commercial Bank	Chief Risk Officer
Rose Lumumba	IFC	Consultant
Ruth Barry	Cornerstones International	Portfolio Manager
Sammy Makove	Insurance Regulatory Authority	Chief Executive Officer
Shameer Patel	I&M Bank Limited	Chief Manager, Corporate and Strategic Planning
Shem Ouma	Retirements Benefit Authority	Head of Research
Simon Nyakundi	Association of Retirement Benefit Schemes	Council Member
Steven Wamathai	Genesis Kenya Investment Management	Investment Manager
Sundeep Raichura	Alexander Forbes Financial Services, East Africa	Group Chief Executive Officer
Tony Olang'	Local Authority Pension Trust	Project Manager
Wanjiru Kirima	IFC	Consultant

C. Interview Questions

NAME:

POSITION / DEPARTMENT:

CONTACT EMAIL / PHONE NUMBER:

DATE OF INTERVIEW:

General Questions

1 Please give us a brief overview: What is your role and the role of your department?

Definition

2 What does the term "green finance" mean to you?

3 Do you think Kenya's exposure to polluting and environmentally damaging investments could pose a systemic risk to the financial system and long-term growth?

Evaluation of current state/processes

4 Does your organization have a policy concerning the integration of ESG, green, or climate change factors into the investment decision-making process? If not, why not? If yes, how and to what extent? Are there any standards / regulations that enforce or hinder such policy?

5 Are there risk assessment methodologies or disclosure requirements that address long-term systemic risk factors? For example: Are financial market actors required to assess long-term, climate-related risks?

6 Do you practice environmental stress testing, e.g., for carbon prices?

Regulatory Barriers

7 In your opinion, what are the critical financial policies, regulations, guidelines, or practices that hinder the channeling of capital by financial institutions into the green economy?

8 What challenges do you face with respect to investing in green investments, e.g., climate resilient infrastructure?

9 There is concern that prudential regulation (e.g., Basel III capital and liquidity coverage ratio rules, rules on the matching of assets and liabilities of pension funds) might be inadvertently pushing institutional investors away from longer-term investments in infrastructure, particularly low-carbon and climate resilient infrastructure. Do you think this happens in Kenya? What could be done to prevent this?

Regulatory Solutions

10 If you could change and/or introduce any piece of financial regulation and/ or financial policy to make it easier to fund projects that support an inclusive green economy, what would the reform be?

11 How do you think financial regulators, policymakers, and private standard setters (such as investor-led initiatives) could potentially influence investment flows toward green finance opportunities?

12 What do you think it would take to fully integrate the sustainability dimension into the long-term financial agenda?

Optional Questions

What types of "green financial innovation" do you see emerging, e.g., green bonds?

Are there domestic industry accords, investor-led solutions, or "stewardship codes" that seek to promote low-carbon, climate resilient, or other sustainable development objectives? If so, how effective are these?

How can the practice of disclosure by corporations, financial institutions, and regulators evolve to strengthen market discipline for a sustainable financial system?

How much of a problem do you perceive short-termism to be? What actions can be taken to overcome it?

Some are concerned that fair-value or market-based accounting principles may have brought a greater focus on short-term market fluctuations. Do you think this has been the case?

D. Inclusive Green Policies and Regulations in the Real Sector in Kenya

STATE PROGRAM/STRATEGY/ ACTION PLAN	PROVISIONS	MAIN IMPLEMENTATION AGENCY
OVERALL NATIONAL PLANNING		
Population Policy for National Development	Recognizing the effect of rapid population growth on Kenya's development goals, the policy proposes a multi-sectoral approach with a focus on voluntary family planning	Ministry of Devolution and Planning
Physical Planning Act	Reserves land for open spaces, parks, urban forests, and green belts	Ministry of Lands, Housing, and Urban Development
Local Government Act (revised)	Maintains sewage systems, including removal and destruction of refuse and effluents	Ministry of Devolution and Planning
Arid and Semi-Arid Lands National Vision and Strategy: Natural Resource Management, 2005–2015	Sets out overarching principles and broad actions required to transform Kenya's arid and semi-arid lands into national wealth and employment creators	Ministry of Devolution and Planning
HEALTH		
Public Health Act	Sanitation and health	Ministry of Health
AGRICULTURE		
Agricultural Sector Development Strategy 2010–2020	Seeks to progressively reduce unemployment and poverty through agriculture and to spur growth in the sector	Ministry of Agriculture, Livestock, and Fisheries
Agriculture Act (1967)	Promotes and maintains stable agriculture and provides for conservation of soil and soil fertility; aims to stimulate the development of agricultural land in accordance with accepted practices of good land management and husbandry	Ministry of Agriculture, Livestock, and Fisheries
Agriculture (Farm Forestry) Rules 2009	Promotes and maintains farm forest cover of at least 10 percent of every agricultural land holding; preserves and sustains environment in combating climate change and global warming	Ministry of Agriculture, Livestock, and Fisheries
ENERGY		
Draft National Energy Policy (third draft)	Aims to facilitate provision of clean, sustainable, affordable, reliable, and secure energy services at least cost, while protecting the environment	Ministry of Energy and Petroleum
Feed-in Tariffs for Renewable Energy Resource Generated Electricity – Guide for Investors	Accelerates development of green energy, including wind, solar, and renewable biomass; promotes generation of electricity from renewable energy sources	Ministry of Energy and Petroleum
Least Cost Power Development Plan	Identifies affordable, low-cost energy sources	Ministry of Energy and Petroleum
Scaling up Renewable Energy Programme – Investment Plan for Kenya	Provides resources to various actors in Kenyan society, including government, to assist low-income countries in achieving their energy goals in ways that improve environmental, economic, social, and productive development	Ministry of Energy and Petroleum
Sessional Paper on Energy (No. 4 of 2004)	Identifies need to integrate energy planning with national economic, social, and environmental policies	Ministry of Energy and Petroleum
Energy Act (2006)	Amends and consolidates laws relating to energy	Ministry of Energy and Petroleum
Energy Management Regulations (2012)	Requires designated facilities, including large commercial and government buildings, to undertake energy audits every three years; energy efficiency and conservation measures be put in place; and audits to be undertaken by licensed energy auditors	Ministry of Energy and Petroleum
Solar Water Heating Regulations (2012)	Requires that "all premises within the jurisdiction of a local authority with hot water requirements of a capacity exceeding one hundred liters per day shall install and use solar heating systems – within five years from the date of coming into force."	Ministry of Energy and Petroleum
Africa Carbon Exchange	The first carbon exchange platform in Africa. Opened in 2011, but activity has been limited since the collapse of carbon prices.	National Treasury
MANUFACTURING		
Occupational, Safety and Health Act (2007)	Ensures health, safety, and welfare of employees in factories	Ministry of Labour, Social Security, and Services
TRANSPORT		
Integrated National Transport Policy	Aims to develop, operate, and maintain an efficient, cost-effective, safe, secure, and integrated transport system to achieve national and international development objectives in a socially, economically, and environmentally sustainable way	Ministry of Transport and Infrastructure
Motor Vehicle Emissions Control in Kenya	Provides for the measurement of vehicular exhaust emissions in Kenya	Ministry of Environment, Water, and Natural Resources
ENVIRONMENTAL PROTECTION		
National Climate Change Response Strategy	Outlines adaptation and mitigation measures to enhance climate resilience	Ministry of Environment, Water, and Natural Resources
National Climate Change Action Plan	Sets out how the National Climate Change Response Strategy will be implemented	Ministry of Environment, Water, and Natural Resources
Forests Act	Reserves, protects, and ensures sustainable use of forests	Ministry of Environment, Water, and Natural Resources
Kenya Forestry Master Plan	Reserves, protects, and ensures sustainable use of forests	Ministry of Environment, Water, and Natural Resources
Water Act	Manages water resources, including prohibiting water pollution, such as discharge of rubbish, refuse, effluent, and trade waste into water	Ministry of Environment, Water, and Natural Resources
Fisheries Act	Manages the exploitation and conservation of fisheries	Ministry of Environment, Water, and Natural Resources
Environmental Management and Coordination Act	Outlines framework for environmental management and related matters – currently under review	Ministry of Environment, Water, and Natural Resources
Wildlife Conservation and Management Act (2013)	Seeks to balance needs of Kenyan people with sustainable wildlife conservation and management	Ministry of Environment, Water, and Natural Resources

Draft Climate Change Bill (2014)	Aims to establish, among others, a climate change fund to access international climate-related funding. Through various financing mechanisms, it will "crowd in" private sector financing of climate-change adaptation and mitigation, and ensure ongoing implementation of a budget-coding system for transparent accounting of climate finance	To be confirmed
UN SUBMISSIONS		
Kenya's Climate Change Technology Needs and Needs Assessment Report under the United Nations Framework Convention on Climate Change	Provides first step towards including development and diffusion of environmentally sound technology in Kenya's investment strategies	Ministry of Environment, Water, and Natural Resources
Millennium Development Goals	Kenya is committed to the goals and is implementing various programmes relevant to the MDGs especially related to energy and environment	Ministry of Devolution and Planning
First National Communication to the United Nations Framework Convention on Climate Change (2002)	Demonstrates Kenya's willingness to meet its obligations under the convention. Kenya ratified the United Nations Framework Convention on Climate Change in 1994, signifying its determination to join the international community in combating climate change	Ministry of Environment, Water, and Natural Resources
Sustainable Development Goals	Kenya co-chairs the process to facilitate consensus among the 193 UN member states on the new Sustainable Development Goals that will succeed the Millennium Development Goals.	Permanent Mission of Kenya to the United Nations

SOURCE: UNEP (2014), Green Economy Assessment Report Kenya, pages 14–16

E. Risk Guarantee Product and Technical Assistance for Investment in Renewables

CASE STUDIES

African Development Bank providing financing and risk guarantee of the Lake Turkana Wind Power Project

The Lake Turkana Wind Power Project is one of the largest wind power projects in the world (300MW), the largest to be constructed in Africa and, to date, the largest private investment in Kenya's history. The project has won several awards and has been nominated as the "African Renewable Deal of the Year 2014" by Thomson Reuters Project Finance International. It is a good example of development finance institutions working with commercial banks on developmental projects, using a range of financing instruments to structure the deal to suit the different types of investors.

The $870 million financing agreement was signed in March 2014. Its financing is made up of a mixture of equity, mezzanine debt, and senior debt. Lenders include the African Development Bank as the lead syndicate bank, European Investment Bank, Nederlandse Financierings Maatschappij Voor Ontwikkelingslanden N.V., Société De Promotion Et De Participation Pour La Coopération Economique, Eastern and Southern African Trade and Development Bank, Nedbank Capital, the Standard Bank of South Africa, Eksport Kredit Fonden, Deg – Deutsche Investitions – Und Entwicklungsgesellschaft Mbh, East African Development Bank, and Triodos.

Aldwych is the largest single investor in the project, alongside KP&P Africa B.V. as co-developers and investors. Aldwych is majority owned by the Pan African Infrastructure Development Fund, which is managed by Harith. Other investors include the Finnish Fund for Industrial Cooperation Ltd., the Industrial Fund for Developing Countries, the Norwegian Investment Fund for Developing Countries, OPIC, Vestas Eastern Africa, and Sandpiper. Aldwych Turkana Ltd. will oversee the project's construction and operations. The project has already started construction and is expected to produce power in 2017.

In addition to its role as the mandated lead arranger for the power plant, the African Development Bank is providing a €20 million African Development Fund partial risk guarantee for the transmission line component. This will protect the power plant against the risk of a delay in constructing the 400km Suswa-Loyangalani transmission line and substations. The governments of Spain and Kenya are financing the transmission line and related substations. The partial risk guarantee was a key condition for access to long-term debt from private sector institutions and Ðfor the financial close for the power plant.

The Lake Turkana Wind Power Project is a Vision 2030 flagship project and a key deliverable under the Kenyan government's commitment to increasing electricity generation to 5,000MW and providing cost-effective renewable power to the public. This project alone will produce about 20 percent of Kenya's currently installed capacity at 9 Kenyan shillings per kilowatt hour. It will have a transformative development impact in the northern, arid areas of Kenya, Kenya's electricity sector, and the country as a whole. It is also expected to generate up to $150 million annually in foreign currency savings due to savings on fuel displacement costs.

World Bank Group providing long-term financing and risk guarantees for OrPower 4 (Olkaria III) geothermal facility

In response to private sector investors' concerns about the security of a return on their investments in Kenya's energy infrastructure and the government's struggle to finance the large-scale investments needed, the World Bank Group has encouraged the private sector to offer a unique package based on $166 million in partial risk guarantees.

IFC provided the project's long-term debt and the Multilateral Investment Guarantee Agency provided a $166 million series of partial risk guarantees to reassure commercial financiers concerned about the state-owned electricity utility and its obligations to the financiers. This combination of instruments unlocked a total financing package of $623 million, including $357 million in private sector investments and commercial lending.

The structure provided the necessary comfort to investors and commercial lenders. IFC provided long-term financing for two of the four independent power producers; this type of funding is generally unavailable for long-term infrastructure projects. IFC's engagement also reassured and supported South-South investors with an appetite for investments in Africa but relatively limited structuring and project implementation ability.

F. Infrastructure Investment Projects

The complete list of infrastructure investment projects coordinated by the PPP Unit is available at: http://www.pppunit.go.ke/news/view/ppp-pipeline-status-report-may-2015.

A selection of the projects included in the list is showcased below.

KENYA PPP PIPELINE – MAY 2015: TRANSPORT AND INFRASTRUCTURE			
NO.	**PROJECT**	**DESCRIPTION**	**STATUS**
1	2nd Nyali Bridge	Contracting authority: Kenya Urban Roads Authority Development of a second Nyali Bridge connecting Mombasa Island with the North mainland to ease congestion on the existing Nyali Bridge and make traffic less dependent on a single channel crossing	On November 25, 2014, Deloitte Consulting Ltd. and its consortium were appointed transaction advisor The transaction advisor is undertaking a feasibility study consistent with the PPP Act to enable the contracting authority to establish the project's technical configuration, commercial attractiveness, and bankability
2	Dualling of Mombasa-Nairobi Highway	Contracting authority: Kenya National Highways Authority Upgrading, capacity expansion, and subsequent operation and maintenance of the heavily trafficked 485km Mombasa-Nairobi highway This highway forms part of the longer Trans-African Highway (Northern Corridor) and is the main transport route serving East and Central African countries from the Indian Ocean seaport of Mombasa	On January 28, 2015, Pricewaterhouse-Coopers Ltd. and its consortium were appointed transaction advisor The transaction advisor is undertaking a feasibility study consistent with the PPP Act to enable the contracting authority to establish the project's technical configuration, commercial attractiveness, and bankability
3	Operation and maintenance of Nairobi – Thika Road	Contracting Authority: Kenya National Highways Authority Operation and maintenance of the eight-lane, 50km superhighway from Nairobi to the out-skirts of Thika, which was completed in November 2012. The project has been proposed under an operation and maintenance PPP scheme, whereby the private party is awarded through a competitive bidding process	On January 28, 2015 Intercontinental Consultants & Technocrats Pvt. Ltd and its consortium were appointed transaction advisor The transaction advisor is undertaking a feasibility study consistent with the PPP Act to enable the contracting authority to establish the project's technical configuration, commercial attractiveness, and bankability
4	Operation and maintenance of Nairobi Southern Bypass	Contracting authority: Kenya National Highways Authority Operation and maintenance upon completion of the 28.6km dual carriageway, which is currently being constructed by the China Road and Bridge Corporation. The project has been proposed under the operation and maintenance PPP scheme, whereby the private party is awarded through a competitive bidding process	On February 25, 2015, CPCS Transcom International Ltd. and its consortium were appointed transaction advisor The transaction advisor is undertaking a feasibility study consistent with the PPP Act to enable the contracting authority to establish the project's technical configuration, commercial attractiveness, and bankability
5	Dualling of Nairob - Nakuru Road	Contracting authority: Kenya National Highways Authority Development and operation of the 157km Nairobi-Nakuru Road (A104), which forms part of the Trans-African Highway (Northern Corridor)	On February 25, 2015 Intercontinental Consultants & Technocrats Pvt. Ltd. and its consortium were appointed transaction advisor The transaction advisor is undertaking a feasibility study consistent with the PPP Act to enable the contracting authority to establish the project's technical configuration, commercial attractiveness, and bankability
6	Roads Annuity Program (Phase 1)	Contracting authority: Ministry of Transport and Infrastructure and its road agencies, Kenya National Highways Authority, Kenya Urban Roads Authority, and Kenya Rural Roads Authority The government plans to develop and rehabilitate 10,000km of the road network within the next five years. Phase 1 of the program (3,000km) adopts a "finance-design-build-maintain-transfer" PPP scheme. In return, the government uses public funds to compensate the private developer via fixed and performance-related periodical payments (annuity)	Approval of project and risk assessment report for Lots 1, 3, 17, 32, and 33
7	Mombasa 2nd container terminal (phase 2 & 3)	Contracting authority: Kenya Ports Authority Construction of a new container terminal with a total area of 100 hectares and capacity to handle 1.2 million twenty-foot equivalent units per annum. The project is funded by the Japan Bank for International Development. Phase 1 involves construction of berths 20 and 21, which will each be 350 meters long and 15 meters deep, providing additional capacity of 550,000 twenty-foot equivalent units per berth. Construction is expected to be completed by March 2016 and is currently about 85 percent complete. Phase 2 will involve construction of berth 22, which will be 250 meters long and 15 meters deep, and will provide additional capacity of 400,000 twenty-foot equivalent units. Phase 3 will involve development of berth 23, which will be 300 meters long, 15 meters deep, and include a side berth of 4.5 meters deep and 80 meters long. There will also be construction of additional stacking yards, procurement of equipment, and dredging works. Completing this phase will give additional capacity of 450,000 twenty-foot equivalent units	Tender for prequalification for the terminal operator for phase 1 was put out in December 2014 and 19 firms applied. Of these, 12 firms were shortlisted, and requests for proposals were issued in April 2015. The bid submission is scheduled to close on June 26, 2015
8	Kisumu Sea Port	Contracting authority: Kenya Ports Authority Development of Kisumu Port into a modern commercial lake port to serve growing trade in the East African Community	On February 27, 2015, Maritime & Transport Business Solutions and its consortium were appointed transaction advisor The transaction advisor is undertaking a feasibility study consistent with the PPP Act to enable the contracting authority to establish the project's technical configuration, commercial attractiveness, and bankability

9	Shimoni Port	Contracting Authority: Kenya Ports Authority Development of the Shimoni Port, which is situated off Wasini, an island off the South Coast. Shimoni Port is one of the Southern ports of Kenya, with a population of about 215,000 inhabitants on an area of 3,267km². The port is small and has limited connectivity to the hinterland. Shimoni is considered to be ideally positioned because it has good nautical access for tourism development and continuation of existing trade on a PPP basis. The private sector will inject additional funds to support infrastructure development (of port facilities and supporting infrastructure), while playing a key role in the operation of the port	Terms of reference for transaction advisory service are being developed
10	Conversion of Berth 11–14 into container terminals	Contracting authority: Kenya Ports Authority Infrastructural modification to berths 11–14 to support loadings from modern container-handling equipment and procurement of handling equipment. Berths 11–14 were constructed between 1956 and 1959 to serve as conventional berths. The berths' original fendering systems and scope were renewed in 1990 and they have a total length of 736 meters and width of 22.6 meters. The berths are increasingly used for container handling even though they do not have requisite equipment such as ship-to-shore gantry cranes. As a result, only vessels with their own gear use these berths. The project is estimated to cost $120 million. Constructing and equipping the berths will take about two years	Project proposal stage
11	Lamu Port development	Contracting authority: Kenya Ports Authority Transformation of Lamu from a small port on the East Coast of Kenya into an international port handling more than 24 million tonnes of cargo and serving a new major transport corridor in Eastern Africa Lamu Port is the key pull factor for all the corridor project components of a flagship infrastructure project (known as the Lamu Port Southern Sudan-Ethiopia Transport project) identified by Vision 2030 Manda Bay at Lamu Port can accommodate any post-panamax vessel. The project will also include the construction of port-associated infrastructure such as a causeway, a port access road, a railway yard, water and electricity supply, a port building, and other port-related services. Lamu Port is expected to have a total of 32 berths, each with an estimated quay length of 400 meters and a draft of between 17.5 meters and 18 meters. The port has an estimated total investment of $5 billion, with an internal economic rate of return of 23.4 percent	Project proposal stage
12	Multi-storey terminal at Likoni	Contracting authority: Kenya Ferry Services Limited Development of a multi-storey terminal on 1.6 hectares in Mombasa to provide a modern ferry terminal, parking, bus terminal, as well as a variety of commercial services to maximize the site's revenue potential	Feasibility study stage
13	Integrated Marine Transport System	Contracting authority: Mombasa County Government Development and operation of an integrated marine transport system on the Indian Ocean involving regular ferry services landing on Mombasa Island and Mainland North, South, and West. Includes water bus and leisure ferry services around Mombasa, floating hotels, cruise vessels, water taxis, and coastal ferry services linking all coastal towns between Mombasa, Lamu, and associated islands	Feasibility study stage
14	Nairobi Commuter Rail Services	Contracting authority: Kenya Railways Corporation Rehabilitation of existing 100km railway line and doubling of sections and support infrastructure. Design and provision of rolling stock and operation of the commuter rail link between Nairobi CBD and airport	Feasibility study stage
15	Operations and maintenance of Jomo Kenyatta International Airport Terminal 2 (Greenfield Terminal)	Contracting authority: Kenya Airports Authority With a capacity of 20 million people per year	Project proposal stage
16	Development and Management of in-flight catering kitchen at Jomo Kenyatta International Airport	Contracting authority: Kenya Airports Authority Introduce a second in-flight kitchen operator at Jomo Kenyatta International Airport to increase competition, leading to improved service delivery and quality of service	Project proposal stage
17	Development and management of food courts at Jomo Kenyatta International Airport	Contracting authority: Kenya Airports Authority Construction of food court area to include a restaurant, a coffee shop, 12 individual food courts, multipurpose shops, an ATM lobby, a banking facility, and a customer care desk facility	Project proposal stage

18	Government Flying School	Contracting authority: Kenya Civil Aviation Authority Establishment of a government flight-training school at the East African School of Aviation, the training directorate of Kenya Civil Aviation Authority in partnership with the private sector	Terms of reference for transaction advisory service are being developed
		KENYA PPP PIPELINE – MAY 2015: ENERGY AND PETROLEUM	
19	980MW coal plant in Lamu	Contracting authority: Ministry of Energy and Petroleum Construction of a 980MW Coal Power Plant in Lamu on a build, own, operate, and transfer basis for 20–25 years	Selection of an independent power producer – negotiations with preferred bidder ongoing
20	800MW liquefied natural gas power plant at Dongo Kundu	Contracting authority: Ministry of Energy and Petroleum 800MW liquefied natural gas power plant to be constructed at Dongo Kundu in Mombasa on a design, finance, construct, own, operate, and maintain basis for 20 years	Tender cancelled
21	40MW solar power plant at Muhoroni, Kisumu County	Contracting authority: Ministry of Energy and Petroleum Procurement of an independent power producer to generate 40MW of solar energy in the Muhoroni area of Kisumu County	Project proposal stage
22	560MW geothermal Olkaria VI	Contracting authority: Kenya Electricity Generating Company Construction of 560MW geothermal pipeline (divided into four equal projects of 140MW each) on a build, own, operate, and transfer basis for 15 years	Phase 1, first 140MW section: Provision of transaction advisory services – terms of reference for transaction advisory service are being developed
23	400MW wind plant at Meru/Isiolo	Contracting authority: Kenya Electricity Generating Company Development of a 400MW wind farm power plant at Meru through private sector participation as independent power producers, occupying an area of about 18,000 acres	Project proposal stage
24	400MW Menengai (phase I)	Contracting authority: Geothermal Development Company Development of a greenfield electricity generation project to increase the installed national capacity by 400MW	Contracts signed and implementation under way for the first 90MW Second 60MW is under tender preparation. Geothermal Development Company is undertaking exploratory drilling for the remaining 250MW
25	800MW Bogoria-Silali (phase 1)	Contracting authority: Geothermal Development Company A greenfield electricity generation project that aims to increase installed national capacity by 800MW. The Bogoria-Silali block comprises Bogoria, Baringo, Arus, Korosoi, Chepchuk, Paka, and Silali prospects	Project proposal stage
26	800MW Menengai (phase 2)	Contracting authority: Geothermal Development Company A greenfield electricity generation project whose objective is to increase the installed national capacity by 800MW	Project proposal stage
27	300MW geothermal plant at Suswa	Contracting authority: Geothermal Development Company A greenfield electricity generation project that aims to contribute up to 300MW toward the Least Cost Power Development Plan. Independent power producers will be invited to buy the steam from Geothermal Development Company under a steam purchase agreement and sell the electricity it generates to Kenya Power under a power purchase agreement, thereby recouping its investment costs	Project proposal stage
28	960MW Kitui Coal Plant	Contracting authority: Ministry of Energy and Petroleum Development of a 960MW coal power plant on the eastern side of Mui Basin, in Kitui County, using independent power producers	Feasibility study stage
29	Offshore Jetty	Contracting authority: National Oil Corporation of Kenya Development, operation, and maintenance of the Mombasa offshore loading and offloading jetty and tank-farm project under a PPP arrangement	Transaction advisor contract award stage

Project proposal stage refers to the stage where the PPP project proposal has been approved by the PPP Committee and the contracting authority has been granted authority to undertake a feasibility study in line with Section 33 of the PPP Act (2013).

G. Possible Inclusive Green Investment Themes across Key Sectors

SECTOR	CLIMATE CHANGE AND OTHER ENVIRONMENTAL AND SOCIAL RISKS	GREEN GROWTH INNOVATION/ INVESTMENT OPPORTUNITIES	EXAMPLES OF INCLUSIVE GREEN INVESTMENTS IN KENYA (A NUMBER OF WHICH ARE REGISTERED PROJECTS UNDER THE CLEAN DEVELOPMENT MECHANISM)[126]
Agriculture, forestry, fisheries	High dependence on rain-fed subsistence agriculture; declining production due to erratic rainfall, soil erosion, and increased evapotranspiration	• Climate-smart agriculture and agroforestry technology (includes drought-tolerant crops, water harvesting, efficient irrigation systems, and integrated soil fertility management) • Industrial-scale cogeneration using biogas produced from agricultural residues • Afforestation; reforestation; forest management; reduced deforestation; harvested wood product management; use of forestry products for bioenergy to replace fossil fuels	• The Vegepro Group, establishing the largest biofuel plant in Eastern Africa • Mumias Sugar Company, extraction of ethanol from by-product bagasse (reg. CDM project)
Trade and industry (includes cement)	Reliance on infrastructure and services (water, energy, and transport); vulnerability to disruption from droughts and heavy rains	• Cleaner technologies and more resource-efficient processes • Pollution control equipment and installation	• Kenafric Ltd., winners of KAM Energy Efficiency Award 2015 • Karan Biofuel Ltd., produces and supplies biomass briquettes (reg. CDM project)
Tourism	Dependence on environmental resources (such as wildlife)	• Eco-tourism • Low-carbon tourism infrastructure	• Porini Eco Camps, award-winning eco-tourism camps
Energy	Reliance on increasingly unreliable, large-scale hydroelectricity	• Renewables (geothermal, wind, solar, and biogas) • Off-grid clean energy solutions • Strategic multipurpose dams • Solar water heater distribution and maintenance	• Lake Turkana Wind Project; Marsabit Wind; Lambwe Valley Wind; General Electric Wind in Kajiado County (reg. CDM projects) • Geothermal developments; Olkaria, Menengai, OrPower4 (reg. CDM projects) • D'Light, BareFoot Ltd., off grid solar system manufacturers/distributors
Transport	Destruction of transport infrastructure due to extreme weather	• More fuel-efficient vehicles; hybrid vehicles; cleaner diesel vehicles; biofuels; bioethanol blending and biodiesel • Green transport infrastructure (rail networks, a mass transit system for Greater Nairobi) • Urban transport management skills, modal shifts from road transport to public transport systems; non-motorized transport (cycling, walking); land-use and transport planning • Technological innovations to make infrastructure "climate proof" (such as a rail network that can withstand high temperatures)	• Rift Valley Railways (Kenya, Uganda) • Africa Sustainable Transport Forum
Waste management	Pollution of air, water, soil; hazard to population living on landfills	• Modern waste management facilities including: landfill methane recovery; waste incineration with energy recovery; composting of organic waste; controlled waste-water treatment; recycling and waste minimization	• Licensed private sector recycling companies include Taka Kenya and EcoPost Kenya
Water and sanitation	Increased water scarcity	• Water-efficient technologies • Improved water resource management (better sewage systems, irrigation, and drainage) • Flood mitigation plans • Use of water filters (reduces demand for firewood to boil water, slowing deforestation)	• Excloosive Ltd.
Telecoms/ICT	Destruction of telecoms infrastructure	• Climate-proof telecoms infrastructure • Renewable energy-powered base stations • Automated weather stations hosted in cell phone towers to transmit data supporting weather insurance products • Expansion of mobile payment services	• Safaricom is one of the leading companies globally in using renewable energy at its base-stations
Financial sector	Reduced returns of investment portfolios over the long term	• New product development (weather risk insurance, micro-insurance, energy-efficiency lending, and green mortgage products)	• M-Pesa, M-Kopa, and M-Shwari all offer micro-insurance to small-scale farmers
Property	Destruction of and damage to property	• Upgrading of building codes to include climate resilience and green building concepts • Green building design; efficient lighting and day lighting; more efficient electrical appliances and heating and cooling systems; alternative refrigeration fluids; recovery and recycling of fluorinated gases; rain water harvesting. • Low-income housing	• Garden City

Extractive industries	Reliance on water and energy; pollution; exposure of sensitive infrastructure (such as pipelines) to extreme weather	• Climate-proof, resource-efficient extraction technologies	• No examples found
Engineering and consulting	Lack of relevant expertise	• Expertise in installation, operation, and maintenance of new, cleaner technologies across all sectors • Sustainable urban planning • Reforestation and regeneration of degraded land • Sustainability impact assessments and management systems	• A number of Kenya-based consulting firms are developing these areas of expertise

SOURCE: Table based on information in the National Climate Change Action Plan (2013), the Climate Change Framework Policy (2014), and the Scaling up Renewable Energy Program Investment Plan for Kenya (2011).

H. The Ten Largest Banks

As of December 2014

	BANK	NET ASSETS (MILLION KSH)	PERCENT OF MARKET SHARE (%)
1	Kenya Commercial Bank Ltd	376,969	11.8%
2	Co - operative Bank of Kenya Ltd	282,689	8.8%
3	Equity Bank Ltd	277,116	8.7%
4	Barclays Bank of Kenya Ltd	226,043	7.1%
5	Standard Chartered Bank (K) Ltd	222,636	7.0%
6	Commercial Bank of Africa Ltd	175,809	5.5%
7	CfC Stanbic Bank (K) Ltd	171,347	5.4%
8	Diamond Trust Bank (K) Ltd	141,176	4.4%
9	NIC Bank Ltd	137,087	4.3%
10	I&M Bank Ltd	137,299	4.3%
	Total in Ksh million	2,148,171	67.3%
	Total in $ million	23,869	

SOURCE: Central Bank of Kenya (2015)

I. The 20 Largest Pension Funds

As of January 2015

	FUND NAME	FUND VALUE (KSH)	RATIO TO TOTAL FUND VALUE
1	National Social Security Fund	134,932,875,000	19.78
2	Kenya Ports Authority Pension Scheme	23,026,644,000	3.38
3	The Local Authorities Pensions Trust	22,651,603,000	3.32
4	Central Bank of Kenya Pension Fund Registered Trustees	21,115,993,000	3.1
5	Kenya Railway Staff Retirement Benefits Scheme	20,164,919,000	2.96
6	Kenya Power	15,954,560,000	2.34
7	Telposta Pension Scheme	12,468,674,000	1.83
8	Kenya Commercial Bank Staff Retirement (Defined Contribution) Scheme 2006	11,806,017,947	1.73
9	Kenya Revenue Authority Staff Pension Scheme	11,475,732,000	1.68
10	University of Nairobi Pensions Scheme 2007	9,586,908,000	1.41
11	Standard Chartered Kenya Staff Retirement Benefits Scheme 2006	9,396,950,000	1.38
12	Barclays Bank of Kenya Ltd DC Scheme	9,351,226,000	1.37
13	National Security Intelligence Service Staff Superannuation Scheme	8,731,934,453	1.28
14	Kenya Commercial Bank Staff Pension Fund	8,447,714,626	1.24
15	Alexander Forbes Staff Provident Fund	8,194,184,000	1.2
16	Alexander Forbes Synergy Retirement Fund	8,194,184,000	1.2
17	The Kenya Airways Ltd Staff Provident Fund	8,140,381,000	1.19
18	National Social Security Fund Staff Retirement Benefits Scheme	6,968,290,048	1.02
19	The Kenya Power and Lighting Company Ltd Staff Retirement Benefits Scheme 2006	6,726,536,000	0.99
20	Kengen Staff Retirement Benefits Scheme	6,626,155,000	0.97
	Ratio to total fund value represented by the top 20 largest pension funds		53.37%

SOURCE: Retirement Benefits Authority (2015)

J. The 10 Largest Fund Managers

As of June 30, 2014

FUND MANAGER	NUMBER OF PARTICIPATING PLANS	ASSETS UNDER MANAGEMENT (MILLION KSH)
Africa Alliance Securities (Kenya)	9	6,665
Co-op Trust Investment Services	64	46,554
Genesis Kenya Investment Management Limited	97	106,286
ICEA Lion Asset Management Limited	28	29,747
Old Mutual Investment Group Limited	92	79,236
Pinebridge Investments East Africa Limited	57	158,906
Stanlib Investments	34	73,343
Total	381	500,737

SOURCE: Alexander Forbes (2014)

K. The 10 Largest General Insurance Firms and the 10 Largest Life Insurance Firms

GENERAL INSURANCE TOP 10	ASSETS (MILLION KSH)
Jubilee Insurance Company	15,019
UAP Insurance Company	12,569
APA Insurance Company	10,493
CIC General Insurance Company	10,429
ICEA Lion General Insurance Company	7,786
GA General Insurance Company	5,631
Kenindia Assurance Company	5,586
British American Insurance Company	4,571
First Assurance Company	4,427
Directline Assurance Company	3,900
Total in million Ksh	80,410
Total in $ million	883

LIFE INSURANCE TOP 10	ASSETS (MILLION KSH)
ICEA Lion Life Assurance Company	39,297
British American Insurance	31,868
Jubilee Insurance Company	30,873
CFC Life Assurance Company	20,282
Pan Africa Insurance Company	18,623
Kenindia Assurance Company	16,421
Old Mutual Assurance Company	12,038
UAP Life Assurance Company	6,458
CIC Life Assurance Company	5,327
Madison Insurance Company	5,196
Total in million Ksh	186,384
Total in $ million	2,040

SOURCE: Insurance Regulatory Authority (2015)

L. Private Equity Funds with Investment Activities in Kenya

8 Miles
88mph
Abraaj
Accion Ventures
Actis
Acumen
AfricInvest
AgriVie
Alpha Africa Asset Managers
Amethis Finance
Ascent Capital
Bamboo Finance
Blue Haven Initiative
Carlyle Group
CDC
Centum
Citadel Capital/Al Qalaa Holdings
Development Partners International
DOB Equity
East Africa Capital Partners
Emerging Capital Partners
eVentures Africa Fund
Fusion Capital
Grassroots Business Fund
Grofin
Harith
Helios Partners
IFC
Invested Development
Kaizen Ventures
Kibo Capital
KKR
Kuramo Capital
LeapFrog Investments
LGT
Lundin Foundations
Maris Capital
Mkoba Fund
Novastar Ventures
Pan African Investment Company
Pearl Capital Partners
Phatisa
Progression East Africa
Proparco
ResponsAbility
Satya Capital
Shulze Investments
Silk Invest
Surya Capital
Swedfund
TBL Mirror Fund
TIA Capital
TLcom
TLG Capital
TransCentury
Vantage Capital
Voxtra
Zoscales

SOURCE: East Africa Venture Capital Association (2015)

Endnotes

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Aligning Kenya's Financial System with Inclusive Green Investment

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