KMRC
KENYA MORTGAGE REFINANCE COMPANY

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) BEST PRACTICES

RESEARCH REPORT

DECEMBER 2023

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List of Abbreviations

BEI	Banking Environment Initiative
BoE	Bank of England
CBK	Central Bank of Kenya
CISL	Cambridge Institute of Sustainable Leadership
CSR	Corporate Social Responsibility
CTP	Climate Transition Plan
CoP	Conference of the Parties
ESCOs	Energy Service Companies
ESG	Environmental, Social and Governance
IEA	International Energy Agency
IFC	International Finance Corporation
IFRS	International Financial Reporting Standards
IMLA	Intermediary Mortgage Lenders Association
IPCC	Intergovernmental Panel on Climate Change
LT-LEDS	Long-Term Low Emission Development Strategy
NCCAP	National Climate Change Action Plan
NGFS	Network for Greening the Financial System
NSE	Nairobi Securities Exchange
PGGET	Physical Greenhouse Gas Emissions Target
PRI	Principles for Responsible Investment
SDGs	Sustainable Development Goals
TCFD	Task Force on Climate-related Financial Disclosures
TLFF	Tropical Landscape Finance Facility
UNEP	United Nations Environment Programme

INTRODUCTION

Shifting toward a sustainable economy stands as the paramount challenge of our era. The continual rise in greenhouse gas emissions is driving global warming, altering the climate, and posing a threat to human existence. Currently, the Earth has warmed by 1°C from pre-industrial levels. Studies indicate that approximately 70% of severe weather incidents observed since 2012 are linked to climate change, with insured losses from natural disasters hitting a staggering US$134 billion in 2017, marking it as the second-costliest year on record. These occurrences are poised to become more frequent. In the absence of resolute action, projections indicate that we're on track to hit a 2.0°C rise around 2050 and a 3.2°C increase by 2100. A 2.0°C rise could result in an estimated 388 million more people exposed to water scarcity, while annual flood damage losses stemming from rising sea levels could amount to as much as US$11.7 trillion.

Preventing these consequences necessitates substantial and continuous reductions in greenhouse gas emissions. To limit global warming to 1.5°C, a reduction of 45% in emissions is necessary by 2030, ultimately reaching a state of 'net zero' global emissions by 2050. This demands an immediate decline in emissions. The shift towards a low-carbon economy calls for a fundamental change in both assets and behaviors, requiring trillions of dollars in financial investments to facilitate this transition.

The latest Intergovernmental Panel on Climate Change (IPCC) report emphasized the necessity of capping global emissions by 2025 to restrict global warming to 1.5°C above pre-industrial levels. However, while efforts from prominent businesses to transition their operations toward net zero are crucial, they alone cannot achieve the comprehensive global transformation required. Instead, there's a pressing demand for businesses to address not only their internal emissions but also collaborate with the broader social, economic, and natural systems. This involves actively involving stakeholders such as banks, the business community, policymakers, and investors in driving this transformative process.

The financial sector is expected to play a key role in responding to the challenges arising from climate change. Major commitments have been made towards financing the transition towards a sustainable, low carbon economy in both developed and emerging markets. In addition, financial sector supervisory authorities worldwide are enhancing their efforts towards promoting sustainability as an area of strategic focus in their respective jurisdictions. Putting people and the planet at the center is the only way for companies to achieve long-term prosperity and support the transition to a sustainable economy.

The finance industry requires forward-thinking, revolutionary innovation to reshape financial frameworks, catering more effectively to businesses generating quantifiable positive social and environmental impacts. This entails developing groundbreaking products that direct capital investments toward opportunities aligning with the Sustainable Development Goals (SDGs) and climate objectives.

Additionally, it involves providing banking and financial services to millions of individuals currently without access, often referred to as the "unbanked," whose needs remain unaddressed due to the absence of formal identification.

As industries increasingly recognize both the risks and opportunities linked to climate issues, there's a notable surge in the acceptance of sustainable financing efforts. Factors such as the emergence of sustainable innovators and a rising consciousness among consumers will contribute to heightened demand for accessible sustainable options. Consequently, companies are urged to invest, introduce innovations, and reshape their business models promptly to safeguard their long-term profitability and sustainability.

A survey conducted by the Intermediary mortgage Lenders Association (IMLA) in 2020 shows that the nascent green mortgage industry is growing despite lack of awareness among the consumers, both lenders and brokers are optimistic about the growth of the green mortgage sector in the future. It found that about 74% still expect demand for green mortgages to grow over the next few years, with 83% expecting the ability to save money on energy bills as being the biggest driver behind market growth. Mortgage brokers responding to the survey said they also expect to see an uptick in the number of borrowers taking out green mortgages, with 58% saying they expect demand for the products to grow in the next few years. This is in line with the findings that more than a third (35%) of brokers in the developed economies plan to advise on these products more often in the future, compared to 2% currently.

60% of people in Africa live in informal settlements – poor housing, sanitization, solid waste management, air quality. In Kenya, many people (45%) live in informal or inadequate dwellings and 83% of households are without access to basic waste collection services which calls for intervention to encourage banks to embed sustainability in business with a focus on housing impact presenting an opportunity for green mortgages.

The popularity of green building technologies in Kenya is rising, with more stakeholders opting for green or environmentally sustainable architecture in housing development. According to a survey by Knight Frank, 29% of home buyers in Africa prefer green homes and do not mind the extra costs indicating an affinity towards green housing. The country's 2019 Population and Housing Census revealed that 19.3% of Kenyan homes used solar power indicating a high sense of the populace towards green mortgages hence the unexplored market.

The transition towards carbon-neutrality and environmental sustainability will reduce the negative impacts of climate change amongst poor communities. Vision 2030 plans to reduce greenhouse gas emissions by 30% of the current levels by 2030.

By 2030, Kenya's GDP could be 12% higher by taking a green growth pathway than continuing a business-as-usual scenario according to Kenya's 2014 Green Economy Assessment report hence banks can adopt green mortgages to chat this sustainable finance journey.

The Ministry of Environment and Natural Resources formulated the Green Economy Strategy Implementation Plan (GESIP) 2016 to 2030 which proposes to promote sustainable infrastructure with the objective of promoting sustainable design, construction and maintenance of buildings with the main goal of ensuring 75% of new and renovated large-scale building in Kenya are green by 2030.

Therefore, KMRC in collaboration with Banks needs to develop and promote mortgage products specifically tailored for sustainable and energy-efficient affordable housing hence sustainable financing.

KEY HIGHLIGHTS

- Accelerating action to achieve corporate net zero goals in an era of turbulence and complexity necessitates a new mindset in which companies expand their frame of reference to take a whole-system approach to transformation.
- In 2019, the Principles for Responsible Banking framework was launched, with signatories committing to align their business strategies with the Sustainable Development Goals (SDGs), the Paris Agreement and other relevant national and regional frameworks. To date, more than 170 banks have signed up, representing one third of the global banking sector including KCB Bank in Kenya.
- The 2021 Global Sustainability Study by Simon-Kucher & Partners, a global consultancy specializing in strategy and pricing, highlights substantial worldwide changes in how consumers perceive sustainability. It uncovers distinct generational variations in the inclination to invest in sustainable products and services. These shifts pose upcoming challenges and opportunities for companies as they navigate a progressively sustainable world.
- Consumers perceive themselves as catalysts for change, emphasizing the pressing need for companies to swiftly adapt. According to the Global Sustainability Study 2021, a staggering 85% of individuals worldwide claim to have altered their buying habits to prioritize sustainability over the past five years.
- According to the 2022 EY Lane4 research report, 84% of workers consider it crucial to be part of an organization that contributes positively to society. Additionally, seven out of ten employees express a higher likelihood of remaining with an employer known for its strong environmental sustainability practices.
- 84% of global consumers consider sustainability important when choosing a brand, with more than half of consumers reporting to be willing to pay a premium for brands that are environmentally responsible according to EY Lane4 report.
- 88% of investors claimed to hold an organization environmental, social and governance (ESG) metrics to the same level of scrutiny as financial and operational reports according to the 2022 EY Lane4 research report.

- 74% of investors report they are more likely to divest from companies with poor sustainability performance according to the 2022 EY Lane4 research report.
- PWC projects an 84% surge in ESG-focused investment, reaching $39.9 trillion by 2026, comprising 21.5% of total assets under management. Additionally, approximately 90% of asset managers are confident that integrating ESG principles into their investment strategies will enhance overall returns.
- The global push for ESG initiatives is largely driven by consumer demand. 2021 Consumer Intelligence Series survey on ESG by PwC found that 83% of consumers think that companies should be actively shaping ESG best practices and more than 50% believe that companies should be doing more to advance ESG issues.
- Globally, more than 1.4 billion adults are still unbanked, meaning, they do not have an account at a financial institution or through a mobile money provider. This can

be due to inaccessible services or because of poverty, lack of internet access or the absence of formal identification or financial literacy highlighting the need for sustainable finance.

- According to World Economic Forum Global Risks Perception Survey 2021 -2022, top 5 global risks in terms of likelihood are all environmental including climate action failure, extreme weather, biodiversity loss, human environmental damage and natural resource crises calling for green finance.
- In 2018, 80% of green market activity was dominated by issuance of green bonds, sustainability bonds and social bonds.
- In September 2023, the Government of Kenya launched Kenya's National Climate Change Action Plan (NCCAP) 2023-2027, Long-Term Low Emission Development Strategy (LT-LEDS) 2022-2050 and Climate Change Act (Amendment 2023).
- The African Union and the Government of Kenya co-hosted the inaugural Africa Climate Summit to discuss sustainable solutions to global climate challenges under the theme "Driving Green Growth and Climate Finance Solutions for Africa and the World.
- Kenya has a demand for climate-friendly bonds amounting to Sh91 billion in the next five to 10 years according to research carried out by Strategic Business Advisory (SBA) in partnership with the Kenya Bankers Association, among others in 2018.
- The Central Bank of Kenya (CBK) has renewed its commitment to greening the Kenyan financial sector and called on players in the industry to implement the guidance on climate-related risk management.
- The finance sector requires forward-thinking and transformative innovation to revamp financial frameworks, catering effectively to businesses that actively create measurable social and environmental benefits. This entails developing innovative products that direct capital towards investment opportunities aligning with Sustainable Development Goals (SDGs) and climate objectives. It also involves providing banking and financial services to millions of individuals without access, addressing the needs of the "unbanked" who are currently underserved or lack the formal identification necessary for access.

- According to a survey by Knight Frank, more Africans (29%) would prefer a greener home and are willing to pay more for it compared to 27% globally informing on green mortgages.
- ESG – Environmental, Social and Corporate Governance is taking precedence over other considerations for African home buyers.
- In its flagship Rewiring the Economy plan, CISL set out three tasks for finance through to 2030:
    i. Ensure capital acts for the long term e.g., long tenor (green) mortgages.
    ii. Price capital according to the true costs of business activities.
    iii. Innovate financial structures to better serve sustainable business.

Kenya Context

National determined contributions, the Climate Change Act, Action Plan

In September 2023, the Government of Kenya launched Kenya's National Climate Change Action Plan (NCCAP) 2023-2027, Long-Term Low Emission Development Strategy (LT-LEDS) 2022-2050 and Climate Change Act (Amendment 2023). Showcasing African leadership through a comprehensive law and policy guiding national and subnational climate action, Kenya demonstrates readiness for support to implement the Nationally Determined Contribution (NDC) through the third NCCAP aligned with the LT LEDS. Kenya's enhanced NDC targets a 32% reduction in GHG emissions by 2030. The NCCAP serves as the key planning document to mainstream and implement climate change actions.

Kenya joined the NDC Partnership in 2017 updating its second NCCAP to align existing national plans with the country's five-year Medium-Term Plan development cycle and updated NDC targets. The NCCAP outlines seven priority climate action areas, with adaptation and mitigation actions across policy and regulatory environments, capacity building, knowledge management, technology and innovation, climate finance, and monitoring, reporting, and verification. The Partnership supported Kenya's first NDC revision with funding from the German government (BMZ) and through GIZ, the elaboration of the second NCCAP (2018–2022), and now the third NCCAP 2023-2027. This support included: technical mitigation and adaptation analyses; equipping the NCCAP Taskforce to set ambitious targets with specific actions in the NCCAP; nationwide consultations with stakeholders; development of sectoral plans through coordination among partners; and the institutionalization of reporting.

Against the backdrop of Kenya hosting the Africa Climate Summit and Africa Climate, the Climate Change (Amendment) Act, 2023 ("the Act") came into force in September 2023, and builds upon the foundations laid by the Climate Change Act, 2016, in pushing Kenya a step forward towards realizing its obligations under the Paris Agreement. Notably, the Act has brought with it a wide array of changes particularly in relation to effecting Article 6 of the Paris Agreement by introducing provisions on the regulation of and participation in carbon markets. To boost accountability and transparency, the Act provides for the establishment of a carbon registry that would be accessible to the public with registers on information relating to carbon credit projects and the amount of carbon credits issued or transferred from Kenya. The carbon registry will boost climate financing activities in the country by reassuring investors in carbon markets. A Designated National Authority as established by the Act will be the custodian of the Registry.

Whilst the importance of climate financing cannot be overemphasized, it is equally important to safeguard the environment from further degradation. In this regard, the Act requires that before commencing a carbon trading project an environmental impact assessment must be carried out in compliance with international obligations. The Act also entrenches the need for carbon projects to specify the anticipated environmental, economic or social benefits of the project which includes the extent to which the project will contribute to the removal of greenhouse gases from the atmosphere in order to contribute to meeting Kenya's greenhouse gases emissions targets.

AFRICA CLIMATE SUMMIT
KEY HIGHLIGHTS

The African Union and the Government of Kenya co-hosted the inaugural Africa Climate Summit to discuss sustainable solutions to global climate challenges under the theme "Driving Green Growth and Climate Finance Solutions for Africa and the World.

The Africa Climate Summit, through the Nairobi Declaration, advocated for a forceful push toward accelerated climate action and innovative financing methods. African leaders emphasized the urgent need for developed nations to reduce carbon emissions while proposing a fresh financing approach aimed at restructuring Africa's overwhelming debt and unlocking climate-related funds. They underscored the significance of decarbonizing the global economy to foster equality and shared prosperity. The summit called for investments that support the sustainable utilization of Africa's natural resources, facilitating the continent's shift towards low-carbon development and contributing to global decarbonization. Additionally, there was a recognition of the disproportionate burdens and risks faced by many African nations due to climate change-induced unpredictable weather patterns and events.

The Summit proposed a new financing architecture responsive to Africa's needs including debt restructuring and relief and the development of a new Global Climate Finance Charter through the United Nations General Assembly and the COP processes by 2025. While economic and financial restructuring are essential components of Africa's green growth agenda, a consistent message emerged from the speeches, panel sessions, side events and exhibitions: technology is at the core of the architecture for sustainable solutions to the global climate crisis.

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Central Bank of Kenya Climate Guidelines

The Central Bank of Kenya (CBK) has renewed its commitment to greening the Kenyan financial sector and called on players in the industry to implement the guidance on climate-related risk management. CBK issued Guidance on Climate-Related Risk Management to the banking sector in 2021 aimed at enabling banks to integrate climate-related risks into their governance, strategy, risk management and disclosure frameworks. It is also intended to enable banks to leverage on business opportunities from efforts to mitigate and adapt to climate change.

These include the adoption of low emission energy sources, development of new products and services, access to new markets, housing, and resilient infrastructure. Banks are expected to develop disclosure templates and commence disclosures effective June 2023. This implies integration of Environmental, Social and Governance (ESG) and Sustainable Development Goals (SDGs) aligned to the CBK Guidance on Climate-Related Risk Management, International Financial Reporting Standards (IFRS) sustainability standards and Nairobi Securities Exchange (NSE) ESG Guidelines.

Best Practices In The Banking Industry – The Bank 2030

The need to track, report, and take action on environmental, social, and governance (ESG) issues is a growing concern for today's banks according to Crowe Insights. The Global Sustainability Study 2021*, conducted by global strategy and pricing consultancy Simon-Kucher & Partners, reveals significant global paradigm shifts in how consumers view sustainability and the associated generational differences in willingness to pay for sustainable products and services. This creates both future challenges and opportunities for all companies as the world becomes more sustainable. Consumers also see themselves as the agents of change, implying that the call to action for companies to adapt has never been more urgent. Globally, 85% of people indicate that they have shifted their purchase behavior towards being more sustainable in the past five years from the sustainability Study report 2021. Across industries and countries, sustainability is a significant purchase criterion though price and quality continue to dominate. Globally, sustainability is rated as an important purchase criterion for 60% of consumers. Attitudes towards sustainability also vary by industry when measuring its importance as a purchase criterion, from 74% in Energy/utilities to 44% in financial services. Construction/home (66%), Consumer goods (63%), Travel and tourism (62%) and Automotive (61%) range in between.

The global push for ESG initiatives is largely driven by consumer demand. 2021 Consumer Intelligence Series survey on ESG by PwC found that 83% of consumers think that companies should be actively shaping ESG best practices and more than 50% believe that companies should be doing more to advance ESG issues. Financial institutions are responding to this call to action with more than 300 banks, representing almost half of banking assets worldwide, adopting the UN Principles for Responsible Banking (a framework for sustainable banking designed to be integrated into banks' strategies and across their portfolios).

Research from the Banking Environment Initiative (BEI) of the University of Cambridge Institute for Sustainability Leadership (CISL); specifically, from conversations with chief executives and chairs of the banks in the BEI found that:

i. Many banks continue to take a short-term risk-based (responsive) or CSR (Corporate Social Responsibility)-based approach to climate change. Regarding themselves as "client led", bankers in 'banking-as-usual' were more comfortable taking a passive approach that responds to client demand. The key characteristic of a bank enabling its clients to transition to a low carbon economy is an 'active mindset' – one that prioritizes relationships over transactions, and which is underpinned by a forward-looking attitude that sees a low carbon future as inevitable.

ii. Innovation and collaboration by empowered bank employees is essential if a bank is to accelerate the transition to a low carbon economy and secure the successful clients of the future

iii. Measuring the financial risks stemming from climate change will enhance a bank's appetite to support clients aligned with a low carbon economy.

Some banks can be said to be taking a strategic approach to the low carbon economy that unlocks latent demand for green investment by clients. Independent of regulatory or policy support, these banks channel capital into the low carbon economy by:

- ✓ Taking direct risk exposure with clients, e.g., green loans.
- ✓ Structuring via capital markets, e.g., transition bonds.
- ✓ Increasing their own lending capacity, e.g., green securitization.
- ✓ Funding innovations, e.g., ring-fenced venture capital funds.

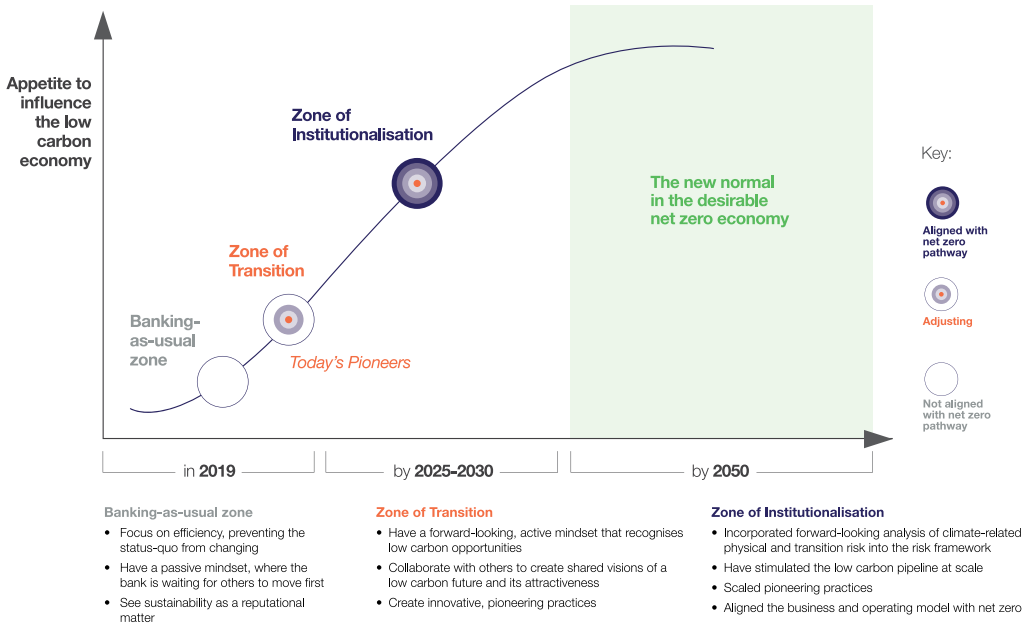
1. Ensure capital acts for the long term.
2. Price capital according to the true costs of business activities.
3. Innovate financial structures to better serve sustainable business.

In its flagship Rewiring the Economy plan, CISL set out three tasks for finance through to 2030:

By 2030, a bank will have integrated the necessary mindset, skills, and innovative strategies to effectively address this challenge. It will perceive the transition as both a significant risk and an opportunity, initially positioning itself within a 'transition zone' (refer to the figure below). Gradually, the bank will comprehend the influence of each financial allocation on the goal of achieving net-zero emissions, realigning its business model accordingly and advocating for systemic changes, like the implementation of carbon taxes, to gain a competitive advantage. This proactive approach will propel the bank to expedite the shift towards a low-carbon economy, reaching an 'institutionalization zone.'

Following the bank's strategic reboot and progression along the illustrated curve, adjustments occur within its business and operational framework. Employees receive empowerment through training and dedicated time to drive and manage the transition effectively. Consequently, there should be a continual expansion in the bank's provision of products and customer service tailored to the low-carbon economy. As this journey culminates, the new business lines, forged by actively directing more capital towards the low-carbon economy, become the predominant focus of the bank. Ultimately, the bank undergoes a comprehensive transformation of its business and operating model.

Figure 1: Accelerating the financing of the low carbon economy – the curve of change and roadmap to a low carbon bank of 2030.



Source; CISL 2022

Result Of An Adjusted Business And Operating Model

A bank adjusting its business and operating model to influence the low carbon transition can

I. Evolve The Product Offer:

Transition Finance

- Create and mainstream transition finance offerings (i.e., KPI bonds, KPI loans like green mortgages, conditional debt) that will encourage clients to transition to a low carbon economy.
- Find ways to offer lending with preferential terms, e.g., blended finance for de-risking.
- Broaden the leasing offer to deepen penetration of green assets (e.g., electric vehicles).
- Structure instruments to aggregate smaller ticket size projects (e.g., small-scale renewable generation)
- Securitize the assets or future cash flows of service companies offering individuals and SMEs access to the low carbon economy of the future, e.g., ESCOs (energy service companies)
- Increase the bank's lending capacity for new green opportunities.
- Create instruments for carbon offsetting and carbon sequestration.

Collaborative Finance

- Connect sector experts with corporates to stimulate demand for low carbon.
- Strive to create and realize a shared vision of the future with others (i.e., clients, experts, capital).
- Engage with DFIs, regulators and policymakers to create an enabling environment for collaborative finance.
- Directly support early-stage innovations
- Facilitate crowd funding to help make funding of smaller projects possible.

ii. Expand Coverage:

Low Carbon Economy For All Customers

- Broaden investment in renewable power generation and in the energy efficiency of industry and buildings.
- Encourage the transition of agricultural practices.
- Help hard-to-abate sectors be a part of a low-carbon transition (e.g., cement or shipping)
- Improve the extent to which individuals and SMEs are supported to transition.

In an effort to mitigate harm, the 2015 Paris Agreement, endorsed by 196 nations, aimed to cap global warming at 1.5°C. The distinction in environmental consequences between this temperature limit and 2°C is significant. At 1.5°C compared to 2.0°C, there's a notable reduction in the number of individuals exposed to the effects of rising sea levels by ten million, droughts by 61 million, and extreme heat by 11 million. Achieving the 1.5°C target necessitates a 45% reduction in emissions by 2030, ultimately reaching 'net zero' emissions by 2050. Simply put, the urgent decarbonization of our economy is imperative now.

An important development occurred in 2017 when eight central banks established the Network for Greening the Financial System (NGFS). The group noted that "climate-related risks are a source of financial risk, and it therefore falls squarely within the mandates of central banks and supervisors to ensure the financial system is resilient to these risks". As of April 2022, the NGFS consists of 114 members and 18 observers and now includes the US Federal Reserve.

The NGFS has structured its work into three streams:

i. **Micro-prudential and supervision:** This workstream looks at the risks to financial institutions as a result of credit losses arising from climate change and examines the difference in risk between 'green' and 'brown' assets.

ii. **Macro-financial:** This workstream looks at the risks of climate change to the economy in general, how these are transmitted to the financial system and where more research is required.

iii. **Scaling up green finance:** This workstream considers how the regulatory regime can support a sound expansion of green finance activities.

Case Studies

Industrial Bank in China

By positioning itself as a green finance leader, Industrial Bank in China (IBC) was best placed to take advantage of Chinese Government policy and shifting technological trends over the past 15 years. In 2005, the bank developed, with the International Finance Corporation (IFC), an energy-efficiency project financing offer for SMEs using future cash flow savings as collateral rather than assets. The purpose was simple; to differentiate the bank' in its expansion efforts – a strategy that the bank's chairman personally championed.

As a result, IBC went from a small regional player in 2005 to the seventh largest bank in China, by total assets, by 2016. IBC became synonymous with green banking, developed in-house expertise on the low carbon economy and has been able to exert "more influence in making the rules shaping the green finance market." Industrial Bank has been a pioneer of green finance in China since becoming the country's first bank to adopt the Equator Principles in 2008, well ahead of any nationwide directive. The Equator Principles form a management framework for financial institutions to determine and manage environmental and social risks in project finance. In 2015, the bank made green finance one of its core businesses, designating it as the primary business in 2021. In the same year, it formulated a five-year development plan for its green finance business. By the end of 2025, Industrial Bank aims to extend Rmb2tn ($280bn) in green financing loans, with at least 55,000 green finance corporate customers.

To this end, and with the goal of a group-wide "all-green" transformation, in January 2022 Industrial Bank proposed building a professional talent team compatible with such ambitious targets, aiming to employ more than 10,000 green finance experts in three years. The bank also incorporated ESG and climate into its comprehensive risk management system and implemented critical ESG policies and strategies across group operations, allowing it to better identify the risk a client might pose to the business, and guide enterprises to strike the balance between short-term profits and long-term sustainable development.

To align with China's 'dual carbon' objectives, Industrial Bank introduced innovative financial products centered on carbon rights and carbon sinks. It played a pivotal role in launching China's inaugural blue bond and spearheaded the issuance of the most extensive "carbon neutral" themed bond by any Chinese joint-stock bank. Industrial Bank's commitment to environmentally conscious financing is evident in its capital distribution. Since its inaugural issuance in 2016, the bank has issued the largest volume of green financial bonds among all commercial banks globally. These funds support diverse projects, spanning energy conservation, emissions reduction, and biodiversity preservation. As of September 2022, the bank's green loans totaled Rmb571 billion, constituting 11% of its overall loans, and it facilitated green financing exceeding Rmb3 trillion across 20,000 projects.

Case Studies

Bank of England

Climate change is moving from a reputational risk issue to a strategic concern for banks. A 2018 Bank of England (BoE) report, Transition in thinking, "The impact of climate change on the UK banking sector", classified the firms' approach to climate change into three categories:

i. The 'Strategic' approach (10% of firms) characterized as "integrating climate-related factors into today's financial risk management, having a board level agreed, firm-wide, strategic response and leveraging disclosure and scenario analysis to deepen understanding of their own portfolio".
ii. The 'Responsive' approach (60% of firms) characterized as "assessing climate change as a financial risk with a three-to-five-year time horizon".
iii. The 'Responsible' approach (30% of firms) characterized as "viewing climate change through a CSR lens".

Although this BoE report was UK focused, the classification is useful globally. Indeed, bankers from around the world interviewed for this study confirmed that in the last two years they have seen rapid changes in internal agendas. These include:

- ✓ Enquiries for sustainable finance knowledge and expertise increasing daily.
- ✓ Departments with responsibility for the sustainability agenda moving to the Strategy function of the bank.
- ✓ Sustainability knowledge is increasingly being distributed across business and risk units.
- ✓ New roles and teams being resourced to meet client demand for sustainable finance, and to spread knowledge about market and industry trends.

Bank of England

The Bank is continuing to make progress in reducing greenhouse gas (GHG) emissions from its own physical operations – which fell by 37% in 2023 – and is on track to reduce emissions by 63% from 2016 to 2030, consistent with limiting the rise in global average temperatures to 1.5°C above pre-industrial levels. The Bank has also developed a Climate Transition Plan (CTP), which sets out its approach to deliver its commitment to reduce emissions from its own physical operations and portfolio to net zero by 2040 – its Physical Greenhouse Gas Emissions Target (PGGET).

The Opportunity Of The Low Carbon Transition- 'Pull Factors'

Two main opportunities exist for banks looking to accelerate the low carbon transition. By grasping both, banks are more likely to secure clients who will thrive in a low carbon economy.

i. Finance segments of the low carbon economy are growing faster than incumbents.

The growth rate of the low carbon economy is at the expense of the status quo. By 2050, inaction against climate change could result in a decline in real GDP of 3.61–7.25% according to the World Bank Kenya Country Climate and Development Report 2023. With about 90% of its electricity coming from renewable sources like hydro-generation and geothermal wells, Kenya is well positioned to provide solutions to other countries looking to lower their emissions. Prominent demand shifts can at the moment be observed within the power and automotive industries. By 2040, electric vehicles are estimated to increase global demand for electricity by 6.8%. Meanwhile, because renewables can produce power at a near zero marginal cost, the management of demand and grid balancing becomes more valuable, relatively speaking. Categorised as 'smart grid' opportunities by the International Energy Agency (IEA), the most promising segment is currently high voltage direct current (HVDC) transmission. Whilst in the automotive industry, the trend towards Electrical Vehicles (EVs) is causing a spike in demand for batteries.

ii. Grow the low carbon pipeline and derive commercial benefit from doing so.

Beyond financing existing market trends, the bank can take steps to accelerate them and derive further commercial benefit. Although a number of products have been developed to channel capital to renewable power and energy efficiency, they are already factored into the current forecasts that global warming of 1.5°C will occur as early as 2030. They are therefore not enough. Yet economic gains of US$26 trillion are possible between 2018 and 2030 if "bold action" on climate change is taken, according to the Global Commission on the Economy and Climate. This requires further investment and financing of low carbon sectors, usually referred to as the green finance or investment gap. For example, the European Commission has conservatively estimated that "achieving the current 2030 climate and energy targets will require €260 billion of additional annual investment [or] about 1.5% of 2018 GDP". By filling this financing gap and accelerating the transition, banks create more opportunities to generate revenue for themselves or improve the rating and resilience of their client base.

The Cost Of Inaction – 'Push Factors'

'Push factors' provide banks with the motivation to construct a business case internally for accelerating the transition to net zero emissions. Three push factors exist:

i. Risk of carrying unmeasured and unmanaged physical and transition risk in the portfolio.

In the "process of adjustment towards a low carbon economy, changes in policy, technology and sentiment could prompt a reassessment of the value of a large range of assets." The starkest example thus far of this 'transition risk' crystallising is in the coal sector. The International Energy Agency (IEA) estimates potential losses from write-downs of thermal coal assets reaching up to US$8.3 trillion by 2060. The Cambridge Institute for Sustainability Leadership (CISL) has devised a Transition Risk Framework to identify such risks. Simultaneously, with climate change, traditional indicators like historical patterns of drought, floods, and crop yields become less reliable predictors of the future, while the increased occurrence of extreme weather events starts to have financial repercussions. The financial impacts of these acute and chronic climate-related 'physical risks' are yet to be factored into pricing models.

Acknowledging the materiality of physical and transition risks, some central banks are moving towards the inclusion of climate change in bank stress tests. The Central of Kenya is the regulator to [mandatorily] stress test its financial system against different climate pathways. Their approach to climate stress testing is not isolated having been developed in consultation with the Network for Greening the Financial System (NGFS), which is composed of 54 central banks and supervisory authorities from around the world. At the same time, the Task Force on Climate-related Financial Disclosures (TCFD) aims to develop more effective climate-related financial disclosures. These disclosures will help companies better understand the implications of climate change and provide data on which regulators can act.In brief, "as the realities of climate change become increasingly apparent, it is inevitable that governments will be forced to act more decisively than they have so far." This will have an impact on all participants in the economy – hence the Principles for Responsible Investment (PRI) collaboration, 'The Inevitable Policy Response'.

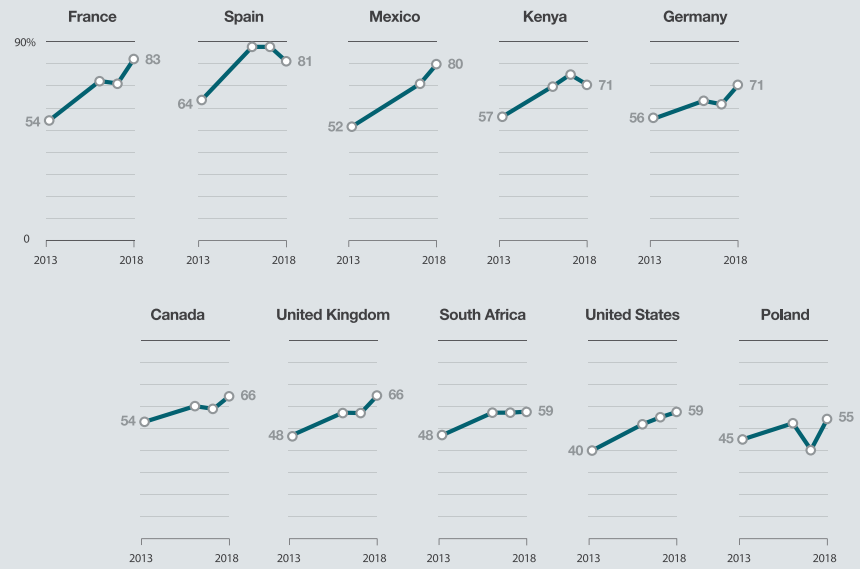
ii. Pressure from investors, employees, and civil society

In addition to pressure from regulators such as the CBK, there is also pressure from the investment community to respond to the climate challenge. In 2017, for example, 100 investors, with nearly US$2 trillion in assets under management, sent a letter to 60 banking CEOs "calling for enhanced disclosure of banks' climate-related risks and opportunities and of how these are being managed by banks' boards and senior executives." These shareholders are empowered by those reporting on the performance of banks

on climate issues, such as BankTrack or Sustainalytics. Investor action is becoming increasingly commonplace. For example, in May 2019 an investor resolution proposed by Climate Action 100+, a coalition of investors with US$32 trillion of assets, was passed. This called for BP to enhance its disclosures on emissions and explain how it will meet the Paris climate goals.

Civil society pressure also continues to grow. 2019 saw the most Google searches for 'climate change' on record, coinciding with New York Climate Week and another round of global protests calling for more action. Since 2013, the public around the world has trended towards viewing climate change as a major threat (Figure below). With voter concern rising, politicians are implementing increasingly assertive policy responses.

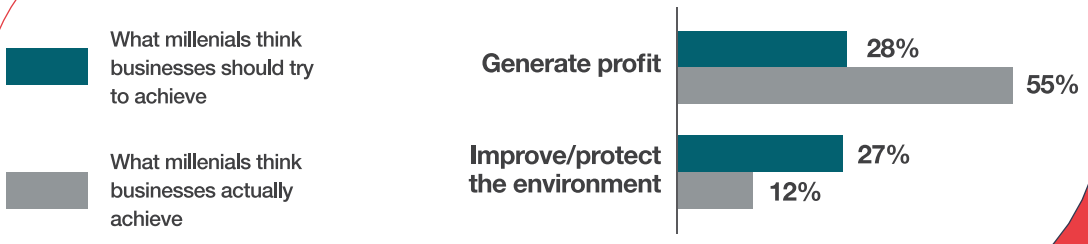
Figure 4: Percentage of people that see climate change as a 'major threat' to their country[57]



Source; CISL 2022

Furthermore, as the climate challenge moves up the consumer agenda, it can affect what investment products are preferred. For example, a recent paper by CISL demonstrated that individuals want more from their invested capital than just returns. With the right information, they will exchange returns of up to 2–3% per year to avoid investing in unsustainable funds. Employee/employer priority misalignment is demonstrated by an annual survey of millennials, conducted by Deloitte (Figure below).

Figure 5: Millennials view of business priorities versus what they think business should aim to achieve[58]



Source; CISL 2022

iii. Legal liability

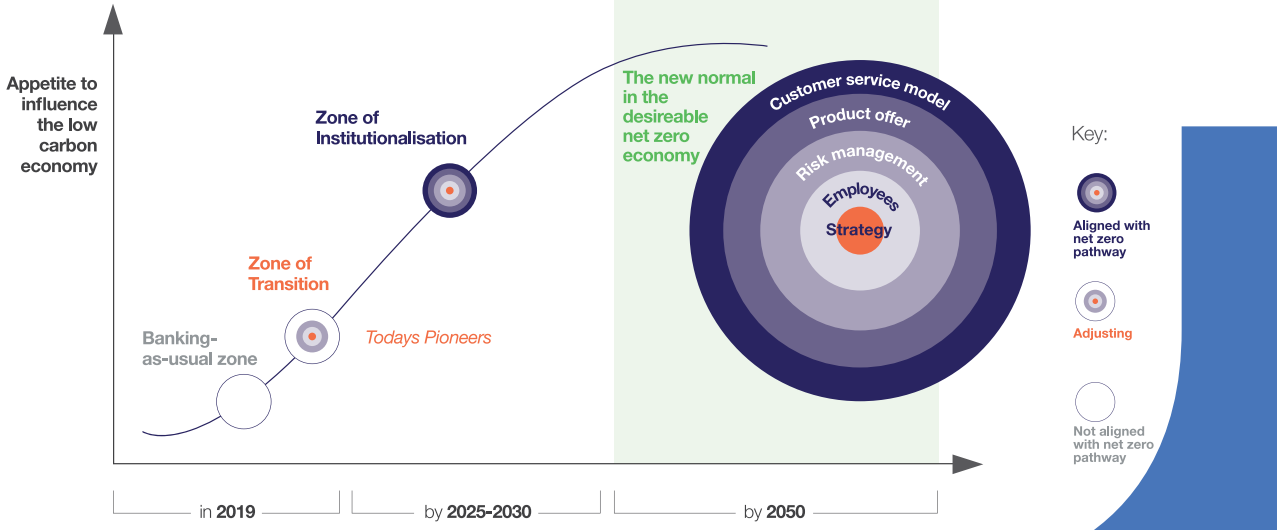
Another risk to banks comes from parties seeking damages as a result of losses incurred when climate risk materializes, or because of the risk that they could. Allegations that climate-related risks were inadequately disclosed were part of the reason that a 2017 Kinder Morgan IPO in Canada was delayed – until the prospectus was updated – and a 2017 Commonwealth Bank of Australia Annual Report was altered. Climate action lawsuits also help to amplify civic pressure. In December 2019, the Dutch Supreme Court upheld a ruling that will see the Dutch Government obliged to accelerate the pace at which GHG emissions are cut.63 Such landmark rulings mean litigation "is increasingly viewed as a tool to influence corporate behavior."

These 'push factors' are moving climate up the C-suite agenda. Senior management attention allows firms not only to address those risks, but also to explore ways to expand the pipeline of investment in low carbon projects by clients. This is slowly growing the suite of products and case studies for how banks can accelerate the transition to a low carbon economy. As a result, "most [banks and financial institutions] (roughly 80%) have board oversight of climate-related risks and opportunities," according to 2019 research by the Global Association of Risk Professionals. In Kenya, only one in four Nairobi Securities Exchange (NSE) listed firms are compliant with environmental, social and governance (ESG) reporting and disclosures. Fifteen out of the 61 publicly traded firms have so far adopted ESG disclosures following the release of the guidelines on this line of reporting in December 2021 according to Business Daily dated 11th December 2023.

Evolution Of Banking To 2030

Growing the appetite to influence the low carbon economy by 2030 and adjusting the banks' business and operating model.

Figure 6: Growing the appetite to influence the low carbon economy by 2030 and adjusting the banks' business and operating model



Source; CISL 2022

As such, it is observed differing appetites influence the transition amongst the banks. If a strategic approach is taken, the bank moves from 'banking-as-usual' to a 'zone of transition' in the figure above. Once in this transition zone, it begins to adjust its business and/ or operating model, empowering employees to tackle the climate challenge and evolving the risk management function to quantify climate risk. Creating more pioneering products that channel capital to the low carbon economy then becomes possible and coverage of the low carbon economy could expand. Over time, as these practices come to redefine the credit portfolio (and are institutionalized) a bank of 2030 should theoretically emerge that only finances assets and clients aligned with a pathway to net zero.

Banking-as-usual: What holds banks back from accelerating the transition?

A responsive or CSR-led approach means that the bank has less appetite to influence the transition to a low carbon economy, tending to finance low carbon assets where there is strong regulatory or market support (e.g., renewable energy). These banks may implement exclusion policies or make public commitments to finance low carbon – from the existing pipeline – but shy away from stimulating low carbon investments by clients.

Banking-As-Usual: What Holds Banks Back From Accelerating The Transition?

Three factors within the control of banks that prevent them from channeling further capital into the low carbon economy:

i. A focus on efficiency – transaction volume or size – means that the amount of time available for innovation or collaboration to unlock low carbon financing opportunities is limited.

In 2018, more than US$150 billion of green bonds were issued, but from the point of view of a bank they remain less attractive to execute than conventional bonds. This is partly due to the additional time involved. Organizations with an excessive focus on efficiency – doing more with less – can run the risk of reducing the resilience of their business and their industry. One reason is that standardized processes and decisions are, by definition, more rigid and reactive. There is less tolerance in the system for unanticipated change (e.g., climate risks). Furthermore, whilst efficiency can improve the bottom line in the short- term by streamlining and focusing on transaction size or volume, it means there is less slack available for employees to cultivate opportunities with longer and less tangible payback horizons. This makes it harder for employees to curate ways to channel capital to low carbon opportunities. The transaction focus of a bank is one manifestation of this kind of efficiency logic, reducing the bank's capacity to grasp the opportunities of a low carbon transition.

However, waiting for others to take the lead cannot accelerate the transition. Allowing others to develop a vision for a low carbon future might reduce risk and cost, but it also reduces opportunities to build a strong market position in that future.

ii. A passive mindset

Demonstrating the materiality of a low carbon transition to clients requires not only time investment by the banker, but also initiative. It runs counter to an approach in which "the way [the bank] operate[s] is client led" and where, "if a client is not asking for it, then [why] would we be involved?" As a result, the bank has less opportunity to stimulate latent low carbon investment by those clients. Instead, the client takes the lead, and the bank has lost the opportunity to accelerate. In their own words, bankers typically:

"Do not have a role to incentivize or motivate clients into a particular business model." "Are not pushers." "Do not put themselves in a position to guide customer decisions."

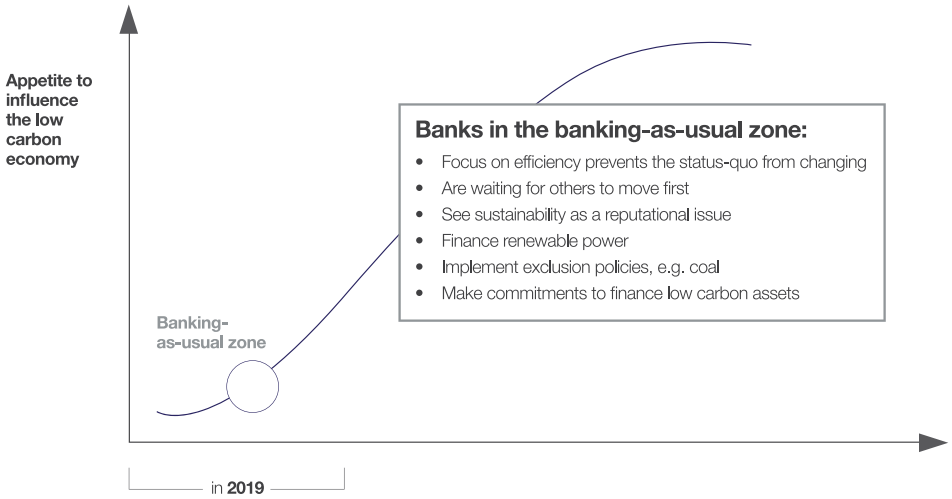
iii. Treating sustainability as a reputational concern

When sustainability is primarily treated as a reputational concern, it can potentially limit the depth and sincerity of actions taken by banks to accelerate the transition. When a bank does not consider the low carbon transition a business-critical priority, it endorses a passive approach to clients that may invest in low carbon assets. This passive mindset limits the extent to which a bank can influence the transition, since it by definition means that the individual or organisation will not seek or carve out opportunities to finance low carbon business cases. Instead, it waits for clients to request financing.

Breaking free from passivity is further challenged by a strong focus on efficiency to compete in the short term. Established businesses strive for efficiency, but those stimulating new demand, including for low carbon investment by clients, need to invest time making those options visible and attractive.

A focus on efficiency also undermines time investment in an evidence base that could expand the appetite to spend time on this promotion; for example, the development of industry transition pathways by an individual bank could, in themselves, help to justify more appetite by highlighting opportunities for the bank through the low carbon transition. Instead, others are expected to lead – either clients, regulators, policymakers, or other stakeholders.

Accelerating the financing of the low carbon economy – the roadmap to the low carbon bank of 2030 (Stage 1: Banking-as-usual)



Source; CISL 2023

Banking Industry Leaders: What Makes It Possible For Banks To Accelerate The Transition?

It is observed that some banks are taking a strategic approach to the low carbon economy that moves them out of 'banking-as-usual'. This strategic approach is underpinned by a forward-looking mindset that recognizes the opportunity and materiality of a low carbon transition to the bank. This is a "long-term vision"– a belief in a different future not based on historic data – and is a fundamental shift in method for banks whose DNA is "to back test". The bank "need[s] to have gained the trust of the winning clients over a long period of time [because] the banks rely on the trust the clients have in it and trust takes time to earn."

Having this trust allows banks to act as an advisor – as a "critical friend"– allowing them to collaborate with the client to help them transition. More than a quarter of bankers interviewed emphasized how deepening relationships with clients was essential for overcoming the climate challenge or grasping any opportunities associated with sector transitions.

"In the short term [leading in sustainable finance] is a cost, but in the long term it will buy us trust."

Seeing a low carbon future as a strategic opportunity also creates an appetite – in the form of resources – to adjust the business and operating model of the bank. The first way this is done is by empowering employees and resourcing the risk management function to identify climate-related sources of risk. By doing so, employees are better positioned to innovate and collaborate to encourage clients to transition. It also makes pioneering products and broader coverage of the low carbon economy possible, building a sustainable finance track record to differentiate the bank from its peers. To empower its employees, the bank can provide training, incentives, and time. It also moves sustainability out of a silo, ensuring the champions it trains are dispersed through various parts of the bank engendering collaboration across business units.

Steps To Empower Employees

1

Capacity building
The critical first step is building capacity and knowledge across the bank. This can focus on the climate challenge, sustainable finance, or sector pathways through a low carbon transition. Such education begins to institutionalize what, to this point, has likely been an informal network of sustainable finance champions.

2

Introducing contractual obligations
To incentivize employees to think differently about what they spend time on, inductions and contracts can be updated so that appraisals are linked to the ESG (Environmental, Social and Governance) impact of employee choices. This could also apply to executive compensation.

3

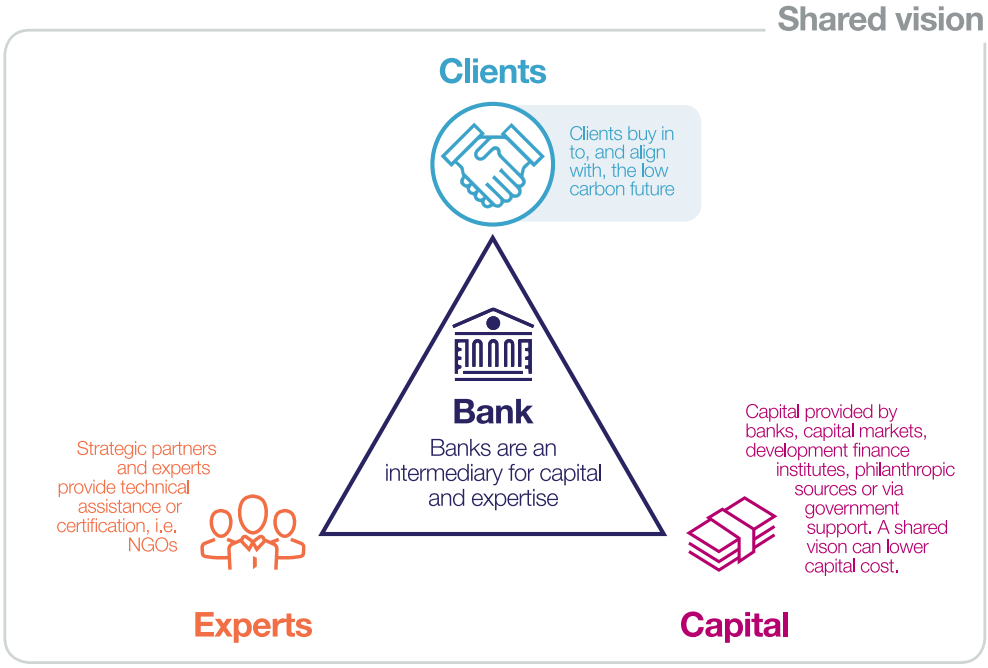
Creating slack
By creating slack, staff are afforded the time to:

- Innovate products – there is a need to be ruthless about the development of products.
- Establish organisation-wide networks – it is where trends converge and/or industries are disrupted that the opportunity to accelerate is most likely to be available.
- Forge partnerships
- Keep up with the pace of change – product innovation, industry shifts and regulatory backdrops are moving extremely quickly.
- At the same time, resourcing the risk management function to understand and quantify climate risk further empowers employees in business units. This would involve incorporating forward-looking analysis of climate-related sources of physical and transition risk into the mainstream risk framework.

4

Creating a shared vision with others
It is possible for the bank to bring counterparties together to promote and then realize visions of a low carbon future, to connect clients with experts and capital that improve the visibility and attractiveness of low carbon business cases.
It begins with a deep, trusting client relationship, where the bank is a "critical friend". This makes it possible to have difficult, but business-critical conversations about the transition. In these conversations the bank can share a vision of a low carbon future with clients. If it has also spent time cultivating relationships with experts, it can then connect the client with the experts or tools needed to realize that vision. These partnerships with experts provide the client(s) with confidence and/or technical assistance.
At the same time, the bank can be finding or innovating ways to secure capital at a rate that makes investment in low carbon assets or operating models more attractive to the client. A capital cost that is preferable to the client could come from a variety of sources; the development finance community, philanthropic sources, international aid, domestic government support (i.e., subsidies) or capital markets. This process utilizes banks' understanding of clients, its unique position in the network of the economy as an intermediary and its ability to design financial instruments. Additionally, capital could also come from the bank's balance sheet, should risk/return align with the strategic approach and sector tolerances. Through a deep client relationship, strategic partnerships with experts and the deployment of its capital markets access and expertise, a bank can enable a shared low carbon vision.

Banks creating a shared vision with clients, experts, and sources of capital.

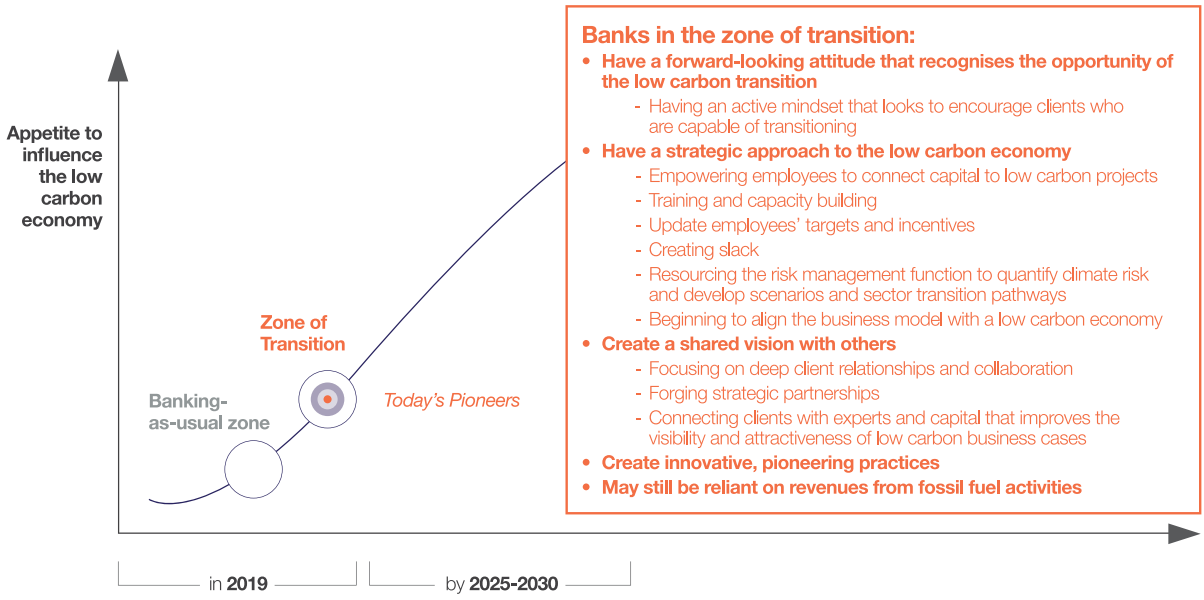


Source; CISL 2023

In other words, bankers 'lean in' with clients and capital markets, and this unlocks demand for low carbon investment by clients and creates new business lines for the bank. As such, the pipeline of low carbon projects has been stimulated and expanded – accelerating the transition.

Importantly, this action can be taken without policymakers. For, although policy and regulation have major roles to play in enhancing the attractiveness of investment in low carbon assets by clients of banks, bankers taking a strategic approach can enable change themselves and come into what we call a 'zone of transition'.

Accelerating the financing of the low carbon economy – the roadmap to the low carbon bank of 2030 (Stage 2: Zone of transition)



Source; CISL 2023

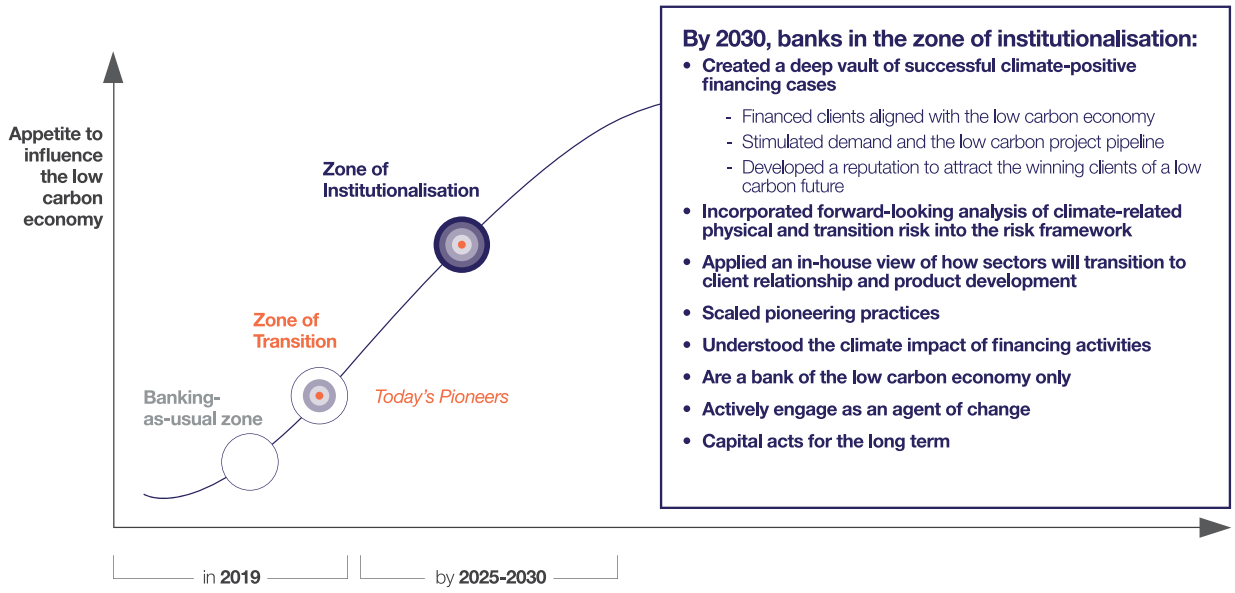
The Next Steps: Innovate, Expand Coverage, And Institutionalise.

By taking a strategic approach to the climate challenge, banks position themselves in a 'zone of transition' that is observably different from 'banking-as-usual'. This empowers employees to be highly collaborative and resource business units to innovate products. Empowered employees create a vault of successful case studies which, in turn, justify a greater allocation of resources, thereby driving expanded coverage. This creates a track record in sustainable finance that the bank can use to attract successful clients of a low carbon future.

Meanwhile, if resourced appropriately, the risk management function integrates scenario analysis and a forward-looking view of the portfolio that recognizes climate-related sources of risk. This forward-looking view creates the evidence base that further enhances the commercial case to adjust the bank's business model and for business units to find pathways to help transition clients, enabling pioneering practices to scale.

As institutionalization occurs, environmental and social risks are understood, assessed and managed within the mainstream risk frameworks, and the impact of every dollar of financing is understood. As such, the portfolio becomes aligned with net zero and capital begins to act for the long term.

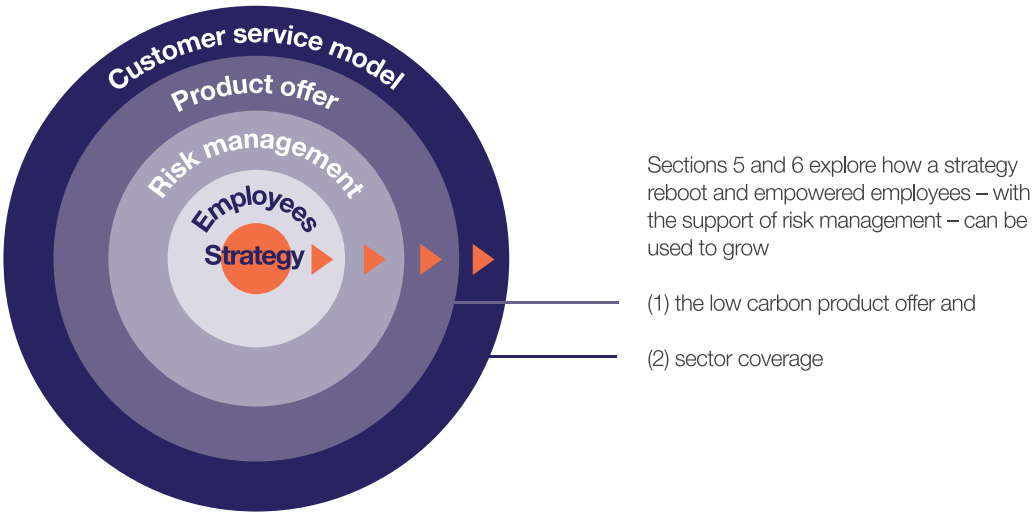
Accelerating the financing of the low carbon economy – the roadmap to the low carbon bank of 2030 (Stage 3: Zone of Institutionalisation)



Source; CISL 2023

Moving along this curve begins with a strategy reboot, empowering employees and evolving the risk management function. This enables the bank to begin to offer new products and attract clients aligned with the low carbon economy. As the bank moves along the above represented curve of change, reaching the 'zone of institutionalization, new business lines created by 'leaning in' to stimulate demand for low carbon investments by clients should have taken over the bank. The bank will thus have accelerated the transition and transformed its business and operating model as below.

Adjusted business and operating model – the roadmap to the low carbon bank of 2030

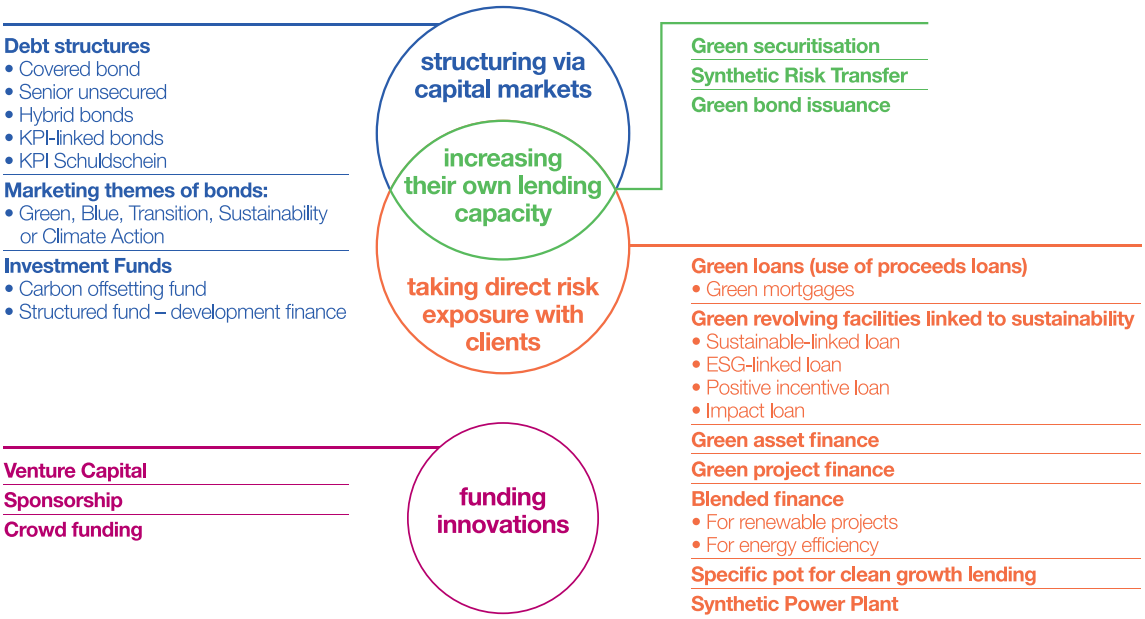


Source; CISL 2023

Financial instruments to channel capital to the low carbon economy
Four methods exist for channelling capital into the low carbon economy (Figure below):

i. capital markets activities,
ii. lending activities,
iii. securitization and/or
iv. equity stakes and sponsorship.

Figure: How banks channel capital into the low carbon economy



Source; CISL 2023

Therefore, KMRC can collaborate with Banks to develop and promote mortgage products specifically tailored for sustainable and energy-efficient affordable housing, that's green mortgages. This can be refinanced with proceeds from issuance of green bonds.

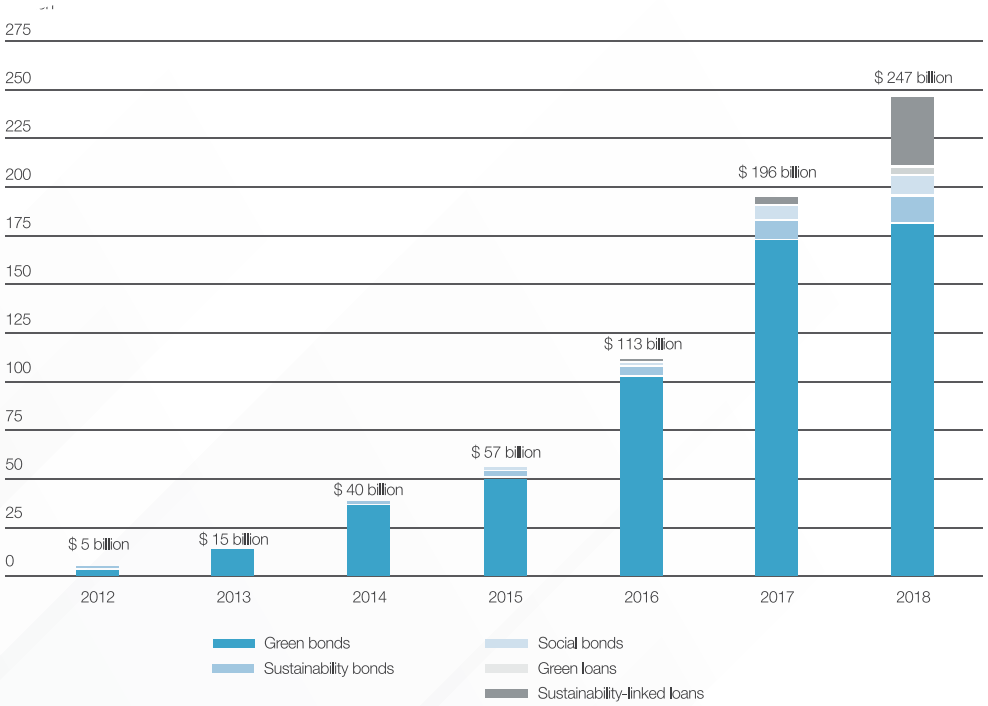
Structuring Via Capital Markets

Capital markets dominate the financing of the low carbon economy using green-labelled financial products. The figure below shows that 80% of green finance activities in 2018 were bond structuring, with sustainability-linked loans and green loans emerging more recently. By 2019, banks issued their own green bonds in a volume of US$145 billion. These are for refinancing of existing projects with the proceeds used for further green lending activities by the bank. Banks own green bond issuance represents around 20% of all green bonds issuances worldwide and is indicative of how direct lending by banks for low carbon projects remains less prevalent.

According to the Financial Times 2023, the impact of green mortgages is currently underwhelming. The market has grown from four products in 2019 to 60 today from 38 different lenders, according to the Green Finance Institute. But the overall market remains tiny: consultancy Baringa/ Anthony Devlin/ Bloomberg reckons that green mortgages amount to £8.1bn or 0.4% of total lending.

Green bonds have dominated the green finance market since 2012. They are debt securities issued to raise capital specifically to support climate-related or environmental projects. Given that this research focuses on accelerating the low carbon transition, it looked to move beyond what is today considered an established product – seeking to highlight and understand emergent financing instruments with the potential to accelerate the low carbon transition.

Sustainable debt issued by instrument type (US$ billon, 2012–18)



Source; CISL 2023

Acorn Projects Limited, a corporate entity, issued a five-year green bond worth KES 4.3 billion (c. US$41 million) to finance green and environmentally friendly buildings for 5000 students in Nairobi. The KES 5 billion MTN programme became the first Green Bond in Kenya. In the process, the first tranche of the issue raised KES 4.262 billion against a minimum target of KES 2 billion. The funds were used to finance Acorn's green projects, including renewable energy production, sustainable waste and water management, construction of green student housing, etc.

Transition bonds, which are about helping heavy carbon emitting industries reduce their GHG footprint, are becoming increasingly popular. One recent landmark financial innovation in this area was a general corporate purpose debt linked with pre-determined sustainability performance targets. This SDG-linked bond for the energy company ENEL linked a KPI about future installed renewable capacity to the coupon rate, which would increase should the company not meet the stated target. The innovation echoed an earlier 'ESG-linked Schuldschein' issuance by Dürr. Investor appetite for these 'finance for transition' offerings is strong. This demand from investors demonstrates a desire to find a way to help existing clients transition. Indeed, where non-financial conditions are attached to the financing, they could be a useful instrument to encourage behavioral change and help 'hard-to-abate' sectors be part of the transition.

A highly collaborative approach is also critical for product innovation. For instance, the Tropical Landscape Finance Facility (TLFF) facilitated by BNP Paribas, the bank connected diverse stakeholders together to collaboratively finance a rubber plantation on degraded land, restoring 88,000 hectares and creating 16,000 fair wage jobs at maturity. The facility was traded as a sustainability bond on capital markets. As appetite and experience grows, as well as standardization and securitization, it could become possible to facilitate more transactions such as this. Figure 14 shows the parties involved to make this business case and shared environmental and social vision possible. The facility was possible because the bank had a deep, long-standing and commercially material client relationship with Michelin and was supported by NGOs and Development Finance Institutions (DFIs), who provided technical assistance and impact measurement. 'Collaborative financing' is evidence of a bank's capability to use its network and structuring expertise to make low carbon projects viable.

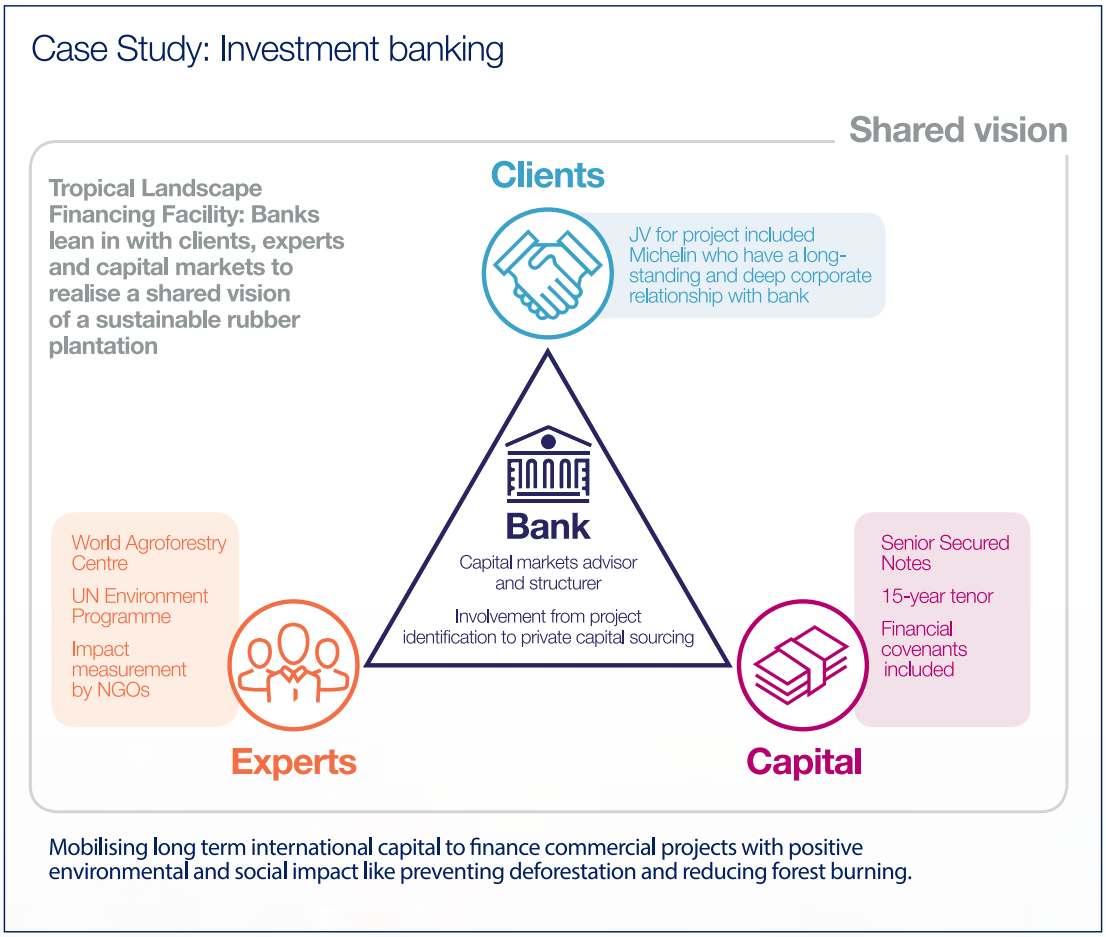
Taking Direct Exposure With Clients

A fast-growing segment of low carbon lending are sustainability-linked loans (figure below). These are typical revolving working credit facilities that are known by a variety of names such as sustainability-linked loans, ESG-linked loans or positive-incentive loans. However, they are all similar in that the payment rate will be adjusted based on performance against a pre-determined non-financial KPI, or an external sustainability score. This adjustment can impact the interest rate by 3–5 basis points (bps) and is currently financed by the internal CSR budget. Therefore, it is a cost for the bank, but is used to build a stronger client relationship and to open a dialogue with clients on sustainability-related topics – the first step of 'leaning in' to unlock low carbon financing opportunities.

Green mortgages are another debt instrument used for particular measures, such as energy efficiency retrofits or domestic solar power generation. A very prominent example of green mortgages can be found in the German market where development bank Kreditanstalt für Wiederaufbau (KfW) offers individuals discounted finance (preferential lending that meets certain climate-positive eligibility criteria). The funds are used to discount commercial bank lending, including mortgages to do this, KfW directs funds through private banks, allowing the development bank access to customers and increasing the visibility and

attractiveness of investments in, for instance, renewable power generation. The eligibility criteria also act as a taxonomy, standardizing what assets can be financed and therefore reducing the transaction costs. In turn, this creates a standardized book of green mortgages on commercial banks' balance sheets, which could be tagged and securitized.

Key stakeholders in the TLFF transaction and the role of the bank



Source; CISL 2023

Increasing Lending Capacity

Synthetic securitization can accelerate the pace at which direct low carbon lending or leasing occurs. Securitization is now becoming an increasingly popular instrument to unlock finance for small-scale low carbon projects, such as automotive leases. The bank scaling this avenue for capital distribution requires:

1

Appropriate knowledge and tagging, which is why standardization of tags via a sustainable taxonomy is valued by the banking industry.

2

In-house expertise that can use the knowledge architecture and build the pipeline.

3

An active approach with clients, experts, and capital markets to collaboratively build up the portfolio and the capital to fund it.

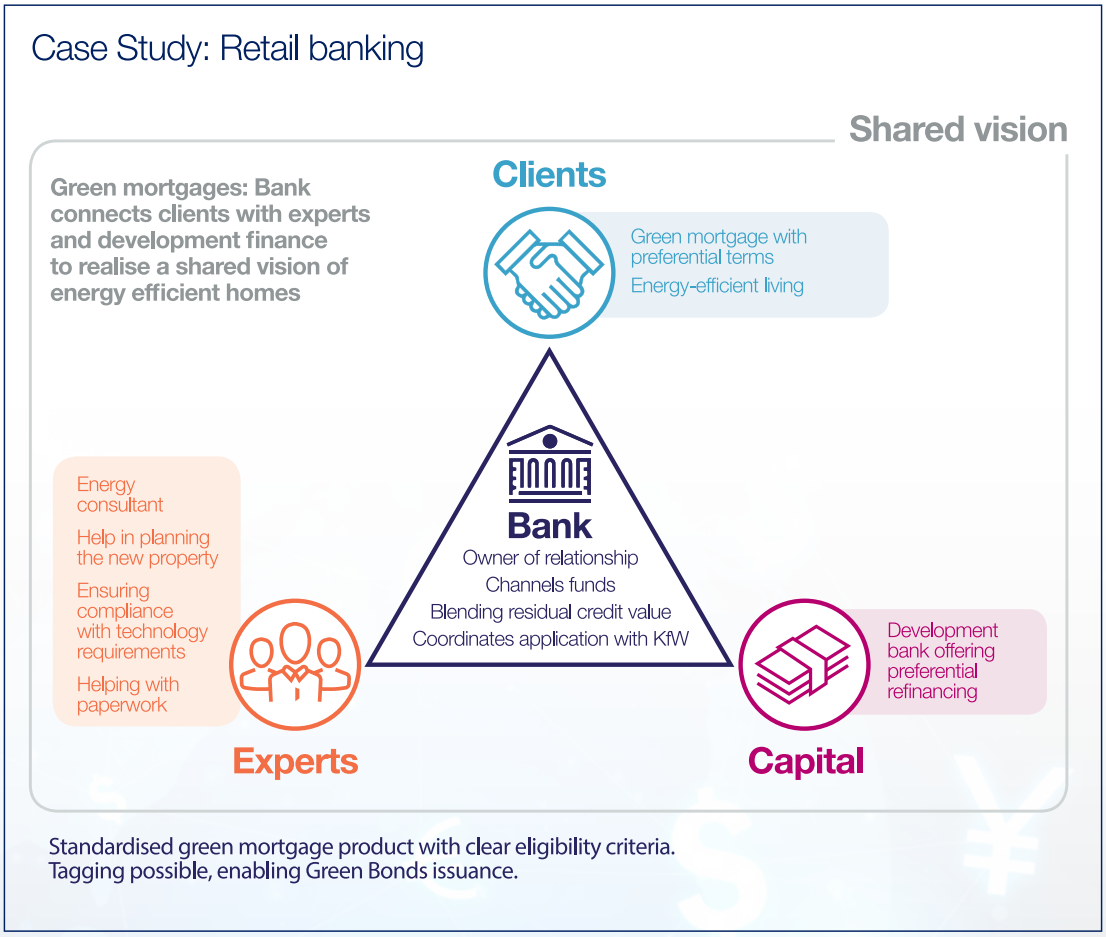
4

Insurance

Another avenue to grow the banks' lending capacity for low carbon is a synthetic risk transfer, in which a third party offers risk protection. One such example of blended finance saw the IFC provide US$85 million credit risk protection to Credit Agricole on a US$2 billion trade finance portfolio. The protection freed up regulatory capital for the bank to lend an additional US$510 million for health, education, and infrastructure projects in emerging economies.

The Declaration commitment by African insurance industry leaders to support the achievement of the UN Sustainable Development Goals was formally launched at the UNEP PSI's 4th Africa summit hosted by ICEA LION Group as a founding signatory in Nairobi in April 2021. Together with 11 other institutions, signatories to the Declaration sought to bring together senior leaders to accelerate solutions to major sustainability challenges – ranging from climate change and ecosystem degradation to poverty and social inequality – particularly in a post-Covid-19 world. This would Support the transition to a resilient, net-zero emissions economy, building on the work of the PSI to establish a Net-Zero Insurance Alliance.

Key stakeholders in KfW green mortgages and the role of the bank



Source; CISL 2023

Funding Innovations

Venture and equity capital funds or incubators are a straightforward way for banks to directly support innovation.
For example, the Wells Fargo Innovation Incubator offers non-dilutive grants to companies to validate technologies in the agriculture or clean technology fields. This capital supports start-ups involvement in the low carbon economy and leverages banks access to these customers.

The current low carbon product offering
In 2018, 80% of green market activity was for the issuance of green bonds, sustainability bonds and social bonds. These are for large corporate and institutional clients. SMEs and individuals, meanwhile, appear to be under-serviced, with green lending or investment products limited. Green and sustainability-linked loans, for example, have also tended to service large corporate and institutional clients. Despite this, it is meaningful to see coverage in all areas, demonstrating that some banks are taking a leadership position by resourcing product innovation to create banner offerings in under-serviced areas.

Opportunities For Banks To Accelerate The Transition To A Low Carbon Economy.

As a bank's capability and appetite to influence the low carbon economy grows, opportunities emerge to expand coverage of the low carbon economy. As well as deepening coverage of renewable power generation and energy efficiency investments, next steps include helping transitions of agricultural practice or innovating the means for hard-to-abate sectors, like cement, to be a part of the journey to net zero emissions. These particular sectors became the focus of our analysis because of recent financial product innovations or trends within the sectors. An expansion of capability and appetite needs to be spent wisely – yet there are numerous opportunities that banks could finance, but which they should not. These are opportunities that make net zero more difficult to achieve. This section begins by out scoping such opportunities before addressing where coverage could expand.

A survey conducted by the Intermediary mortgage Lenders Association (IMLA) in 2020 shows that the nascent green mortgage industry is growing despite lack of awareness among the consumers, both lenders and brokers are optimistic about the growth of the green mortgage sector in the future. It found that about 74% still expect demand for green mortgages to grow over the next few years, with 83% expecting the ability to save money on energy bills as being the biggest driver behind market growth. Mortgage brokers responding to the survey said they also expect to see an uptick in the number of borrowers taking out green mortgages, with 58% saying they expect demand for the products to grow in the next few years. This is in line with the findings that more than a third (35%) of brokers in the developed economies plan to advise on these products more often in the future, compared to 2% currently.

60% of people in Africa live in informal settlements – poor housing, sanitization, solid waste management, air quality. In Kenya, many people (45%) live in informal or inadequate dwellings and 83% of households are without access to basic waste collection services which calls for intervention to encourage banks to embed sustainability in business with a focus on housing impact presenting an opportunity for green mortgages.

The popularity of green building technologies in Kenya is rising, with more stakeholders opting for green or environmentally sustainable architecture in housing development. According to a survey by Knight Frank, 29% of home buyers in Africa prefer green homes and do not mind the extra costs indicating an affinity towards green housing. The country's 2019 Population and Housing Census revealed that 19.3% of Kenyan homes used solar power indicating a high sense of the populace towards green mortgages hence the unexplored market.

The transition towards carbon-neutrality and environmental sustainability will reduce the negative impacts of climate change amongst poor communities.

Vision 2030 plans to reduce greenhouse gas emissions by 30% of the current levels by 2030. By 2030, Kenya's GDP could be 12% higher by taking a green growth pathway than continuing a business-as-usual scenario according to Kenya's 2014 Green Economy Assessment report hence banks can adopt green mortgages to chat this sustainable finance journey.

What Projects Not To Finance

To have the best chance of limiting global warming to 1.5°C above pre-industrial levels, emissions need to reach net zero by 2050. Financing certain projects (investments by clients) can help reduce the emissions of 'brown' sectors, like oil & gas, but also make achieving net zero more difficult. Put simply, 'doing less harm' does not equal 'doing good'. Investments by bank clients that would make achieving net zero more difficult include:

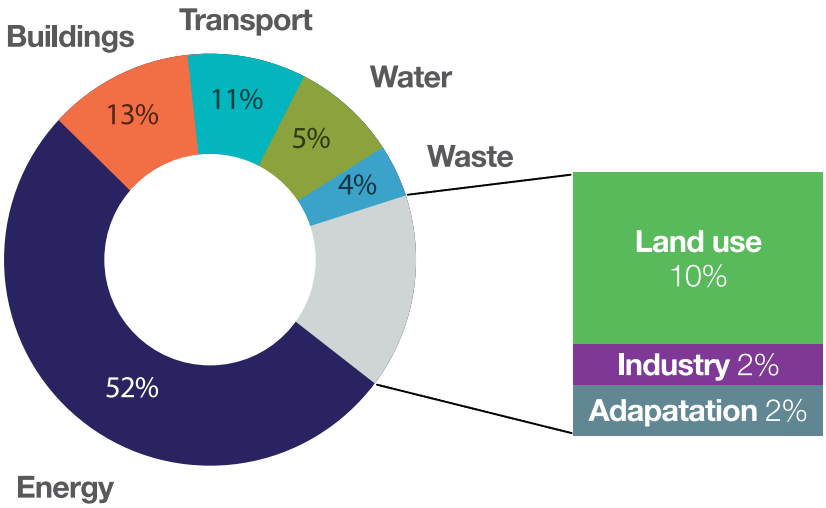
1. Any manufacturing advancement that improves the efficiency of internal combustion engines
2. Oil refinery efficiencies
3. Aspects of the liquefied natural gas (LNG) value chain
4. The justification of one type of oil production method at the expense of another based on a lower emissions profile, e.g. thermal-enhanced oil recovery methods versus conventional onshore methods.
5. Greenhouse gas emissions (non -green buildings)

The problem is that investment in assets or efficiencies, such as refining, transport, methane, flaring and venting CO2, and energy for extraction reduce emissions and enhance the profitability of business-as-usual, making it relatively more difficult for green assets to compete. For example, in 2017 Repsol issued a €500 million 'green' bond that was controversial because funds were earmarked for investments such as refinery efficiencies. Such financing enhanced the core business model of oil & gas at the expense of green alternatives to fossil fuels.

However, 'transition bonds' that finance the transition of a company to a low carbon operating model offer investors an exciting and credible opportunity to support companies on their journey to net zero. The concept is powerful if used wisely but should not be used to achieve a lower emissions profile if low carbon alternatives exist. For example, passenger vehicles can use low carbon electricity; an oil & gas company that invests heavily in vehicle charging infrastructure is pushing both a transition to low carbon mobility and a transition of its own business model from fossil fuels. Supporting such an investment with a transition bond could be defensible; whereas one used to reduce the carbon footprint of refinery operations that produce gasoline is not.

Renewable power generation and investments to make industry, buildings, and households more energy efficient are the most common low carbon destinations for capital. They target the decarbonization of electricity and heat production that constitute 25% of GHG emissions. In 2017, a majority of green bonds issuances, a bellwether for the state of green finance, went to energy efficiency savings. Also in 2017, two-thirds of power generation investment worldwide went to renewables.

Green bond use of proceeds, emerging markets, 2018



As a method for enhancing the attractiveness of renewables or more energy-efficient equipment, 'as-a-service' business models are also worth noting. The model can involve selling on-site renewable power or energy efficiency as a service, in which future performance is guaranteed. The arrangement shifts the cost of capital, residual asset value risk, market risk and performance/maintenance risk from the final customer to the service provider. Invariably, the bank will be financing this service provider; but by finding ways to reduce the cost of capital for these service providers or by improving their access to customers, the bank can further help individuals and SMEs gain access to low carbon assets.

Where To Broaden Coverage

Renewable power generation and investments to make industry, buildings and households more energy efficient are only two parts of the low carbon economy that need to be scaled. Other areas emerging as opportunities are:

i) Green residential building - The popularity of Green Building technologies in Kenya is rising with more stakeholders opting for a green or environmentally sustainable buildings with 29% of homebuyers in Africa prefer green homes which cut costs associated with energy use, water use and maintenances as Per Knight Frank report 2021. The country's 2019 Population and Housing Census revealed that 19.3% of Kenyan homes used solar power indicating a high sense of the populace towards green buildings eliciting the green mortgages conversation. The Ministry of Environment and Natural Resources formulated the Green Economy Strategy Implementation Plan (GESIP) 2016 to 2030 which proposes to promote sustainable infrastructure with the objective of promoting sustainable design, construction and maintenance of buildings with the main goal of ensuring 75% of new and renovated large-scale building in Kenya are green by 2030.

ii) Hard-to-abate sectors, for example shipping or cement, because recent financial instrument innovation could see these sectors become part of the low carbon transition.

iii) iii. Agriculture, because conventional wisdom about best practice on-the-ground is evolving. **Transitioning agricultural practices represent an opportunity to use a depleted carbon sink to sequester emissions whilst also creating a more resilient and efficient borrower.** The bank can help promote the transition by using its unique position in the economy; specifically, by connecting its client with experts and sources of capital that could help the client see the value in adopting farming methods with a lower carbon footprint. Agriculture, forestry and land use change account for 24% of greenhouse gas emissions. Upward pressure on this percentage is likely because demand for crop calories is forecast to increase by 56 per cent between 2010 and 2050. To even meet the 2°C goal, the agricultural sector will need to cover this incremental demand for calories whilst reducing net emissions by two-thirds.

iv) Electric passenger vehicles because opportunities exist to make EVs more affordable if the bank goes 'beyond core banking'. For instance, going beyond leasing and providing the vehicle and all the ancillary services, including the power needed to fuel it, for one single subscription fee – an 'as-a- service' model.

Three methods for banks to channel capital into the low carbon economy.

Financing and intermediation activity	Pricing externalities using innovative products	Extension of the bank's business and operational remit
Electric arc furnaces	Carbon capture with benefits, e.g. reforestation	Encourage consumers to change habits
Renewable energy supply, including bio based	Using carbon offsets to incentivise sector transitions	Encourage clients to optimise operations or train employees
Shipping fleet overhaul		Act as a virtual power plant to speed up penetration of renewables
Utility-scale battery storage		Offer electric-vehicles-as-a-service to transition automotive sector
Near-commercial renewables, e.g. floating solar		
Micro-grids		
More efficient industrial assets or processes		
Water management		
Greener buildings		
Electrification of heating and industry		
Transitioned agricultural practices		
Facilitating symbiosis, e.g. district heating		

Source; CISL 2023

Collaboration and product innovation is vital if the bank is to use these methods to channel more capital to the low carbon economy. For example, industrial symbiosis is predicated on consultation between technical experts to optimize waste streams, whilst influencing consumer habits requires credible third-party data or verification – take certification standards.

Select Opportunities To Accelerate The Transition

1 Hard-to-abate sectors, for example shipping or cement, because recent financial instrument innovation could see these sectors become part of the low carbon transition.

2 Aggregate smaller renewable generation or energy efficient assets together, so that smaller ticket sizes can be financed. Collaborate with crowd finance initiatives or DFIs to reduce risk at the bottom of the capital stack for these smaller ticket sizes, perhaps prior to aggregation.

3 Use leasing instruments and capabilities to deepen the penetration of green assets, like EVs (again, including individuals and SMEs in the transition).

4 Utilize existing cash flow and borrowing facilities to facilitate a transition of agriculture practice to improve the capital efficiency and resilience of the borrower, many of whom are smallholders, and use land to sequester carbon.

5 Introduce 'transition finance', such as adjustable-rate debt, that promotes client transitions and enables hard to- abate sectors, like shipping or cement, to transition. Adjustments would be based on non-financial KPIs and could track efficiency savings.

6 Create eco-carbon instruments for investing clients that automatically channel capital to carbon offsets, creating a new pipeline of capital for carbon sequestration (e.g. reforestation).

7 Create banking products: -
Green banking products refer to financial products and services that are designed with a focus on environmental sustainability and social responsibility. These products are offered by banks and financial institutions to promote environmentally friendly and socially responsible practices.

Select Opportunities To Accelerate The Transition

Here are some examples of green banking products:

- **Green Mortgages:**
  These are mortgage loans designed to encourage environmentally friendly practices in home construction and improvement. Borrowers may receive favorable terms for energy-efficient homes or improvements.

- **Green Auto Loans:**
  Financing options for eco-friendly vehicles, including electric cars and hybrid vehicles. These loans may offer lower interest rates to incentivize the purchase of environmentally conscious automobiles.

- **Energy-Efficient Home Improvement Loans:**
  Loans specifically for financing energy-efficient upgrades to homes. This can include solar panel installations, energy-efficient appliances, insulation, and other green home improvements.

- **Sustainable Personal Loans:**
  Unsecured loans that individuals can use for various purposes, but with a focus on supporting sustainable and eco-friendly initiatives. This might include financing sustainable travel, eco-friendly lifestyle changes, or green business ventures.

- **Green Credit Cards:**
  Credit cards that offer rewards or incentives for environmentally friendly purchases. This may include cashback or rewards for spending on sustainable goods and services.

- **Green Business Loans:**
  Loans designed to support environmentally responsible business practices. This can include financing for green infrastructure, renewable energy projects, or sustainable supply chain initiatives.

- **Sustainable Investment Products:**
  Financial instruments that allow customers to invest their money in environmentally and socially responsible projects. This can include green bonds, sustainable mutual funds, and other investment options that prioritize ESG (Environmental, Social, and Governance) criteria.

- **Carbon Offset Programs:**
  Some banks offer programs where customers can purchase carbon offsets to compensate for their carbon footprint. The funds from these programs are typically invested in environmentally beneficial projects.

Green Savings Accounts:
Savings accounts that support green initiatives by allocating a portion of the bank's profits to environmental causes. Customers may also receive special benefits or interest rates for choosing these accounts.

Eco-Friendly Insurance Products:
Insurance products that support sustainable practices. For example, insurance for green buildings, eco-friendly vehicles, or insurance policies that reward policyholders for adopting environmentally friendly behaviors. The Declaration commitment by African insurance industry leaders to support the achievement of the UN Sustainable Development Goals was formally launched at the UNEP PSI's 4th Africa summit hosted by ICEA LION Group as a founding signatory in Nairobi in April 2021. Together with 11 other institutions, signatories to the Declaration sought to bring together senior leaders to accelerate solutions to major sustainability challenges – ranging from climate change and ecosystem degradation to poverty and social inequality – particularly in a post-Covid-19 world. This would Support the transition to a resilient, net-zero emissions economy, building on the work of the PSI to establish a Net-Zero Insurance Alliance besides close the insurance protection gap by actively developing and promoting inclusive and innovative insurance solutions (including through insurtech and nature-based solutions) for households, businesses and governments in order to build resilient cities and communities as well as sustainable food and agriculture systems, among others

The Vision For Bank 2030

In its flagship Rewiring the Economy plan, CISL set out three tasks for finance through to 2030:

i. Ensure capital acts for the long-term e.g. long tenor (green) mortgages.
ii. Price capital according to the true costs of business activities.
iii. Innovate financial structures to better serve sustainable business.

A bank in 2030 will have institutionalized the mindset, competencies and innovative practices needed to meet this challenge. As a result of doing so, it would have:

- ✓ Financed clients that are aligned with a 'net zero' emissions economy.
- ✓ Taken on additional business model risk to accelerate sector transitions.
- ✓ Developed a distinctive competency and reputation to attract the winning clients of a low carbon future.
- ✓ Understood, measured, and managed climate-related sources of risk in the credit portfolio.
- ✓ Understood the impact of each dollar of financing on the net zero emissions goal.
- ✓ Aligned the bank's business model with net zero, both from an operational and strategic perspective.
- ✓ Advocated for system change that quickened the low carbon transition, as such change was in the bank's interest.

This journey begins with an active, forward-looking mindset. This mindset recognizes the opportunity of the low carbon transition. It is observed that bankers take action because they think it is essential to their business – helping them serve the successful clients of the future, avoid risks, generate returns, and maintain their social license to operate. If this line of thinking is adopted across the firm, it results in a 'strategic approach' by banks to the climate challenge that encourages product innovation, deeper client relationships and more collaboration with third parties.

CISL research found that the first steps of this strategic approach are to:

1. Empower employees with time and knowledge about the transition.
2. Create industry transition pathways and forward-looking scenario analysis to understand climate-related sources of risk.
3. Actively help clients transition their business models to low carbon by focusing on collaborative and transition finance.

Empowered employees are better able to innovate and collaborate in order to stimulate investment in low carbon assets or operating models by clients. Over time, this should create new business lines for the bank. Alongside the quantification of climate-related risk in the credit portfolio, these new business lines should justify deploying additional resources (time, business model risk) to unlock further demand for low carbon investments by clients. This would be a virtuous circle wherein the pipeline of low carbon projects is continuously stimulated and expanded by a bank.

This strategic approach has applicability beyond climate change mitigation as the climate, environmental and social challenges we face are interconnected. This means that the path to a low carbon bank of 2030 could also represent a preliminary sketch for the journey to a sustainable bank – a bank with the appetite and ability to quicken the pace at which the full range of SDGs are met.

While CISL research focused on how banks can accelerate the transition, it's undoubtedly true that policymakers and regulators also hold a significant role. Their involvement isn't solely about making low-carbon choices appealing to bank clients; it's about strategically motivating banks to leverage their unique position to advance these options. For instance, implementing taxonomies and market incentives can facilitate the expansion of green securitization. The goal is to encourage banks to actively promote these environmentally friendly options through their intermediation role in the economy.

As a bank's business and operational structure moves toward achieving net-zero goals, advocating for systemic changes, such as the implementation of carbon taxes, becomes aligned with the bank's interests. This advocacy stems from the understanding that such systemic shifts will not only benefit the bank but also provide it with a competitive edge over rivals that haven't adapted their business models to align with sustainability goals.

Last, but not least, by redefining its 'organizational purpose' the bank can hasten the institutionalization of an active, forward-looking mindset. This bank of 2030 would have a purpose aligned with creating and maintaining a 'sustainable economy' and so would make decisions based on long-term financial, social, and environmental benefits. As such, the very reason and motivation for the bank's activities will be derived from three goals – financial, social, and environmental.

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