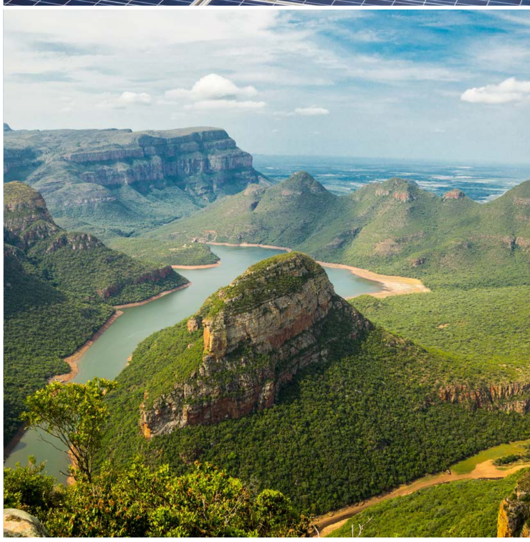
Climate risk regulation in Africa's financial sector and related private sector initiatives

Baseline study November 2021







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Executive summary

Extreme weather phenomena such as rising temperatures and the increasing frequency of droughts and floods are affecting lives and livelihoods in Africa. According to the Global Climate Risk Index 2021,[1] five African countries ranked among the 10 countries most affected by extreme weather in 2019: Mozambique (first), Zimbabwe (second), Malawi (fifth), South Sudan (eighth), and Niger (ninth).[2]

The negative societal effects of climate change, such as loss of life and livelihoods, are already and will continue to be tragic and severe, and are a key concern to governments and individuals. More frequent and severe weather events, as well as a delayed transition to a low-carbon economy and the increasingly material financial losses these directly and indirectly cause are also impacting the financial system, with potential systemic consequences for financial stability. The threat posed to the global financial system by climate-related risks is recognised by the Financial Stability Oversight Council's 2021 report on climate-related financial risk and the Network for Greening the Financial System's (NGFS) October 2021 progress report on global supervisory and central bank climate scenario exercises. Extreme weather events could lead to damage of physical assets, including real estate, productive capital, and infrastructure, consequent property and casualty insurance losses, damage to balance sheets of households and firms, increases in defaults, and potential financial sector distress. A late or sudden transition to a low-carbon economy could result in an abrupt repricing of climate-related risks and stranded assets, which could negatively impact the balance sheets of financial institutions (FIs).

Globally, the financial sector's consideration of climate change risks has gathered momentum in the past 10 years. This has manifested, for example, in the development of the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations, the NGFS, and various initiatives under the United Nations Environment Programme Finance Initiative (UNEP FI), such as the Principles for Responsible Banking (PRB), Collective Commitment to Climate Action (CCCA), and the Net-Zero Alliances. While some countries and regions are actively driving their financial sectors' approaches to climate risks through regulatory requirements, other jurisdictions are more influenced by private sector efforts.

This report seeks to assess the integration of climate-related risks in the prudential, financial, regulatory, and supervisory frameworks of a selection of African countries and identify potential levers to incentivise their internalisation. It does not explore broader green/sustainable finance-related initiatives, like bonds and principles.

1 The Global Climate Risk Index 2021 analyses and ranks to what extent countries and regions have been affected by impacts of climate-related extreme weather events (storms, floods, heatwaves, etc.). The most recent data available for 2019 and from 2000 to 2019 were taken into account. The three countries most affected in 2019 were Mozambique and Zimbabwe, as well as the Bahamas. The Climate Risk Index (CRI) indicates a level of exposure and vulnerability to extreme events, which countries should understand as warnings in order to be prepared for more frequent and more severe events in the future. Impacts from extreme-weather events hit the poorest countries hardest as these are particularly vulnerable to the damaging effects of a hazard, have a lower coping capacity and may need more time to rebuild and recover.

2 Global Climate Risk Index 2021, GermanWatch, 2021.

To assess the status of climate risk integration, 25 interviews were completed with 11 financial sector authorities covering 17 countries[3] and 14 large private sector players (banks and insurers) from seven countries, covering 19 countries in total. (See list of interviewees in Methodology). The sample has been built to represent a diverse set of countries in terms of geographical areas and economic development.

Key takeaways

- **Nine out of the 11 authorities interviewed (82%) consider climate risk a high or very high priority on their agenda.[4]**

- **To date, few financial sector regulators and supervisors have published regulations or supervisory expectations with respect to FIs' climate risk management practices.**

  Based on our interviews, most financial sector regulators and supervisors have not explicitly addressed climate-related or broader sustainability-related risks through binding regulations and supervisory guidelines. While authorities can consider these risks as part of their existing mandates, there are ongoing efforts to develop effective and complete frameworks to identify, assess, manage, and disclose climate-related risks aligned to private sector developments.

- **The countries and regions in this assessment can be grouped into three broad archetypes based on current regulatory and supervisory approaches:**

  1. Established: Countries that have published or drafted a specific prudential regulation to identify, measure, and manage climate-related risks. Examples of countries in this archetype are Mauritius and Kenya. On October 15, 2021, the Central Bank of Kenya (CBK) issued the Guidance on Climate-Related Risk Management to commercial banks and mortgage finance companies, enabling banks to integrate climate-related opportunities and risks in their governance structure, strategy, and risk management frameworks. Further, it will guide these institutions in disclosing climate-related information to their stakeholders. The principles are binding, with banks "required to comply". The Bank of Mauritius (BoM) published draft Guidelines to support FIs' integration of climate-related and environmental risks on September 30, 2021. This draft is scheduled to be finalised by the end of 2021 and is binding, with FIs "expected to comply".

  2. Emerging: Countries that have implemented other regulations/guidance or engaged with industry (for example, principle-based regulations, disclosure standards, stress tests, and best practice guidance). Examples of countries in this archetype are Egypt, Ghana, Morocco, Nigeria, South Africa, and Zimbabwe.

  Regarding disclosure standards, in March 2021 Egypt's Financial Regulatory Authority (FRA) published resolutions 107/2021 and 108/2021, which require listed companies and non-bank FIs to make Environmental, Social, and Governance (ESG) disclosures and TCFD disclosures, depending on their size (issued capital, net equity). In terms of published guidelines/best practices, the Central Bank of Egypt's (CBE) Guiding Principles on Sustainable Finance also address climate risks (especially the fourth principle). While these Principles are non-binding, private sector players indicated that CBE is following up regularly.

  In Morocco, Bank Al-Maghrib (BKAM) issued Directive n°5/W/2021 in March 2021, a non-binding best practice guidance requiring credit institutions to identify and disclose potential sources of climate-related and environmental risks as well as to ensure their measurement, management, monitoring, and control.

  3. Initiating: Countries that have not yet started integrating climate risks into their regulatory/supervisory actions (but may have initiated work through international or national collaboration). Examples of countries in this archetype are Union Monétaire Ouest Africaine (UMOA) members,[5] as well as the DRC, Tunisia, and Rwanda.

- **Authorities are considering additional regulatory measures to strengthen the financial industry's integration of climate risk.**

  – Defining **risk assessment methodologies**, such as climate stress tests, is considered relevant by 82% of authorities interviewed but implemented in only one of the featured jurisdictions.

  – Defining **incentivisation mechanisms** such as collateral requirements for capital and collateral haircuts[6] is relevant for 73% of authorities interviewed but implemented in just one of the featured jurisdictions.

  – Defining **measures aimed at improving counterparty-level data availability and quality** (for example, standardised disclosure requirements

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3 BCEAO is a financial regulatory authority covering Benin, Burkina Faso, Ivory Coast, Guinea-Bissau, Mali, Niger, Senegal and Togo.

4 All percentages are from interviews conducted for this report.

5 Benin, Burkina Faso, Ivory Coast, Guinea-Bissau, Mali, Niger, Senegal and Togo.

6 A haircut is a lower-than-market-value placed on an asset when it is being used as collateral for a loan.

and central data repositories) is considered relevant by 82% of authorities interviewed but implemented in just one of the featured jurisdictions.

- **Among all potential options, non-binding measures are preferred by authorities but not widely implemented at present.**

  Among the 14 measures to strengthen the integration of climate risk by the financial industry, six of the top nine initiatives declared highly relevant or in place (by more than 50% of authorities interviewed) are non-binding.

  - Running **awareness-raising campaigns and events** (for example, via surveys, conferences, and dialogue) is the most relevant non-regulatory action with 100% of authorities assessing it as "very relevant" but is implemented in only two of the featured jurisdictions.

  - Sharing **best practices** (for example, via guides and roundtables) is considered relevant by 82% of interviewed authorities and has been implemented by two of the featured jurisdictions.

  - Publishing **assessments of the financial sector's aggregate climate risk exposure** is considered relevant by 64% of authorities interviewed and has been implemented by two featured jurisdictions.

  - Defining a **taxonomy for economic activities** is considered relevant by 64% of all authorities interviewed but has not yet been implemented by any featured jurisdiction.

- **Lack of data and capabilities to define regulations and guidelines were the main challenges indicated by 82% of authorities interviewed, followed by a lack of international standards or common methodologies (for example, stress tests), mentioned by 73% of authorities interviewed.**

- **Collaboration/technical assistance is considered a powerful enabler for strengthening climate risk management.**

  Several of the most advanced authorities have joined the NGFS to benefit from international best practice on the regulatory side. Most authorities that have implemented binding regulations are members of NGFS or the Sustainable Banking and Finance Network (SBFN), as these groups serve as platforms for knowledge sharing on the integration of climate risk into their regulatory frameworks.

  On the private sector side, a range of institutions anticipate regulatory actions in response to demands from investors and development finance institutions (DFIs). For example, several FIs in Egypt, Morocco, South Africa, and Zimbabwe have been among the first to sign up to the TCFD recommendations. In contrast, others are engaged in or committing to global initiatives like UNEP FI and the Net Zero Banking Alliance (NZBA), developing sustainability and climate strategies, adjusting credit policies, and engaging counterparties on climate risks. In some countries, national industry initiatives are catalysts for climate risk practices (for example, the Kenya Bankers Association Sustainable Finance Initiative), primarily through capacity-building programmes and knowledge exchange. The 'train the trainers programme' launched by the AfDB for developing project proposals to access the Green Climate Fund is also an example of an initiative that seeks to build a pool of experts who could, in turn, pass on their knowledge to other organisations throughout the continent.

  FIs are tackling climate change independently of binding or non-binding regulations because "it is the right thing to do" or because they anticipate that acting early could enhance their brand reputation and build long-term capacity as more funds are redirected from high-carbon to low-carbon projects.

Outlook: potential actions for stakeholders

Based on the challenges highlighted during the interviews, the following insights are presented for consideration for relevant stakeholders:

- Authorities and private sector players could consider:
  - Building their own capabilities and contributing to the capacity building of private sector players by, for example, highlighting best practices, offering training programmes, establishing working groups, and so on. Several interviewees mentioned the need to collaborate with external organisations and initiatives to deliver this approach.
  - Facilitating access to physical and transition risk-related data and information, for example by integrating reliable sources in a central repository.
  - Developing stress test models and scenario analyses, both for supervisory purposes and as reference points for institutions.
- Authorities could consider:
  - Implementing mandatory minimum disclosure standards for the financial and non-financial sectors in line with TCFD recommendations, covering governance, strategy, risk management, metrics, and targets.
  - Implementing specific regulations and supervisory guidelines to ensure FIs' adequate consideration of climate risks and to facilitate their interaction with counterparties, investees, and clients.
- Development Finance Institutions (DFIs) and international organisations could consider:
  - Supporting authority capability development through technical assistance.
  - Encouraging financed entities to implement climate management practices.

The options presented in this report are to be viewed as potential considerations within the ongoing global discussion on climate risk management. Their potential implementation is likely to be informed by the outcome of discussions held at the UN's COP26 Summit.

1 | Key Insights on the regulatory baseline study

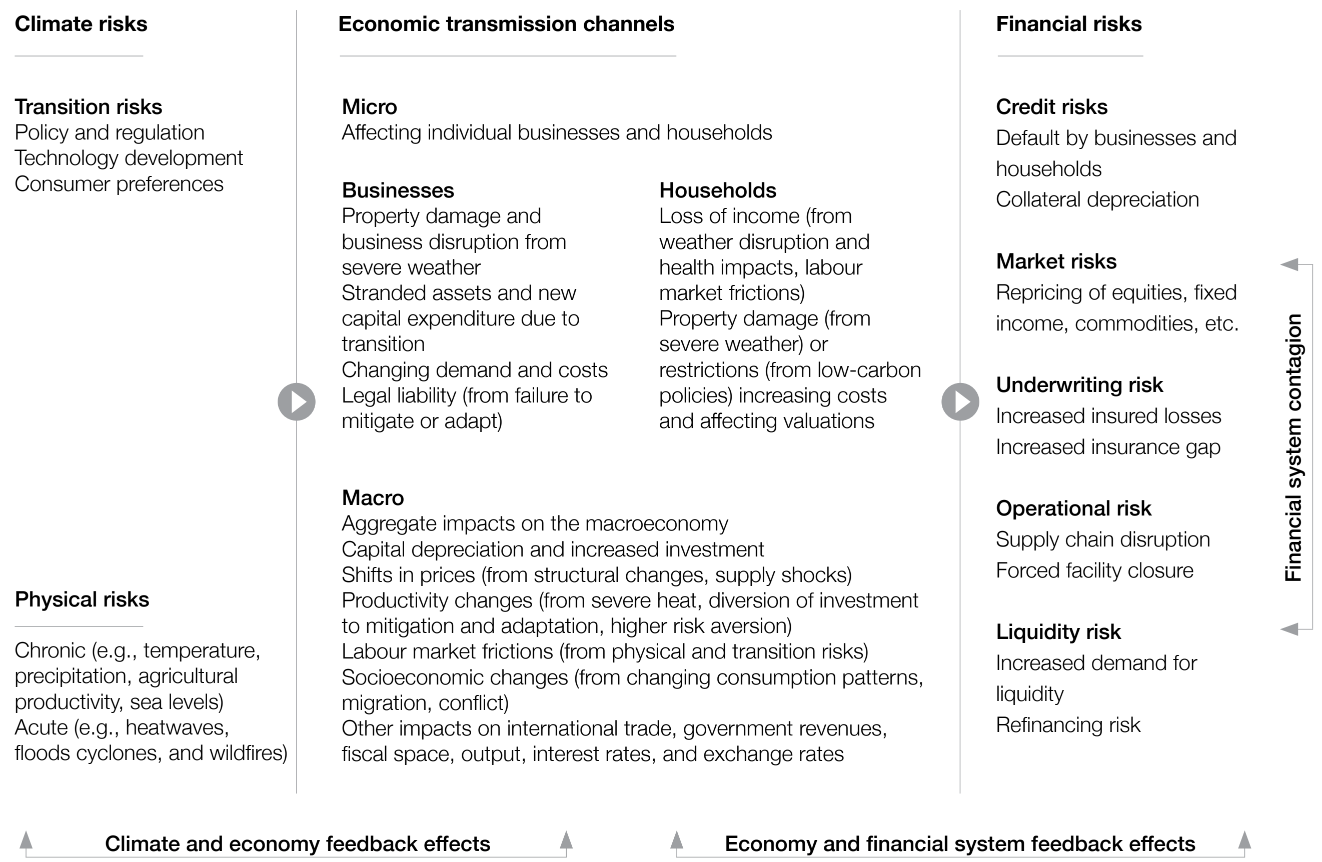
1.1 Context, objectives, and scope of the study

1.1.1 Africa is one of the most exposed regions to climate change, with half of the 10 countries most affected by climate change located on the continent

Climate risk matters in Africa because the continent is among the most vulnerable to climate change, according to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). The social and human impacts of climate change are documented by several institutions, including the IPCC, but for the purpose of this report, the focus is on the impacts of climate risks on African financial systems. Extreme weather phenomena such as rising temperatures and the increasing frequency of droughts and natural disasters are already affecting lives in Africa to varying degrees across countries. The visible effects of climate change throughout the continent and the increasingly material financial losses directly and indirectly caused by climate change are also accelerating climate risk awareness among financial sector regulators and the private sector.

Climate change poses a major threat to financial stability. A report published in September 2021 by the think-tank Ceres[7] establishes $2.2 trillion[8] of exposure to climate risk for syndicated loans in 10 major US banks. It finds that

Figure 1:
Transmission channels from climate risks to financial risks



Source: Climate Scenarios for Central Banks and Supervisors report, NGFS, June 2021

7 Financing a Net Zero Economy: The Consequences of Physical Climate Risk for Banks, Ceres, 2021.
8 $ refers to US dollar throughout.

the annual value-at-risk from physical climate impacts on just the syndicated loan portfolios of major US banks could approach 10%, and that two-thirds of banks' physical risk comes from the indirect economic impacts of climate change, such as supply chain disruptions and lower productivity, with coastal flooding (driven by sea-level rise and stronger storms) representing the largest source of direct risk. Climate risks lead to financial risks through several transmission channels (Figure 1).

In this context, countries have outlined aspirations to transition to lower-energy systems, particularly through the expansion of renewable energy, in their Nationally Determined Contributions (NDCs) to the Paris Agreement. However, these commitments can be challenging to fulfil in countries that are dealing with existing challenges such as extreme poverty, conflict, drought, and inflation.

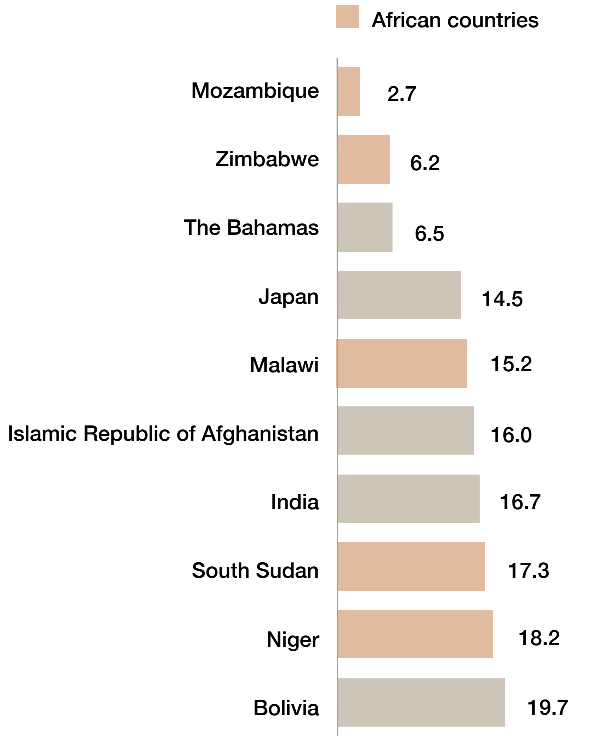
Furthermore, transition risks associated with the move to a lower-carbon economy may constitute a major issue in economies driven by the commodities sector, where oil and gas and mining companies account for a large proportion of employment and GDP. In particular, several African economies are dominated by carbon-intensive sectors and rely on power generation from coal. A successful transition to a lower-carbon economy requires adequate financial, technical, and capacity-building support to African countries. For instance, compensating job losses in high-carbon industries with at least the same number of jobs in renewable energy or other low-carbon industries may help make the social cost of the transition more acceptable to stakeholders.

Climate hazards are already a highly relevant concern in Africa today and are expected to intensify, with their effects contributing to food insecurity, population displacement, and stress on water resources. There is growing awareness of these physical risks of climate change among African authorities as well as in the private sector. According to the UN's Framework Convention on Climate Change,[9] Africa is the most vulnerable continent to climate change impacts under all climate scenarios above 1.5°C. Despite accounting for only 4% of global greenhouse gas (GHG) emissions,[10] Africa faces climate-related challenges that pose a risk to livelihoods and public health and infrastructure investments, economies, water and food systems, and agriculture. The following factors contribute to Africa's vulnerability to climate hazards:

- Sub-Saharan Africa has 95% of rain-fed agriculture globally, making the continent particularly vulnerable to droughts.[11]
- Agriculture's large share of GDP and employment adds to the continent's vulnerability, as do other weather-sensitive activities such as herding and fishing, with disruptive weather events leading to income losses and increased food insecurity.[12]
- According to the Global Climate Risk Index 2021,[13] five African countries ranked among the 10 countries most affected by extreme weather in 2019: Mozambique (first), Zimbabwe (second), Malawi (fifth), South Sudan (eighth), and Niger (ninth).[14]

Because Africa is one of the most vulnerable continents to climate change and climate variability, it has a strong incentive to join the global adaptation effort and bolster its adaptive capacity. Rising temperatures and increasingly severe weather events are likely to aggravate water stress, increase food insecurity, and increase disruptions across the continent, compromising public health,

Figure 2:
Half of the 10 countries most affected by extreme weather in 2019 are in Africa*



* The Climate Risk Index indicates a country's level of exposure and vulnerability to extreme events. A low score corresponds to the highest level of exposure and vulnerability.

Source: Global Climate Risk Index 2021, Germanwatch

9 United Nations Framework Convention on Climate Change, UN.
10 Lacour M Ayompe et al, 'Trends and drivers of African fossil fuel CO2 emissions 1990-2017', Environmental Research Letter 15 124039, 2020.
11 "Climate change in Africa," African Development Bank Group, afdb.org.
12 Ibid
13 Global Climate Risk Index 2021, GermanWatch, 2021.
14 Note that the lower a country's Global Climate Risk Index, the more it was affected by extreme weather in 2019.

livelihoods, and potentially the safety of citizens, as well as the performance of economic systems.

These impacts have placed a sense of urgency on stakeholders to tackle these challenges and African countries are becoming more active in driving the global climate agenda.[15] As of November 2019, a large majority of African states had ratified the Paris Agreement and submitted their NDCs, focusing on adaptation measures. Signatories have committed to enhancing climate action by reducing their GHG emissions and building resilience. However, many of their commitments require financial, technical, and capacity-building support.

1.1.2 Financial sector considerations of climate change risks have gained momentum globally in the past 10 years

The 1972 Stockholm conference was the first time sustainability was put on the agenda of an international conference, leading to the creation of the United Nations Environment Programme (UNEP). The 1992 Earth Summit held in Rio de Janeiro was also instrumental in building global momentum on sustainability issues. Efforts to mitigate climate change have been prominent on the international political agenda – and increasingly addressed at regional and national levels – ever since, including on the African continent. These efforts culminated in the Paris Agreement being adopted by 196 countries in 2015. The Paris Agreement sets out commitments to mitigate climate change and adapt to its effects and limit global warming to well below 2°C above pre-industrial levels. Article 2.1.c of the Paris Agreement specifies the aim to strengthen the global response to the threat of climate change in the context of sustainable development and efforts to eradicate poverty, including by "making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development."

From a financial sector prudential regulatory perspective, climate-related risks were brought to the attention of authorities in part by former Governor of the Bank of England Mark Carney's "Tragedy of Horizons" speech on September 29, 2015. This speech outlined the connection between climate change and its related impacts on economic systems and financial markets and their stability. Carney urged the financial industry, including regulators, supervisors, and private sector institutions, to look beyond the immediate business and political cycles and their current mandates to assess the potential impacts that could derive from unmanaged risks related to global climate change. By linking climate risks to financial stability, this speech helped modify how authorities perceived the threat of global warming to financial stability and inspired further action by many stakeholders across financial markets.

In another milestone, just a few weeks later, the G20 Financial Stability Board (FSB) created the Task Force on Climate-related Financial Disclosures (TCFD) in December 2015, with the objective of identifying the information needed by investors, lenders, and insurance underwriters to assess and price climate-related risks and opportunities appropriately. This work resulted in the publication of the TCFD recommendations[16] in June 2017, which established a central disclosure framework for financial and non-financial institutions' approaches to climate-related risks and opportunities in the domains of governance, strategy, and risk management, along with related metrics and targets.

Assessing the impact of physical and transition climate risks on the financial system is an increasingly prominent issue. Climate change affects the returns (and value) of financial assets and, conversely, investors' investment choices in financial assets can exacerbate climate change. This dual materiality is leading monetary and banking authorities to adapt their risk analysis tools, as seen recently in Morocco's n° 5W21 Directive setting operational mechanisms and objectives to measure, manage, and control climate-related risks.[17] In Africa, this adaptation must consider low levels of financial development, which limit the transmission of monetary policy and must also consider the importance of exchange rate policies in small open economies. Finally, financial policies in Africa could consider the right incentives to guide investment decisions in favour of green sectors and the leverage that development banks can provide.

Further, ESG issues could threaten companies in Africa, with overlapping effects for their lenders. Vulnerable ecosystems will increase the impact of climate hazards, pose problems to the continent's businesses, and could compound material losses for investors. Therefore, stakeholders have increasing expectations of FIs to manage sustainability issues.

Furthermore, as a result of the shift taking place in the international financial sector towards green and sustainable financing to help mitigate the effects of climate change, companies in Africa are under increasing pressure from debt and equity investors, lenders, and other stakeholders to contribute to the transition and address climate change-related risks and opportunities as part of their businesses.

In this context, multiple initiatives have been launched at the international level to support authorities and the private sector in addressing climate change and related risks. These initiatives range from voluntary disclosure

15 "Climate change in Africa," African Development Bank Group, afdb.org.

16 "Recommendations of the Task Force on Climate-related Financial Disclosures," TCFD, 2017.

17 Directive n° 5/W/2021, Bank Al-Maghrib, 2021.

standards, the development of climate risk measurement tools (including scenario analysis and stress testing), and portfolio steering methodologies to pledges for portfolio alignment and other objectives. The following section outlines a selection of initiatives that are relevant in the context of this study, as membership signals an overall commitment to contribute to climate change mitigation and to address climate-related risks.

Network of Central Banks and Supervisors for Greening the Financial System

NGFS concentrates primarily on environmental and climate issues for the global central bank community. The network was set up at the Paris One Planet Summit on December 12, 2017. It initially consisted of eight central banks and supervisors committed to sharing best practices, contributing to the development of environment and climate risk management in the financial sector, and mobilising mainstream finance to support the transition toward a sustainable economy. By the end of 2020, the group had grown to 83 members and 13 observers. NGFS has seven African members covering 14 countries: Bank of Mauritius, Banque Centrale de Tunisie, Bank Al-Maghrib, Central Bank of Seychelles, Financial Regulatory Authority of Egypt, the South African Reserve Bank, and the Central Bank of West African States (which groups eight countries from UMOA). The Federal Reserve Bank of the United States joined the network on December 15, 2020. NGFS published its first comprehensive report, "A Call for Action," on April 17, 2019, proposing six recommendations to facilitate the financial sector's role in achieving the objectives set out in the 2015 Paris Agreement (Figure 3).[18] Network members commit to developing and sharing best practices (commitments one to four) and encouraging action from policymakers (commitments five and six).

Sustainable Banking and Finance Network

Launched in 2012, the Sustainable Banking and Finance Network (SBFN) – formerly the Sustainable Banking Network – is a voluntary community of emerging market bank regulators and associations interested in sustainable banking policies, guidelines, and practices. Its primary objective is to facilitate collective learning among its members and support them in developing policies to create drivers for sustainable financing practices. Members include financial sector regulatory agencies, ministries of environment, ministries of finance, capital market regulators, financial sector industry associations, and multi-stakeholder sustainable finance platforms from emerging markets. As of October 2021, SBFN members represent 63 institutions, 43 member countries, and $43 trillion (86%) of the total banking assets in emerging markets. SBFN members are committed to moving their financial sectors towards sustainability, with the twin goals of improved management of ESG risks and increased capital flows to activities with positive environmental and social impacts, such as mitigating and adapting to climate change.

Facilitated by the International Finance Corporation (IFC) and supported by the World Bank Group, SBFN is a platform for knowledge sharing and capacity building, mobilising practical support for members to design and implement national initiatives.

Figure 3:
NGFS commitments for climate-related risks

Commitment 1	Integrating climate-related risk into financial stability monitoring and micro-supervision
Commitment 2	Integrating sustainability factors into own-portfolio management
Commitment 3	Bridging the data gaps
Commitment 4	Building awareness and intellectual capacity and encouraging technical assistance and knowledge
Commitment 5	Achieving robust and internationally consistent climate and environment-related disclosure
Commitment 6	Supporting the development of a taxonomy of economic activities

18 "A call for action: Climate change as a source of financial risk", Network for Greening the Financial System first Comprehensive report, April, 2019.

IFC, the private sector arm of the World Bank Group, acts as the Secretariat of the SBFN, playing the role of strategic and technical advisor, as well as global convener of the SBFN and its members.

Task Force on Climate-Related Financial Disclosures

The TCFD was created by the Financial Stability Board with the aim of developing recommendations for more effective climate-related disclosures that could encourage more informed investment, credit, and insurance underwriting decisions. This, in turn, empowers stakeholders to understand better the focus of carbon-related assets in the financial sector and the financial system's exposure to climate-related risks. In July 2017, the TCFD proposed a voluntary, consistent management and disclosure framework, structured into four thematic areas: (i) Governance: structure and disclosure of an organisation's governance on climate-related risks and opportunities; (ii) Strategy: disclosure of potential impacts and opportunities related to climate risks from the organisation's businesses, strategy, and financial planning perspectives; (iii) Risk Management: disclosure of the processes through which the organisation identifies, assesses, and manages climate-related risks; and (iv) Metrics and Targets: disclosure of the metrics and targets used to assess and manage climate-related risks and opportunities.

Principles for Responsible Banking

The Principles for Responsible Banking (PRB) is a global sustainability framework and initiative of UNEP FI. They encompass a distinct set of frameworks for guaranteeing that each signatory bank's strategy and practice aligns with the vision for society set out in the SDGs and Paris Agreement. The movement has been joined by almost 250 banks, representing more than 40% of banking assets worldwide. The framework consists of six principles:[19]

1. 'We will align our business strategy to be consistent with and contribute to individuals' needs and society's goals, as expressed in the Sustainable Development Goals, the Paris Climate Agreement, and relevant national and regional frameworks.'

2. 'We will continuously increase our positive impacts while reducing the negative impacts on, and managing the risks to, people and the environment resulting from our activities, products, and services.'

3. 'We will work responsibly with our clients and customers to encourage sustainable practices and enable economic activities and create shared prosperity for current and future generations.'

4. 'We will proactively and responsibly consult, engage, and partner with relevant stakeholders to achieve society's goals.'

5. 'We will implement our commitment to these principles through effective governance and a culture of responsible banking.'

6. 'We will periodically review our individual and collective implementation of these Principles and be transparent about and accountable for our positive and negative impacts and our contribution to society's goals.'

Principles for Sustainable Insurance

The Principles for Sustainable Insurance (PSI) is a global sustainability framework and initiative of UNEP FI, the financial branch of UNEP. PSI serves as a global framework for the insurance industry to address ESG risks and opportunities—and a global initiative to strengthen the insurance industry's contribution as risk managers, insurers, and investors to building resilient, inclusive, and sustainable communities and economies. There are four principles of sustainable insurance:[20]

1. 'We will embed in our decision-making ESG issues relevant to our insurance business.'

2. 'We will work together with our clients and business partners to raise awareness of ESG issues, manage risk, and develop solutions.'

3. 'We will work together with governments, regulators, and other key stakeholders to promote widespread action across society on ESG issues.'

4. 'We will demonstrate accountability and transparency in regularly disclosing publicly our progress in implementing the Principles.'

Partnership for Carbon Accounting Financials

The Partnership for Carbon Accounting Financials (PCAF) is a global partnership of FIs that work together to develop and implement a harmonised approach to assessing and disclosing the GHG emissions associated with their loans and investments. PCAF has developed an open-source global GHG accounting standard for FIs.

19 Principles for Responsible Banking, UN Environment Programme Finance Initiative, 2019.

20 Principles for Sustainable Finance, UN Environment Programme Finance Initiative.

Principles for Responsible Investment

The Principles for Responsible Investment (PRI) is a UN-supported network of investors working to promote sustainable investment through the incorporation of ESG considerations into investment and ownership decisions. There are six principles of responsible investment as follows:[21]

1. 'We will incorporate ESG issues into investment analysis and decision-making processes.'
2. 'We will be active owners and incorporate ESG issues into our ownership policies and practices.'
3. 'We will seek appropriate disclosure on ESG issues by the entities in which we invest.'
4. 'We will promote acceptance and implementation of the Principles within the investment industry.'
5. 'We will work together to enhance our effectiveness in implementing the Principles.'
6. 'We will each report on our activities and progress towards implementing the Principles.'

Net-Zero Alliances in the finance industry

Net Zero Banking Alliance (NZBA): Created in 2021 with 43 founding members, NZBA brings together banks committed to aligning their lending and investment portfolios with net-zero emissions by 2050. Under the alliance, signatory banks set an intermediate target to align their lending and investment portfolios by 2030 or sooner, using robust, science-based guidelines. As of October 2021, membership includes 82 banks with $58 trillion in assets representing 38% of the global banking industry. In Africa, signatories include Kenya Commercial Bank (Kenya), Investec Group (South Africa), and Commercial International Bank (Egypt).

Net Zero Insurance Alliance (NZIA): NZIA brings together insurers and reinsurers committed to playing an active role in accelerating the net-zero transition by transitioning their underwriting portfolios to net-zero GHG emissions by 2050, consistent with a maximum temperature rise of 1.5°C above pre-industrial levels by 2100. As of October 2021, it is signed by 13 insurers and reinsurers, with members headquartered in Europe, Africa, and Asia. African members include ICEA Lion Group in Kenya.

Net Zero Asset Owner Alliance (NZAOA): NZAOA brings together institutional investors with the goal of delivering a commitment to transition their investment portfolios to net-zero GHG emissions by 2050. As of October 2021, it has 58 institutional investors representing $9.3 trillion in assets under management. African members include Prudential PLC and African Risk Capacity Ltd. Prudential PLC is a UK-based company that operates in several African countries including Cameroon, Ivory Coast, Ghana, Kenya, Nigeria, Togo, Uganda, and Zambia. African Risk Capacity Insurance Company Limited is a financial affiliate of the African Risk Capacity (ARC), a specialised agency of the African Union. NZBA, NZIA, and NZAOA are all UN-convened alliances.

Net Zero Asset Managers Initiative (NZAMI): NZAMI is a global group of asset managers committed to supporting the goal of net-zero GHG emissions by 2050 or sooner, in line with global efforts to limit warming to 1.5°C; and to supporting investing aligned with net-zero emissions by 2050 or sooner. NZAMI currently has 128 signatories with $43 trillion in assets under management.

Paris Aligned Investment Initiative (PAII): PAII was established in May 2019 by the Institutional Investors Group on Climate Change (IIGCC). PAII has grown into a global collaboration supported by four regional investor networks – AIGCC (Asia), Ceres (North America), IIGCC (Europe), and IGCC (Australasia).

Net Zero Financial Services Provider Alliance (NZFSPA): NZFSPA is a global group of financial service providers committed to supporting the goal of global net-zero GHG emissions by 2050 or sooner, in line with the ambition to limit the global temperature increase to 1.5°C above pre-industrial levels.

Glasgow Financial Alliance for Net Zero (GFANZ): GFANZ is the umbrella coalition of net-zero initiatives in the finance industry in the UN's Race to Zero campaign. GFANZ is convened by UNEP FI and was co-launched by the Prince of Wales' Sustainable Markets Initiative (SMI) Financial Services Taskforce (FSTF). Its membership currently includes nearly 300 financial firms representing assets of roughly $90 trillion.

NZBA, NZIA, NZAOA, NZAMI, PAII, and NZFSPA are all part of GFANZ as the umbrella net-zero financial alliance.

Collective Commitment to Climate Action (CCCA): CCCA is a global banking sector initiative that supports the transition to a net-zero economy by 2050. It comprises 38 banks from six continents that have decided to align their portfolios with global climate goals.

21 Principles for Responsible Investment, PRI.

1.1.3 Taking stock of the status of climate-risk integration in financial sector prudential regulatory frameworks across selected African countries

Regulatory requirements can be a powerful catalyst to the private sector's adoption of climate risk-related practices. This study seeks to identify existing regulatory and supervisory requirements specific to climate-related risks in the financial sectors of selected African countries, and to understand whether authorities are planning further developments in this area.

In doing so, the assessment also takes into consideration private sector efforts at the industry level, for example, through national or regional working groups aimed at developing self-regulation, facilitating capacity building, or presenting fora for knowledge exchange. It also seeks to identify key obstacles and propose policy options to support the private sector's advancement on climate risks.

This report has three objectives:

- To provide all stakeholders (both authorities and private sector players) with an understanding of:
  - The state of integration of climate-related risks in the financial system on the African continent focusing on 10 countries,
  - The financial stability architecture of the selected countries, and
  - Regulations on climate-related risks by regulatory bodies and private sector initiatives.
- To highlight current challenges to the integration of climate risk by financial sector authorities.
- To consider potential areas of further support.

The scope of the study covers 19 countries selected to represent the continent's diversity in terms of financial system structures and exposures to climate-related risks. Overall, 25 organisations were interviewed, including 11 financial authorities from 17 countries and 14 private sector players from seven countries (see list of interviewees in the Methodology section).

Figure 4:

25 interviews with authorities and private players covering 19 countries were organised between September - October 2021*

Individual countries **UMOA member countries**

Authorities (11)

Private players (14)

*Organisations interviewed are listed in the Methodology on page 44.

1.2 Perspectives on the integration of climate risk by regulators, supervisors, and private sector players across Africa

1.2.1 Climate risk is a top priority for almost all authorities

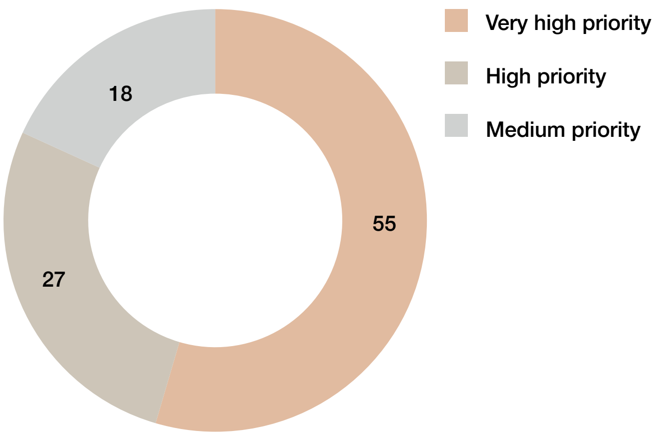
All interviewed authorities clarified that they could address climate risks as part of their general mandate to ensure financial stability. Most authorities (>80%) indicated that they consider climate risk to be of very high or high strategic priority. This sense of urgency manifests, for example, in the broad membership of authorities in climate and sustainability risk-related initiatives like the NGFS and SBFN.

Several interviewees highlighted that climate-related risks cannot be considered in isolation and that due consideration must be given to overall economic and societal circumstances (for example, economic concentration in carbon-intensive sectors).

> *"Climate risk was not a priority so far because we had other pressing social issues to deal with."*
>
> ***- Central Bank – Head of Banking Supervision***

This adds complexity to the regulatory approach to climate risks and often requires alignment with broader stakeholder groups, especially government actors. Nonetheless, regulatory action and other forms of supervisory engagement were generally seen as desirable by interviewed stakeholders.

Figure 5:
A large majority of authorities are considering climate-related risks as a top priority



> *"With monetary policy, climate risk has become our top concern."*
>
> ***– Central Bank – Head of Sustainability Department***

82% of the authorities interviewed considered climate risk a high or very high priority

Source: Survey done with authorities (N=11)

1.2.2 While most authorities are currently defining their approaches on climate risk, few countries have issued binding regulations to date

While there were no specific climate risk-related regulatory requirements published by any of the interviewed authorities at the time of this research (only drafts), some have started to approach climate risks through market discipline by requiring FIs to make climate or sustainability (risk) disclosures (for example, Resolutions 107 and 108/2021 by the Financial Regulatory Authority of Egypt). The Central Bank of Egypt (CBE), for instance, issued guiding principles of sustainable financing in 2021. These principles are not yet binding, but they have enabled banks to start building capacity. In addition to prudential authorities, some national stock exchanges impose disclosure requirements for certain types of listed companies (for example, the Nairobi Stock Exchange published an ESG Disclosure Guidance Manual in June 2021, which specifies the requirements of the 2015 Code of Corporate Governance Practices for Issuers of Securities). Some authorities have expanded beyond disclosure requirements by setting out principle-based regulations that are followed up on through regular reporting mechanisms between supervised institutions and the authority (for example, the Sustainable Banking Principles by the Bank of Ghana; Guiding Principles on Sustainable Finance by CBE; and Sustainable Banking Principles by the Central Bank of Nigeria).

These regulations generally represent regulatory starting points, as some authorities have publicly indicated their intention to develop regulations and supervisory guidelines (for example, Central Bank of Kenya and Bank of Mauritius).

Figure 6:
Overview of climate risk-related regulations and initiatives across selected African regions

Based on interviews

Driving "Established"
Driving "Emerging"

Considered relevant, not yet initiated | Considered relevant, under development (< 2 years) | In place

Authorities & private sector actions		Archetype 3 "Initiating"				Archetype 2 "Emerging"						Archetype 1 "Established"	
		DRC	Tunisia	BCEAO	Rwanda	Zimbabwe	Egypt	Ghana	Nigeria[1]	Morocco	South Africa	Kenya	Mauritius[2]
Define specific prudential regulations		Not yet initiated	Not yet initiated	Not yet initiated	Not yet initiated	Not yet initiated	Not yet initiated	Under development	Not yet initiated	Not yet initiated	Under development	In place	In place
Implement other regulations/ guidance or engage with industry	Define principle-based regulation	Not yet initiated	Not yet initiated	Under development	Under development	In place	Not yet initiated	Under development	In place	In place	Under development	Not yet initiated	Not yet initiated
	Define disclosure requirements	Not yet initiated	Not yet initiated	Under development	In place	Under development	In place	Not yet initiated	In place	In place	Under development	In place	In place
	Publish guidelines/best practices	Not yet initiated	Not yet initiated	Under development	Under development	Not yet initiated	In place	In place	In place	Not yet initiated	In place	Not yet initiated	In place
	Run exploratory stress tests	Not yet initiated	Not yet initiated	Under development	Under development	Not yet initiated	Under development	Under development	Not yet initiated	In place	Under development	Not yet initiated	Under development
	Run survey on climate risk practices	Not yet initiated	Not yet initiated	Under development	Under development	In place	Not yet initiated	In place	Not yet initiated	In place	In place	Not yet initiated	In place
Working groups and international collaboration	Join international working group (NGFS, SBFN)	Not yet initiated	In place	Not yet initiated	Under development	Under development	In place	In place	In place	In place	In place	Under development	In place
	Set up internal working group(s) on climate risk	Not yet initiated	In place	In place	Under development	In place	In place	Not yet initiated	Not yet initiated	In place	In place	In place	In place
	Set up a private-public working group(s)	Not yet initiated	In place	Not yet initiated	Under development	In place	In place	In place	Not yet initiated	In place	In place	In place	In place
Private sectors initiatives	FIs joining international asso-ciation (e.g., TCFD, NZBA)	Not yet initiated	Not yet initiated	Not yet initiated	Not yet initiated	In place	In place	Not yet initiated	In place	In place	In place	In place	In place
	Existence of industry working group on climate risk	Not yet initiated	Not yet initiated	Not yet initiated	Under development	Under development	In place	Not yet initiated	In place	Not yet initiated	In place	In place	Not yet initiated

Note: Archetypes defined in terms of regulatory advancement
1. Implementation Guidance to the Nigerian Sustainable Banking Principles are not binding *per se*, but can generally be considered detailed
2. Mauritius has drafted its prudential regulations and should be finished by the end of the year 2021

Three archetypes of current regulatory and supervisory approaches were identified among the jurisdictions within the scope of this study (Figure 6):

1. **"Established" archetype: countries that have published/drafted a specific prudential regulation to identify, measure, and manage climate-related risks. Examples of countries in this archetype are Kenya and Mauritius.**

- On October 15, 2021, Central Bank of Kenya (CBK) issued the Guidance on Climate-Related Risk Management to commercial banks and mortgage finance companies, enabling banks to integrate the climate-related opportunities and risks in their governance structure, strategy, and risk management frameworks. Further, it will guide these institutions in disclosing climate-related information to their stakeholders. The principles provided by the Guidance on Climate-Related Risk Management are binding, with banks "required to comply".

- On September 30, 2021, Bank of Mauritius (BoM) published draft Guidelines to support FIs' integration of climate-related and environmental risks. This draft is scheduled to be finalised by the end of 2021 and is binding, with FIs "expected to comply".

2. **"Emerging" archetype: countries that have implemented other regulations/guidance or engaged with industry (for example, principle-based regulations, disclosure standards, stress tests, and best practice guidance). Examples of countries in this archetype are Egypt, Ghana, Morocco, Nigeria, South Africa, and Zimbabwe.**

- Regarding disclosure standards, in March 2021, Egypt's Financial Regulatory Authority (FRA) published resolutions 107/2021 and 108/2021, which require listed companies and non-bank FIs to make ESG disclosures and TCFD disclosures, depending on their size (issued capital, net equity). Regarding published guidelines and best practices, the CBE's Guiding Principles on Sustainable Finance also address climate risks (especially the 4th principle). While these Principles are non-binding, private sector players indicated that CBE is following up regularly to see if they are being considered.

- In Morocco, Bank Al-Maghrib (BKAM) issued Directive n°5/W/2021 in March 2021, a non-binding best practice guidance requiring credit institutions to identify and disclose potential sources of climate-related and environmental risks as well as to ensure their measurement, management, monitoring, and control.

3. **"Initiating" archetype: countries that have not yet started integrating climate risks into their regulatory/supervisory actions (but may have initiated work through international or national collaboration). Examples of countries in this archetype are: Union Monétaire Ouest Africaine (UMOA) members,[22] as well as the DRC, Rwanda and Tunisia.**

22 Benin, Burkina Faso, Ivory Coast, Guinea-Bissau, Mali, Niger, Senegal and Togo.

1.2.3 Authorities are considering additional regulatory measures to strengthen the financial industry's integration of climate risk

Authorities are considering or implementing additional nonbinding measures to strengthen the integration of climate risk by the financial industry. These include:

- Defining **risk assessment methodologies**, such as climate stress tests, is considered relevant by 82% of authorities interviewed but currently implemented in only one of the featured jurisdictions.

- Defining **incentivisation mechanisms** such as requirements for capital and collateral haircuts[23] is relevant for 73% of authorities interviewed but implemented in just one of the featured jurisdictions. Defining measures aimed at improving counterparty-level data availability and quality (for example, standardised disclosure requirements and central data repositories) is considered relevant by 82% of authorities interviewed but currently implemented in just one of the featured jurisdictions.

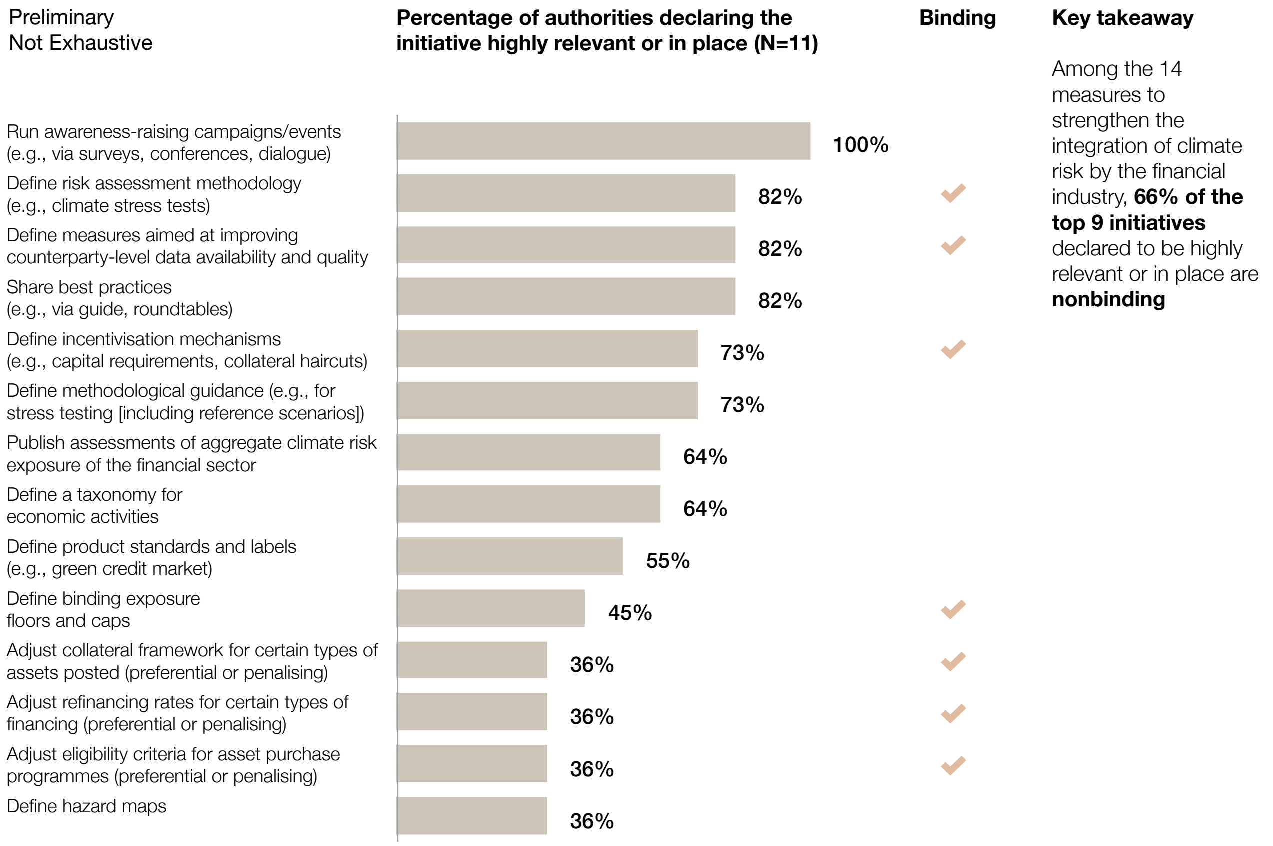
- **Among the potential options explored, non-binding measures are preferred by authorities, but not often currently implemented.**

"We aim to train African financial institutions, to be a catalyst in the rest of Africa with experience, knowledge and best practice sharing."

- Central Bank – Head of Green Finance Supervision

Figure 7:

Authorities are mainly considering or implementing additional nonbinding measures to strengthen the integration of climate risk by the financial industry



Source: Expert interviews

23 A haircut is the lower-than-market-value placed on an asset when it is being used as collateral for a loan.

Among the 14 measures to strengthen the integration of climate risk by the financial industry, six of the top nine initiatives declared to be highly relevant or in place (by more than 50% of authorities interviewed) are non-binding.

- Running **awareness-raising campaigns and events** (for example, via surveys, conferences, and dialogue) is the most relevant non-regulatory action, with 100% of authorities interviewed assessing it as "very relevant", but is currently implemented in only two of the featured jurisdictions.

- Sharing **best practices** (for example, via guides and roundtables) is considered relevant by 82% of interviewed authorities and thus far has been implemented by two of the featured jurisdictions.

- Publishing **assessments of the financial sector's aggregate climate risk exposure** is considered relevant by 64% of authorities interviewed and has been implemented by two featured jurisdictions.

- Defining a **taxonomy for economic activities** is considered relevant by 64% of authorities interviewed but has not yet been implemented by any featured jurisdiction.

1.2.4 Key challenges include a lack of data, internal capabilities, international standards, and common methodologies

There are three main challenges that currently hinder African authorities' efforts to integrate climate risk into their financial systems. Among these, lack of data and lack of internal capabilities to define regulations and guidelines were the most relevant ones for authorities, both of which were mentioned by 82% of authorities interviewed. This was followed by a lack of international standards or common methodologies, such as stress tests, mentioned by 73% of interviewed authorities.

The issue of data covers many dimensions, including access, availability, coverage, and granularity. Many respondents, especially from the private sector, mentioned that they did not have access to reliable databases to assess and measure climate risk.

The challenges encountered by African private players regarding climate risk integration are similar to those mentioned by authorities. The top three challenges are mentioned by over half of the interviewees.

Figure 8:
Main challenges indicated by authorities
What are the main challenges you have identified, and need support with?

Preliminary Not Exhaustive	**Authorities (N=11)**	**Quotes from interviews**
Lack of data and quality issues for climate risk measurement/management	82%	Data are currently mostly sourced via manual extractions from public sources, external data packages, and client data into fragmented, standalone data pools. **Central Bank – Head Economist**
Lack of internal capabilities to implement the climate risk agenda (e.g., training, expertise)	82%	There is a lack of capacity, especially in professional experiences; there are only few experts in ministries trained by UN but not available to the private sector. **Central Bank – Head of Sustainable Development department**
Lack of international standard/common methodology (e.g., stress tests)	73%	Methodology is lacking harmonisation, from the relevancy of risk factors and adjustments to NGFS scenarios, to labels in order to avoid greenwashing. **Central Bank – Climate research team**
Lack of awareness/alignment between stakeholders at the jurisdiction level	27%	We need trainings that allow a better understanding of climate risk. Why not start with an international seminar on climate risk regulation? It is necessary to contextualise with the African context. **Central Bank – Director of Banking Activities**

Source: Expert interviews

Figure 9:

Main challenges indicated by private players

What are the main challenges you have identified, and need support with?

Preliminary Not Exhaustive	**Private Players (N=14)**	**Quotes from interviews**
Lack of data and quality issues for climate risk measurement/management	79%	We need to advance from an awareness stage to a measurement stage, and the first challenge is data availability, both inside and outside the company. **– Director of Risk/Underwriting**
Lack of capabilities in the private sector (dedicated teams with expertise and training, financial resources for SMEs)	64%	The resources are overworked, for instance our sustainability report team is a small team, and sometimes we lack specific skills on sustainability. **– Sustainability Manager**
Lack of international standard/common methodology (e.g., stress tests)	50%	There is a lack of harmonisation when we need to stress-test methodologies and scenarios. **– Head of Communications and Sustainability**
Lack of awareness/alignment between stakeholders at the jurisdiction level	43%	We need a mentality change; the regulator has still not come up with a regulation about the expectations regarding climate change. A road map would be useful. **– Head of Corporate and Regulatory Affairs**

Source: Expert interviews

1.2.5 Collaboration and technical assistance are considered powerful enablers to strengthen climate risk management

In almost all African countries assessed in this study, at least one prudential authority is engaging in climate-related risks as part of its membership in either the NGFS or SBFN, or both. Private sector participation in global initiatives is less common, but selected institutions have emerged as early-movers in this regard.

Several private sector players indicated that regulators and supervisors are one of multiple national and global stakeholder groups that expect them to address climate-related risks. These other stakeholders include DFIs, private-sector lenders, and debt and equity investors that are paying increasing attention to the transition efforts and climate risk management practices of their borrowers, investees, and clients, following requirements they need to meet themselves. For instance, signatories of net-zero initiatives and alliances such as NZBA commit to steering their lending and investment portfolios towards net-zero emissions, which has indirect implications on their borrowers and investee companies (for example, by using voting rights in Board elections or divesting). Other frequently cited stakeholders that engage in climate risk and transition efforts included credit and extra-financial ratings agencies and non-governmental organisations (NGOs).

The ‘training of trainers programme’ launched by the AfDB for developing project proposals to access Green Climate Fund is also an example of an initiative aimed at building a pool of experts who could in turn pass on their knowledge to other organisations throughout the continent.

Figure 10:
Overview of memberships in international climate-related initiatives, by country

As of September 20, 2021

✓ Member

Archetype	Country	NGFS	Sustainable Banking and Finance Network	PRI	TCFD	UN environment programme finance initiative	Net-Zero Banking Alliance
"Established"	Mauritius	✓				✓	
	Kenya		✓	✓	✓	✓	✓
"Emerging"	South Africa	✓	✓	✓	✓	✓	✓
	Morocco	✓	✓	✓	✓	✓	
	Nigeria		✓	✓		✓	
	Ghana		✓			✓	
	Egypt	✓	✓	✓	✓	✓	✓
	Zimbabwe						
"Initiating"	Rwanda						
	BCEAO	✓					
	Tunisia	✓					
	DRC						

Notes: The BCEAO is a NGFS member
Seychelles is a UN Environment Programme Finance Initiative member
Source: Initiative websites

1.3 Outlook: potential actions for stakeholders

Based on the challenges of addressing climate risks highlighted during the interviews, the following options are presented for consideration by relevant stakeholders:

- Authorities and private players could consider the following actions:
  - Build their own capabilities and contribute to the capacity building of private sector players by, for example, highlighting best practices, offering training programmes, establishing working groups, and so on. Several interviewees mentioned the need to collaborate with external organisations and initiatives to deliver this approach.
  - Facilitate access to physical and transition risk-related data and information, for example, by integrating reliable sources in a central repository.
  - Develop stress test models and scenario analyses, both for supervisory purposes and as reference points for institutions.
- Authorities could also consider the following actions:
  - Consider mandatory minimum disclosure standards for the financial and non-financial sectors in line with TCFD recommendations, covering governance, strategy, risk management, metrics, and targets.
  - Consider specific regulations and supervisory guidelines to ensure that FIs adequately consider climate risk and to facilitate their interaction with counterparties, investees, and clients.
- DFIs and international organisations could consider the following actions:
  - Support authorities' capability development through technical assistance.
  - Encourage financed entities to implement climate management practices.

The options presented in this report are from the AfDB and are to be viewed as proposals within the ongoing global discussion on climate risk management. Their implementation could be informed by the outcome of discussions held at the UN's COP26 Summit.

To assess the status of climate-risk integration in African countries, 25 interviews were completed with financial sector authorities and large private sector players.[24] In section 2 of this report we describe the financial stability architecture of some of these countries and present an overview of climate risk-related initiatives in each. All information presented here is drawn from conducted interviews or sourced from publicly available data provided by central banks.

2.1 Country analysis – Democratic Republic of the Congo (DRC)

2.1.1 Financial stability architecture

The DRC's financial system is solely regulated by the Central Bank of the Congo, which oversees the country's financial and monetary stability on behalf of the government.

2.1.2 Climate risk-related initiatives

Regulation on climate-related risks

There are currently no regulations on climate-related risks in the DRC.

Self-regulatory bodies and private sector initiatives

The DRC's private sector does not currently have an industry initiative working on climate-related risks.

2.2 Country analysis – Egypt

2.2.1 Financial stability architecture

The Egyptian financial sector is overseen by the CBE and the FRA. The CBE is the regulator and supervisor of the banking sector, as stipulated by Law No. 88 of 2003 Promulgating the Law of the Central Bank, the Banking Sector and Money, as amended by Law No. 162 of 2004 and Law No. 93 of 2005, and the Presidential Decree No. 65 of 2004. CBE is mandated with ensuring the safety and soundness of the Egyptian banking system and may issue regulatory and supervisory standards. It also performs regular supervisory oversight by means of on- and off-site inspections. CBE has been a member of the SBFN since 2019.

The FRA is the regulator and supervisor of the non-banking sector, financial markets, and instruments, as set out in Law No. 10 of 2009. The FRA's scope includes capital markets, future exchanges, insurance activities, mortgage finance, financial leasing, factoring, and securitisation. Its primary objectives are to ensure the stability and integrity of non-banking financial markets, protect investors' and participants' rights, and facilitate the efficiency and transparency of non-banking financial markets. The FRA has been a member of the NGFS since December 2020.

2.2.2 Climate risk-related initiatives

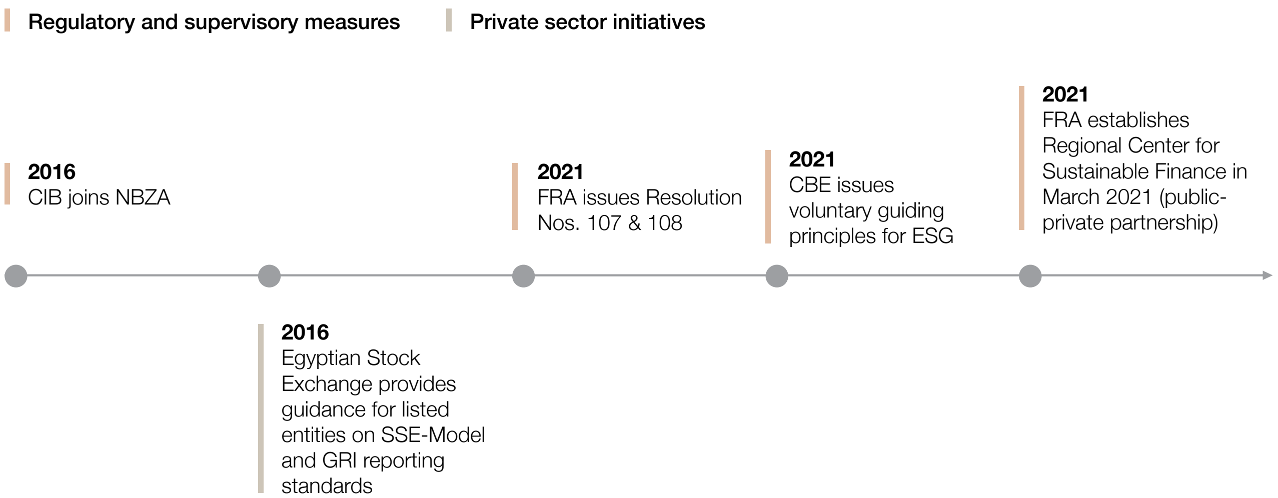
Regulation on climate-related risks

In July 2021, the FRA issued Resolution Nos. 107 and 108, which lay out the sustainability disclosure requirements to be applied from the 2022 financial year onwards. The Resolutions differentiate between two company sizes: 1) Companies listed on the Egyptian Exchange (EGX) and non-bank financial services companies with issued capital/net equity of at least EGP 100 million that will have to make ESG disclosures; and 2) EGX-listed companies and non-bank financial services companies with issued capital/net equity of at least EGP 500 million that will have to make additional TCFD-aligned disclosures. Moreover, starting in January 2022, companies of this scope must provide the FRA with quarterly reports on their plans and activity towards meeting disclosure requirements.

In July 2021, CBE issued its Guiding Principles on Sustainable Finance for the banking sector with the intention of developing the general framework for the application of sustainable finance, building capabilities, and providing the necessary resources to implement such principles. It currently has a three-year plan in place to decide whether to issue binding regulatory requirements. The FRA also indicated it may consider developing regulatory requirements for non-bank FIs. The CBE expects banks to take the necessary actions to adopt the Guiding Principles in the future, though they remain non-binding per se. The guidelines are composed of six principles: 1) Building the necessary capabilities and knowledge; 2) Enhancing sustainable finance; 3) Involving stakeholders; 4) Managing climate risks;

24 Note interviews were not conducted in Nigeria or Kenya. Information for these countries was sourced from publicly available data.

Figure 11:
Overview of regulations, supervisory measures, and private sector initiatives related to climate risk in Egypt



Source: Expert interviews

5) Applying the principles of sustainability to the bank's internal activities and operations; and 6) Reporting.

Self-regulatory bodies and private sector initiatives

In March 2021, the FRA launched the Regional Center for Sustainable Finance (RCSF). Focusing on Egypt and the Middle East and Africa (MEA), the RCSF is part of an initiative at the FRA aimed at bringing together all training and educational institutes providing services to Non-Banking Financial Institutions (NBFIs), including private players and non-Egyptian Financial Institutions, within the FRA mandate to support the green development of the non-banking financial markets.

The RCSF's main objectives are to target the removal of existing market barriers that might hinder the gradual integration of sustainable finance practices, instruments, and management models. It will also promote sustainable finance literacy in different countries in the MEA region, especially in countries where Egyptian NBFIs have growth and expansion potential.

Aside from RSCF, a few private sector institutions have started to adopt global climate/sustainability risk-related initiatives. For example, the only financial sector players to officially support TCFD recommendations thus far are the EGX, since December 2017, and the Commercial International Bank, since August 2020. Four banks have signed up to the UN PRB in 2021, whereas EGF Hermes is the only Egyptian signatory to the UN PRI and there is no signatory to the PRSI as yet. Commercial International Bank was a founding signatory of the NZBA in April 2021 and has been chosen to represent Africa as part of the UN-convened NZBA steering group.

In 2016, EGX provided guidance and recommendations for listed companies complying with the Sustainable Stock Exchanges (SSE) model Guidance for Reporting on ESG and is also encouraging listed companies to adopt internationally accepted reporting frameworks such as the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines in disclosing a company's sustainability performance.

2.3 Country analysis – Ghana

2.3.1 Financial stability architecture

According to Bank of Ghana (BoG), "Ghana's financial system is regulated and supervised by four distinct authorities. The authorities are the BoG, National Pensions Regulatory Authority (NPRA), the Securities and Exchange Commission (SEC), and the National Insurance Commission (NIC). The banking sector is regulated by BoG, while the pensions, securities, and insurance industries are regulated by NPRA, SEC, and NIC, respectively. To help curb the risks of coordination gaps associated with this financial supervisory model, Ghana has established a number of advisory committees such as the Financial Stability Advisory Council (FSC)."

BoG regulates and supervises both banks and all non-banking FIs, excluding insurance companies (for example, microcredit institutions, financial NGOs, remittance companies). Its mandate is to direct banking and credit systems to ensure an efficient and sound banking system. BoG also considers and proposes reforms to laws relating to the banking sector. It is mandated by

Bank of Ghana Act 2002 (Act 612), Bank of Ghana (Amendment) Act 2016 (Act 918), and the Non-Bank Financial Institutions Act 2008 (Act 774). BoG's mandate further extends to monitoring the financial performance and operations of banks and non-banking FIs.

The NIC operates under the Insurance Act 2006 (Act 724) to ensure effective administration, supervision, and regulation of the insurance sector in Ghana. In addition, NIC is mandated to approve rates of insurance premiums and commissions, provide a bureau for complaints resolution, and arbitrate insurance claims when disputes arise.

In 2018, the President of Ghana established the FSC under Article 58 of the Constitution. FSC members consist of the Governor of the Bank of Ghana, Deputy Governor of the Bank of Ghana, Deputy Minister of Finance, Commissioner of the NIC, Director-General of the Securities and Exchange Commission, CEO of the National Pensions Regulatory Authority (NPRA), and the Officer-in-Charge of the Ghana Deposit Protection Corporation. The FSC was established with the following objectives:

- To strengthen and reinforce the stability of the financial system.
- To evaluate and mitigate financial stability.
- To develop and enhance resolution frameworks for crisis preparedness.

The Securities and Exchange Commission, established by the Securities Industry Act 2016 (Act 929), regulates the securities market. It exists to regulate and promote the growth and development of an efficient, fair, and transparent securities market.

The NRPA, established by the National Pensions Act 2008 (Act 766), regulates and monitors the country's three-tier pension scheme and ensures the effective administration of all pension funds.

2.3.2 Climate risk-related initiatives

In 2019, BoG issued voluntary guiding Sustainable Banking Principles to underpin banks' Environmental and Social Risk Management (ESRM) policy frameworks. They consist of seven General Principles, and five sector-specific Guidance Notes and present sustainable banking as a two-way interrelated imperative, namely:

- Improving the contribution of finance to sustainable and inclusive growth by funding society's long-term needs.
- Strengthening financial stability by incorporating ESG factors in lending decision making.

Regulation on climate-related risk

In 2015, BoG inaugurated a Sustainable Banking Committee to develop sustainable banking principles. The Committee produced a first draft of the Sustainable Banking Principles and Sector Guidance Notes. The principles were subsequently launched by BoG in 2019 to provide guiding principles to underpin effective ESRM policy frameworks for banks. The framework presented seven principles:

1. Environmental and Social Risk Management – banks identifying, measuring, mitigating, and monitoring environmental and social risk in their lending and other financial products and services.
2. Internal Environment, Social, and Governance in banks' operations – identifying and effectively managing the environmental and social aspects impacting internal business operations.
3. Promoting Corporate Governance and Ethical Standards.
4. Promoting Gender Equality.

Figure 12:

Overview of regulations, supervisory measures, and private sector initiatives related to climate risk in Ghana

Regulatory and supervisory measures

2015
Bank of Ghana establishes Sustainable Banking Committee to develop sustainable banking principles

2019
Sustainable Banking Principles launched and adopted by banking sector

2020
Bank of Ghana conducts survey to establish TCFD disclosure readiness for 2021 reporting

Source: Expert interviews

5. Financial Inclusion – extending banking services to the unbanked and underbanked areas of the country.

6. Promoting Resource Efficiency, Sustainable Production, and Consumption.

7. Reporting for five sectors: Agriculture & Forestry; Construction & Real Estate; Manufacturing; Oil & Gas; Mining; and Power & Energy.

The guiding principles can currently be used voluntarily, but become binding once institutions formally sign up. The BoG also initiated a survey to gauge the level of banking sector readiness for TCFD disclosures aligned to global standards being incorporated into annual reporting from 2021. While there is no binding regulation published or under development yet, BoG indicated that it considers this regulatory approach to be a priority (for example, in the context of future revisions to the risk-based Pillar 2 of the regulatory framework).

Self-regulatory bodies and private sector initiatives

No private player is currently building capacity on climate-related risk, to the knowledge of BoG.

Ghana Association of Bankers was part of the Sustainable Banking Committee that developed the Ghana Sustainable Banking Principles. Also, banks have indirectly adopted global practices through their commitments to the Ghana Sustainable Banking Principles.

2.4 Country analysis – Kenya

2.4.1 Financial stability architecture

Kenya's financial sector (excluding insurance) is supervised and regulated by the Central Bank of Kenya (CBK).

CBK promotes financial stability and a well-functioning banking system through regulation, supervision, and licensing of FIs (banks and non-bank FIs). CBK was established under Article 231 of the Constitution of Kenya 2010 and is mandated by Sections 4 and 4A of the Central Bank Act. Non-bank FIs are licensed under the Banking Act and supervised through Risk-Based Supervision.

The capital markets in Kenya are supervised, licensed, and monitored by the Capital Markets Authority (CMA). CMA is an independent public agency established by an Act of Parliament Cap 485 of the Laws of Kenya, under National Treasury and Planning. CMA is mandated by the Capital Markets Act and Central Depositories Act 2000. CMA also regulates the Nairobi Security Exchange (NSE), the Kenyan exchange for listed companies.

The insurance industry is regulated and supervised by the Insurance Regulatory Authority, which was established under the Insurance Act (Amendment) Cap 487 of the Laws of Kenya. The regulator works collectively and individually with industry companies to achieve fundamental insurance regulatory objectives, including ensuring compliance, promoting voluntary compliance, maintaining consumer confidence, and ensuring operational viability and solvency.

The Retirement Benefits Authority, established under the National Treasury, is the regulatory and supervisory body for establishing and managing retirement benefit schemes. Its mandate includes protecting the interests of members and sponsors of retirement benefits, promoting the development of the sector, and implementing all government policies.

SACCO Societies Regulatory Authority (SASRA) is the government's principal agency responsible for the supervision and regulation of SACCO (Savings and Credit Cooperative Organisation) societies in the country, in accordance with SACCO Societies Act No. 14 of 2008. SASRA's objectives are to supervise and regulate SACCOs, develop the industry, provide financial resources, and build institutional capacity.

2.4.2 Climate risk-related initiatives

Regulation on climate-related risk

In 2016, Kenya's parliament enacted the Climate Change Act (2016), providing a regulatory framework in response to climate change and a mechanism for establishing effective institutional arrangements for climate action, including climate finance. Climate finance was enacted as a National Policy in 2018. Through the Act, the National Climate Fund was established as a financing mechanism to support climate change actions and interventions. Furthermore, the Climate Change Act (CCA) incentivises the private sector to fight climate change and create a conducive environment for ESG. The CCA, in its Article 20, integrates climate risk into all forms of assessment.

In 2016, the Kenyan National Treasury introduced the National Policy on Climate Finance. The guiding principles are based on the Constitution of Kenya, Kenya Vision 2030 and medium-term plans, Climate Change Act 2016, Public Finance Management Act 2012 (as amended in 2014), various sectoral policies, and international treaties and obligations.[25]

25 The National Climate Finance Policy, Republic of Kenya, December 2016.

In October 2021, CBK released its Guidance on Climate-Related Risk Management for financial banks. The purpose of the guiding principles is to:

- Embed financial risks from climate change in governance.
- Incorporate the financial risks from climate change into financial risk management practice.
- Develop an approach to disclosure on the financial risks from climate change.

The principles provide guidance in the following areas:

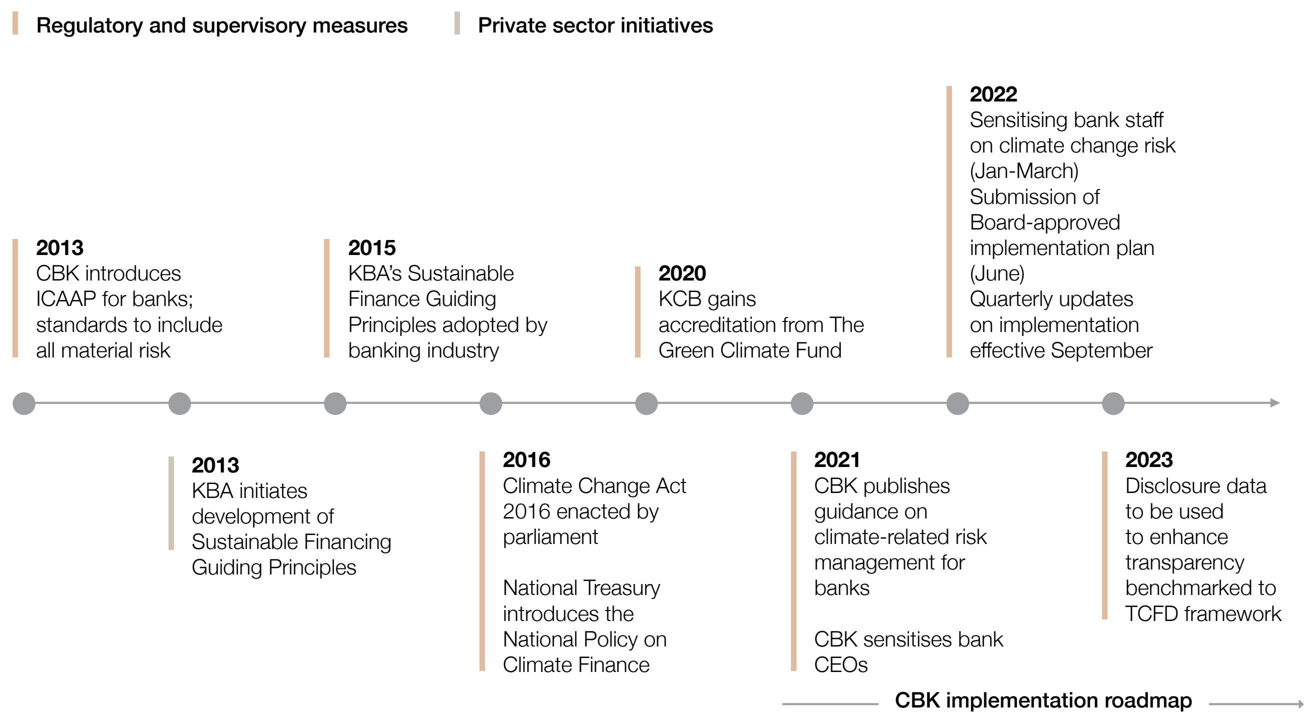
- Risk management – institutions are expected to assess the potential impacts of climate risks on their business's traditional risk categories (credit risk, market risk, liquidity risk, operational and legal risk, reputational risk, and strategic risk).
- Control and mitigation – institutions are expected to carry out measures to control and mitigate exposures to climate-related risks on business strategy and risk appetite.
- Monitoring and reporting – institutions are expected to implement processes to monitor and report exposures to climate-related risk, ensuring exposures are consistent with risk appetite.
- Disclosure of climate-related information – institutions are expected to develop an approach to disclosing climate-related information aligned to published TCFD recommendations along four Pillars (Governance, Strategy, Risk Management, and Metrics and Targets).

As set out in part V of CBK's Guidance, banks can gradually adopt the requirements, but are expected to submit to the CBK a Board-approved, time-bound implementation plan by June 2022. Banks then have to update the CBK on their progress in implementing the plan on a quarterly basis.

Self-regulatory bodies and private sector initiatives

In 2013, Kenya Bankers Association (KBA) commenced the development of Sustainable Finance Guiding Principles to create a globally competitive industry. The principles adopted global best practice from the Equator Principles, IFC Sustainability Framework, Nigeria Sustainable Banking Principles, African Development Bank Green Growth Strategy, Global Reporting Initiative Reporting Guidelines, UNEP FI Guidelines, UN Global Compact Principles, Kyoto

Figure 13:
Overview of regulations, supervisory measures, and private sector initiatives related to climate risk in Kenya



Source: Expert interviews

Protocol, and Kenya's National Climate Change Policy. The guiding principles were adopted by Kenya's banking industry in 2015 and focus on:

1. Financial returns versus economic viability.
2. Growth through inclusivity and innovation.
3. Managing and mitigating associated risks – firms should seek to mitigate social and environmental risks associated with their financing activities.
4. Resource scarcity and choice.
5. Business ethics and values.

KBA has recently concluded a country assessment in partnership with SBFN and IFC, which entailed developing, implementing, and evaluating sustainable regulations, guidelines, and related policy actions.

In July 2021, the Nairobi Stock Exchange/CMA drafted the proposed ESG disclosures guidance manual for listed companies.

KCB Kenya is a founding member of Net Zero Banking Alliance, a member of CCCA, and a UNEP FI PRB signatory. Furthermore, two Kenyan insurers are members of PSI; ICEALION is a member of NZIA and Financial Sector Deepening Kenya is a member of PRI.

2.5 Country analysis – Mali

2.5.1 Financial stability architecture

The Malian financial sector is regulated by the Central Bank of Western African States[26] (BCEAO). BCEAO is the sole regulator for the banking sector. Created in 1959 by founding members of the UMOA, which would be created in 1962, BCEAO is mandated to define and conduct the monetary policy of its eight member states (UMOA, including Mali), issue its fiduciary currency (CFA Francs), conduct its foreign exchange policy, hold and manage the foreign exchange reserves of member states, promote the proper functioning of payment systems, and promote financial stability. Non-banking financial markets, such as capital markets and insurance markets do not have an explicit regulator.

2.5.2 Climate risk-related initiatives

Regulation on climate-related risks

The Malian financial regulatory framework does not explicitly mention climate-related risks.

Self-regulatory bodies and private sector initiatives

According to interview responses and desk research, there is little private sector initiative on climate-related risks in Mali as yet.

2.6 Country analysis – Mauritius

2.6.1 Financial stability architecture

The financial sector in Mauritius is regulated and supervised by the Central Bank of Mauritius (BoM) in collaboration with the Financial Services Commission (FSC).

The mandate for BoM is to bring price stability and financial system stability, as well as to promote economic development. Regulation and supervision of banks by BoM aim to ensure financial system stability in the country.[27] BoM also hosts the Mauritius Credit Information Bureau (MCIB), which operates towards ensuring a sound credit information system. BoM is legislated by the Bank of Mauritius Act 2004.

The role of the FSC, established in 2001, is to regulate and supervise non-bank financial services and corporations that propose to conduct business outside Mauritius. The FSC is mandated under the 2007 Financial Services Act and has enabled legislations, inter alia, the Securities Act 2005, Insurance Act 2005, and Private Pension Schemes Act 2012. These Acts enable FSC to license, regulate, monitor, and supervise the conduct of business activities for the non-bank financial services sector. BoM has been a member of NGFS since July 2020.

26 Banque Centrale des Etats de l'Afrique de l'Ouest.

27 Role and Functions of the Bank, Bank of Mauritius website.

2.6.2 Climate risk-related initiatives

Regulation on climate-related risk

BoM's membership in the NGFS in 2020 inspired the establishment of the Climate Change Center (CCC) and various taskforces to consult with the financial sector and FSC on integrating climate-related and environmental financial risk management in their business strategy and risk appetite, based on issued draft guidelines.

This membership also supports its focus on sustainable development and greening the banking sector. BoM has committed to publishing its pledge at the UN's COP26 Summit, covering its commitments to NGFS recommendations. BoM has since established the CCC, launched on October 14, 2021, which has representative members from FSC and the banking and insurance sectors. The CCC will have four subcommittees/taskforces, which are likely to focus on various aspects of climate-related and environmental financial risk management in the financial sector:

1. Task Force on Regulation and Supervision.
   - Consists of members from the banking community, FSC and insurance sector.
   - Has issued draft guidelines on climate-related and environmental financial risk management with the banking community, for consultation purposes.
   - Expects FIs to manage the climate and environment-related financial risks within their business strategy and risk appetite by identifying, understanding, and integrating these risks.
   - Expects FIs to make disclosures on governance, strategy, risk management, and metrics, and KPI and KRI targets by the end of 2022.
2. Task Force on Monetary Policy.
3. Task Force on Sustainable Finance.
4. Task Force on Internal Strategy.

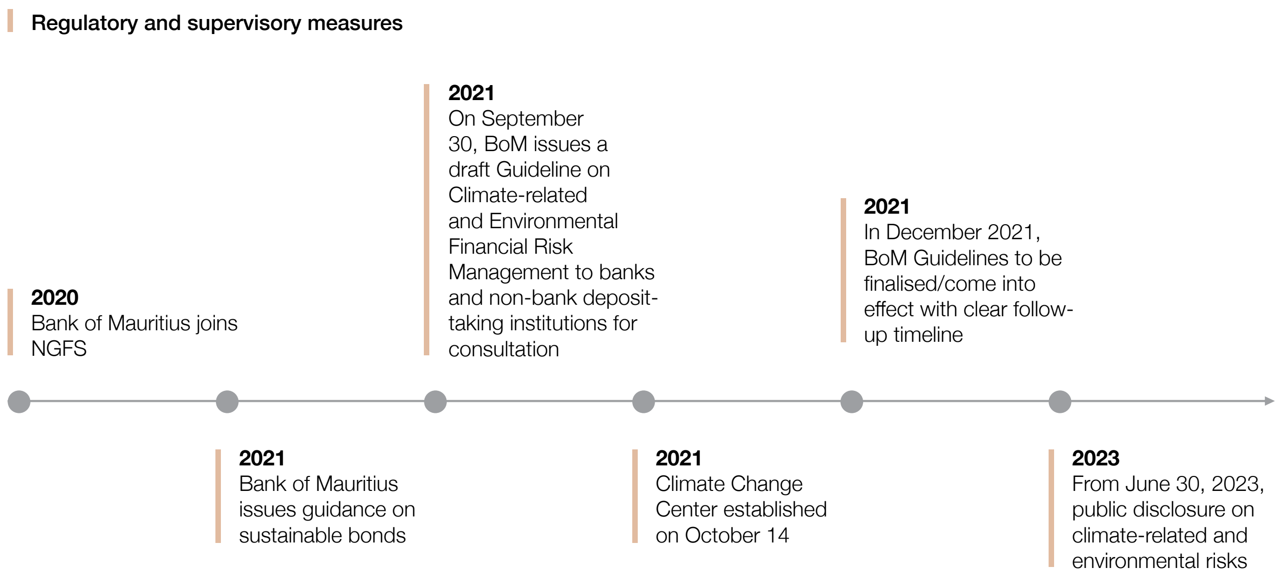
On September 30, 2021, BoM published draft Guidelines to support FIs' integration of climate-related and environmental risks. This draft is scheduled to be finalised by the end of 2021 and is binding, with FIs "expected to comply".

Self-regulatory bodies and private sector initiatives

No voluntary private sector initiatives have been reported.

Mauritius Commercial Bank (MCB) is a member of the PRB and 16 Mauritian asset managers signed the PRI.

Figure 14:
Overview of regulations, supervisory measures, and private sector initiatives related to climate risk in Mauritius



Source: Expert interviews

2.7 Country analysis – Morocco

2.7.1 Financial stability architecture

The Moroccan banking system is solely regulated by the Central Bank of Morocco, also called Bank Al-Maghrib (BKAM).

The Moroccan non-banking financial system is regulated by the Moroccan Authority for Capital Markets[28] (AMMC), a public institution whose mission is to ensure the proper functioning and transparency of capital markets (not only securities) in Morocco. Its jurisdiction includes capital markets, futures exchanges, insurance activities, mortgage finance, financial leasing, factoring, and securitisation.

2.7.2 Climate risk-related initiatives

Regulation on climate-related risks

BKAM and AMMC have been members of the SBFN since 2014 and 2018, respectively.

In 2016, BKAM published a roadmap aimed at aligning the Moroccan financial sector with sustainable development, including climate risk, which it presented at the COP22 which took place in Marrakech.

In March 2021, BKAM issued a guideline for the banking sector on financial risks related to climate change: together with the World Bank, it is preparing a risk map and a common taxonomy (for instance, guidelines to distinguish between 'green' and 'brown' assets). This risk map aims to enable the Moroccan banking sector to map climate risks (physical and transition risks) through a guideline analysis they can apply to their own asset portfolios. Under the Directive n°5/W/2021, a framework has been put in place to enable credit institutions to identify the potential sources of climate-related and environmental risks and ensure their measurement, management, monitoring, and control. Specifically, with this new regulation, Moroccan banks are required to transmit to BKAM periodic reporting on their management of climate risk, including both quantitative and qualitative performance indicators of their exposure to climate risk.

Self-regulatory bodies and private sector initiatives

In 2016, the Professional Banking Group of Morocco (GPBM) published a 'Banks and Climate Charter'. This Charter aims to bring together regulators, stock exchanges, and other financial market players and international experts to share experiences and best practices on climate finance. It also aims to discuss recent regulatory developments and initiatives aimed at aligning capital markets with climate-resilient development.

Figure 15:
Overview of regulations, supervisory measures, and private sector initiatives related to climate risk in Morocco

Source: Expert interviews

28 Autorité marocaine du marché des capitaux.

The Charter furthermore aims to contribute to the debate on the specific context of developing countries and to identify effective solutions and mechanisms through the creation of global and regional partnerships between capital regulators, exchanges, and central depositories on climate finance.

In May 2017, the Casablanca Stock Exchange issued a guide on corporate social responsibility (CSR) and sustainability reporting in cooperation with the AMMC and other stakeholders. The guide aims, inter alia, to help listed companies in their preparation for potential future sustainability reporting requirements.

Bank of Africa – BMCE Group – is a TCFD and PRB member. MATU Assurance is a PSI member, and Sogecapital Gestion is a PRI member.

2.8 Country analysis – Nigeria

2.8.1 Financial stability architecture

The Nigerian financial sector is overseen by the Central Bank of Nigeria (CBN). The Banks and Other Financial Institutions Act (BOFIA) gives CBN powers to supervise and regulate banks and other FIs in the country.

CBN's stated mandate is to deliver price and financial system stability and promote sustainable economic development. It has five departments through which it ensures financial system stability: Banking Supervision, Consumer Protection, Financial Policy and Regulation, Other Financial Institutions, and the Payment System Management department.

In addition, the Federal Ministry of Finance plays an advisory role to the Federal Government on its fiscal operation and collaborates with CBN on monetary affairs. CBN reports to the Presidency through the Federal Ministry of Finance.

The Securities and Exchange Commission (SEC) is the top regulatory institution of the Nigerian capital market and is overseen by the Federal Ministry of Finance. The SEC is responsible for regulating the capital market with the aim of protecting investors and developing the capital market in order to boost efficiency and create a path for a private sector-led economy.

The Nigerian financial architecture also consists of the Nigerian Deposit Insurance Corporation (NDIC), which complements the CBN in its regulatory and supervisory roles. The NDIC was set up in 1989 with the objective of providing deposit insurance and correlated services for banks to promote assurance in the banking industry. The NDIC can examine the books and affairs of insured banks and other deposit-taking FIs. The NDIC reports to the Federal Ministry of Finance and is independent of the CBN.

The Federal Mortgage Bank of Nigeria (FMBN) is the regulatory body for the mortgage finance industry. It offers banking and advisory services and carries out research activities relating to housing. The FMBN is regulated by the CBN.

In addition to these regulatory bodies, the Federal Minister of Finance chairs and oversees the Financial Services Co-ordinating Committee (FSCC). In April 1994, the CBN decided to adopt a formal framework for the co-ordination of regulatory and supervisory activities in the Nigerian financial sector by creating the FSCC to address more effectively issues of common concern to regulatory and supervisory bodies through consultations and regular inter-agency meetings. The FSCC was given legal status by the 1998 amendment to Section 38 of the CBN Act 1991 and officially initiated by the Governor of the CBN in May 1999.

2.8.2 Climate risk-related initiatives

Regulation on climate-related risks

In 2012, CBN, via the Bankers' Committee, approved the adoption of the Nigeria Sustainable Banking Principles (NSBP). These principles were to be adopted by banks, discount houses, and DFIs in Nigeria. The application of these principles by banks is binding. The NSBP shows the Bankers' Committee's commitment to delivering positive development impacts to society while protecting the communities and environment in which FIs operate.

These principles serve as a guide for banks on what they can finance or invest in. The NSBP is mandatory for all banks, and banks are required to submit reports every six months on their progress on ESG-related goals. These reports are to be disclosed annually and published on banks' websites and the stock exchange market (if the bank is on the premium board). In addition to this, banks are required to publish an annual sustainability report.

To enable effective implementation of these principles and guidelines, a number of documents are issued to banks, including:

- The Nigerian Sustainable Banking Principles.
- The Nigerian Sustainable Banking Principles Guidance Notes.
- Nigerian Sustainable Banking Principles Power Sector Guidelines.
- Nigerian Sustainable Banking Principles Agriculture Sector Guidelines.
- Nigerian Sustainable Banking Principles Oil and Gas Sector Guidelines.

These documents aim to support banks' implementation of the NSBP. Recently, climate risks were added to the principles. The CBN directs full adoption and implementation of these principles and guidance by all banks, discount houses, and DFIs.

For these principles to be successfully implemented, banks, discount houses, and FIs would need to develop a management approach that balances the environmental and social (E&S) risks identified with the opportunities to be exploited through their business activities.

Self-regulatory bodies and private sector initiatives

In collaboration with the CBN, the private sector of the banking industry has established a group called the Sustainability Champions. The group hosts events and awards to encourage banks to adopt climate change initiatives. The Sustainability Champions also play a capacity-building role and are invited every quarter to facilitate training sessions on climate risks for banks. This seeks to bridge the gap between banks at different stages of their climate change journeys.

Figure 16:

Overview of regulations, supervisory measures, and private sector initiatives related to climate risk in Nigeria

Regulatory and supervisory measures | **Private sector initiatives**

2011
National Adaptation Strategy and Plan of Action for Climate Change in Nigeria (NASPA-CCN) Document containing tactics and plan for implementing adaptation measures in the country

2012
Nigerian Sustainable Banking Principles established in 2012 by the Banker's Committee with approval from CBN

2013
National Policy on Climate Change (NPCC) becomes the principal document for climate activities in Nigeria, designed to build a climate-resilient society through the attainment of specified goals

2015
Nigeria's Nationally Determined Contribution (NDC) highlights the country's climate target and defines measures to attain those targets

2018
Nigerian Green Bond Market Development Program launched by FMDQ Securities Exchange in collaboration with Climate Bonds Initiative

Source: Expert interviews

The National Insurance Commission has issued a 2021-2023 strategic plan, which will cover environment-related issues, and has held discussions on how to approach climate risks.

In the financial sector, the Nigerian Stock Exchange (NSE) is taking up a key role in developing green investment opportunities in the capital market. It has delivered guiding principles to inspire good corporate governance and transparency among companies or issuers listed on the NSE. Furthermore, it is also assisting listed companies in integrating sustainability reporting. In 2018, the NSE issued Sustainability Disclosure Guidelines, which were approved by the SEC.

The guidelines became effective on January 1, 2019, and consist of four main sections, which cover the value proposition of sustainability, integrating sustainability, principles and core elements of a sustainability report, and reporting requirements. They provide the value proposition of sustainability in the Nigerian context and clarify a step-by-step approach to integrating sustainability into organisations, indicators that could be considered when providing annual disclosure to the Exchange, and timelines for such disclosures. These guidelines are mandatory for all companies listed on the Premium Board of the Exchange.

Some Nigerian banks are members of SBFN, PRI, and PRB.

2.9 Country analysis – Rwanda

2.9.1 Financial stability architecture

The National Bank of Rwanda (BNR) is the sole regulator and supervisor of the Rwandan financial sector. BNR regulates and supervises the banking and microfinance systems, non-bank FIs, and payment systems. BNR has a mandate to ensure price stability and a sound financial system.

The Ministry of Finance and Economic Planning plays the role of creating and observing acceptable standards of accountability and transparency in public finance management.

The Capital Market Authority (CMA), established by Law No.23 /2017 of May 31, 2017, is responsible for developing and regulating the capital markets industry, commodities exchange and related contracts, collective investment schemes, and warehouse receipts system.

The insurance sector is supervised and regulated by the National Insurance Commission, established in 2002.

2.9.2 Climate risk-related initiatives

Regulation on climate-related risks

BNR has no regulation on climate risks as yet, however, this is under development and expected in the coming year, with specific requirements for risk management such as stress testing. The framework is also to include disclosure-related requirements.

Self-regulatory bodies and private sector initiatives

The Rwanda Bankers Association has a mandate to ensure proper risk management frameworks in general and in banking operations. While there has been no training on this yet, training is scheduled to take place in 2022.

Rwanda has not yet adopted any of the international frameworks such as TCFD, PRB, PSI, and PRI.

Figure 17:

Overview of regulations, supervisory measures, and private sector initiatives related to climate risk in Rwanda

Regulatory and supervisory measures

2011
Rwanda Green Growth and Climate Resilience Strategy (RGGCRS) adopted to transform Rwanda into a developed, low-carbon, and climate-resilient economy

2012
National Fund for Environment (FONERWA) raises funds for the environment, climate change, and green growth

2013
Rwanda Environmental Management Authority (REMA) is created to oversee all climate change impacts and adaptation within the state

2017
National Strategy for Transformation (NST1) sets priority for a green economy approach in the transformation of the country

Source: Expert interviews

2.10 Country analysis – South Africa

2.10.1 Financial stability architecture

The South African financial services sector is overseen by the South African Reserve Bank (SARB), a member of NGFS, to ensure its stability and functioning.

- SARB oversees the country's monetary policy in consultation with the Minister of Finance, mandated by Section 222 of the Constitution of South Africa.
- SARB also regulates and supervises the financial sector (both non-financial and FIs).
  - Regulation of FIs is done through the Prudential Authority (PA), a division of SARB.
    - > Regulated institutions include banks, insurers, cooperative financial institutions, stock exchange, financial conglomerates, and market prudential regulation structures.
  - The Minister of Finance oversees the Financial Sector Conduct Authority (FSCA). FSCA replaced the Financial Services Board in 2018.
    - > FSCA is a market conduct regulator protecting consumers and promoting fair treatment. FSCA regulates FIs that are licensed in terms of the financial sector law, including banks, insurers, retirement funds, and administrators and market infrastructure. FSCA also supervises the Johannesburg Stock Exchange (JSE).
    - > Both entities, the PA and FSCA, supervise the JSE and FIs under the 'twin peaks model' introduced in 2018 but signed into law in August 2017, under the Financial Sector Regulation (FSR) Act.[29]

2.10.2 Climate risk-related initiatives

Regulation on climate-related risks

South Africa currently has no active regulation relating to climate risk, but the PA is working on a set of regulations expected to be enforced within the next three years. The approach to guidelines/regulation may follow the precedent set by ECB and the Bank for International Settlements (BIS). PA is also communicating requirements for the banking industry to consider climate risk as part of stress testing and the Internal Capital Adequacy Assessment Process (ICAAP).

SARB has identified the enhancement of the regulatory framework as a strategic priority and is undertaking work to incorporate climate risks, especially across pillars two and three. The King Code of Corporate Governance IV includes principle-based guidelines for FIs to consider E&S aspects in their strategy and provide disclosures accordingly, but it is generally voluntary in application (however, the JSE has made application of the King Code a listing requirement).

- South Africa's journey to greening its financial services commenced in 2017, with the National Treasury convening a working group of regulators and industry players to develop a Green Finance Taxonomy and governance framework. In 2020, the working group produced a technical paper defining the Green Finance Taxonomy for the financial sector.
  - The taxonomy took into consideration global regulatory changes in sustainable financing when dealing with E&S risks and opportunities, assessing the market barriers and implementation of sustainable and climate finance.
  - The technical paper includes PA's guidance on climate in Pillar 2, which provides direction on risk management and governance requirements that allow for climate risk to be explicitly considered by all FIs. This initiative was supported by IFC, the Swiss State Secretariat for Economic Affairs (SECO) and the Swedish International Development Cooperation Agency (SIDA).
- PA is a member of the Sustainable Insurance Forum (SIF), a leadership group of insurance supervisors and regulators working together to strengthen their understanding of sustainability issues facing the insurance sector, including climate change. At the 2018 International Association of Insurance Supervisors (IAIS) Annual Conference, the Chair of the executive committee of IAIS requested SIF to work with the organisation to develop an issue paper on the implementation of TCFD recommendations in the insurance sector.
  - As a member of SIF, PA distributed a survey to the South African insurance sector in February 2019 to gather a representative view of insurers' awareness about climate change and the reporting landscape, including TCFD recommendations.
  - The results of the survey were used to inform the IAIS/SIF issue paper on TCFD implementation. After receiving results from the insurance industry, PA extended the survey to the banking sector. Based on responses from nearly 1,200 entities (groups and firms) across

29 Prudential Regulation, South African Reserve Bank website.

15 jurisdictions, the findings of the survey reflect those of the recent 2019 TCFD Status Report, which found slow progress on climate risk disclosure within the insurance sector.[30]

– The results were released in October 2019 and showed that 90% of insurers and 99.8% of banks believe that climate change will impact their businesses, while 84% of insurers and 98% of banks are already reporting on information relevant to climate change. However, there are currently no official guidelines for climate-risk reporting and some inconsistency in the KPIs and KRIs reported. The survey highlighted a potential need for detailed guidelines from authorities to enhance the financial sector's understanding of climate risk and mainstream the integration of climate-related risks in business planning and strategy conversations.

Moreover, a Sustainable Finance Working Group was established in June 2020, under South Africa's Climate Risk Forum, to develop norms and standards required for the development of sustainable finance instruments. South Africa's Climate Risk Forum was chaired by the National Treasury and the Banking Association South Africa (BASA). The following members attended:

- Association for Savings and Investment South Africa (ASISA).
- JSE.
- Council of Retirement Funds of South Africa (Batseta).
- South African Venture Capital and Private Equity Association (SAVCA).

A draft handbook is expected to be finalised in Q4 2021.

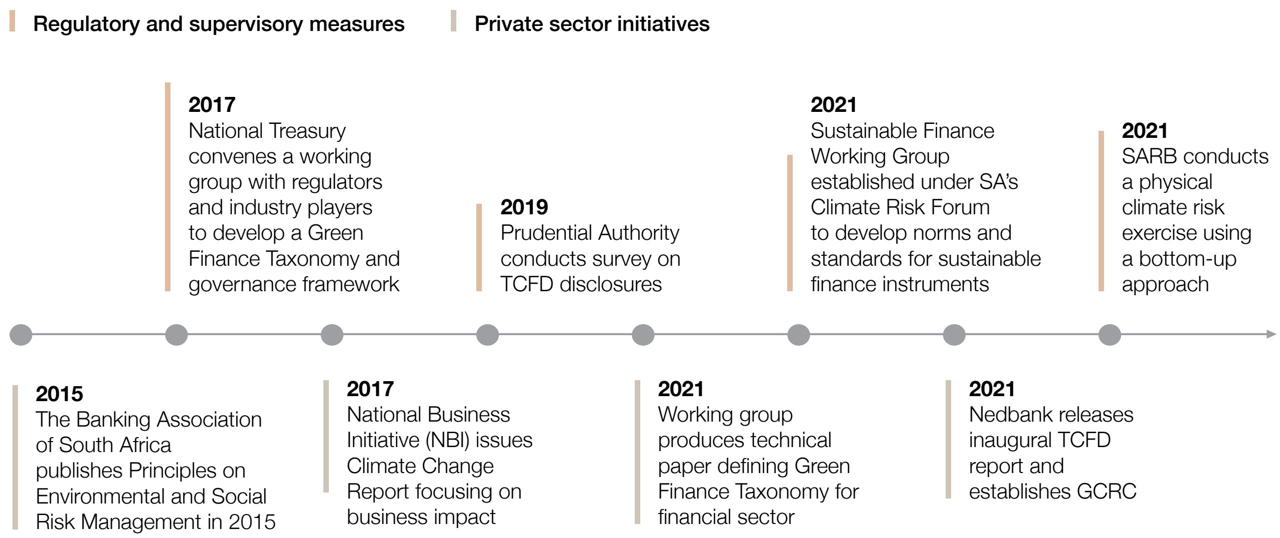
Self-regulatory bodies and private sector initiatives

The financial industry is taking voluntary steps towards integrating climate risk in decision making.

The South African banking industry voluntarily adopted the TCFD framework for the disclosure of climate-related risks. This incorporates governance, strategy, risk management, metrics, and targets. A major South African private bank has established a view on climate-sensitive sectors for TCFD disclosure and is actively involved in developing the South African Green Taxonomy, which the bank expects to adopt. This bank is also in discussion with PA on its climate risk approach to quantify and manage the expected impact on the group's portfolio (including physical and transition risks) and methodologies adopted to account for climate risk within credit decision making.

Figure 18:

Overview of regulations, supervisory measures, and private sector initiatives related to climate risk in South Africa



Source: Expert interviews

30 "National Treasury publishes updated Technical Paper on Financing a Sustainable Economy", South African Sustainable Finance Initiative, October 15, 2021.

For the reporting year ended December 2020, Nedbank, another major bank, released its inaugural TCFD report and has established a Group Climate Resilience Committee (GCRC), effective from March 2021.[31]

2.11 Country analysis – Tunisia

2.11.1 Financial stability architecture

The Tunisian banking sector is composed of 30 banks, 12 of which are publicly traded on the Tunisian stock market. The largest banks are the state-owned Société Tunisienne de Banque (STB), Banque National Agricole, and Banque de l'Habitat (BH), which collectively represent 40% of banking assets and 34% of banking sector deposits.

The Central Bank of Tunisia regulates the country's banks with the main objective of maintaining price stability. It is also in charge of conducting monetary policy, applying laws relating to foreign exchange, managing the foreign exchange reserves, and supervising and regulating banking activities.

The Conseil du Marché Financier (CMF) is the regulator and supervisor of the financial markets in Tunisia. It is responsible for ensuring the protection of savings invested in securities, and the organisation of markets and ensuring their smooth operation to prevent practices that may impede their proper functioning. It is also responsible for monitoring financial reporting and punishment of breaches or violations of regulations. It oversees the Tunis Stock Exchange, the brokers, and Tunisian Clearing.

The Tunisian Stock Exchange Market is responsible for drawing up action programmes aimed at mobilising savings and directing them into stock investment or any other negotiable financial instrument. It guarantees the protection of the invested savings in stocks or any other financial return negotiable in the stock exchange.

The financial sector of Tunisia is also made up of deposit institutions, including public banks, saving banks, private banks, foreign banks, and non-resident banks. The Tunisian financial sector includes many public and private insurance companies and several investment companies. These investment companies focus their activity on the purchase and management of securities.

2.11.2 Climate risk-related initiatives

Regulation on climate-related risks

In line with the country's efforts in terms of green growth, the Central Bank of Tunisia has integrated NGFS principles since 2019 through the adoption of the National Low Carbon Strategy (SNBC), the National Strategy for Sustainable Development (SNDD), and the National Strategy for the Green Economy (SNEV).

Self-regulatory bodies and private sector initiatives

The Tunisia Green Economy Financing Facility (Tunisia GEFF) is a $150 million credit facility channelled through Tunisian banks and leasing companies to private sector sub-borrowers for investment in technologies and services that support the transition to a green economy.

Tunisia GEFF helps address the lack of available capital and experience, which has hindered Tunisian businesses' uptake of sustainable and efficient energy technologies and practices until now. These types of facilities have facilitated hundreds of green finance deals, leading to positive financial and environmental outcomes for businesses, residents, and communities.

31 "Doing what is required today for a better tomorrow": Task Force on Climate-Related Financial Disclosures (TCFD) Report for the year ended December 31, 2020, Nedbank Group.

2.12 Country analysis – Zimbabwe

2.12.1 Financial stability architecture

Zimbabwe's financial sector is made up of four regulatory authorities supervised by the Ministry of Finance: The Reserve Bank of Zimbabwe (RBZ), Deposit Protection Corporation, Securities Commission, and Insurance and Pensions Commission.

The financial sector of Zimbabwe is supervised by the Ministry of Finance. All other regulators and supervisors of the financial system are under the Ministry of Finance.

RBZ serves as the chief institution responsible for regulating and supervising banks. It also formulates and implements monetary policies and is the sole issuer of banknotes and coins in the country.

The Deposit Protection Corporation is responsible for protecting depositors, thereby ensuring the security and reliability of the banking system. The corporation has the power to obtain information from FIs that allow it to detect early signs of complications within the banking system.

The Securities Commission oversees the regulation of securities services in Zimbabwe; these include securities exchanges, Central Securities Depositories (CSDs), and respective members. The Commission also prevents the misuse of inside information and improper trading practices.

The Insurance and Pensions Commission (IPEC) was created to regulate and monitor the insurance and pensions industries.

2.12.2 Climate risk-related initiatives

Regulation on climate-related risks

Expert interviews indicate that climate risk-related initiatives in Zimbabwe are still developing. Only the Environmental Agency of Zimbabwe regulates climate-related activities. However, RBZ is developing regulations across the financial sector, such as making reporting on sustainable matters mandatory for all banks. This has started to be voluntarily applied by some banks.

The 2020 monetary policy statement by RBZ requires banks to review their climate risk management. This is principle-based guidance, but is enforceable. RBZ also has a section dedicated to sustainability, including climate risks.

On June 14, 2019, the Zimbabwe Stock Exchange (ZSE) introduced "Sustainability Information and Disclosure" as a new listing requirement. According to this new requirement, issuers need to provide sustainability reporting, including risk coverage. While the listing rules do not provide specific disclosure standards or mandatory reference frameworks, they recommend the adoption of the Global Reporting Initiative's (GRI) Sustainability Reporting Guidelines or Standards.

Self-regulatory bodies and private sector initiatives

There is no legislative directive on climate-related risk initiatives, but private banks are taking voluntary action on some initiatives and some banks in the private sector are getting direction from global climate initiatives.

The Infrastructure Development Bank of Zimbabwe (IDBZ), which was created by the Parliament of Zimbabwe, has taken up responsibilities to mitigate climate risk, especially in the infrastructure sector. The bank has Environmental and Social Standards (ESS) which are aligned to the IFC Performance Standards. These standards allow the bank to identify, analyse, control, and manage the adverse E&S impacts of its activities.

IDBZ is in the process of creating a Climate Finance Facility (CFF), which is essentially a ring-fenced fund dedicated to financing green projects in Zimbabwe in priority areas, including renewable energy, energy efficiency, irrigation schemes, and waste management systems.

Abbreviations and Acronyms

AIGCC	Asia Investor Group on Climate Change
AML/CFT	Anti-Money Laundering/ Countering the Financing of Terrorism
AMMC	Moroccan Authority for Capital Markets
BASA	Banking Association South Africa
BCEAO	Central Bank of West African States
BIS	Bank for International Settlements
BKAM	Bank Al-Maghrib
BOFIA	Banks and Other Financial Institutions Act
BoM	Central Bank of Mauritius
CBE	Central Bank of Egypt
CBK	Central Bank of Kenya
CBN	Central Bank of Nigeria
CCC	Climate Change Centre
CCCA	Collective Commitment to Climate Action
CFF	Climate Finance Facility
CMA	Capital Markets Authority
COBAC	La Commission Bancaire de l'Afrique Centrale
COSUMAF	Commission de Surveillance du Marche Financier de l'Afrique Centrale
CSDs	Central Securities Depositories
DFI	Development Financial Institution
ECB	European Central Bank
EGX	Egyptian Exchange
ESG	Environmental, Social and Governance
ESRM	Environmental and Social Risk Management
ESS	Environmental Social Standards
FIC	Financial Intelligence Centre
FMBN	Federal Mortgage Bank of Nigeria
FRA	Financial Regulatory Authority
FSB	Financial Stability Board
FSC	Financial Services Commission
FSC	Financial Stability Advisory Council
FSCA	Financial Sector Conduct Authority
FSCC	Financial Services Coordinating Committee
FSR	Financial Sector Regulation
FSTF	Financial Services Taskforce
GCRC	Group Climate Resilience Committee
GFANZ	Glasgow Financial Alliance for Net-Zero
GHG	Greenhouse Gas
GPBM	Professional Banking Group of Morocco
IAIS	International Association of Insurance Supervisors
ICAAP	Internal Capital Adequacy Assessment Process
IDBZ	Infrastructure Development Bank of Zimbabwe
IIGCC	Institutional Investors Group on Climate Change
IPEC	Insurance and Pensions Commission
JSE	Johannesburg Stock Exchange
KBA	Kenyan Bankers Association
KPI	Key Performance Indicator
KRI	Key Risk Indicator
MCB	Mauritius Commercial Bank
MCIB	Mauritius Credit Information Bureau
NDIC	Nigerian Deposit Insurance
NGFS	Network of Central Banks and Supervisors for Greening the Financial System
NGFS	Network for Greening the Financial System
NIC	National Insurance Commission
NPRA	National Pensions Regulatory Authority
NSBP	Nigeria Sustainable Banking Principles
NSE	Nairobi Security Exchange
NZAMI	Net Zero Asset Managers Initiative
NZBA	Net Zero Banking Alliance
NZFSPA	Net Zero Financial Services Provider Alliance
NZIA	Net Zero Insurance Alliance
NZOA	Net Zero Asset Owner Alliance
PA	Prudential Authority
PAII	Paris Aligned Investment Initiative
PCAF	Partnership Carbon Accounting Financials
PRB	Principles for Responsible Banking
PRI	Principles for Responsible Investment
PRSI	Pay Related Social Insurance
PSI	Principles for Sustainable Insurance
RBZ	Reserve Bank of Zimbabwe
SACCO	Savings and Credit Cooperative Organisation
SARB	South African Reserve Bank
SASRA	SACCO Societies Regulatory Authority
SAVCA	South African Venture Capital and Private Equity Association
SBFN	Sustainable Banking and Finance Network
SEC	Securities and Exchange Commission
SECO	Swiss State Secretariat for Economic Affairs
SIDA	Swedish International Development Cooperation Agency
SIF	Sustainable Insurance Forum
SMI	Sustainable Markets Initiative
TCFD	Task Force on Climate-Related Financial Disclosures
UEMOA	Union Economique et Monétaire Ouest Africaine
UMOA	Union Monétaire Ouest Africaine
UNEP FI	United Nations Environment Programme Finance Initiative

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Methodology

A set of semi-structured interviews and a questionnaire were developed for each of the countries studied. This was sent to the authorities of the respective financial systems of each country as well as to regulated financial organisations in those countries. The objective of the interviews and questionnaires was to assess in each country the current state of financial regulation related to climate change and its risks for the financial sector; to assess the drivers for issuing already established regulations; and to gather details on incipient regulation and self-regulatory practices in the sector.

Overall, 25 relevant stakeholders were interviewed, including 11 authorities covering 17 countries and 14 private players from seven countries, covering 19 countries in total.

Organisation category	Region or country	Organisation name
Central bank/Authority 11	Mali	La Banque Centrale des États de l'Afrique de l'Ouest (BCEAO)
	DRC	Central Bank of Congo
	Egypt	Central Bank of Egypt
	Egypt	Financial Regulatory Authority of Egypt
	Ghana	Bank of Ghana
	Mauritius	Bank of Mauritius
	Morocco	Al Maghrib Bank
	Rwanda	Banque Nationale de Rwanda
	South Africa	South African Reserve Bank
	Tunisia	National Bank of Tunisia
	Zimbabwe	Reserve Bank of Zimbabwe
Industry initiative / Group 2	Zimbabwe	Bankers Association of Zimbabwe
	Kenya	Kenya Bankers Association
Private sector players 12	Egypt	Commercial International Bank of Egypt
		ICEA LION Group
	Kenya	KCB Group
	Mauritius	Mauritius Commercial Bank
	Nigeria	Wema Bank
	Nigeria	Africa Re
	Rwanda	Bank of Kigali
	Rwanda	Equity Bank
	South Africa	FirstRand Group
	South Africa	Investec Group
	South Africa	Land Bank
	South Africa	Standard Bank
	Zimbabwe	Central Africa Building Society (CABS)

Appendix – Detailed regulations analysis

Figure 19:
Overview of specific and principle-based regulations

			Egypt	Kenya	Mauritius	Morocco	Nigeria	Zimbabwe
Classification criteria			**Resolutions 107/2021 & 108/2021**	**Guidance on Climate-related Risk Management**	**Draft Guideline for Climate-related & Environmental Risk Management**	**Directive n° 5/W/2021**	**Nigerian Sustainability Banking Principles**	**Monetary Policy Statement (Feb 2020)**
Authority			Financial Regulatory Authority	Central Bank of Kenya	Bank of Mauritius	Bank Al-Maghrib	Central Bank of Nigeria	Reserve Bank of Zimbabwe
Status			Published, not yet effective	Effective, with transitional arrangement	Under development	Fully effective	Fully effective	Fully effective
Financial sector coverage	**Type**	Banking	✓	✓	✓	✓	✓	✓
		Insurance	✓	✗	✗	✗	✗	✗
		Financial markets	✓	✗	✗	✗	✗	✗
	Size		Listed companies, Non-bank financial services	All sizes	All sizes	All sizes	All sizes	All sizes
Regulatory approach	**Scope**	Climate	✓	✓	✓	✓	✗	✓
		Sustainability	✓	✗	✗	✗	✓	✗
	Level of detail	Principle-based	✗	✗	✗	✓	✓	✓
		Specific	✓	✓	✓	✗	✗	✗
Regulated domain	**Strategy**		✗	✓	✓	✓	✗	✗
	Governance		✗	✓	✓	✓	✓	✓
	Risk mgmt.		✗	✓	✓	✓	✓	✓
	Disclosures		✓	✓	✓	✓	✓	✗

Figure 20:
Detailed analysis of specific regulations

			Egypt	Kenya	Mauritius
Classification criteria			**Resolutions 107/2021 & 108/2021**	**Guidance on Climate-related Risk Management**	**Draft Guideline for Climate-related & Environmental Risk Management**
Governance	Board-level governance		✗	✓	✓
	Organisation-wide roles & responsibilities		✗	✗	✓
Strategy & Risk manage-ment	Business/risk strategy		✗	✓	✓
	Risk appetite		✗	✓	✓
	Risk identification	Holistic	✗	✓	✓
		Risk type-specific	✗	✗	✗
	Risk measurement	Transaction-level	✗	✓	✓
		Portfolio-level	✗	✓	✓
	Risk mgmt.	Transaction-level	✗	✗	✓
		Portfolio-level	✗	✓	✓
	Risk monitoring & reporting		✗	✓	✓
Disclos-ures	Qualitative	Strategy	✓	✓	✓
		Governance	✓	✓	✓
		Risk mgmt.	✓	✓	✓
	Quantitative		✓	✓	✓