KENYA BANKERS ASSOCIATION

Kenya Bankers Association

Environmental Risk Exposure in the Kenyan Banking Sector

2022

fsd Kenya

IUCN

The Mitsubishi Corporation Fund for Europe and Africa

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Foreword

The Kenyan banking sector is a key contributor to the financing of various businesses and projects in the country. This has contributed to Kenya's economic development including the level of activity and assets in the trade, manufacturing, and real estate sectors which are key beneficiaries of bank financing. However, through their activities and by extension the activities of the business and projects that benefit from this financing, banks are exposed to financial risks emanating from environmental risks. These risks are the result of, among other factors, errors of commission or omission to undertake and/or manage the risks identified in Environmental Impact Assessments (EIAs), particularly in lending extended to clients.

Climate and environmental emergencies have become more pronounced and will continue to pose greater risks to society and sustainable economic development. A transition to sustainable financing practices will, therefore, be important to not only mitigate the impact of the environmental risks that banks are exposed to but also ensure the long-term financial stability of the banking sector.

Good gains have been made by banks to embrace sustainable financing practices since the launch of the Sustainable Finance Initiative (SFI) Guiding Principles. Several banks have ratified the SFI Guiding Principles with additional capacity-building efforts such as training to bank staff provided to embed the Principles. However, the integration of robust environment-related considerations into banks' risk management and decision-making process remains limited across the sector.

This report on the Environmental Risk Exposure in the Kenyan Banking Sector provides a good understanding of the current state of environmental risk management within the Kenyan banking sector, the supporting regulation and legal framework, the current challenges, and potential interventions at a regulatory and policy, institutional, and organisational level to promote the adoption of better environmental risk management practices. Our key finding is that collective efforts will be required among banks, regulators, industry associations, professional associations, and development partners, among other stakeholders, to enhance the preparedness and resilience to climate and environmental events and mitigate their negative impacts when they occur.

We encourage all the stakeholders concerned to play their part to promote the adoption of sustainable environmental management practices. As we strive for growth at both the country and organisation level, balanced and prudent approaches will be required to create a safer and healthier future for the present and generations to come. We trust that this study will support banks as they implement robust environmental risk management practices as well as convene the various stakeholders around the efforts to preserve the environment.

This report on the Environmental Risk Exposure in the Kenyan Banking Sector was prepared under the mandate of the Kenya Bankers Association (KBA) and with the support of the Financial Sector Deepening (FSD) Kenya, and the International Union for Conservation of Nature (IUCN) whose funding was made available by Mitsubishi Corporation Fund for Europe and Africa (MCFEA). Additionally, several stakeholders were consulted including banks, industry associations, professional associations, regulators, and development partners, among others. We hereby thank all the contributors for their input as well as the efforts made in facilitating the preparation of this report.

Executive summary

Background

Traditionally, financial Institutions have been concerned with risks associated with their profitability and business operations. However, in recent years, with the evolution of Corporate Social Responsibility (CSR), financial institutions are now witnessing the emergence of a new category of risk - Environmental, Social and Governance (ESG) risks. In this category, social and environmental sustainability issues are gaining prominence due to the increasing awareness of the effects of climate change, media coverage of prolific sustainability messages, and ESG-related business regulation which has had an impact on financial institutions' profitability and reputation.

The COVID-19 crisis has further amplified the ESG agenda, leading to the acceleration in the demand for sustainable finance by stakeholders. Sustainable financing looks to channel capital to economic activities and projects that deliver sustainable outcomes. To keep abreast with the ESG evolution, it is, therefore, vital for financial institutions to re-assess and strengthen their ESG risk frameworks.

A financial institution's environmental and social risks are those of its clients and are inherent in clients' operations. Some potential environmental and social risks may not seem significant or relevant at the time of approval of lending but may become so during implementation, for instance as a result of higher regulatory standards and increased levels of enforcement. In other cases, environmental and social risks, such as contamination, hazardous chemical spills, or explosions, may seem unlikely to occur, but when they do, the environmental and social impact could potentially be extremely high.

Environmental and social risks can be mitigated through compliance with environmental and social regulations and international good practice environmental and social risk management standards. These risks are not static, but rather are dynamic over time and subject to change.

Commercial banks in Kenya have embraced different attitudes and are at different stages in embedding sustainability in their credit risk management systems. Most banks are taking a precautionary approach in their credit risk assessment process by ensuring they meet the minimum legal requirements. However, additional efforts will be required to manage environmental and social risks, not only because they introduce a type of risk that was not structurally addressed previously, but because the risks associated with environmental and social issues are more difficult to quantify. Demonstrating, and potentially quantifying, the impact environmental and social risks have on the financial risk profile and performance of financial institutions may help to make these risks tractable.

A good understanding of the components of the environmental and social framework is required, in a much broader context than the apparent physical risks and other interconnected and reinforcing factors such as how climate change impacts biodiversity loss and vice versa, to contribute to better environmental and social risk management practices. This includes the

regulatory framework as a tool to aid the identification and mitigation of regulatory environmental and social risk exposures in the Kenyan banking sector.

Addressing the current gaps will require not only the development of the banks' capabilities to manage these emerging risks but also resolving systemic issues that have historically impacted the businesses and sectors to which banks lend to. The study identified gaps at a regulatory and policy level and institutional level, in addition to organisation-specific challenges.

These issues ranged from inconsistencies in existing regulation to cross-agency coordination challenges, and inadequate technical capacity among environment experts (individual experts or firm of experts registered under regulation 14 of the Environmental (Impact Assessment and Audit Regulations, 2003), among others. These gaps will need to be addressed in working towards an integrated approach to managing multifaceted environmental and social risk risks that banks would be exposed to. This would also strengthen the efforts made at the organisational level as banks adapt their existing organisational structures and systems to better manage environmental and social risks.

At an organisational level, to reduce exposure to environmental and social risks, banks need to ensure that their clients' financial and operational sustainability is not undermined by the adverse impacts of their operations on the environment and surrounding communities. Banks should further ensure that their clients' financial and operational sustainability is cushioned against the adverse impacts of climate change. Thus, banks need to have a clear understanding of potential environmental and social risks and implications for clients' operations before providing financing to their operations.

This requires the proactive identification, assessment, and management of environmental and social risks, including those posed by non-compliance with environmental laws and regulation, and adverse climate change impacts, before they become significant or result in an adverse outcome for the client. A financial institution can best achieve this by developing and implementing an Environmental and Social Management System (ESMS), to systematically assess the environmental and social risks and opportunities arising from their clients' operations and manage its exposure to these and other risks.

Considering the significance of environmental and social risks, banks need to invest in various risk management initiatives to reduce their exposure by employing a range of environmental and social risk management tools.

In addition, close collaboration with other stakeholders concerned will support these efforts by resolving external environment issues and building awareness of and fostering the proactive management of environmental and social risks. Organizations such as KBA, IUCN, FSD Kenya, and WWF are working closely with the banking community in Kenya to develop tools and approaches that can be used to address the emerging environmental risks.

Scope and objectives

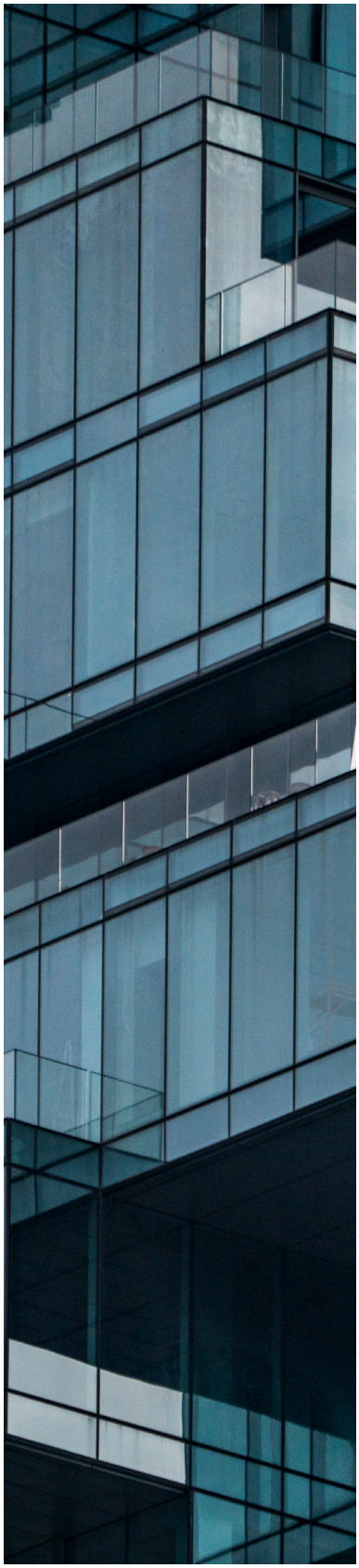
The objective of the study was to understand the level of exposure within the banking sector and develop potential interventions to support the assessment and management of environmental risks emerging from projects that banks would support in the usual course of business through their lending activities.

To assess the status of environmental risk management in the Kenyan banking sector, the study surveyed 21 commercial banks and undertook in-depth consultations with 5 banks (from each tier i.e., tier 1, 2, and 3)[1] to understand their environmental risk management practices. The study also undertook additional consultations with stakeholders concerned which included environmental sector regulators such as the National Environment Authority(NEMA) and the Water Resources Authority (WRA), professional associations (Architectural Association of Kenya and Town and County Planners Association of Kenya), and leading multilateral banks which have robust environmental risk management practices in place.

This report is the culmination of secondary research and the views and opinions from the consultations with the above stakeholders. The majority of the information that formed the basis for the conclusions in the report was derived from the consultations with Kenyan banks and other stakeholders concerned. Additionally, information from secondary sources was also considered to inform good practices in environmental risk management and sustainable financing.

[1]Tiers are based on a Market Size Index determined by the Central Bank of Kenya. Tier 1, tier 2, and tier 3 banks constitute banks with a Market Size Index of more than 5 percent, between 1 and 5 percent, and less that 1 percent respectively.

Current context

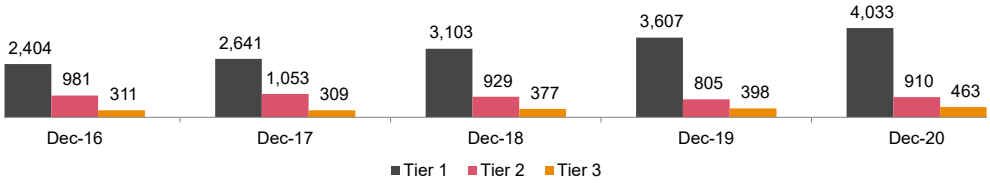


Banking sector overview and sectoral exposures

The Central Bank of Kenya (CBK) identified 41 active commercial banks[2] operating in the country as of December 2020, as well as one mortgage financing corporation, and eight non-operating bank holding companies. According to the Central Bank of Kenya, 23 commercial banks (over 50 percent) were locally owned while 17 were foreign-owned. The government of Kenya had majority ownership in 2 local institutions.

The sector is moderately concentrated, with the nine largest Kenyan banks accounting for c.75 percent (KES 4,033 billion) of the sector's assets as of December 2020. The balance is divided between medium and small banks, which are typically niche institutions with limited franchises and undiversified business models catering to specific customer segments including specific business types and individuals. The larger banks operate a traditional universal banking model with diversified business lines catering to both the retail and commercial segments. This gives rise to a 3-tier classification of the Banks with tier 1 banks accounting for 75 percent of the market share[3], while tier 2 and tier 3 banks account for 17 percent (KES 910 billion) and 9 percent (KES 463 billion) of the market share respectively, as of December 2020.

Bank assets according to tiers, KES 000's billion



Source: CBK, PwC analysis

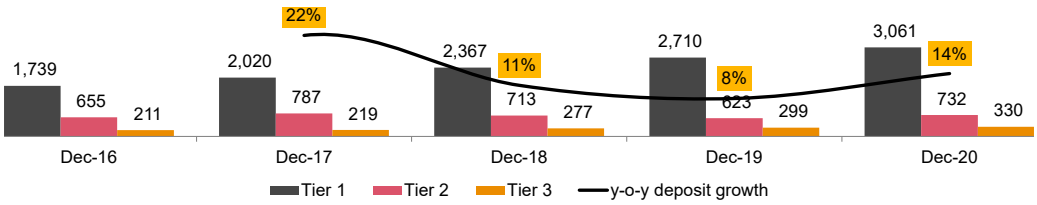
Bank net assets grew by KES 1,710 billion (annual growth rate of 10 percent) between December 2016 and December 2020 mainly driven by an increase in lending to the private sector and accumulation of government securities by Tier 1 and Tier 3 banks with Tier 2 Banks registering a 2 percent decline in their asset base over the same period. The loan to asset ratio declined from 59 percent in 2016 to 52 percent in 2019 indicating diversification of income sources driven by increased investments into government securities. The loan to asset ratio declined to 49 percent in 2020 due to the effects of COVID-19 that dampened increased lending to the private sector.

In a similar trend, deposits grew by KES 1,637 billion (annual growth rate of 13 percent) between 2016 and 2020 with Tier 1 banks registering the highest growth in deposits (annual growth rate of 15 percent) mainly supported by the mobilisation of funds through agency banking and mobile banking platforms which have gained broad traction in the industry. Tier 2 and Tier 3 banks registered slower growth 3 percent and 12 percent growth respectively in customer deposits in the same period. The larger banks continue to attract higher deposit rates amidst concerns surrounding the financial health of lower-tier banks.

[2]Includes Charterhouse Bank Limited and Chase Bank (K) Ltd which are in liquidation and Imperial Bank Ltd, which is in receivership

[3]The market share statistic is calculated on a net asset basis

Customer deposits according to tiers, KES 000's billions

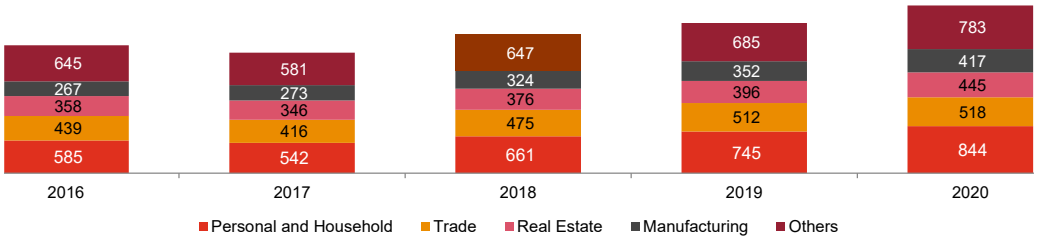


Source: CBK, PwC analysis

Sectorial exposures

CBK identified that the majority of the commercial banks' loan portfolio as of December 2020 related to personal and household lending (28 percent), which was approximately KES 844 billion. There is also significant lending to the Trade (KES 518 billion), Real Estate (KES 445 billion), and Manufacturing (KES 417 billion) sectors which represent 46 percent of the total lending as of December 2020. The sectorial loan portfolio composition remained stable from 2016 to 2020 except for trade loans which declined to 17 percent of total loan composition from 19 percent in 2019 due to the effects of COVID-19. Disruption of trade activities in 2020 increased the risk sentiment of the sector, reducing the lending appetite to the sector.

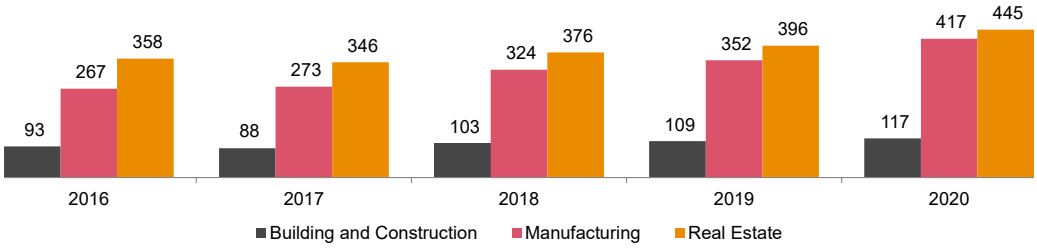
Sectoral exposures, KES billions



Source: CBK, PwC analysis

Lending generally increased at an annual rate of 8 percent to building and construction, manufacturing, and real estate sectors between 2016 and 2020 mainly supported by economic growth. There was a reduction of 1 percent in lending in the sectors in 2017 attributable to the general elections which increased the business risk sentiment in the country[4]. Credit standards tightened in 2019 as shown by slower credit growth of 7 percent (14 percent in 2018) in the sectors as lenders sought to manage non-performing loans. The increase in non-performing loans was attributable to delayed payments from public and private sectors as well as the slow uptake of housing units[5].

Loans in sectors of interest, KES in billions

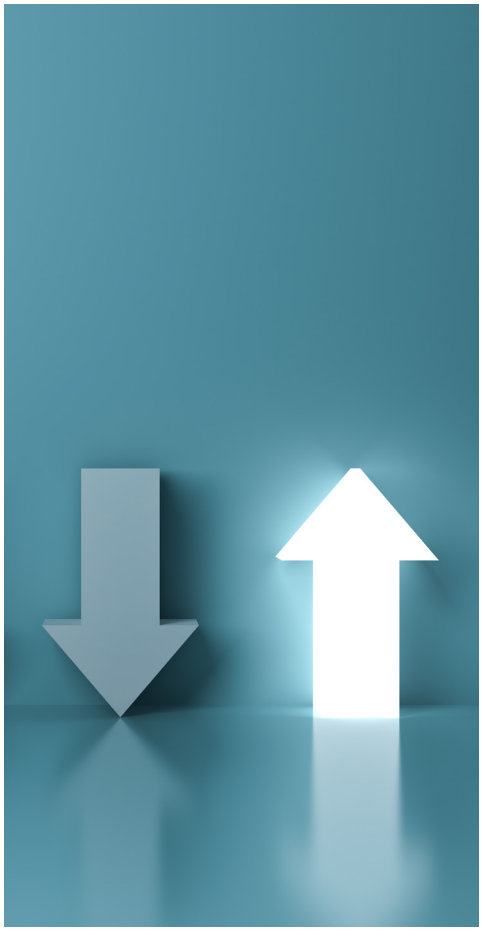


Source: CBK, PwC analysis

[4]World Bank Policy Research Working Paper, The Impact of Interest Rate Caps on the Financial Sector, April 2018

[5]CBK Banking Supervision Annual Report 2019

Environmental risk exposures in the banking sector



Environmental and social risks to the banking sector came into the limelight when in 2018 over 4,000 buildings were earmarked for demolitions in Nairobi County. This was mainly attributed to the buildings being constructed on riparian land and road reserves. Many of the buildings involved were developed before the enactment of the Environmental Management and Coordination Act (EMCA), 1999, the principal legislation for the protection of various aspects of the environment. As such, a lot of the encroachment before 2000 may be attributed to a lack of regulation to guide the riparian reserves.

Environmental and social risks are not explicitly defined in EMCA. Consequently, several sectors are adversely affected by existing and emerging risks that are characterised as environmental risks. The banking sector has been one of those exposed to various direct and indirect environmental and social risks. Although the internal operations of banks do not generate significant environmental and social impacts, their credit operations which make loans to businesses and projects expand their exposure to the risks borne by the beneficiaries of this lending.

According to a recent report published by the Network for Greening the Financial System (NGFS), the financial impact of climate-related risks to the financial services industry mainly takes two forms[6]: physical risks (which mainly emanate from environmental adverse effects from events such as storms, wildfires, rising water and floods and whose effects are immediate and visible; and transition risks which are associated with public and private initiatives aimed at reducing carbon emissions and move toward greener business models. NGFS (2020)[7] further breaks down the sources of physical and transition risks as follows:

Table 1: Environmental and climate-related risks

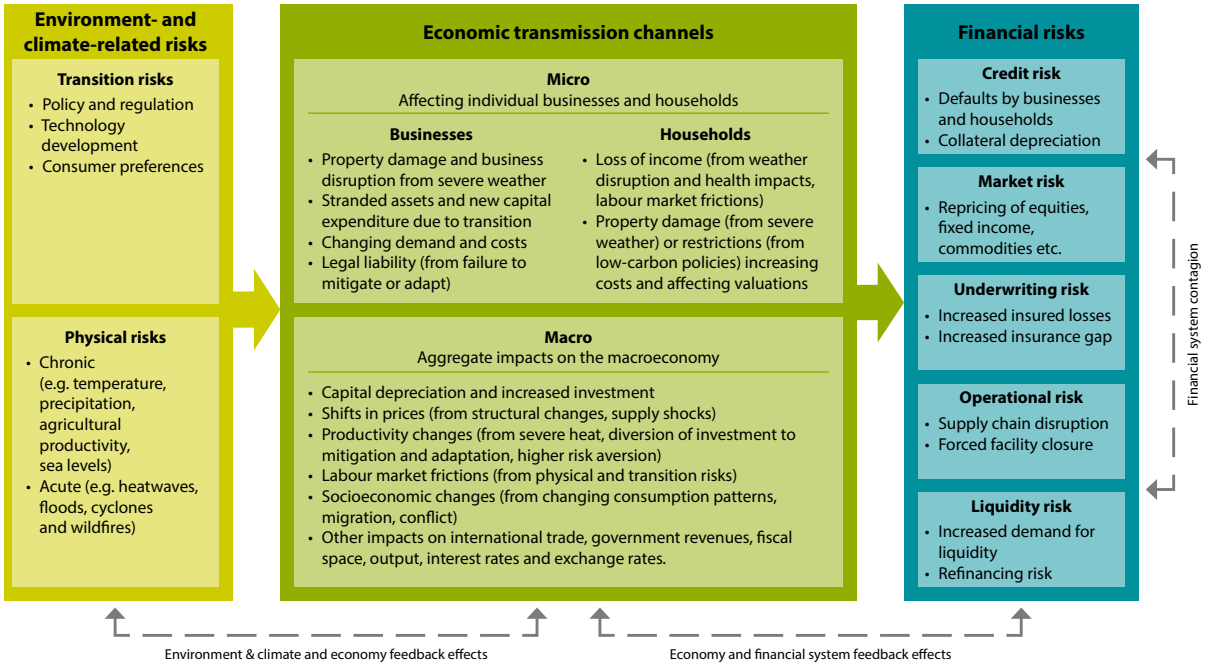
Sources of risk	Examples
Physical Risks	
Extreme weather events	Tropical cyclones/typhoons, floods, winter storms, heat waves, droughts, wildfires, hailstorms
Ecosystem pollution	Soil pollution and degradation, air pollution, water pollution, marine pollution, environmental accidents
Sea-level rise	Chronic sea-level rise or sea surges
Water scarcity	Drought or insufficient supply of water
Deforestation/desertification	Deforestation caused the extinction of species, changes to climatic conditions, desertification, and displacement of populations
Transition risks	
Public policy change	Energy transition policies, pollution control regulations, resource conservation regulations
Technological changes	Clean energy technologies, energy-saving technologies, clean transportation, and other green technologies
Shifting sentiment	Changes in consumer preference for certain products, changes in investor sentiment on certain asset classes
Disruptive business models	New ways to run businesses that can rapidly gain market shares from traditional businesses (e.g., virtual meetings that significantly reduce business travels; vertical farming that challenges traditional farming)

[6]de Galhau, Villeroy, Climate change: Central Banks are taking action, FSR. 2019.

[7]Network for Greening the Financial System (NGFS), Overview of Environmental Risk Analysis (ERA) by Financial Institutions, 2020

In the report, NGFS highlights that risks relating to environmental factors have not been sufficiently recognised and addressed by many financial institutions, especially in developing countries, due to the lack of understanding of how environmental risk translates to financial risks[8]. The report illustrates how financial firms' exposures to environmental risks are transmitted to financial risks as per the following illustration:

Exhibit 1: Transmission of environmental risks to financial risks[9]



Financial losses related to environmental risk exposures

As illustrated in Exhibit 1 physical risks can lead to increased business disruption and damage which affect banks directly when marked with increased defaults and impaired asset values. This results in increased refinancing risks and liquidity risks for the banking sector. On the other hand, transition risks may affect business operations and the broader economy through changes in patterns of investment, productivity, and shifts in prices resulting from structural changes. This has the effect of creating financial risks for both investors and lenders.

Similar studies have estimated financial losses relating to environmental risk exposures. Monsterology et al. (2018)[10] analytically assessed the climate transition risk exposures of two main Chinese government-backed banks (China Development Bank and Export-Import Bank of China) portfolios to overseas energy infrastructure projects. The study estimated the banks' exposures to losses induced by climate transition risk ranged between 4 percent and 22 percent of their portfolio value.

Bettison and Monsterology (2019)[11] assessed the climate risk exposure of the Austrian National Bank, Oesterreichische National bank (OeNB), bond portfolio issued by OECD countries, which were subjected to mild and tight climate policy scenarios. The study found that there would be negative shocks in the bonds associated with countries that are highly dependent on the oil sector for fiscal revenue which would then cascade to the asset quality of the portfolio of OeNB.

[8]Network for Greening the Financial System (NGFS), Overview of Environmental Risk Analysis (ERA) by Financial Institutions, 2020

[9]Network for Greening the Financial System (NGFS), Overview of Environmental Risk Analysis (ERA) by Financial Institutions, 2020

[10]Monasterolo, I., Zheng, J. I., & Battiston, S. (2018). Climate Transition Risk and Development Finance: A Carbon Risk Assessment of China's Overseas Energy Portfolios. China & World Economy, 26(6), 116-142.

[11]Battiston, S., & Monasterolo, I. (2019). A climate risk assessment of sovereign bonds' portfolio. Working Paper available at SSRN https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3376218

An EIU study[12] estimates that, from an investor's perspective, global warming of around 4 degrees Celsius could result in an asset value loss of USD 4.2 trillion of financial assets globally, a 5 degrees Celsius warming could result in a value loss of USD 7 trillion, while 6 degrees Celsius of warming could lead to a value loss of USD 13.8 trillion.

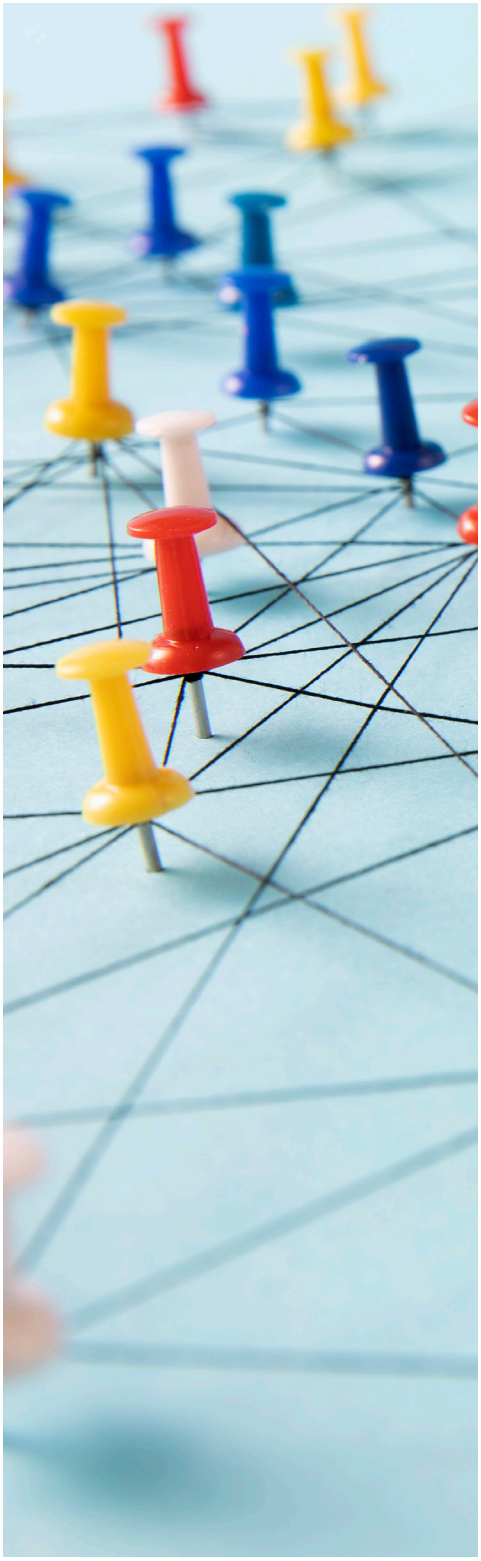
Locally, extreme weather events have led to negative impacts including the loss of life, property, and livelihood, to varying degrees, across the country. For example, the drought in 2017 led to a decline in agricultural commodity production and livestock herds as farmers tried to recover from losses.

The fiscal liability of floods, which are increasingly linked to climate change, is equivalent to 5.5 percent of GDP every seven years, while that of droughts, also linked to climate change, is equivalent to 8 percent of GDP every five years, according to the second National Climate Change Action Plan 2018-2022 (NCCAP II)[13].

[12]EIU. (2015). The cost of inaction: Recognising the value at risk from climate change. https://eiuperspectives.economist.com/sites/default/files/The%20cost%20of%20inaction_0.pdf

[13]Republic of Kenya Ministry of Environment and Forestry, National Climate Change Action Plan 2018-2022. http://www.environment.go.ke/wp-content/uploads/2020/03/NCCAP_2018-2022_ExecutiveSummary-Compressed-1.pdf

Enabling improved environmental risk management



Legislative and regulatory framework

Introduction

Kenya has a distinct legislative and institutional framework catering to social and environmental protection and management. Recent policy and legislative interventions involving enforcement of existing regulations and enactment of the new legislation have had an impact on local businesses and by extension, affected the lending operations of financial institutions.

Feedback gathered from interviews conducted during the study suggests that most banks' approach to environmental risk-related compliance is to ensure that all the relevant regulatory approvals have been obtained and that customers/borrowers make contractual representations to comply with environmental laws and regulations. However, it is becoming increasingly evident that to mitigate regulatory risk, lending institutions will need to take a more proactive role.

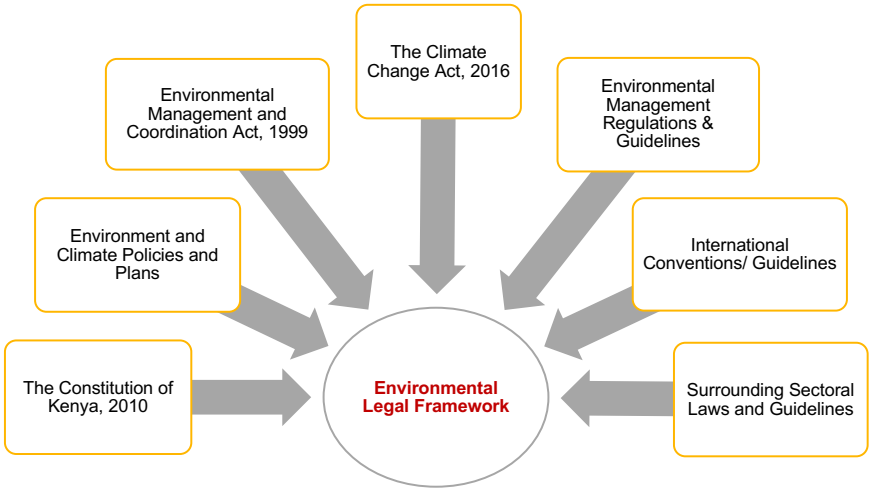
As part of building robust environment risk management frameworks, financial institutions should go beyond requiring regulatory compliance approvals as part of lending decision-making. It is recommended that financial institutions embed ongoing monitoring of projects to ensure regulatory compliance during the loan tenure. Reporting and disclosure requirements should be incorporated into credit documentation, and internal and external training capacity building should be conducted. ESG assessments covering sustainability components and risk of future enforcement action should also be commissioned on financing projects and risk ratings allocated which should then inform extended funding decisions. Lobbying will also be required to promote more effective regulations.

Set out below, is the existing environmental legislative and institutional framework.

Legislative framework

The Kenyan environment and climate change framework is anchored on the Constitution of Kenya. It is supported by several sector-specific statutes and policies. The general rules of international law, which include principles of international environmental law also form part of Kenyan law relating to the environment and climate.

Applicable environmental policies, laws, and regulations



In this section, we have summarised the laws, regulations, and guidelines governing the environmental sector. Select detailed and specific provisions under some of the key environmental policies, laws, and regulations can be found in Appendix.

As part of assessing the environmental and social risk exposures, financial institutions should be familiar with the existing environmental laws and regulations to better combat the related underlying challenges and dynamics. These laws and regulations are set out below.

The Constitution of Kenya

The Constitution is the supreme law of the Republic of Kenya and binds all persons and all State organs at both national and county levels of government. Kenya's commitment to a sustainable environment and environmental management is expressed in Article 42 which states that every person has the right to a clean and healthy environment, which includes the right to have the environment protected for the benefit of present and future generations through legislative and other measures and to have obligations relating to the environment fulfilled.

Article 69 of the Constitution requires the State to ensure sustainable exploitation, utilisation, management, and conservation of the environment and natural resources.

Environment and Climate Plans and Policies

The National Environment Policy

Vision 2030, Kenya's long-term national planning strategy, includes environmental considerations that inform environmental policies. The Kenya National Environment Policy, 2013 promotes cooperation, partnerships, and participation in the protection, conservation, and sustainable management of the environment and natural resources. The policy informs the country's efforts to confront current and emerging environmental issues and challenges.:

National Climate Change Action Plan

The National Climate Change Action Plan, 2018-2022 is a five-year plan that helps Kenya adapt to climate change and reduce greenhouse gas

emissions. It requires the Government to develop action plans to guide the mainstreaming of climate change into sector functions. The second National Climate Change Action Plan (NCCAP 2018-2022) is the first such action plan under the Climate Change Act, 2016, which mandates the preparation of 5-year climate change action plans as its principal implementation tool. Concerning environmental or climate risks, the action plan calls for the "building of the in-house capacity of financial institutions to assess climate risk and develop climate-related schemes.

Environmental Management and Coordination Act (amended in 2015)

The Environmental Management and Coordination Act (EMCA) 1999, Cap 387 of the Laws of Kenya (amended in 2015 to align with the Constitution), provides for the establishment of a legal and institutional framework for the management of the environment.

EMCA establishes, among others, the following institutions: The National Environment Management Authority (NEMA), the National Environmental Public Complaints Committee, the National Environment Tribunal, the National Environment Action Plan Committees, and the County Environment Committees.

NEMA is the principal government agency charged with the implementation of all policies relating to the environment and exercising general supervision and coordination over all matters relating to the environment in consultation with other lead government agencies.

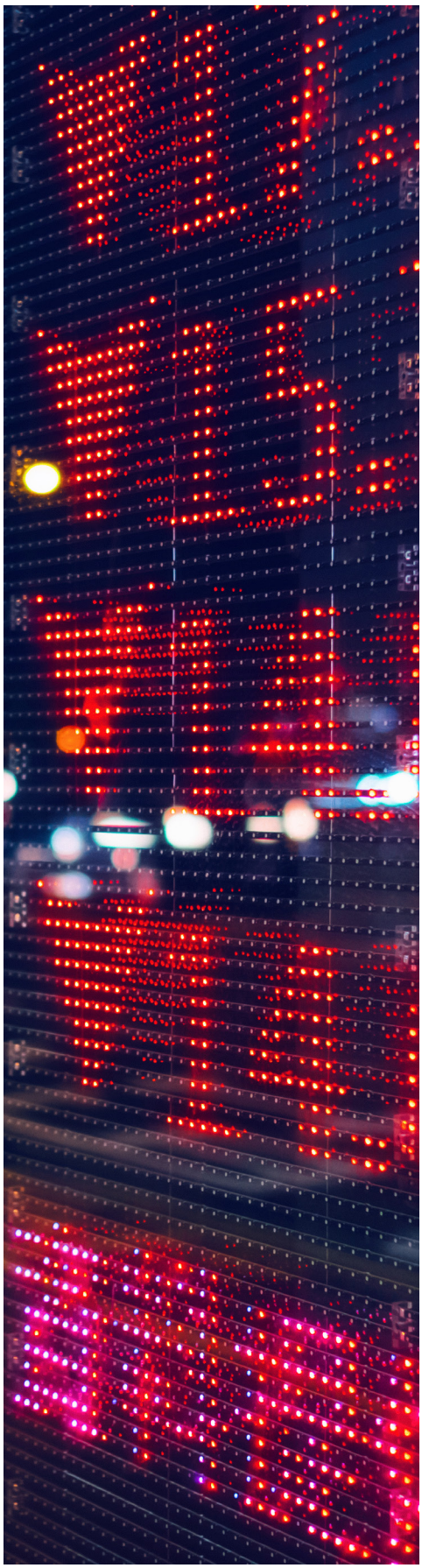
Before the enactment of the EMCA in 1999, there was no single environmental legislation and no central agency to enforce environmental laws. Kenya's environmental law was contained in various natural resource sectoral statutes. This sectoral approach entrusted enforcement responsibility in various government departments which created jurisdictional overlaps and conflicts. It was realised that there was a need to have a focal point within the government to coordinate policies and activities and to advise the government on environmental management issues, hence the emergence of EMCA and NEMA.

Section 67 of the Act explicitly states that an environmental impact assessment (EIA) license issued to a project proponent can be revoked, suspended, or cancelled for not more than twenty-four months, where the licensee contravenes the provisions of the license. It is, therefore, in the interest of a project financier to ensure that the proponents of the projects it finances comply with the project's EIA licensing conditions and requirements as a way of mitigating any financial risk that would result from the revocation, suspension, or cancellation of the license.

Climate Change Act, 2016

Kenya's Climate Change Act, 2016 is the first climate change-dedicated legislation in Africa. The Act adopts a mainstreaming approach that includes integration of climate change considerations into all sectors and in County Integrated Development Plans. It empowers the Cabinet Secretary responsible for climate change to formulate policy, action plans and pass enabling regulations

It also establishes the National Climate Change Council, chaired by His Excellency the President, which is responsible for the mainstreaming of the NCCAP and administration of the National Climate Change Fund. The Act also provides for a Climate Change Directorate (CCD), which serves as the Secretariat of the Council and is mandated to provide vision, leadership,



guidance, and coordination on matters relating to climate change in the country. It is the lead agency of the Government on national climate change plans and actions to deliver operational coordination.

State departments and public entities are required under the Climate Change Act, to report on greenhouse gas emissions and regularly monitor and review the performance of climate change functions. Finally, the Act establishes the Climate Change Fund - a financing mechanism for priority climate change actions and interventions[14].

It is incumbent on financial institutions to understand that the Act empowers the national and county governments to take actions to "mainstream and reinforce climate change disaster risk reduction into strategies and actions of public and private entities".

Environmental Management Regulations

Several environmental regulations and guidelines have been developed to promote environmental protection. These include:

[14]Government of the Republic of Kenya (2018). National Climate Change Action Plan 2018-2022. Ministry of Environment and Forestry, Nairobi.

Environmental Impact Assessment (EIA) regulations 2003	**Environmental Management and Coordination (Environmental Impact Assessment and Audit) Regulations, 2003, Amended in 2019** These regulations stipulate how an EIA project report should be prepared and specify all the requirements that must be complied with. It highlights the stages to be followed, information to be made available, the role of every stakeholder and rules to be observed during the whole EIA project report-making process.
EIA guidelines	**Environmental Impact Assessment (EIA) Guidelines and Administrative Procedures** These guidelines provide for procedural guidelines for implementation of Environmental Impact Assessment (EIA), Monitoring and Environmental Audit (EA), Strategic Environmental Assessment (SEA), and issues of Transboundary, Regional and International Conventions, Treaties and Agreements. It describes procedural steps in EIA studies and EAs as well as the contents and format of the study reports to be submitted to NEMA.
Strategic Environmental Assessments (SEA) guideline 2011	**Strategic Environmental Assessments (SEA) Guidelines** Under the guidelines, the objective of a Strategic Environmental Assessment (SEA) is to systematically integrate environmental considerations into policy, planning, and decision-making processes, such that environmental information derived from the examination of proposed policies, plans, programs, or projects are used to support decision making. SEA is evoked where the policy plan or program is likely to result in a significant environmental effect. The Environmental (Impact Assessment and Audit) Regulations vests the responsibility for carrying out SEA on the relevant lead agency working closely with NEMA.
Waste management regulations 2006	**Environmental Management and Coordination (Waste Management) Regulations, 2006** The Regulations are meant to streamline the handling, transportation, and disposal of various types of waste. The regulations aim to protect human health and the environment. The regulations emphasise waste minimisation, cleaner production, and segregation of waste at the source.
Water quality regulations 2006	**Environmental Management and Coordination (Water Quality) Regulations, 2006** These regulations provide for the protection of lakes, rivers, streams, springs, wells, and other water sources. They provide that no person shall: • Abstract ground water or carry out any activity near any lakes, rivers, streams, springs, and wells that is likely to have any adverse impact on the quantity and quality of the water, without an Environmental Impact Assessment (EIA) license issued; or • Cultivate or undertake any development activity within a minimum of six meters and a maximum of thirty meters from the highest ever recorded flood level, on 9 either side of a river or stream (riparian reserve conditions).
Air quality regulations	**The Environmental Management and Co-Ordination (Air Quality) Regulations, 2014** These regulations provide for the prevention, control, and abatement of air pollution to ensure clean and healthy ambient air. It provides for the establishment of emission standards for various sources, including. motor vehicles. It also covers any other air pollution source as may be determined by the Minister in consultation with the authority. Emission limits for various areas and facilities have been set. The regulations provide the procedure for designating controlled areas, and the objectives of air quality management plans for these areas. They set out the standards for air quality and emissions limits for controlled and non-controlled amenities.

Wetland regulations	**The Environmental Management and Co- ordination (Wetlands Riverbanks, Lake Shores and Sea Shore Management) Regulations, 2009** The objective of this regulation is to provide for the conservation and sustainable use of wetlands, riverbanks, lakeshores, seashores, and their resources in Kenya and to ensure their protection of as habitats for species of fauna and flora. It provides that resources on the riverbanks, lake shores, and the seashore shall be utilised sustainably. The environmental impact assessment shall be mandatory for all major activities on riverbanks, lake shores, and the seashore. In 2017, NEMA issued the draft Environmental Management and Coordination (Conservation and Management of Wetlands) Amendment Regulations, 2017 intended to amend the existing regulations. These regulations are still in draft form and have not yet been gazetted.
Controlled substances regulations	**Environmental Management and Coordination (Controlled Substances) Regulations, 2007 (Legal Notice No.73 of 2007)** The regulation provides for the classification of controlled substances. It also gives the control measures that should be put in place to ensure adequate safety of people and the environment during the manufacture, storage, transport, selling, handling, and disposing of a controlled substance. The regulations also give provisions for licensing of any person who wishes to manufacture, import, supply, or transit a controlled substance in Kenya. These regulations set out the list of controlled substances and the requirement for seeking a license from NEMA to manufacture, import and supply, or transport a controlled substance.
Noise Regulations	**Environmental Management and Coordination (Noise and Excessive Vibration Pollution Control) Regulations, 2009** These regulations determine that no person or activity shall make or cause to be made any loud, unreasonable, unnecessary, or unusual noise that annoys, disturbs, injures, or endangers the comfort, repose, health, or safety of others and the environment. The regulations set out standards on the maximum permissible noise emission levels for different sectors. The regulations also relate noise to its vibration effects and seek to ensure that the level of noise causes no harmful vibrations. Any person intending to undertake activities in which noise is suspected to be injurious or endangers the comfort, repose, health, or safety of others and the environment, must make an application to NEMA, and acquire a license subject to payment of requisite fees and meeting the license conditions.

Environmental Management Banking Guidelines

Central Bank of Kenya Guidance on Climate-Related Risk Management

According to the Global Risks Report 2020, climate action failure and extreme weather events are ranked the top two global risks in terms of likelihood, and the former also tops the rankings in terms of impact[15]. The report highlights the implications of climate change as catastrophic, wide-ranging, and intersecting, and cautions that some impacts are still unknown.

The known risks include loss of life, stress on ecosystems, food and water crises, exacerbation of geopolitical tensions, economic losses, capital market risks, and supply chain disruptions. It is because of these that global central banks and regulators are demonstrating a growing commitment to climate change and making a commitment to tackle the challenge with regulations and guidelines on climate and social risks management.

As part of efforts to address climate-related financial risks in the Kenya financial sector, the Central Bank of Kenya (CBK) recently issued the Guidance on Climate-Related Risk Management in October 2021 (the Guidance).

The Guidance applies to all commercial banks and mortgage finance companies operating in Kenya and borrows from global best practices and pronouncements on climate risk management. The Guidance adopts a phased implementation approach with banks expected to start making disclosures of climate-related information between January 2023 to June 2023. In the meantime, bank CEOs/managing directors are expected to be sensitised on the requirements of the Guidance in October 2021 followed by staff members between January 2022 to March 2022.

The Guidance aims to require banks to embed the consideration of the financial risks from climate change in their governance arrangements; incorporate the financial risks from climate change into their existing

[15]Source: WEF, Global Risks Report 2020, January 2020.

financial risk management practice and develop an approach to the disclosure of the financial risks from climate change[16].

Banks should develop and submit to CBK a time-bound plan approved by the institution's Board on how they plan to implement the guidance herein, which is approved by the Board by June 30, 2022. The plan is to be signed by both the Chairman and Chief Executive Officer of the institution. Subsequently, each institution shall submit a quarterly report to CBK on the progress of its implementation of the plan within 10 days after the end of every calendar quarter from the quarter ending September 30, 2022.

The Board of Directors and senior management of a bank are tasked with formulating and implementing climate-related financial risk management strategies, policies, procedures, guidelines, and minimum standards. We set out below a summary of the main areas covered in the Guidance:

i) Governance
Institutions should have robust governance arrangements in place that enable them to effectively identify, manage, monitor, and report the risks they are, or might be, exposed to both on an individual and consolidated basis.

ii) Oversight
The Board should exercise oversight over the institution's exposure and responses to climate-related issues, including adequately embedding climate-related risks into the institution's risk management framework.

iii) Strategy
Institutions should embed climate considerations throughout their strategy formulation process, from strategic assessment to action plan development.

iv) Risk management
Institutions should incorporate climate-related risk considerations into their risk management framework, and establish effective risk management processes to identify, measure, monitor, report, control, and mitigate climate-related risks. These risks include credit risk, market risk, liquidity risk, operational and legal risk, reputational risk, and strategic risk.

v) Reporting
Reporting structures should be developed for internal reporting by banks to the Board and Senior Management periodically to provide status updates on the identification, assessment, and management of climate-related risks.

Kenya Bankers Association Sustainable Finance (SFI) Guiding Principles

In 2015, the Kenya Bankers Association (KBA) issued the KBA Sustainable Finance (SFI) Guiding Principles that guided banks to create long-term value for their clients, firms, economy, and the environment. The banking industry, through the KBA, adopted the Principles during the 2nd CEO Round table on Sustainable Finance held on 31st March 2015. The Guiding Principles include Financial returns versus economic viability; Growth through inclusivity and innovation; Managing and mitigating associated risks, Resource scarcity and choice, and Business ethics and values.

Under the KBA SFI Best Practice Standards aligned with Principle 3 of the KBI SFI Guiding Principles[17] (Managing & Mitigating Associated Risks):

a) The management should establish an Environmental and Social Risk Management System (ESMS) to strengthen and mitigate impacts. The credit analysis process should include the review and categorization of environmental and social risks; and consist of (a) risk categorization, (b) assessment of risks, (c) benchmarking compliance with the local laws and regulations, and (d) defining the mitigation measures.

b) There is a need to develop an internal monitoring system to monitor commercial clients' associated risks over time, and to ensure compliance with agreed environmental, social, and corporate governance (ESG) requirements defined in the loan agreement. This includes expanding consideration of indigenous people and protected land and wildlife through proactive engagement (dialogue) and comprehensive risk analysis for commercial projects.

c) Procedures should be established by management to ensure compliance with the local laws and regulations on labour standards, including health and safety, persons with disabilities, and labour rights. This also entails the elimination of all forms of forced and compulsory labour; the effective abolition of child labour; and the elimination of discrimination in respect of employment and occupation.

d) Management should dedicate a resource person(s) towards realizing "Sustainable Finance Principle 3: Managing & Mitigating Associated Risks". The resource person(s) would have designated ESG responsibilities that cut across institutional departments. For large and medium-sized institutions as defined by the Central Bank

[16]Guidance on Climate-Related Risk Management, October 2021. Retrieved from https://www.centralbank.go.ke/wp-content/uploads/2021/10/Guidance-on-Climate-Related-Risk-Management.pdf

[17]Sustainable Finance Initiative, Industry Guiding Principles. https://sfi.kba.co.ke/industry-principles

(Tier I and Tier II), there should be at least one (1) dedicated resource person with relevant experience in environmental and social risk management. For the small financial institutions (Tier III), this requirement can be met through shared responsibility roles.

e) A grievance and dispute resolution mechanism to receive and facilitate resolution of concerns and grievances about the environmental and social impact of financed activities should be established by the management with reporting of material disputes to the board of directors.

Draft Nairobi Securities Exchange ESG Disclosure Guidance Manual

The Nairobi Securities Exchange (NSE) has put together a draft ESG Disclosure Guidance Manual. The manual aims to guide how listed companies in Kenya can collect, analyse, and publicly disclose important ESG information using an approach that meets international standards on sustainability reporting. This document also guides on how companies can progressively integrate ESG in strategy, operations, and performance management. To help reduce uncertainties on which framework or standards to apply, the manual recommends the adoption of the 'Global Reporting Initiatives (GRI) Sustainability Reporting Standards, 2018' as the common framework for ESG reporting by listed companies in Kenya.

According to the manual, the ESG reporting process for listed entities should be composed of six interconnected steps including setting governance structures, performing situational analysis, performing materiality analysis, developing value creation strategies, developing ESG report content, seeking assurance, and publishing an ESG report.

International Guidelines, Standards, and Conventions

The Global Reporting Initiatives (GRI) Sustainability Reporting Standards, 2018

The Global Reporting Initiative (GRI) is an international independent standards organisation that helps organisations understand and communicate their impacts. The GRI has proposed a set of reporting principles to guide organisations in ensuring the quality and proper presentation of the reported information. The organisation is required to apply the reporting principles to be able to claim that it has prepared information following the GRI Standards.

These principles are:

i) Accuracy - The organisation shall report information that is factually correct and sufficiently detailed to enable the assessment of the organisation's impacts.

ii) Balance - The organisation shall report information in an unbiased way and provide a fair representation of the organisation's negative and positive impacts.

iii) Clarity - The organisation shall present information in a way that is accessible, understandable, and usable.

iv) Comparability - The organisation shall select, compile, and consistently report information, to enable the analysis of changes in the organisation's impacts over time and the analysis of these impacts relative to other organisations.

v) Completeness - The organisation shall provide sufficient information to enable the assessment of the organisation's impacts during the reporting period.

vi) Sustainability context - The organisation shall report information on its impacts in the wider context of sustainable development.

vii) Timeliness - The organisation shall report information on a regular schedule and make it available in time for information users to make decisions.

viii) Verifiability - The organisation shall gather, record, compile, and analyse information in a way that the information can be examined to establish its credibility.

IFC Performance Standards on Environmental and Social Sustainability

The International Finance Corporation (IFC) Performance Standards are widely considered as one of the most comprehensive and practical approaches to managing environmental and social risks for private investments in emerging markets and are also considered an international benchmark[18]. The performance standards related to:

- Environmental and Social Assessment and Management System
- Labour and Working Conditions
- Pollution Prevention and Abatement

[18]https://equator-principles.com/

- Community, Health, Safety, and Security
- Land Acquisition and Involuntary Resettlement
- Biodiversity Conservation and Sustainable Natural Resource Management
- Indigenous Peoples
- Cultural Heritage

As part of the review of environmental and social risks and impacts of a proposed investment, IFC uses a process of environmental and social categorisation to reflect the magnitude of risks and impacts. The categories are[19]:

i) Category A: Business activities with potential significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented.

ii) Category B: Business activities with potential limited adverse environmental or social risks and/or impacts that are few, generally site-specific, largely reversible, and readily addressed through mitigation measures.

iii) Category C: Business activities with minimal or no adverse environmental or social risks and/or impacts.

iv) Category FI: Business activities involving investments in financial institutions or through delivery mechanisms involving financial intermediation.

The Equator Principles

The Equator Principles (EPs) are a risk management framework, adopted by financial institutions, for determining, assessing, and managing environmental and social risk in projects[20]. The EPs are based on the IFC Performance Standards.

Equator Principles Financial Institutions (EPFIs) commit themselves to implementing the EPs in their internal environmental and social policies, procedures, and standards for financing projects. According to the Principles, an EPFI will not provide financial services where the client will not, or is unable to, comply with the EPs.

The EPs are internationally recognised guidance that is considered by many stakeholders as the benchmark for analysing, monitoring, and mitigating environmental and social risk. The EPs are intended to provide a minimum standard for due diligence and monitoring to support responsible risk decision-making. The principles in summary include:

i) Review and Categorisation of the Project

ii) Environmental and Social Assessment

iii) Applicable Social and Environmental Standards

iv) Environmental and Social Management System and Equator Principles Action Plan

v) Stakeholder Engagement

vi) Grievance Mechanism

vii) Independent Review

viii) Covenants

ix) Independent Monitoring and Reporting

x) Reporting and Transparency

As of July 2021, 126 EPFIs in 38 countries worldwide have officially adopted the EPFIs, covering over 70 percent of international project finance debt in emerging markets[21].

The World Bank Group EHS Guidelines

The World Bank Group EHS Guidelines are technical reference documents containing examples of good international best practices in Environment, Health, and Safety for projects, designated by the World Bank Group. The Guidelines consist of the General EHS Guidelines, common to all industries, and several industries specific EHS Guidelines. The criteria include Environmental, Occupational Health and Safety, Community Health and Safety, and Construction and Decommissioning. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects will be required by the World Bank to achieve whichever is more stringent.

The Paris Agreement under the United Nations Framework Convention on Climate Change, 2015

The United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement is an international treaty on climate change, adopted in 2015. Under the Paris Agreement, countries are committed to submit nationally determined contributions (NDCs) and communicate actions they will take to reduce their greenhouse gas emissions. The Climate Change Act and the National Adaptation Plan 2015 -2030 are contributing immensely to the national implementation of the Paris Agreement.

[19]https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ sustainability-at-ifc/policies-standards/es-categorization

[20]Source: Wikipedia

[21]https://equator-principles.com/about/

United Nations Framework Convention on Climate Change (UNFCCC), 1994

The United Nations Framework Convention on Climate Change (UNFCCC) is an intergovernmental treaty developed to address the problem of climate change. The UNFCCC sets out a framework for action aimed at stabilising atmospheric concentrations of greenhouse gases to avoid "dangerous anthropogenic interference" with the climate system. Controlled gases include methane, nitrous oxide, and, in particular, carbon dioxide. The UNFCCC entered into force on 21 March 1994 and now has 192 parties.

The 2021 United Nations Climate Change Conference, also known as COP26, scheduled to be held in Glasgow, Scotland kicked off on 31 October 2021. As part of the goal to secure global net-zero by mid-century and keep 1.5 degrees Celsius within reach, every financial decision needs to take climate into account. This includes all private investment decisions, but also all spending decisions that countries and international financial institutions are making as they roll out stimulus packages to rebuild economies from the pandemic. In addition, banks, insurers, investors, and other financial firms must commit to ensuring their investments and lending are aligned with net-zero.

United Nations Convention on Biological Diversity, 1992

The Convention on Biological Diversity is the international legal instrument for "the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources". It covers biodiversity at all levels -ecosystems, species, and genetic resources.

Montreal Protocol on Substances that Deplete the Ozone Layer, 1989

The Montreal Protocol regulates the production and consumption of nearly 100 man-made chemicals referred to as ozone-depleting substances (ODS). It has been ratified by all UN Member States. The Montreal Protocol phases down the consumption and production of the different ODS in a stepwise manner, with different timetables for developed and developing countries. Parties have specific responsibilities related to the phase-out of the different groups of ODS, control of ODS trade, annual reporting of data, national licensing systems to control ODS imports and exports, and other matters. Developing and developed countries have equal but differentiated responsibilities, but most importantly, both groups of countries have binding, time-targeted and measurable commitments.

Vienna Convention for the Protection of the Ozone Layer, 1985

The Vienna Convention, concluded in 1985, is a framework agreement in which States agree to cooperate in relevant research and scientific assessments of the ozone problem, to exchange information, and to adopt "appropriate measures" to prevent activities that harm the ozone layer. Kenya ratified the Vienna Convention in 1988.

Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention), 1971

The Ramsar Convention on Wetlands of International also known as Waterfowl Habitat is an international treaty for the conservation and sustainable use of wetlands. It is also known as the Convention on Wetlands. It seeks to halt the worldwide loss of wetlands and to conserve them through wise use and management.

Surrounding Sectoral Environment Laws

Kenya has a range of national policies and legislation that cover sector-specific environmental issues, such as forests, agriculture, water resources, wildlife, fisheries, and mining. There are also supporting local and international laws, regulations, policies, conventions, and guidelines found in sectoral laws that touch on environmental aspects.

Legislation	Summary
Water Act, 2016	This is an Act of Parliament that provides for the regulation, management, and development of water resources, water, and sewerage services. The Act establishes the Water Resources Authority that among other functions, formulates and enforces standards, procedures, and regulations for the management and use of water resources. The Act further provides for the right to clean and safe water in adequate quantities and to reasonable standards of sanitation. The issuance of a permit under the Water Act may where applicable, be subject to EIA.
Wildlife Management and Conservation Act 2013	This Act deals with the conservation and management of wildlife in Kenya. The Act provides that wildlife should be conserved to yield optimum returns in terms of cultural, aesthetic, scientific, and economic benefits. The Act requires that full account be taken of the inter-relationship between wildlife conservation and land use. The Act controls activities within the national parks, which may lead to the disturbance of wild animals. Unauthorised entry, residence, burning, damage to objects of scientific interest, the introduction of plants and animals, and damage to the structure are prohibited under this law.
Kenya Forest Conservation and Management Act (2016)	The Act provides for the creation of the Kenya Forest Service (KFS) which is responsible for forest management and conservation. County Governments are required to adopt and implement policies in adherence to the Act. The Act provides for the establishment and implementation of rules and regulations governing importation, exportation, and trade in forest produce, production, transportation, and marketing of charcoal, quarrying operations in forest areas, and guiding the preparation of forest management plans for public, community, and private forests.
Fisheries Management and Development Act, 2016	This is an Act of Parliament that provides for the conservation, management, and development of fisheries and other aquatic resources to enhance the livelihood of communities dependent on fishing. The Act sets out fisheries management measures that may be undertaken for the conservation and management of any fishery. Such measures include defining and identifying fragile aquatic ecosystems and providing structures to enable collaborative protection.
Mining Act, 2016	The Mining Act obligates mining operations to comply with laws on environment and water rights and use the land under the terms of the permit or licence. Persons conferred with mineral rights are also expected to comply with the Occupational Health and Safety Act. Before qualifying for a mining licence, applicants are expected to obtain an Environmental Impact Assessment, Social Heritage Assessment and submit an approved Environmental Management Plan.
Occupational Safety and Health Act, 2007	This Act covers provisions for the health, safety, and welfare of employees. It applies to all workplaces and its purpose is to protect persons against risks to safety and health arising out of, or in connection with, the activities of persons at work.
Public Health Act (Cap. 242)	This Act concerns the protection of public health in Kenya and lays down rules relative to, among other things, food hygiene and protection of foodstuffs, the keeping of animals, protection of public water supplies, the prevention and destruction of mosquitos, and the abatement of nuisances including nuisances arising from sewerage.
The County Governments Act, 2012	The Act gives effect to chapter 11 (Devolution) of the Constitution and provides for the county government powers, functions, and responsibilities in the delivery of services and connected purposes. The Fourth Schedule of the Constitution states that the National Government is responsible for the protection of the environment and natural resources. On the other hand, under Section 5 of the County Government Act, the County Governments are responsible for the implementation of specific national government policies on natural resources and environmental conservation such as forestry, soil, and water conservation.
Physical and Land Use Planning Act, 1999	This Act gives the county governments powers to control development within their areas of jurisdictions. County governments have the power within their areas of jurisdiction to prohibit or control the use and development of land and buildings in the interests of proper and orderly development of its area, consider and approve all development applications, grant all development permissions, and reserve and maintain all the land planned for open spaces, parks, urban forests, and green belts following the approved physical and land use development plans. The Act also empowers the Director of Physical Planning has powers to include in a local physical development plan conservation of the natural beauty of the area, including lakes and other inland waters, banks of rivers, the foreshore of harbours, and other parts of the sea, hill slopes, and summits and valleys.
The National Construction Authority Act, 2011	The purpose of this Act is to provide for the establishment, powers, and functions of the National Construction Authority (NCA). The NCA oversees the construction industry and coordinates its development. It also sets out application requirements and procedures for the registration of persons and firms as construction contractors.
National Land Commission Act, CAP 5D of 2012	This is an Act of Parliament that provides for the functions and powers of the National Land Commission. It provides for the management and administration of land following the principles of set out in the Constitution and the national land policy.

Institutional framework

Environmental institutional framework overview

The National Environment Management Authority (NEMA) is the principal government agency responsible for regulating environmental protection. It is established within the Ministry of Environment, Water and Natural Resources. NEMA has a mandate to implement EMCA and to coordinate overall matters relating to environmental protection with other government agencies.

HHowever, NEMA shares jurisdiction with other government entities over certain various environmental aspects under different legislative instruments.

There is therefore often duplication of licensing jurisdiction at the national and county level and across sector-specific regulators which creates differing standards and conflicts. For instance, water abstraction is licensed by both NEMA and the Water Resource Authority, effluent discharge is licensed by NEMA and the Ministry of Water, and waste management activities are licensed by NEMA as well as by the Nairobi County[22].

In each of these cases, it is unclear which entity has precedence over the other. Moreover, each entity garners a significant portion of its funding from license fees, and so is unwilling to relinquish its legal authority to grant licenses[23].

Stakeholder consultations conducted during this study also revealed that there is a general lack of clarity on the mandates relating to relevant institutions, particularly the role played by counties vis a vis national government. The institutional framework could therefore benefit the harmonisation of enabling environmental policies and legislation to avoid conflicting mandates.

A table setting out the detailed descriptions, roles, and obligations of the institutions governing the environment sector is set out in the Appendix.

Organisational level structures and management

Banks are at a historic tipping point in the pursuit of growth which has become closely interconnected with the fulfilment of broader development goals, environmental, and social sustainability. While banks can position themselves in a variety of ways on the matter, they cannot maintain the status quo given the opportunities to finance sustainable developments and activities, diminishing resources, and tighter sustainability regulations are impacting clients and their ability to repay debt. In addition, some of the risks of inaction that banks face include:

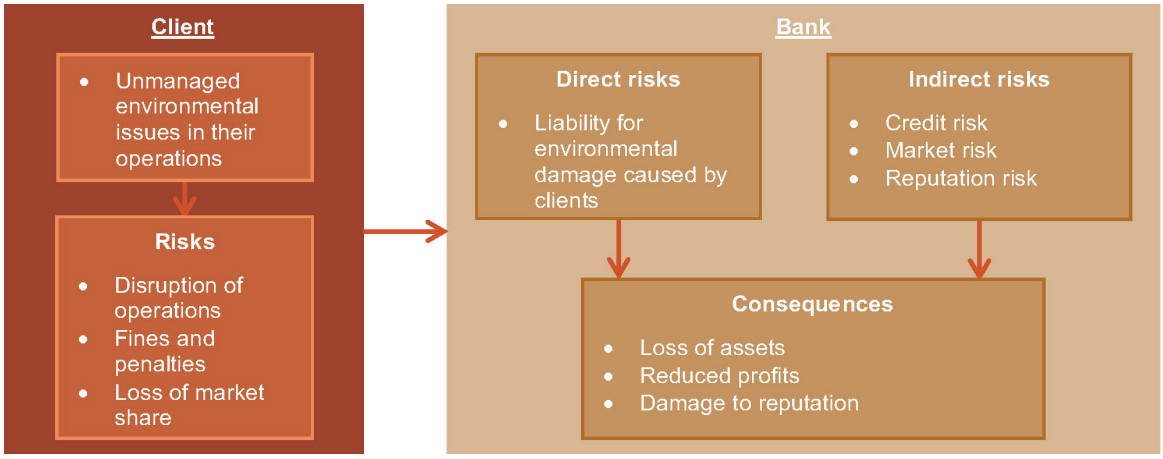
- Loss of business opportunities and financing options through a failure to adapt to changing market realities.
- Higher overall risk exposure through a failure to understand the materiality of environmental and social risks.
- Potential pressure or disengagement of investors prioritising sustainable investment choices.
- Lack of preparedness for regulatory and policy adjustments and the ensuing increased cost of compliance.
- Overexposure to industries sensitive or subject to environmental and social pressures, financial losses due to non-performing lending portfolios as well as the transfer of liabilities to the bank through foreclosure and other forms of bank activities.
- Risks to reputation, credibility, and image of the bank through a failure to respond to stakeholder expectations.

Environmental risks should be properly identified and assessed to inform the appropriate risk mitigation and management approach. Risks that are not systematically assessed may be incorrectly assumed to be irrelevant. In sum, environmental risks (see Figure 1 for a list) can have the following direct and indirect consequences:

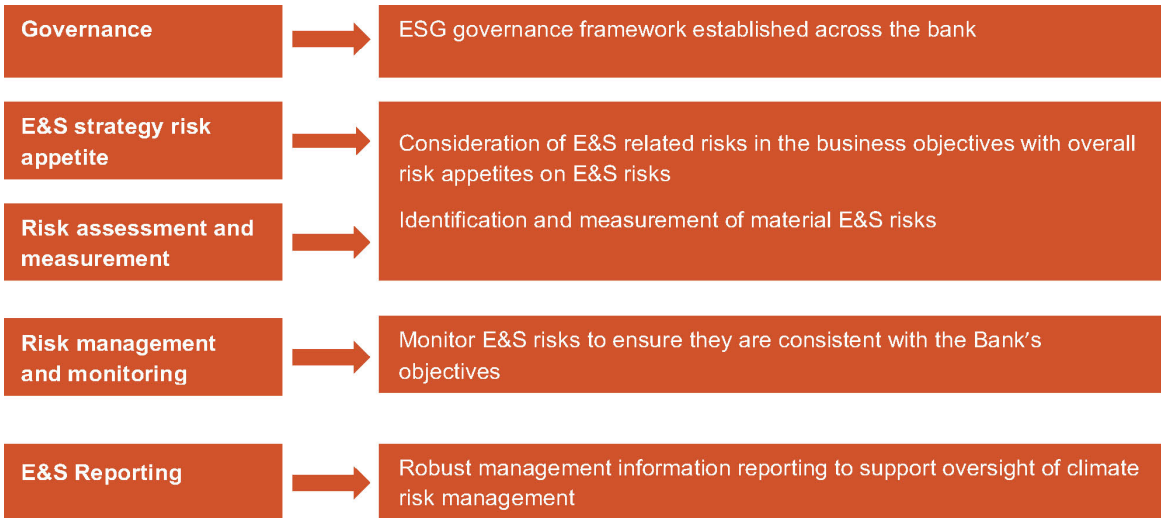
[22]Opondo 2012

[23]How Well Do Environmental Regulations Work in Kenya? A Case Study of the Thika Highway Improvement Project, June 2013, Benjamin Barczewsk

Figure 1: Direct and indirect consequences of environmental risks

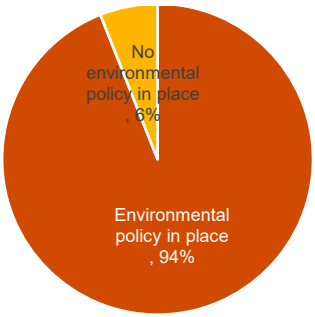


Environmental and social risks are inherent to all economic activities and for banks, risks may come from both the transactional level and at the portfolio level. Like all other risk exposures that banks face, the risk management approach should form part of the banks' enterprise risk management processes from governance to reporting.

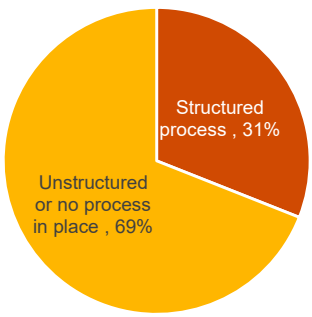


Based on the outcomes of surveys, local banks recognise the impact/challenges that environmental and social risks pose and have implemented a varying range of responses – from minimal compliance checklists in the credit appraisal process to extensive policies and strategies for environmental risk management. The majority of those surveyed have integrated some elements of environmental risk management in their operations.

Environmental risk policy in place



Structured environmental risk management process in place



94 percent of the respondents indicated that they have an environmental risk management policy to support lending/ credit assessments, but only 31 percent had a structured environmental risk management process supported by a team/division with defined responsibilities. However, where environmental and social risk management teams exist within the organisation, they are either be part of the risk management team or the credit teams and not dedicated divisions.

The lending process was standard across the banks surveyed: Customer onboarding; Credit origination; Credit assessment/appraisal; loan documentation; loan disbursement; and monitoring and control. However, the level to which environmental and social risks assessments performed vary from bank to bank based on the policies in place and embedded operating practices. Some banks had policies in place and had made progress in embedding associated operating procedures to assess environmental and social risks while others were lacking, as demonstrated by the case study below.

Bank A	**Bank B**
Bank A is a Tier 1 commercial bank in Kenya. Of the Bank's total portfolio, 20 percent is in the Manufacturing sector and 4 percent in the Real estate sector. The Bank has an Environmental and Social Risk Management Policy that guides the environmental and social risk assessment process and an Environmental and Social Risk Categorisation Tool. Environmental and social risk governance is well defined from the role of the Board, the senior management, the credit department, and the Environment and Social Risk team that is part of the risk management team as well as the environment and social risk champions that are trained on the KBA Sustainable Finance Initiatives. In the credit origination, appraisal processes, documentation, and ongoing monitoring process, the bank has embedded the following specific environmental and social risk management processes. Screening process: i) E&S risk categorisation - Categorisations are undertaken for each project based on the magnitude of its potential environmental and social risks and impacts. Bank A performs an environmental and social due diligence commensurate with the nature, scale, and stage of the projects. ii) E&S Due diligence - Compliance to National regulatory requirements, NEMA Environment Impact Assessment (EIA), and/ or Directorate of Occupational Safety and Health Services (DOSHS) Occupational Safety Health Audit (OSHA) reports for project activities in the Medium & High E&S Risk categories. iii) E&S covenants - Environmental Social Risk Management Plan (ESMP) recommendations from EIA and/or OSHA reports compliance is embedded in contracts iv) ISO certification if available (i.e., 14000 series on Environmental Management Systems & 18000 series on Occupational Health and Safety Management Systems) v) E&S Monitoring - Bank A carries out E&S risk monitoring by reviewing client performance on the agreed-upon action plans.	Bank B is a Tier 3 Commercial Bank in Kenya. Of the Bank's total lending, 20 percent is in the Manufacturing sector and 4 percent in the Real estate sector. The Bank does not have a formal policy on environmental and social risk management. Aspects of E&S risks are however included in the Credit risk management policy. The responsibility for the management of the environmental and social risks largely lies with the Credit Risk Management Team and credit analysts. In the credit origination, appraisal processes, and documentation process, E&S risks are identified by the credit analysts. Factors for consideration in the credit origination process include environmental impacts of the projects, health, and safety impacts to individuals and communities. As part of the credit appraisal process, the Bank ensures compliance with the stipulated laws of the country and county, and relevant approvals, permits, and certificates have been received from the regulators (e.g., NEMA approvals). Monitoring involves the review of reports submitted by the clients such as building inspection reports.

The survey also indicated that a range of risk management standards is applied by banks to assess environmental and social risks as part of their lending process. The surveyed banks indicated they use a combination of two or more standards in their credit assessments. For example, a tier-one bank that had a structured internal environmental and social risk assessment framework indicated that they had incorporated the NEMA Legal Notice 52, IFC performance standards, and the World bank EHS guidelines to develop their framework.

This adoption of various standards was driven by the need to comply with existing environmental regulations and contextualise and localise international good practices to have fit-for-purpose guidelines to support the banks in their environmental and social risk assessment process. Widely adopted across various financial institutions were the IFC's Performance Standards, as an international benchmark for identifying and managing environmental and social risks. IFC's Environmental, Health, and Safety (EHS) Guidelines provide technical guidelines with general and industry-specific examples of good international industry practices to meet IFC's Performance Standards.

In many countries, the scope and intent of the IFC Performance Standards are addressed or partially addressed in the country's environmental and social regulatory framework. The IFC Performance Standards encompass eight topics:

a) Environmental and Social Assessment and Management System: Commercial clients/investees are required to manage the environmental and social performance of their business activity, which should also involve communication between the client/investee, its workers, and the local communities directly affected by the business activity. This requires the development of a good management system, appropriate to the size and nature of the business activity, to promote sound and sustainable environmental and social performance as well as lead to improved financial outcomes.

b) Labour and Working Conditions: For any business, its workforce is a valuable asset, and a sound worker-management relationship is a key component of the overall success of the enterprise. By protecting the basic rights of workers, treating workers fairly, and providing them with safe and healthy working conditions, commercial clients/investees can enhance the efficiency and productivity of their operations and strengthen worker commitment and retention

c) Pollution Prevention and Abatement: Increased industrial activity and urbanisation often generate increased levels of pollution to air, water, and land that may threaten people and the environment at the local, regional, and global levels. Commercial clients/investees are required to integrate pollution prevention and control technologies and practices (as technically and financially feasible as well as cost-effective) into their business activities

d) Community Health, Safety, and Security: Business activities can increase the potential for community exposure to risks and impacts arising from equipment accidents, structural failures, and releases of hazardous materials as well as impacts on a community's natural resources, exposure to diseases, and the use of security personnel. Commercial clients/investees are responsible for avoiding or minimising the risks and impacts to community health, safety, and security that may arise from their business activities

e) Land Acquisition and Involuntary Resettlement: Land acquisition due to the business activities of a commercial client/investees may result in physical displacement (relocation or loss of shelter) and economic displacement (loss of access to resources necessary for income generation or as means of livelihood) of individuals or communities. Involuntary resettlement occurs when affected individuals or communities do not have the right to refuse land acquisition and are displaced, which may result in long-term hardship and impoverishment as well as environmental damage and social stress. Commercial clients/investees are required to avoid physical or economic displacement or minimise impacts on displaced individuals or communities through appropriate measures such as fair compensation and improving livelihoods and living conditions.

f) Biodiversity Conservation and Sustainable Natural Resource Management: Protecting and conserving biodiversity (including genetic, species, and ecosystem diversity) and its ability to change and evolve, is fundamental to sustainable development. Commercial clients/investees are required to avoid or mitigate threats to biodiversity arising from their business activities and to promote the use of renewable natural resources in their operations.

g) Indigenous Peoples: Indigenous Peoples are recognised as social groups with identities that are distinct from other groups in national societies and are often among the marginalised and vulnerable. Their economic, social, and legal status may limit their capacity to defend their interests and rights to lands and natural and cultural resources. Commercial clients/investees are required to ensure that their business activities respect the identity, culture, and natural resource-based livelihoods of Indigenous Peoples and reduce exposure to impoverishment and disease.

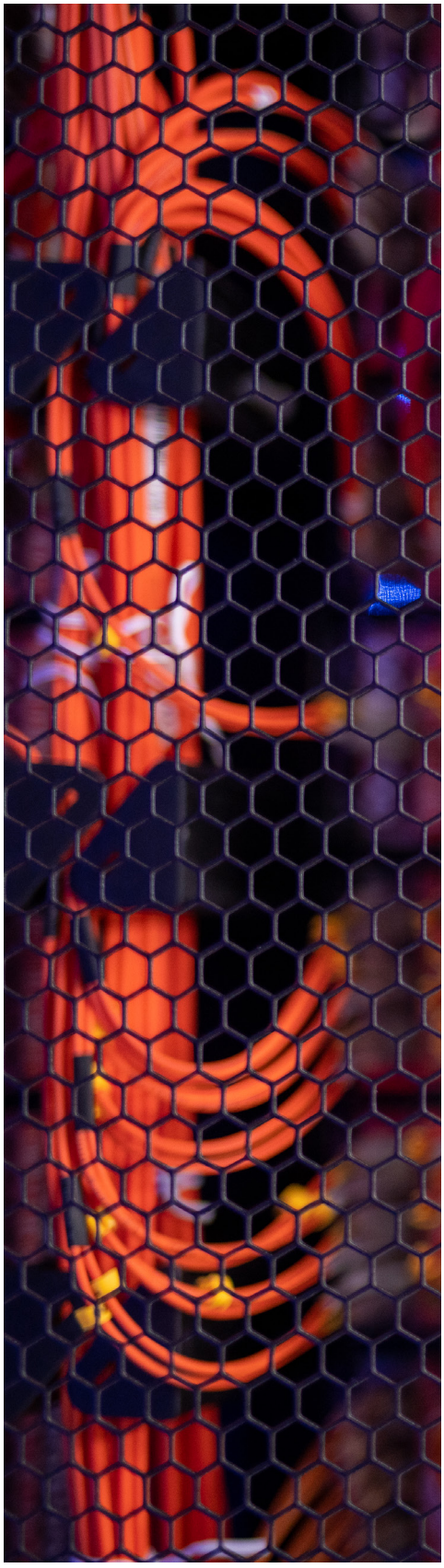
h) Cultural Heritage: Cultural heritage encompasses properties and sites of archaeological, historical, cultural, artistic, and religious significance as well as unique environmental features and cultural knowledge, innovations, and practices of communities embodying traditional lifestyles, which are protected for current and future generations. Commercial clients/investees are required to avoid significant damage to cultural heritage due to their business activities.

The IFC Performance Standards offer a framework for understanding and managing environmental and social risks for high-profile, complex, international, or potentially high-impact projects. A financial institution is required to verify as part of its environmental and social due diligence process that clients comply or can work towards complying with the IFC Performance Standards.

In adopting the IFC Performance Standards, the financial institution needs to be knowledgeable of the environmental and social laws of the country in which it operates and compare the regulatory requirements against those of the IFC Performance Standards to identify gaps.

A good understanding of both sets of requirements as well as potential gaps ensures that the financial institution will effectively identify and assess the key environmental and social risks and impacts that might be associated with their operations.

Gap assessment and challenges identified



Regulatory and policy challenges

Inconsistencies in the existing environmental regulations

The study noted disparities in environmental regulation, specifically riparian land zoning rules. The interplay between zoning guidelines under the Physical Planning laws and the Environment Regulations riparian rules is not well defined - land survey and cadastral maps often do not demarcate expected riparian boundaries. This leads to real estate developments being designed and executed on riparian zones on the strength of unmarked survey maps.

The same case applies to animal migratory routes which are not marked on the land survey and cadastral maps. Many developments have been demolished or delayed by litigation by members of the public or wildlife conservation activists after they were determined to have been built on animal migratory routes.

Additionally, there are several competing laws on the management and protection of riparian reserves. These laws indicate varying measures of the riparian width on the river/wetland and determine the zone from different points of reference, hence creating confusion. The competing laws include:

i) Environmental Management and Co-ordination (Water Quality) Regulations, 2006 states that no person shall cultivate or undertake any development activity within a minimum of six (6) meters and a maximum of thirty (30) meters from the highest ever recorded flood level, on either side of a river or stream, and as may be determined by the authority from time to time.

ii) Water Resources Management Rules, 2007 states that unless otherwise determined by a Water Resources Inspector, the riparian land on each side of a watercourse shall be defined as a minimum of six (6) meters or equal to the full width of the watercourse up to a maximum of thirty (30) meters on either side of the bank.

iii) Survey Act Cap 299 sets the following reservation distances: Coast foreshore reservation - not less than 60 meters in width shall normally be reserved above high-water mark; Tidal River reservations - not less than 30 meters in width above high-water, no mention of other rivers; Lake reservations - not less than 30 metres in width from the water edge at ordinary high-water.

iv) Physical Planning (Subdivision) Regulation, 1998 provides that in a subdivision of land, wayleaves or reserves along any river, stream or watercourse shall be provided of not less than 10 meters in width on each bank, except in areas where there are established flooding.

v) Agriculture (Basic Land Usage) Rules, 1965 provides that any person who cultivates or destroys the soil or cuts down any vegetation or

depastures any livestock, on any land lying within 2 meters of a watercourse, or, in the case of a watercourse more than 2 meters wide, within a distance equal to the width of that watercourse to a maximum of 30 meters, shall be guilty of an offense.

Institutional overlap with conflicting roles of different government agencies

We identified a conflict of roles between NEMA and County Governments. The Constitution, under Part 2 (3) of the Fourth Schedule delegated the control of air pollution, noise pollution, other public nuisances, and outdoor advertising ("Delegated Functions") to the County Governments. This role had been previously conducted by NEMA under the relevant Environment Management and Coordination Regulations.

Despite this re-allocation, NEMA officers continue to carry out the Delegated Functions, citing enforcement powers under Environmental Management and Coordination Regulations. For example, projects that require noise permits to undertake works at night or on weekends. This function has been devolved to County Governments under the Constitution. However, NEMA officers often assume authority to grant permissions for such activities to continue despite the existence of County Government approvals.

This has led to closures by NEMA for projects that proceeded on the strength of the County Government approval, resulting in losses for investees and increased default risk for the banks. It is, therefore, vital to have a streamlined multiagency approach when it comes to inspections of ongoing developments.

In addition, other Government agencies such as NCA and the DOSH also often issue warnings especially to ongoing construction sites, regarding environmental issues which leads to a multiplicity of instructions and compliance obligations.

Public participation challenges

Public participation is a requirement during the EIA process. In a recent landmark decision, the courts found that the land on which Kenya's largest wind power project - Lake Turkana Wind Project sits had been issued in an irregular, unlawful, and unconstitutional manner. It held that the Constitution was not followed when 150,000 acres of community land was allocated to Lake Turkana Wind Power Limited, based on unprocedural public participation.

As part of the EIA process, a Project Summary Report (PSR) and a Comprehensive Project Report (CPR) are prepared for Low and Medium Risk Projects respectively. For High-Risk Projects, the proponent is mandated to ensure an Environmental Impact Assessment Study Report (SR) is prepared by an EIA Expert.

For Low and Medium Risk projects, public participation comes before submission and approval of the PSR or CPR Reports by NEMA. At this stage, the NEMA EIA Guidelines, require the views of the public about the project to be sought, ensuring the representativeness of the potentially affected people. In practice, this is done through public meetings and questionnaires. For High-Risk Projects' Environmental Impact Assessment SR, the public participation process is more intense, as it is conducted both prior and after approval of the Project Report by NEMA.

The Environmental (Impact Assessment and Audit) Regulations provides guidelines and procedures on how to conduct an EIA, which is summarised below:

i) During the process of conducting an environmental impact assessment study, the proponent shall in consultation with the authority, seek the views of persons who may be affected by the project.

ii) In seeking the views of the public, after the approval of the project report by the authority, the proponent shall publicise the project and its anticipated effects and benefits, hold at least three public meetings with the affected parties and communities to explain the project and its effects, and receive their oral or written comments; ensure that appropriate notices are sent out at least one week before the meetings and that the venue and times of the meetings are convenient for the affected communities and the other concerned parties; and ensure, in consultation with the authority that a suitably qualified coordinator is appointed to receive and record both oral and written comments and any translations thereof received during all public meetings for onward transmission to the authority.

Although the public participation methodology has been outlined in the regulations as above, practical guidelines to ensure that the consultation process is meaningful both qualitatively and quantitatively are lacking. Thus, it is not clear to the EIA Experts what constitutes adequate public participation. As evidenced by the Lake Turkana Wind Power case, the lack of adequate public consultation is one of the most common grounds on which EIA licenses are cancelled by the National Environment Tribunal leading to massive losses for banks and borrowers.

Arbitrary issuance of Improvement/Restoration Notices and Stop Orders by NEMA

Under Section 117 (3) of EMCA, NEMA's environmental inspectors have the power, with the approval of the Director-General or his designate, to issue Improvement

and Closure Notices for any manufacturing plant or other establishment or undertaking which pollutes or is likely to pollute the environment. The court has gone on to uphold actions by NEMA where Improvement Notices have been ignored, including eviction and demolition.

The section further states that any establishment or undertaking closed down as a result of the issuance of a closure notice may resume its operations only with the written approval of the Director-General.

In practice, we understand from feedback received, that due process may not be followed in the issue of Notices. This has allegedly opened up loopholes that create opportunities for corruption in NEMA officers' dealings with project proponents.

There is thus a need to amend the process of issuance and withdrawal of any Improvement or Closure notices to ensure there is adequate oversight over the whole process.

Institutional challenges

Deficient Environmental Social Impact Assessments

The Kenya Lamu Coal project clearly illustrates the challenge and consequence of deficient project Environmental and Social Impact Assessments (ESIA). The project was well-funded – the Industrial and Commercial Bank of China had approved the extension of almost USD 1 billion and South Africa's Standard Bank Limited had committed to financing the project to the tune of USD 300 million.

However, in 2016, the National Environment Tribunal nullified the EIA licence and ruled that the ESIA failed to adequately consider the negative effect of pollution from the coal plant. The project was ultimately halted due to the environmental and social risks involved, with the key financiers pulling out of the project at the last minute. Amu Power, a consortium of Kenyan companies, which had initiated the coal plant and planned to run it, had already committed a sizeable amount of land which ultimately ended up being unused. The project is currently stalled and unless fresh ESIAs are conducted and approved, the expenditure would be unrecoverable.

While the Lamu Coal project was stopped well before the construction phase commenced, similar obstacles may arise at any point in the project, exposing banks to risks of delinquency where a project faces ESG compliance sanctions or ceases to exist due to deficient ESIAs or Environment Audits (EA).

From the feedback received during consultations, one of the root causes of deficient ESIAs is unethical practices by EIA experts. Regulations do not have stringent requirements for ESIA/EA experts. This results in the broad licensing of experts which have led to numerous unqualified persons handling projects and offering inappropriate advice. Some lead and associate experts are allegedly producing low-quality reports and, in some instances, even duplicating old reports.

It was also noted that there is no independent professional body to guide the operations of registered lead and associate experts in the industry. The Environmental Institution Kenya (EIK) is an association of experts that is responsible for the professional development of its members. However, it has no power to discipline rogue environmental experts who are involved in unethical practices such as duplicating reports as well as overcharging and undercharging ESIA/EA fees.

Unethical behaviour among clients/borrowers

Feedback received from consultations suggests that some customers/borrowers change/alter project designs after acquiring the EIA license. Others willfully fail to disclose project information during the NEMA license application process. For instance, a customer may present plans for developments with three floors. But after acquiring the EIA license, they build more floors than the approved number without approvals or amending the plans.

Some factories also fail to accurately disclose the nature of operations that they intend to carry out once they are operational. This may be due to fear that NEMA might reject the proposed projects.

When there is a disparity between what NEMA approved and what the customer implemented, NEMA will normally issue improvement notices, restoration orders, or closure notices. This is quite costly and may impact the ability of the clients to service loans.

The burden of monitoring compliance to licenses and permits received from the authorities often lies with the project developers. Having the right level of staff and expertise would identify early breaches to the environmental regulations and corrective measures would be implemented earlier on to prevent the negative consequences of environmental damages.

Inadequately constituted EIA consultancy teams

ESIA consultants are expected to have qualified professional working teams able to undertake effective ESIAs on behalf of the proponent. However, based on feedback received, many ESIA consultancies do not have interdisciplinary teams, solid technical skills, and legal know-how.

As part of the EIA process outlined in the Environmental (Impact Assessment and Audit), Regulations, 2003, NEMA is required to review all EIA reports before the issuance of EIA licenses. NEMA is also required to submit copies of the EIA report to lead agencies for comments as part of the review process. We understand that lead agencies often take too long to submit their comments to NEMA. The lead agencies may have a shortage of staff or lack funds to hire staff or consultants to review the EIA reports on their behalf. As a result, in many cases, NEMA approves the EIA reports before getting comments from the lead agencies.

NEMA similarly sometimes does not have the required technical knowledge internally in certain complex areas. This has resulted in some projects being approved without proper technical review. Such projects can easily be stopped or derailed if an appeal is lodged at the National Environment Tribunal. There is thus a need for strengthening ESIA consultants and NEMA both financially and technically.

Poor project planning

In practice, an EIA tends to be conducted at the last stage of planning, usually after the proponent has obtained all the County Approvals including change of use and approval of building drawings. In such cases, the EIA process has come in too late in the project cycle to inform any required design changes. This means that any recommendations by the EIA expert are not considered. It is thus vital to involve environmental experts in the planning stages of any project. The recent wave of demolitions between 2017 to 2020 exposed the wanting land management and administration system in the counties. Many of the demolished properties had the necessary approvals from the various agencies including the county governments. Many of the properties constructed before the enactment of EMCA were also affected by transition risks related to policy changes that have been implemented since. Although the Physical and Land Use Planning Act, 2019 requires the County governments to solicit comments from relevant authorities or agencies regarding development applications, feedback suggests that NEMA is rarely consulted.

Lack of comprehensive national databases and information sources

It was noted that there was a lack of comprehensive information regarding the procedures that should be followed for a given project. For example, key stakeholders indicated that many towns do not have land-use plans or have outdated land-use maps. This often leads to unplanned development giving rise to significant environmental exposures in case the projects are developed in riparian zones or beyond the designated property boundaries. Town planning matters are also not well understood and overlooked by banks and developers when they undertake their projects. There also lacks a central reference point that would guide planning activities for both developers and regulators on matters relating to environmental management from project appraisal to project monitoring. It was noted that there are various players involved in the process, each working with varied environmental management data points and databases, which leads to conflicts.

Unfavourable business climate for the manufacturing sector, making it unsustainable to comply with the requirements of EMCA and its subsidiary legislation

Manufacturing processes produce hazardous waste, effluents, and emissions, which have to be treated or processed further to adhere to standards set out in the Waste Management Regulations, Water Quality Regulations, and Air Quality Regulations.

The treatment of waste, effluents, and emissions is costly, and many manufacturers are unable to meet the costs. Non-compliance usually leads to the closure of the factories leading to huge losses to the factories and banks which lend to these manufacturers. Manufacturing costs are, generally perceived to be high in Kenya, and as such many establishments lack the budget for environmental management or pollution control.

Delays in obtaining regulatory approvals

Delays in obtaining approvals and certificates from the relevant external bodies like NEMA and County Governments were cited as being a challenge in the implementation of environmental risk assessments by banks. Additionally, delays in obtaining feasibility studies, project plans, building approval plans, bills of quantities, permits, and licenses for the project's loans also pose a challenge.

Lack of public awareness

The associations consulted noted a general lack of public awareness on planning and environmental matters. For instance, banks and developers generally overlook town planning considerations when undertaking their developments. This inevitably leads to future non-compliance issues with the County governments and the relevant regulators. However, it was also acknowledged that in other cases, towns do not have land-use plans or have outdated development plans which are not fit-for-purpose.

Organisational challenges

Lack of integrated ESG-focused approach

Several banks noted that one of the challenges they face in environmental risk management is a lack of a general environmental/ESG risk management regulatory framework that specifically applies across the banking sector. Some banks noted that lack of suitable training for banking staff was a challenge for banks when incorporating environmental risk assessment in their lending processes. Other banks noted that a lack of technical ESG expertise was a challenge in implementing environmental risk assessments.

Several banks noted that the implementation of ESG in the banking sector was expensive and would require securing the right tools, resources, and support from stakeholders. For instance, one bank, lending primarily to corporates, indicated that developing tools to capture some of the nuances of clients would be costly. The bank also needed to hire an external consultant and receive DFI support or specific resource to manage environmental exposure.

The banks primarily cited the associated costs of performing environmental risk assessments as being a hurdle. The banks recognised the challenge of undertaking monitoring activities to ensure compliance with environmental obligations by their clients. In some cases, monitoring client compliance with a set Environment Risk Management standard often proves to be difficult due to the technical nuances in a project's lifetime.

There has been a global shift towards ESG because the cost of implementation of ESG frameworks far outstrips the consequences that could ensue due to a lack of it. There is an emergence of new laws and standards, an increased focus on enforcement of existing ESG regulations, a shift in stakeholder expectations, and growing commercial pressures derived from sustainable financing and impact investment drives. This calls for lenders, borrowers, regulators, and other stakeholders to create an integrated ESG eco-system, which is currently lacking.

Best practice and international guidelines such as Equator Principles, IFC Performance Standards, and World Bank Group EHS Guidelines should be adopted or incorporated when configuring ESG management systems. This is important because emerging global ESG best practice requirements are shaping local laws and enforcement actions.

For instance, based on global best practice sustainability shifts and community calls, the Cabinet Secretary in charge of the Environment on 14 March

2017 gazetted a notice which imposed a ban on the use of plastic carrier bags. The action was motivated by the environmental degradation believed to be caused by plastic bags. After the ban on plastic carrier bags, most businesses manufacturing plastic bags had to shut down or relocate their business. While there is no recent estimate of the impact of the ban, there has been a reduction in the number of plastic bag manufacturers which left banks exposed, in the event there were any credit facilities extended these plastic bag manufacturers. Furthermore, there are proposed legislative interventions such as the Nairobi City County Plastic Control (Amendment) Bill, 2021, that will see the scope of the ban extended not only to plastic bags but to all single-use plastics.

Such interventions are bound to further impact manufacturers and, by extension, any banks extending any financing to them. It is therefore important to stay ahead of legislation by conducting early ESG regulatory scanning and risk assessment, then use these results to inform environmental and social risk management practices and lending decisions.

Lack of a common framework to manage environmental and social risks

The banks interviewed indicated the lack of a standard regulatory framework that guides the management of E&S risks in the sector.

As such, there is a varying range to the effectiveness of policies, processes, and systems applied by the banks in the management of environmental and social risks. As such, compared to other risks that are well regulated and have a consistent framework

of management, such as credit risk, the relative importance accorded to environmental risks in the integrated / enterprise risk management framework of Banks differs significantly.

Limited project monitoring

In most cases, financial institutions rely on the NEMA EIA license and County Government project approvals as proof of compliance for the project. While this is adequate for some projects, there is a need for more environmental due diligence owing to the many gaps that exist in the licensing process. This is because the EIA license from NEMA is issued with conditions and it is vital to confirm that the investee is adhering to all the EIA license conditions as the project progresses. Any contravention of EIA license conditions is grounds for cancellation/revocation of the EIA license and/or prosecution.

From the feedback received, many project developers also do not employ officers/consultants to monitor compliance to environmental legislation and EIA license conditions. Non-compliance can result in legal interventions high penalties, and project closure thus exposing banks to losses.

In August 2018, several buildings were demolished by NEMA in a bid to reclaim grabbed wetlands in Nairobi. The buildings had been constructed on riparian reserves contrary to the Environmental Management and Coordination (Water Quality) Regulations, 2006 (Regulations) and the Water Resources Management Rules, 2007 (Rules). According to the Rules, riparian land on each side of a watercourse should be a minimum of six metres or equal to the full width of the watercourse up to a maximum of thirty metres on either side of the bank. The Regulations restrict any development activity within a river or stream to a minimum of six metres and a maximum of thirty metres on either side based on the highest recorded flood level.

For example, South End Mall on Langata Road which had been reported to be obstructing Mutuini-Ngong River leading to perennial flooding and destruction of property in the surrounding neighbourhood, was demolished on instructions from a multi-agency team comprising of NEMA, National Youth Service, and Nairobi County Government officials. The Ukay Mall which was reported to have been built atop the Nairobi River was also demolished. In addition, residential apartments in Kileleshwa were pulled down as part of the campaign to demolish structures built on riparian land.

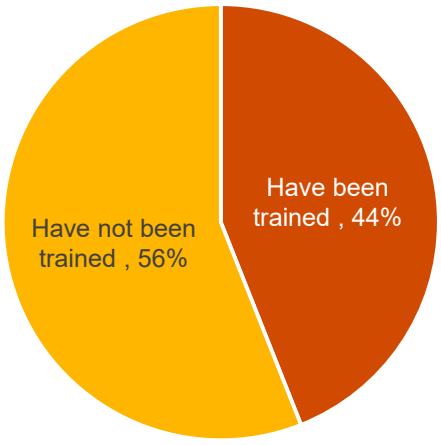
In Milimani Splendor Management Limited v National Environment Management Authority and 4 others [2019] eKLR, the project proponent sought to restrict NEMA from demolishing their property and also sought compensation for the violation of their fundamental rights. They had constructed their property and maintained a 10-metre riparian reserve (whereas the Wetlands Regulations required a distance ranging from 6 metres to 30 metres). This was supported by copies of letters from the Commissioner of Lands and an EIA License from NEMA. An improvement notice was sent to the Petitioner, which was ignored and led to the demolition of the petitioner's property. In deciding the case, the Court stated that every person should take an active role in environmental protection in light of Article 69(2) of the Constitution, which places a duty on every person to cooperate with state organs to protect and conserve the environment and ensure ecologically sustainable development. NEMA was ultimately tasked with surveying the river in question all the way downstream to determine the boundary between the river and adjacent landowners. The request to restrain the demolition was denied and the demolition would only be avoided by complying with the Improvement Notice in effect.

The case illustrates the fact that lending institutions must take a more proactive role in determining the environmental compliance of their clients as this constitutes more than checking for approvals, which may be withdrawn upon review or completely ignored by enforcing authorities such as NEMA.

Siloed risk-management processes

Most businesses understand how to mitigate conventional risks, which can be relatively easily isolated and addressed with standard risk-management approaches. But when it comes to complex risks embedded in interconnected systems, such as those related to climate risks and the changes associated with a transition to a low-carbon economy, standard approaches are not adequate.

Staff trained on environmental risk management



Climate risk assessments are affected by a lack of clarity on risk definitions, the identified risks, and which function "owns" them. Effective environmental and social risk management requires broad ownership and understanding of climate risks and opportunities and the financial impacts and input from across the organisation which is a challenge in the banking sector. From the surveyed banks, only 44 percent indicated that their staff had received training on environmental and social risks.

Lack of awareness on environmental risks and their impact

The lack of awareness of environmental and social risk management was identified as the key challenge in the adoption of robust environmental risk management by local banks. 63 percent of the survey participants indicated that environmental risk disclosures form part of banks' reporting in the annual financial reports and sustainability reports. However, a review of the reports showed that the disclosures related to the Bank's corporate social responsibility activities lacked disclosures on areas such as environmental and social exposure and the environmental and social risk management approach adopted by banks in their lending activities.

In addition, our in-depth discussions with several banks indicated that environmental and social risks are an emerging issue in the sector and are in the initial stages of adapting to better manage these risks. Banks are at various stages of implementing environmental and social management within their loan processing, but considerable support will be required, not only because it introduces a type of risk that was not structurally addressed previously, but because of the risks associated with environmental and social issues are more difficult to quantify. Demonstrating, and potentially quantifying, the impact environmental and social risks have on the financial risk profile and performance of financial institutions may help to make these risks tractable.

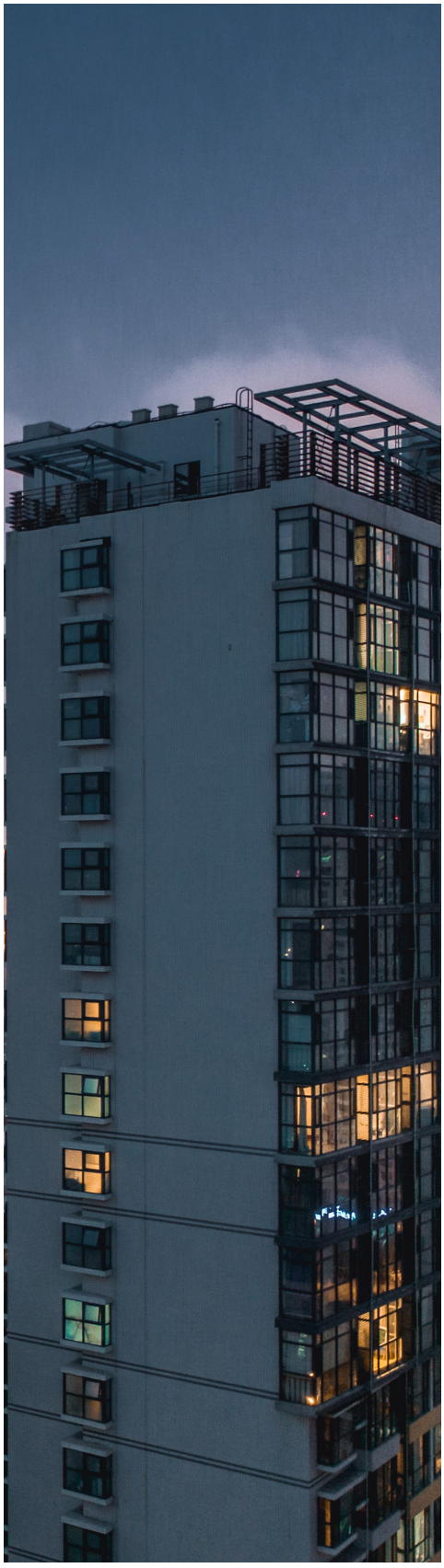
A good understanding of the components of the environmental and social framework in a much broader context than the apparent physical risk that present and other interconnected and reinforcing factors such as how climate change impacts biodiversity loss and vice versa will contribute to better environmental and social risk management practices.

Shortage of qualified professionals

The implementation of the Environmental and Social (Risk) Management System involves policy and procedural interventions backed by extensive human resources development.

For effective environmental and social risk management to be implemented, banks require a risk management team that is well-versed in the country's environmental compliance requirements including the environment regulations/standards, social safeguard policies, impact assessments, and environmental protection licenses. Qualified and experienced environmental and social risk management staff are currently scarce in the country and it will require deliberate efforts to promote the development of the industry.

Opportunities for intervention



Regulatory and policy interventions

Addressing ESG gaps by embedding Sustainable Financing Practices

Sustainable finance is a subset of the overall financial market which offers a structured way to channel capital to economic activities and projects that deliver sustainable outcomes. Financiers' world-over are looking to manage their ESG risks by requiring borrowers to demonstrate compliance with not only local environmental and sectoral policies but other international standards such as the Equator Principles, International Finance Corporation (IFC) performance standards, and/or the Global Reporting Initiatives (GRI) Sustainability Reporting Standards, 2018.

Global disclosure requirements are also growing momentum. Recent trends include the proliferation of voluntary reporting standards that companies may adopt to aid disclosure of environment and climate change-related financial risk.

Notably, in 2016, the G20 Financial Stability Board (FSB) established the Task Force on Climate-Related Financial Disclosures (TCFD), which released a set of recommendations for the voluntary disclosure of climate change-related financial risks. TCFD recommendations require companies to disclose qualitative data, including scenario analysis, which identifies risks based on differing climate change-driven scenarios. TCFD recommendations are a voluntary reporting initiative that is rapidly becoming popular given their endorsement by major investors, regulators, and many major companies worldwide.

Nature-based solutions ("NbS") are also emerging as an approach to address environmental risks in the financial sector. The International Union for Conservation of Nature (IUCN) defines NbS as "actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits". NbS are designed to address major societal challenges, such as food security, climate change, water security, human health, disaster risk, social and economic development. To ensure NbS reach their potential to address societal challenges, IUCN developed the Global Standard for Nature-based Solutions. The IUCN Guidance for using the IUCN Global Standard for Nature-based Solutions can be used by financing institutions including banks to assess the environmental viability of proposed projects and to advise on suitable alternatives or adjustments.

In June 2021, the Taskforce on Nature-related Financial Disclosures (TNFD) was formally launched. The task force aims to provide financial institutions and corporations with guidance on the reporting of nature-related risks, to encourage organisations to adopt nature-positive outcomes. This initiative is particularly important for Kenya given that its economy is natural resources-driven/dependent.

Another commendable effort in the financial sector to steer the global economy towards net-zero emissions and deliver the Paris Agreement goals is the Glasgow Financial Alliance for Net Zero (GFANZ). GFANZ brings together leading net-zero initiatives from across the financial system to accelerate the transition to net-zero emissions by 2050 at the latest. Representing Kenya is KCB and Safaricom, which are among the hundreds of global financial institutions that have adopted the targets under the GFANZ.

In Kenya, the CBK Guidance on Climate-Related Risk Management was introduced in October 2021. It requires financial institutions to report on their climate-related financial risk through a phased approach. This in turn will mean that customers will be under pressure to provide this information to financial institutions, calling for clear reporting, and disclosure guidelines. During our consultations, the banks:

i) Noted that policy development and implementation by CBK was critical for the proper adoption of ESG in the market.

ii) Recommended the establishment of a robust banking environment charter whose role will include enhanced coordination on environmental issues between banks and external bodies in aspects of operational planning. The charter should ensure policies are reviewed frequently to develop and implement legislative frameworks to address all the emerging environmental issues comprehensively and competitively.

iii) Recommended enhanced engagements with regulators and other stakeholders concerned e.g., NEMA to provide technical expertise, guidance, and training for environmental risk management units or credit teams

Regulators and the banking sectors can learn from progressive economies that have implemented recent international and regional interventions are highlighted below:

i) The UK climate-related disclosures under TCFD are mandatory by 2025 for corporates, banks, asset managers, and pension schemes with early implementation by premium listed companies.

ii) Asset managers and other financial players in the EU are required to disclose sustainability data under their Sustainable Finance Disclosure Regulation.

iii) Amendments to the Tokyo Stock Exchange's Corporate Governance Code and the Guidelines for Investors' and Companies' Dialogue in 2021 included specific references to sustainable practices in a variety of areas.

iv) In China, the Guiding Opinions on Promoting Investment and Financing to Address Climate Change, issued in 2020, emphasises the necessity of developing and supporting climate and green finance products and projects.

v) The Singaporean Monetary Authority of Singapore (MAS) issued proposed Guidelines on Environmental Risk Management for banks, insurers, and asset managers in 2020. The guidelines include provisions for environmental risk resilience and support the financial sector's transition.

vi) The South African financial regulatory body proposed enhanced ESG disclosures for pension funds, but initially, this would be accomplished through voluntary guidance.

vii) The European Central Bank (ECB) and the Bank of Japan (BOJ) in 2021 announced targeted support to the private sector to address climate change. This included changes to the monetary policy framework to enhance issuers' alignment with climate-related EU legislation in its allocation of corporate bond purchases[24]. The BOJ also indicated it provide funds at zero interest rate to financial institutions supporting efforts to address climate change. The BOJ also announced it would begin buying non-Yen-denominated green bonds issued by foreign governments and institutions[25].

Organizations such as FSD Kenya, IUCN, WWF, and other international stakeholders are working closely with the banking community in Kenya to develop tools and approaches that can be used to address the emerging environmental risks identified in this report.

Continued collaboration with these and other stakeholders concerned will support these efforts by resolving external environment issues, building awareness of, and fostering the proactive management of environmental and social risks.

Addressing sub-standard ESIAs through lobbying for institutional changes

Professional misconduct should be handled by a mandated professional body with adequate enforcement powers to ensure the integrity of ESIA/EA reports. To achieve this, regulators should consider the legal establishment of the Environmental Institution Kenya (EIK) through an Act of Parliament, with the following proposed objectives and functions:

i) To ensure that all registered environmental experts in Kenya meet the standards, competence, and professional conduct that are appropriate for the environmental professional services they provide.

[24]ECB presents action plan to include climate change considerations in its monetary policy strategy (https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.pr210708_1~f104919225.en.html)

[25]The Bank of Japan's Strategy on Climate Change (https://www.boj.or.jp/en/announcements/release_2021/rel210716b.htm/)

ii) To set, maintain and continuously improve the standards of learning, professional competence, and professional conduct for the provision of environmental consultancy services in Kenya.

iii) To determine, maintain and enhance the standards of professional practice and ethical conduct and learning for the environmental and social practitioners in Kenya.

iv) To represent, protect and assist members of the environmental profession in Kenya in matters relating to the conditions of practice and welfare.

v) To formulate policies that promote the restructuring of the legal profession in Kenya to embrace the spirit, principles, values, and objects of the Constitution of Kenya.

vi) To facilitate the realisation of a transformed legal profession that is cohesive accountable, effective & independent.

vii) To establish mechanisms necessary for the provision of equal opportunities for all environmental practitioners in Kenya.

viii) To protect and promote the interest of consumers of environmental profession service and the public interest generally by providing fair, effective, efficient, and transparent procedures for the resolution of complaints against environmental practitioners.

ix) To develop and facilitate adequate training programs for environmental practitioners.

The proposed regulatory agency should maintain a database of all EIAs for assets that are collateralised by financial institutions in partnership with the lands office with the monetary values transparently disclosed and reported. This will promote the visibility of EIA transactions for the banking sector and the wider financial sector and ensure that those EIAs that are fraudulently issued are tracked.

The amendment should also be made to the Fourth Schedule of the Environmental (Impact Assessment and Audit) Regulations, 2003 on the Criteria for Environmental Impact Assessment Experts Registration to include specific fields of study or specialisation.

Additionally, NEMA should conduct a clean-up of the Environmental Impact Assessment Experts Register. Any misconduct or complaint against an Expert should be made available in the EIA Expert database at NEMA. This will enable banks and their clients to engage credible experts who offer sound environmental management advice. NEMA and WRA should maintain a publicly viewable database of EIA experts and allow stakeholders to give ratings. This will allow financial institutions and other stakeholders to identify the entities that are considered credible based on crowdsourced rating information.

Addressing inadequate technical skills through capacity building

Addressing the current capacity constraints will require several interventions to promote the development of qualified staff at all levels. These interventions are highlighted below.

i) NEMA and WRA staff should be trained in various relevant areas.

ii) Capacity building of relevant bank staff linking to KBA's SFI Platform.

iii) NEMA and WRA should be well funded to ensure that they can bring onboard key experts.

iv) NEMA should train and appoint members from other government agencies such as WRA, KFS, KWS, NCA, DOSHS, and County Government as environmental inspectors. This will help in monitoring ongoing developments and ensure compliance with environmental laws and EIA license conditions.

v) NEMA should revise the current Code of Practice and Professional Ethics for Integrated Environmental Assessment and Audit Experts to include criteria governing how multidisciplinary tasks should be handled during the EIA Process.

vi) Bank staff linking to KBA's SFI Platform should be trained on ESG Risks.

Addressing poor planning challenges

PThe poor project planning challenges should focus on ensuring environmental impact issues are considered as early as possible in project design assessment. Some of the interventions that could be pursued include the following.

i) Anchor environmental assessments early on in the development design process. This will ensure that any development in riparian or environmentally sensitive areas does not commence before an EIA license is issued.

ii) Amend Part IV of the Physical and Land Use Planning Act, 2019 to include the requirement for EIA as part of the Development Control and Approval process.

iii) Establish a centralised licensing portal that incorporates all the conditions that have been stipulated by the various licensing departments.

iv) EIA should be undertaken before development plans are approved as the best practice.

Addressing disparities in riparian and wildlife passage environmental regulations

Parliament should pass the Environmental Management and Coordination (Conservation and Management of Wetlands) Amendment Regulations, 2017. These amendments are viewed as adequate because they clearly define the distances and measurement points regarding riparian zones of streams, rivers, lakes, and wetlands.

Amendments should also be made to the Environmental Management and Co-ordination (water quality) Regulations, 2006 Part II Sec 6, Water Resources Management Rules, 2007,116 (2), Survey Act Cap 299 Part XII, and Physical Planning (Subdivision) Regulation,1998 to harmonise the definitions and measurements regarding protected riparian zones with the Environmental Management and Coordination (Conservation and Management of Wetlands) Amendment Regulations, 2017.

Mapping riparian reserves in consultation with other agencies/stakeholders concerned

NEMA should only approve developments near rivers and wetlands after the proponent has engaged WRA to physically mark the riparian zone and determine the beacons for the highest water mark.

NEMA, in coordination with WRA, should map all riparian zones and avail the data through a database that will be accessible by banks and other stakeholders.

There should be capacity building on riparian land zoning among the surveyors, planners, engineers, and project proponents. This can be achieved through professional associations requiring sensitisation sessions for their members on riparian land zoning and environmental laws.

Addressing unfavourable business climate for the manufacturing sector

Lobby for amendment of the EMCA to include green tax reliefs for projects and manufacturing companies/ factories to establishments that are compliant with ESG and sustainability requirements.

Embedding Technology and Computer Assisted Land Surveillance

Banks and regulators should utilise technology to lower EIA-related transaction costs. This can be done through the introduction of Geographic Information Systems (GIS) enabled by software and drone technology within both NEMA and WRA, to map out and have publicly available maps and data on areas that are gazetted as public land, areas close to rivers, and other riparian location. This will allow bank credit analysts to easily access maps digitally and hasten the review process. Practical examples where successful technology utilisation has been studied and utilised include:

a) Utah State University conducted a cost-benefit analysis of implementing unmanned aerial vehicle (UAV)/drone technology within agricultural appraisals. The study found that UAVs/drones can increase efficiency and accuracy when inspecting large tracts of land. UAVs/drones allow appraisers to view areas of the property that are difficult to assess due to weather, accessibility, or terrain. UAV can also assist in collateral inspections and offer a fast and reliable method to inspect and secure collateral. The drawbacks, however, include legal ramifications and additional time spent to obtain commercial licensing.

b) Beacon/qPublic.net[26] is a US-based e-government solution that allows users to view local government information and related records online. The platform provides interactive public access portals that allow users to view county and city information, public records, and GIS via an online portal.

c) Minnesota Real Estate Appraisal Services LLC[27] has also implemented the use of GIS in its appraisal reports. The use of GIS illustrates specifics of the property on a map such as elevations, soil types, wetland areas/wetland types, and other property-specific attributes. All mapped attributes are fully explained within the appraisal report. All mapping and data used for explanation are acquired by the USGS, Minnesota DNR, or other reliable entities.

Institutional level interventions

Strengthening Multi-Agency Alignment

The regulators and other stakeholders should consider the following interventions to improve and strengthen the multi-agency alignment.

i) Amendment of Part IV and Part V (25 and 26) of the Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations, 2009 to ensure the devolved powers are transferred from NEMA to the County Governments hence eliminating the overlap.

[26]https://qpublic.schneidercorp.com/

[27]https://www.mnreappraisals.com/services/gis/gis-mapping-valuation/

ii) NEMA should train and appoint members from other government agencies such as WRA, KFS, KWS, NCA, DOSHS, and County Government as environmental inspectors. This will help in monitoring ongoing developments in a unified manner and ensure compliance with environmental laws and EIA license conditions (Section 117 of EMCA 1999 empowers the NEMA Director-General to appoint environmental inspectors among the various government agencies involved in inspections of ongoing developments)

Incorporating public participation in the EIA consideration and approval process by regulators

There is a need for clear public consultation guidelines that will direct experts on how to conduct adequate public consultation exercises. NEMA should develop public participation guidelines during the EIA process or revise the EIA Regulations 2003 and set minimum standards to ensure that the consultation process is meaningful both qualitatively and quantitatively.

Addressing arbitrary issuance of improvement/ restoration notices and stop orders by NEMA

Lobby for the digitisation of the process of issuance of improvement and closure notices to ensure there is adequate oversight from NEMA headquarters/ director-general. The processes of issuing such orders and withdrawals should be handled by two separate departments or authorities to promote independence.

Addressing delays in obtaining regulatory approvals

NEMA should invest in adequate staffing and training to ensure the regulators and government officials are adequately equipped and motivated to provide timely services and oversight.

The Kenya Wildlife Service should map and gazette migratory routes

To comply with the Wildlife Conservation and Management Act, 2013, there is a need for information on the existing migratory routes. This should be made readily available for relevant professionals to access when they deal with projects that would have an impact on wildlife.

Addressing lack of public awareness

Raising public awareness on the importance of environmental sustainability will ensure there is a demand for better accountability. Campaigns to facilitate culture change and nationwide appreciation of the environmental policies provide one route to raising awareness. The education system is the other key entry point, where there is scope to include a focus on environmental sustainability in curricula of subjects such as engineering, agriculture, energy, and transport[28].

If there is increased awareness, people are more likely to consider environmental matters when undertaking their developments. Professional associations should lobby, educate, and teach on some of these issues.

Organisational level interventions

Addressing unethical behaviour among customers/borrowers

Banks should have an Environmental Management System as well as policy and governance structures to ensure clients/investees adhere to environmental laws. Banks should consider bringing on board independent environmental consultants to conduct regular independent environmental audits. In addition, strengthening the environmental accountability mechanisms, particularly for sectors such as manufacturing, real estate, and construction, consistent monitoring, disclosures, and reporting requirements is necessary to ensure compliance.

Addressing insufficient project monitoring through ongoing monitoring

Banks should hire independent environmental experts and conduct their own environmental due diligence for all projects before financing. Banks should also participate in active environmental monitoring of the activities of their clients/investees. This can be achieved through periodic second-party environmental compliance audits. Banks should have departments/ consultants to monitor environmental compliance in projects they have financed. Environmental compliance and reporting should form part of the conditions the investees should commit to before disbursement.

Streamlining the risk management process to incorporate environmental risk factors

A streamlined risk management approach is a key priority for the Kenyan Banking industry and its sustainability. The common thread running through risk categories banks are used to dealing with (i.e., credit and counterparty risks, market risks, liquidity

[28]World Bank. 2019. Kenya Country Environmental Analysis. © World Bank

risks, operational risks, etc.) is that they all concern the impacts of the risk on the institution itself. However, with E&S risks, risk management must consider new perspectives, for example, not only the impact E&S risks have on the bank but also the potential impact of stakeholders on the bank and vice versa the risks to which the bank is exposing its stakeholders and the environment due to its business activities.

Our proposed principles aim to create an enabling environment for the management of E&S risks based on a governance framework and strategy for managing the risk and opportunities brought by climate change, and to provide guidance for considering climate considerations in their risk management framework and a planned approach to related information disclosures:

Governance

The board has primary responsibility for a bank's climate and social resilience and soundness. The Board should therefore have a sufficient understanding of the climate and social issues in determining a Bank's approach to address them. Additionally, to fulfil its mandate, the board should consider E&S risks when developing the institution's overall business strategy, business objectives, and risk management framework and exercise effective oversight on their implementation.

This oversight may be delegated to board-level committees, key personnel, or management-level committees. Such delegation should be made formally with the relevant roles and responsibilities, governance structure, and escalation/reporting procedures clearly outlined and documented in the mandate/charter/terms of reference/job duties.

This governance structure will be varying, and a range of practices is expected such as more advanced institutions will have integrated climate-related considerations and structures while smaller institutions can simply expand the mandates of designated individuals e.g., Head of Risk / Chief Risk Officer in dealing with the risks and opportunities arising from climate change.

Risk strategy development and implementation

Banks should define and implement a sensible business strategy to deal with environmental and social risks. The boards should exercise oversight of the development and implementation of environmental and social risk strategies, including embedding climate-related risks into the Bank's risk appetite framework.

The risk strategy on ESG risks has to be aligned closely with the business strategy as the closer the environmental and social aspects are to the core part of a bank's business model, the closer the activities are aligned and the more senior the managers and integrated into the business.

The risk strategy then needs to be operationalised through a corresponding system of Risk Appetite Statements. Starting with an inspection of ESG risk factors across all risk types, quantitative and/or qualitative limits can be assigned on an aggregate level and finally be broken down into individual risk types. When taking ESG risks into account in their strategies, banks must keep in mind that environmental and social risks' planning horizons are usually much longer than the 3–5 years traditionally considered in business and risk strategy design. This especially applies to the climate-change aspects of environmental and social risks.

Risk management

Many Kenyan Banks are still in the early stage of developing their approach to dealing with E&S-related risks and time is needed to establish the process and build the relevant capabilities.

Day-to-day climate-related risk management activities should be carried out by the Bank's existing risk management function, independent of the risk-taking activities and operational units it reviews. In line with the usual risk governance arrangement, the responsibilities of managing climate-related risks could be allocated among three lines of defence as follows:

- The first line of defence. For instance, climate-related risk assessments may be undertaken during the client on-boarding, credit application, and credit review process. Front office staff should have sufficient awareness and understanding to identify potential climate-related risks.
- The second line of defence covers the oversight of climate risks in business activities, the monitoring of risks, and the review of the relevant policies and procedures. For instance, the risk function is primarily responsible for undertaking independent climate risk assessment and monitoring, including challenging the initial assessment conducted by the front office staff.
- The third line of defence should be provided by an independent and effective internal audit function, which includes periodic audit evaluation of the effectiveness of the climate risk functions performed by the first and second lines of defence.

Identification

Due to the broad range of dependencies across financial and non-financial risks, environmental and social risks should not be assessed linearly. Instead, environmental, and social risks should be identified by investigating cause-effect relationships and or common triggers. environmental and social risks must be considered for every risk type, from financial to non-financial risks i.e., within each risk type an examination must be made of the extent ESG risks are apt to change the assessment of the respective risk type. To run those identification steps, highly qualified personnel are required. Special training will be inevitable. Initial identification may focus on geographical locations and industry sectors that are more vulnerable to physical or transition risks respectively.

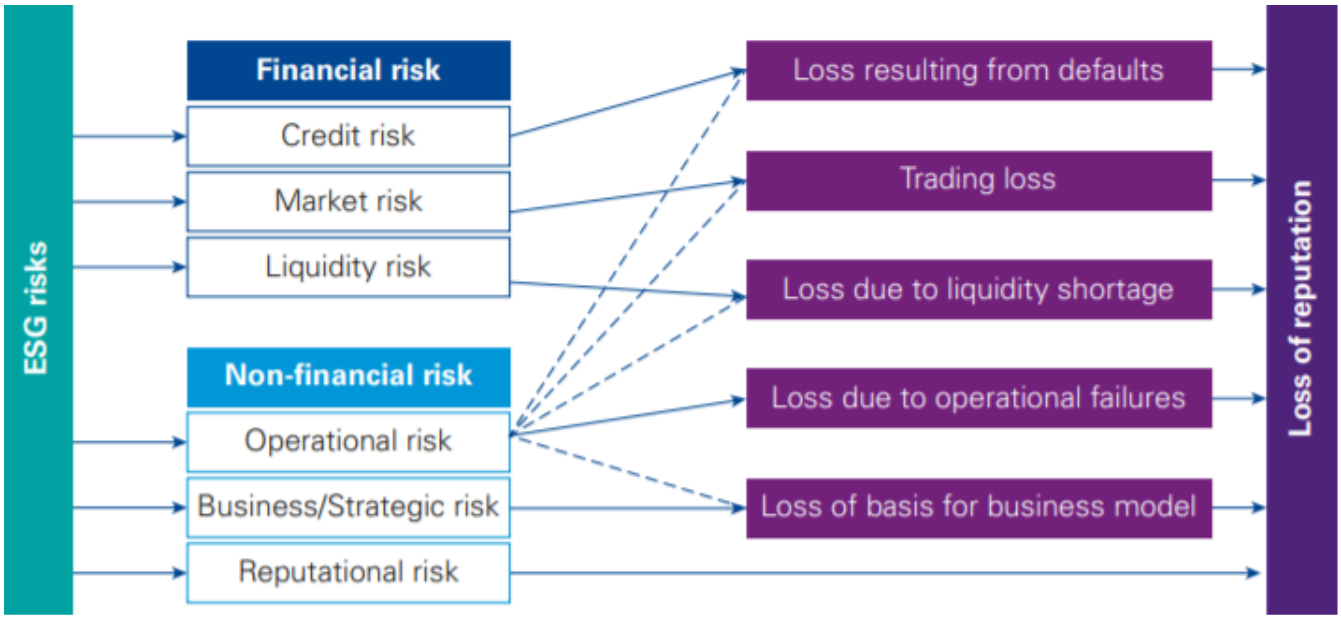
The current focus by the Kenyan banks has been on physical risks i.e., dangers that banks and their customers see themselves exposed to e.g., weather damages to assets, loss of value of assets held as security. The scope of this needs to expand to review other areas of exposure such as a bank's own non-environmental and social compliant behaviour can cause reputational risks, this, in turn, can — together with a stronger environmental and social risk awareness of stakeholders — lead to legal disputes, i.e., legal risks are increased. This demonstrates that the dependencies across financial and non-financial risks mean that environmental and social risks cannot be assessed linearly. Instead, environmental, and social risks have to be identified by investigating cause-effect relationships and/or common triggers.

Measurement and evaluation

Environmental and social risks materialise in known risk types. For example, stringent regulations on carbon emissions can cause the closure of factories, resulting in credit defaults and changes in market sentiment in impairments. environmental and social risks therefore can affect counterparty, market price, liquidity, and operational risks.

However, the cause-effect mechanisms require a wide range of expert knowledge along the process (e.g., on transforming climate scenarios and models into business impacts throughout the value chain). A crucial process step in measuring and evaluating environmental and social risks is the assessment of the current environmental and social exposure.

Exhibit 2: Cause-effect mechanisms of ESG risks[29]



[29]ESG risks in banks, KPMG International, 2021

Concrete next steps for banks must include the insight knowledge on the different value quick and early probing of available data sources and tools for initial measurement evaluation assessment.

Controls and monitoring

As with all risk types, development of preventive and reactive control measures is at the heart of the risk management process. The options available to a bank for controls around environmental and social risks are varied and must be selected individually. Examples include:

- Sector level measures - Banks implement measures to impose limitations or policies on their exposures to sectors that do not align with their climate strategy or risk appetite. Such measures, together with any climate considerations or assessment criteria, could be set out in relevant sector policies to facilitate consistent implementation and risk assessment. Apart from sectoral exposure policy, banks may also consider applying more stringent lending terms such as a shorter tenor and a lower loan-to-value limit.
- At the client level – Banks, in their client selection, the credit assessment, annual review, and ongoing monitoring processes, may review whether the business activities of their clients are in line with their climate strategy or risk appetite, considering the client's climate strategies. Banks may then determine the appropriate mitigation measures. Depending on their approach to climate change.

Reporting

Transparency on environmental and social risk exposure and control measures throughout the bank is needed, so comprehensive, action-oriented internal reporting is vital. Information on environmental and social risks can be included in existing risk-reporting frameworks and existing risk types.

This reporting is crucial and should provide information for all governance levels including the Board to make informed decisions on environmental and social risk management and strategy.

Disclosure and external reporting

Across the world, there has been an increased focus on non-financial statement disclosures with a focus on Sustainability reporting and in some regulatory regions, the disclosures around environmental and social risks are mandatory.

A Regulatory framework for disclosing climate-related information to increase transparency in the sector. Banks should, at least on an annual basis, disclose their approach to managing environmental and social risks in a manner that is clear and meaningful to their stakeholders. Disclosures should include the potential impact of material environmental and social risks on the bank, including quantitative metrics such as exposures to sectors with higher risk sectors.

Adoption of the well-regarded international reporting frameworks, such as recommendations by the Financial Stability Board's Task Force on Climate-related Financial Disclosures ("TCFD") would provide a useful framework for the disclosure of climate-related risks.

Appendix

Select environment regulatory provisions

Law / Regulation / Guidelines / Standards	Requirement/Obligation	Provision
Constitution of Kenya, 2010	All persons are required to adhere by the national value and principle of sustainable development when applying or interpreting any law or implementing public policy decisions.	Art. 10(2)(d)
	Every person has the right to a clean and healthy environment.	Art. 42
	Land in Kenya shall be held, used, and managed in a manner that is equitable, efficient, productive, and sustainable.	Art. 60
	Every person has a duty to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources	Art. 69(2)
Environmental Management and Co-ordination Act, 1999	Every person in Kenya is entitled to a clean and healthy environment and has the duty to safeguard the environment. Every person shall cooperate with state organs to protect and conserve the environment and to ensure the ecological sustainable development and use of natural resources.	Sec. 3
	NEMA must grant an approval after an environmental impact assessment (EIA) is carried out for certain specified activities to be undertaken. Some of the activities include: • Dealing with any structure in, or under the river, lake, sea, or wetland • excavating, drilling, tunnelling, or disturbing the river, lake, sea, or wetland • directing or blocking any river, lake, sea, or wetland from its natural and normal course	Sec. 42
	It is an offence to release any polluting or hazardous substance into the coastal zone. A person found guilty of this offence shall be liable upon conviction to a fine of not less than one million shillings or to imprisonment for a period not exceeding two years or to both. Where any polluting or hazardous substances are released into the Coastal Zone, any person responsible for management of the polluting or hazardous substances shall be liable: • for any resultant damage; and • for the cost of any measures reasonably taken for the purpose of preventing, reversing, or minimising any damage caused by such discharge; and • for any damage caused by any measures so taken.	Sec. 55
	All project proponents must submit a project report to NEMA in the prescribed format before financing, commencing, proceeding with, carrying out, executing, or conducting or causing to be financed, commenced, proceeded with, carried out, executed, or conducted by another person any undertaking specified in the Second Schedule of this Act.	Sec. 58
	NEMA may require any proponent of a project to carry out at his own expense further evaluation or environmental impact assessment study, review or submit additional information for the purposes of ensuring that the EIA study, review, or evaluation report is as accurate and exhaustive as possible.	Sec. 62

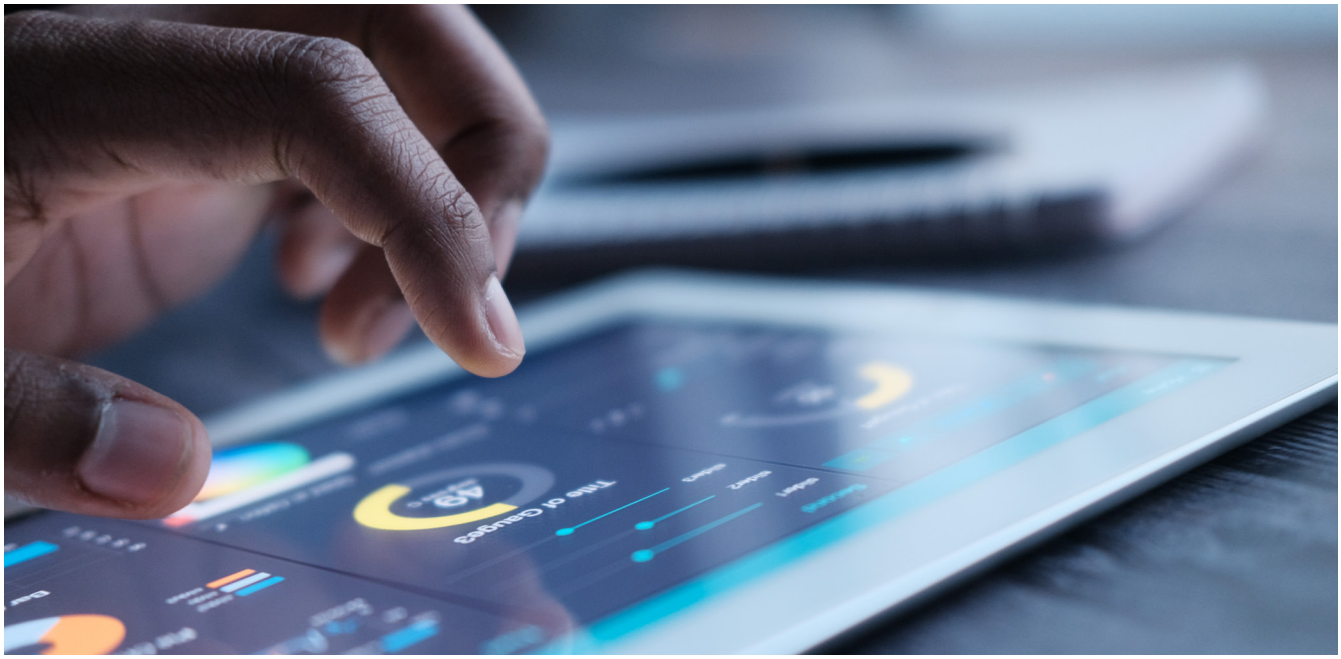
Law / Regulation / Guidelines / Standards	Requirement/Obligation	Provision
Environmental Management and Co-ordination Act, 1999	NEMA may after issuance of an environmental impact assessment licence, direct the licensee to submit a fresh EIA study, evaluation, or review report where: • there is a substantial change or modification in the project or in the manner in which the project is being operated. • the project poses environmental threat which could not be reasonably foreseen at the time of the study, evaluation, or review; or • it is established that the information or data given by the proponent in support of his application for an EIA licence was false, inaccurate, or misleading.	Sec. 64
	NEMA and the government cannot be held liable in respect of a project, EIA study or EIA license or consequences resulting from the above. The issuance of an EIA licence in respect of a project cannot be used as a defence to any civil action or to a prosecution that may be brought against a proponent in respect of the manner in which the project is executed, managed, or operated.	Sec. 66
	The owner of the premises or the operator of a project for which an EIA study report has been made shall keep accurate records and make annual reports to NEMA describing how far the project conforms in operation with the statements made in the submitted EIA study report. The owner of premises or the operator of a project shall take all reasonable measures to mitigate any undesirable effects not contemplated in the submitted EIA study report and shall prepare and submit an environmental audit report on those measures to NEMA annually.	Sec. 68
	It is an offence to discharge any poison, toxic, noxious, or obstructing matter, radioactive waste, or other pollutants. A person found guilty of this offence shall be liable to imprisonment for a term of not more than two years or to a fine of not more than one million shillings or to both.	Sec. 72
	All owners or operators of irrigation project schemes, sewerage systems, industrial production workshops or any other undertaking which may discharge effluents or other pollutants shall submit on demand to NEMA accurate information about the quantity and quality of such effluent or other pollutant.	Sec. 73
	It is a requirement to obtain an effluent discharge licence from NEMA before discharging any effluents or other pollutants into the environment.	Sec. 75
	It is a requirement to obtain an emission license from NEMA before emitting a substance or energy which is causes or is likely to cause air pollution.	Sec. 80
	No person shall discharge or dispose of any wastes, whether generated within or outside Kenya, in such manner as to cause pollution to the environment or ill health to any person	Sec. 87
	No person shall discharge any hazardous substance, chemical, oil or mixture containing oil into any waters or any other segments of the environment.	Sec. 93
Environmental (Impact Assessment and Audit) Regulations, 2003	No proponent shall implement a project likely to have a negative environmental impact; or for which an EIA is required unless an EIA has been concluded and approved.	Reg. 4(1)
	No licensing in Kenya shall issue a licence for any project for which an EIA is required unless the applicant produces to the licensing authority an EIA license issued by NEMA.	Reg. 4(2)

Law / Regulation / Guidelines / Standards	Requirement/Obligation	Provision
Environmental (Impact Assessment and Audit) Regulations, 2003	No licensing authority in Kenya shall issue a trading, commercial or development permit or license for any micro project activity likely to have cumulative significant negative environmental impact before it ensures that a strategic environmental plan encompassing mitigation measures and approved by NEMA is in place.	Reg. 4(3)
Environmental Management and Coordination (Water Quality) Regulations, 2006	All persons are required to refrain from activities that directly or indirectly cause water pollution.	Reg. 4(1)
	A person must obtain a valid effluent discharge license before discharging any effluent from sewage treatment works industry or other point sources. A person must obtain an EIA license before carrying out any activity near any lakes, rivers, streams, springs, and wells that is likely to have any adverse impact on the quantity and quality of the water. A person can only cultivate or undertake any development activity within full width of a river or stream to a minimum of six metres and a maximum of thirty metres on either side based on the highest recorded flood level.	Reg. 6
	All operators and suppliers of treated water, containerised water and all water vendors shall comply with the relevant quality standards in force as may be prescribed by the relevant lead agencies.	Reg. 8
	No person shall use water for trade or industrial undertaking unless such person complies with the standards established by the competent lead agency in regard to that particular activity.	Reg. 10(1)
	No person shall discharge any pollutants into the aquatic environment unless such pollutant complies with the standards set out in the Third Schedule to these Regulations.	Reg. 11
	Every licensed person who generates and discharges effluent into the environment shall carry out daily effluent discharge quality and quantity monitoring and shall submit quarterly records of such monitoring to NEMA or its designated representative.	Reg. 14(1)
	No person shall use or allow to be used any natural water body for recreational purposes unless the water body meets the quality standards for recreational standards as set out in Tenth Schedule to these Regulations.	Reg. 25
Environmental Management and Co-ordination (Waste Management) Regulations, 2006	No person shall dispose of any waste on a public highway, street, road, recreational area or in any public place except in a designated waste receptacle.	Reg. 4(1)
	No person shall be granted a licence to transport waste unless such person operates a transportation vehicle approved by NEMA upon the recommendation of the relevant lead agency.	Reg. 7(1)
	A waste disposal site or plant, shall comply with all conditions imposed by NEMA to ensure it operates in an environmentally sound manner.	Reg. 10(1)
	Every licensed owner or operator of a waste disposal site or plant shall carry out an annual environmental audit.	Reg. 12
	Every trade or industrial undertaking shall install at its premises anti-pollution equipment for the treatment of waste.	Reg. 14(1)
	No industry shall discharge or dispose of any waste in any state into the environment, unless the waste has been treated in a treatment facility in a manner prescribed by NEMA in consultation with the relevant lead agency.	Reg. 15
	No person shall engage in any activity likely to generate any hazardous waste without a valid EIA licence issued by NEMA.	Reg. 17(1)
	No person shall export hazardous wastes without a valid permit issued by NEMA and a valid Prior Informed Consent document issued by the designated national authority of the receiving country.	Reg. 20(1)

Law / Regulation / Guidelines / Standards	Requirement/Obligation	Provision
Environmental Management and Co-ordination (Waste Management) Regulations, 2006	No person shall own or operate any institution that generates bio-medical waste without a valid EIA licence issued by NEMA.	Reg. 26
Environmental Management and Co-ordination (Wetlands, River	Subject to the provisions of Section 42 of the Act, no person shall carry out any of the activities stipulated therein without a permit issued by the relevant lead agency and an EIA License issued by NEMA where applicable.	Reg. 12
Banks, Lake Shores and Sea Shore Management) Regulations, 2009	Every owner, occupier or user of land which is adjacent to a wetland shall, with advice from the NEMA, have a duty to prevent the degradation or destruction of the wetland, and shall maintain the ecological and other functions of the wetland.	Reg. 14(1)
	A developer intending to a undertake a project which may have a significant impact on a wetland, riverbank, lake shore or the seashore shall carry out an EIA.	Reg. 21(1)
	The Director - General may issue Environmental Restoration orders in order to allow a wetland, riverbank, lake shore or the seashore area which has been degraded to regenerate.	Reg. 22
Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations, 2009	No person shall make any loud, unreasonable, unnecessary, or unusual noise which annoys, disturbs, injures, or endangers the comfort, health or safety of others and the environment.	Reg. 3(1)
	No person shall make any noise in excess of the noise levels set in the First Schedule to these Regulations, unless such noise is reasonably necessary to the preservation of life, health, safety, or property.	Reg. 5
	Any person intending to carry out construction, demolition, mining, or quarrying work shall, during the EIA studies: • identify natural resources, land uses or activities which may be affected by noise or excessive vibrations from the above specified activities • determine the measures which are needed in the plans and specifications to minimise or eliminate adverse noise • incorporate the needed abatement measures in the plans and specifications	Reg. 15
	A person shall obtain a license from NEMA before installing a sound source that creates or is likely to emit noise or excessive vibrations.	Reg. 16(1)
	No person shall carry out activities relating to fireworks, demolitions, firing ranges or specific heavy industry without a valid permit issued by the NEMA.	
	Where an Environmental Inspector reasonably believes that any person is emitting or is likely to emit noise or excessive vibration in any area in excess of the maximum permissible levels, the Environmental Inspector may, with the approval of the Director-General, in consultation with the relevant lead agency, serve an improvement notice on that person.	Reg. 25(1)
	Where there is continuous emission of noise or excessive vibration after the Environmental Inspector has issued an improvement notice, the Environmental Inspector may, with the approval of the Director General, and in consultation with the relevant lead agency, order the closure of an establishment or undertaking emitting such noise or excessive vibration.	Reg. 26
Environmental Management and Coordination (Air Quality) Regulations, 2014	No person shall act in a way that directly or indirectly causes or is likely to cause immediate or subsequent air pollution; or emit any liquid, solid or gaseous substance or deposit any such substance in levels exceeding those set out in the First Schedule.	Reg. 5
	No person, owner or operator of a facility shall cause or allow the emission of air pollutants in excess of the limits stipulated under the Third Schedule.	Reg. 15

Law / Regulation / Guidelines / Standards	Requirement/Obligation	Provision
Environmental Management and Coordination (Air Quality) Regulations, 2014	The owner or operator of a controlled facility shall ensure that exposure of workers to occupational air pollutants is monitored and recorded in the form set out in the Tenth Schedule.	Reg. 17
	A control Order may be issued in anticipation of a breach of any provision of these Regulations or of any term or condition of a licence, or in response to such breach.	Reg. 21(1)
Public Health Act	A health authority has the duty to prevent or remedy the construction or occupation of unhealthy premises and to take proceedings against any person causing or responsible for the continuance of any such unhealthy conditions.	Sec. 117
	The medical officer of health, if satisfied of the existence of a nuisance, shall serve a notice on the occupier or owner of the premises on which the nuisance arises requiring him to remove it within the time specified in the notice.	Sec. 119
	A court may order the demolition of premises in instances where repairs to or alterations are not likely to remove the nuisance and make such dwelling fit for human habitation. The owner or occupier of the demolished premises shall not be entitled to compensation or rent in respect of the premises.	Sec. 124
Water Act, 2016	A permit is required for any of the following purposes: • any use of water from a water resource, except as provided by section 37 • the drainage of any swamp or other land • the discharge of a pollutant into any water resource • any other purpose, to be carried out in or in relation to a water resource, which is prescribed by Regulations made under this Act to be a purpose for which a permit is required.	Sec. 36
	It is an offence to carry out specified activities without a permit.	Sec. 38
Physical and Land Use Planning Act, 2019.	A person shall not carry out development within a county without a development permission granted by the respective county executive committee member.	Sec. 57(1)
	A person applying for development permission shall ensure that any documents, plans and particulars that are provided to the respective county executive committee member while applying for development permission have been prepared by the relevant qualified, registered, and licensed professionals.	Sec. 59(1)
	When considering an application for development permission, a county executive committee member shall take into consideration the provision of community facilities, environmental, and other social amenities in the area where development permission is being sought.	Sec. 61
	Where an applicant for development permission has been granted development permission but has not commenced the proposed project within three years of receiving the development permission that permission shall lapse.	Sec. 64(1)
	A county executive committee member may impose conditions or impose a fine to be prescribed in regulations on an applicant for development permission for building works where that applicant fails to complete the building works within five years.	Sec. 65
	A licensing authority shall not grant a license for the commercial or industrial use or occupation of any building, or in respect of any premises or land, for which development permission has not been granted by the relevant county executive committee member.	Sec. 66

Law / Regulation / Guidelines / Standards	Requirement/Obligation	Provision
Physical and Land Use Planning Act, 2019.	A county executive committee member shall serve the owner, occupier, agent or developer of property or land with an enforcement notice if it comes to the notice of that county executive committee member that— • a developer commences development on any land without the required development permission having been obtained; or • any condition of a development permission granted under this Act has not been complied with.	Sec. 72(1)
IFC Performance Standards	The IFC Performance Standards are an international benchmark for identifying and managing environmental and social risk and has been adopted by many organisations as a key component of their environmental and social risk management. The financial institution is required to verify as part of its environmental and social due diligence process that the commercial client/investee complies with the IFC Performance Standards. To do so, the financial institution needs to be knowledgeable of the environmental and social laws of the country in which it operates and compare the regulatory requirements against those of the IFC Performance Standards to identify gaps. If non-compliances with the IFC Performance Standards are identified and depending on the severity of the issue, the financial institution can require the commercial client/investee to develop a corrective action plan for addressing the issue within a reasonable timeframe and stipulate this as a condition of the financial transaction with the commercial client/investee.	
World Bank Group Environmental, Health & Safety Guidelines	The Environmental, Health, and Safety (EHS) Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). When one or more members of the World Bank Group are involved in a project, these EHS Guidelines are applied as required by their respective policies and standards. These General EHS Guidelines are designed to be used together with the relevant Industry Sector EHS Guidelines which provide guidance to users on EHS issues in specific industry sectors.	



Key environment regulators and banking sector stakeholders

	Key Regulators / Stakeholders	Role	Obligations
1.	**National Environment Management Authority (NEMA)**	NEMA is established under EMCA as the principal instrument of Government for the implementation of all policies relating to environment.	• The functions of NEMA are as follows: • Coordinating environmental management activities. • Taking stock of natural resources. • Advising on land use planning. • Undertaking research, investigation, and surveys in the field of environment and disseminating information. • Mobilising and monitoring the use of financial and human resources for environmental management. • Regulating, monitoring, and assessing activities to ensure that the environment is not degraded. • Enforcing environmental standards. • Undertaking environmental education, public awareness. • Preparing the state of the environment report. • Development and implementation of the national environment action plans.
2.	**Ministry of Environment and Forestry**	The Ministry is tasked with policy development and management.	The Ministry objectives include: • Protect and manage the environment for sustainable development. • Promote innovation and appropriate technologies. • Protect and restore forest ecosystem. • Increase forest and tree cover. • Create enabling environment for good governance in environment and natural resources management. • Strengthen institutional framework for efficient utilisation of resources and effective service delivery. • Promote research and innovations. • Enhance climate change resilience and low emission development pathway. • Enhance the generation and dissemination of weather and climate information.
3.	**County Environmental Committees (CEC)**	Established under EMCA the committees are constituted by the respective Governor via Gazette notice.	The functions of CEC are as follows: • Proper management of the environment within the county for which it is appointed. • Develop a county strategic environmental action plan every five years.
4.	**National Environment Complaints Committee (NECC)**	Established under EMCA. Acts as a safeguard for members of the public who feel aggrieved by actions taken under the proposed project. The public can exercise their constitutional rights to launch a complaint should they have exhausted all other grievance redress mechanisms available to them.	The functions of NECC are as follows: • Investigate any allegations or complaints against any person or against NEMA in relation to the condition of the environment in Kenya and to make a report of its findings together with its recommendations to the Cabinet Secretary. • Investigate on its own motion, any suspected case of environmental degradation and to make a report of its findings together with its recommendations to the Cabinet Secretary. • Undertake public interest litigation on behalf of the citizens in environmental matters.

	Key Regulators / Stakeholders	Role	Obligations
5.	**The National Environment Tribunal (NET)**	NET is a quasi-judicial tribunal established pursuant to EMCA. Upon the making of an award, NET's mandate ends there as it does not have the power to enforce its awards. EMCA provides that any person aggrieved by a decision or award of NET may within 30 days appeal to Court.	The functions of NET are as follows: • To hear and determine appeals from NEMA's decisions and other actions relating to issuance, revocation, or denial of (EIA) licences and imposition of restoration orders. • To give direction to NEMA on any matter of complex nature referred to it by the Director General.
6.	**The Environment and Land Court**	The Court has original and appellate jurisdiction to hear and determine all disputes.	The Court has powers to: • Deal with disputes relating to land administration and management. • Hear cases relating to public, private and community land and contracts or other instruments granting any enforceable interests in land. • Exercise appellate jurisdiction over the decisions of subordinate courts or local tribunals in respect of matters falling within the jurisdiction of the Court.
7.	**Water Resources Authority (WRA)**	WRA is a state corporation established under the Water Act. It is mandated through delegated Authority on behalf of the National government to safeguard the right to clean water by ensuring that there is proper regulation of the management and use of water resources.	The functions of WRA are as follows: • Formulate standards, procedures, and regulations. • Enforce regulations and ensure compliance through inspection, monitoring, and enforcement. • Receive water permit applications for water abstraction, water use and recharge and determine, issue, vary water permits; and enforce the conditions of those permits. • Regulate water use allocation. • Collect water permit fees and water use charges. • Provide information and advice the Cabinet Secretary for formulation of policy on National Water Resource Management, water storage and flood control strategies. • Coordinate with other regional, national, and international bodies for the better regulation of the management and use of water resources. • Manage the National Monitoring and Information System.
8.	**Climate Change Directorate (CCD)**	The CCD is the Secretariat for the Climate Change Council (yet to be established) and coordinates the technical implementation of climate change functions. This includes providing analytical support and technical assistance on climate change and coordinating the implementation of and reporting on the NCCAP 2018-2022.	CCD is responsible for coordination of the implementation of NCCAP 2018-2022, including coordination of climate change actions and related measurement, monitoring, and reporting. The functions of CCD are: • Provide analytical support on climate change – for the various ministries, agencies, and County Governments. • Provide technical assistance – based on needs identified by County Governments. • Establish and maintain a national registry – for both mitigation and adaptation actions. • Serve as the national knowledge and information management centre – for collating, verify, refining, and disseminating knowledge and information on climate change. • Coordinate adherence to the country's international obligations including reporting on NDCs; developing national communications, biennial update reports and Kenya's GHG inventory; and representing Kenya in international negotiations. • Coordinate implementation of the gender and intergenerational plan at the National and County Government levels. • Coordinate actions related to climate finance. • Work in collaboration with other agencies at the National and County Government levels to: Identify low carbon development strategies; develop strategies and coordinate actions for building resilience to climate change and enhancing adaptive capacity; and optimise Kenya's opportunities to mobilise climate finance.

	Key Regulators / Stakeholders	Role	Obligations
9.	**Directorate of Occupational Safety and Health Services (DOSHS)**	DOSHS is a department within the Ministry of Labour and social protection, whose mandate is to ensure compliance with the provisions of the Occupational Safety and Health Act 2007 and promote safety and health of workers.	The functions of DOSHS include: • Inspecting workplaces to ensure compliance with safety and health law • Examination and testing of steam boilers, air & steam receivers, gas cylinders, lifts, cranes chains and other lifting equipment • Measurements of workplace pollutants for purposes of their control • Investigation of occupational accidents and diseases with a view to preventing recurrence • Medical examinations of workers • Training on Occupational safety and health, first aid and fire safety • Approving architectural plans of building intended for use as workplaces • Disseminating information on occupational safety and health to customers
10.	**National Construction Authority (NCA)**	NCA is a statutory body established under the National Construction Authority Act.	• Its main function is to regulate, streamline and build capacity in the construction industry. • A project that requires an EIA license can only be registered by the NCA where a valid EIA license is obtained from NEMA by the project proponent.
11.	**The Kenya Forestry Service (KFS)**	KFS is a corporate body established under the Forest Conservation and Management Act. As the protector of all public forests, KFS will stop any development deemed to be in a public forest. KFS is one of the lead agencies that NEMA consults when proposed developments are near forests.	The functions of the Service are: • Conserve, protect and manage all public forests • Prepare and implement management plans for all public forests • Receive and consider applications for licenses or permits in relation to forest resources • Establish and implement benefit sharing arrangements • Assist county governments to build capacity in forestry and forest management • In consultation with relevant stakeholders, develop programmes for tourism and for recreational and ceremonial use of public forests • Promote forestry education and training • Register and maintain a register of all forest management plans prepared for public forests • Collaborate with relevant persons in identifying research needs • Develop, maintain, and regularly update a geographic information system database of all forests in Kenya.
12.	**The National Land Commission (NLC)**	An Independent Commission whose main mandate is to manage public land on behalf of the National and County Governments.	• The mandate of the NLC captures the management and administration of land in accordance with the principles of set out in the Constitution and the national land policy.
13.	**The County Governments**	The Fourth Schedule of the Constitution distributes functions between the National Government and County Governments.	• The Fourth Schedule allocates control of air pollution, noise pollution, other public nuisances and outdoor advertising, and county planning and development to county governments • Through its various departments, the county issues approvals for any developments that fall within its jurisdiction. • The Environment departments in county governments conduct monitoring and enforcing of noise standards

	Key Regulators / Stakeholders	Role	Obligations
14.	**Commercial Banks**	Commercial banks in Kenya provide financing and capital in various sectors of the economy including in real estate and manufacturing.	• Despite the lack of a formal environmental risk management regulatory framework applicable to banks, banks are required to ensure that their lending activities have a positive impact on the environment and that borrowers adhere to their environmental obligations.
15.	**Industry Associations**	Industry associations in the manufacturing and real estate sectors are key banking sector stakeholders. These include the Kenya Bankers Association, Kenya Association of Manufacturers, Kenya Property Developers Association, and the Petroleum Institute of East Africa.	• The Kenya Bankers Association (KBA) is the financial sector's leading advocacy group and the umbrella body of the institutions licenced and regulated by the Central Bank of Kenya. KBA continues to reinforce a reputable and professional banking sector and issued the KBA Sustainable Finance (SFI) Guiding Principles that guides banks to create long-term value for their clients, firm, economy, and the environment. • The Kenya Association of Manufacturers (KAM) is a representative of manufacturing and value-add industries in Kenya. Through fact-based advocacy, KAM partners with Government and its associated agencies to ensure a dynamic and flourishing manufacturing sector in Kenya. • The Kenya Property Developers Association is the representative body of the residential, commercial, and industrial property development sector in Kenya. It works in proactive partnership with policymakers, financiers, and citizens to ensure that the property development industry grows rapidly but in an organised, efficient, economical, and ethical manner. • Petroleum Institute of East Africa (PIEA) is a professional industry association that among other functions, creates public and consumer awareness on basic environment, health and safety issues touching on handling and use of petroleum products.
16.	**Professional Associations**	Professional associations in the manufacturing and real estate sectors are key banking sector stakeholders. These include the Architectural Association of Kenya, Town and County Planners Association of Kenya, Environment Institute of Kenya, and the Institution of Surveyors of Kenya.	• The Architectural Association of Kenya (AAK) is an association for professionals in the built and natural environment in Kenya incorporating Architects, Quantity Surveyors, Town Planners, Engineers, Landscape Architects and Environmental Design Consultants and Construction Project Managers. It acts as a link between professionals and stakeholders in the construction industry including policymakers, manufacturers, real estate developers and financial institutions. • The Town and County Planners Association of Kenya comprises town, county, country planners, and urban and regional planners and physical planners. The Association promotes professional development, education, public awareness, sustainable development and the protection and conservation of the built and natural environment. • The Environment Institute of Kenya seeks to empower its members and promote professionalism in environmental governance towards sustainable development in Kenya. • The Institution of Surveyors of Kenya (ISK) is a professional organisation in Kenya that brings together professionals in land and real estate sector. One of the functions of ISK is to contribute to the development of international and national policies and legal frameworks, strategies and plans in land management in a manner that facilitates sustainable development.

	Key Regulators / Stakeholders	Role	Obligations
17.	**Development Finance Institutions (DFIs)**	National and international development finance institutions (DFIs) are specialised development banks or subsidiaries set up to support private sector development in developing countries. They are usually majority-owned by national governments and source their capital from national or international development funds or benefit from government guarantees[30].	• DFIs invest in private sector projects to promote job creation and sustainable economic growth. They apply demanding investment criteria aimed at safeguarding financial sustainability, transparency, and environmental and social accountability.

[30]OECD, Development finance institutions and private sector development. https://www.oecd.org/development/development-finance-institutions-private-sector-development.htm