



**National Bank of Rwanda**  
**Banki Nkuru y'u Rwanda**

KN 6 Av.4/P.O. Box 531 Kigali-Rwanda

Tel: (+250) 788199000 /

Website: [www.bnr.rw](http://www.bnr.rw) /

E-mail: [info@bnr.rw](mailto:info@bnr.rw) /

Swiftcode: BNRWRRRW /

Twitter: @CentralBankRw

*The Governor*

**GUIDELINES N° 2600/2023 – 00036 [616] OF 29/11/2023 ON CLIMATE-RELATED  
AND ENVIRONMENTAL FINANCIAL RISKS MANAGEMENT FOR FINANCIAL  
INSTITUTIONS**

November 2023

**TABLE OF CONTENTS**

CHAPTER ONE: GENERAL PROVISIONS.....5

Article One: Purpose of these guidelines .....5

Article 2: Interpretation.....6

Article 3: Scope of application.....7

Article 4: Proportionality and materiality assessment .....7

Article 5: Business models and strategy.....8

CHAPTER II: GOVERNANCE AND RISK MANAGEMENT.....8

Section One: Governance.....8

Article 6: Responsibilities of the Board of Directors .....8

Article 7: Responsibilities of the senior management.....9

Article 8: Role of internal control functions .....9

Section 2: Risk management .....10

Article 9: Risk management framework.....10

Article 10: Risk identification .....11

Article 11: Risk analysis and measurement.....13

Article 12: Risk evaluation and mitigation .....13

Article 13: Risk reporting and monitoring .....14

CHAPTER III: SCENARIO ANALYSIS AND STRESS TESTING.....16

Article 14: Application of scenario analysis and stress testing .....16

CHAPTER IV: DISCLOSURES AND REPORTING OF CLIMATE AND ENVIRONMENTAL FINANCIAL RELATED INFORMATION.....17

Article 15: Approach for disclosing climate-related and environmental financial risks information .....17

Article 16: Governance .....18

Article 17: Strategy .....18

Article 18: Risk Management .....18

|  |    |
|--|----|
| Article 19: Metrics and targets.....   | 18 |
| Article 20: Risk reporting .....   | 19 |
| CHAPTER V: MISCELLANEOUS, TRANSITIONAL AND FINAL PROVISIONS.....   | 19 |
| Article 21: Self-assessment for Climate-related and environmental financial risks .....                      | 19 |
| Article 22: Compliance with the provisions of these guidelines.....  | 20 |
| Article 23: Monitoring the implementation roadmap.....   | 20 |
| Article 24: Entry into force .....   | 20 |
| ANNEXES .....  | 21 |
| Annex 1: Example of Annual Climate-Related and Environmental Financial Disclosure Reporting Format.....      | 21 |
| Annex 2: Self-Assessment for Climate and Environmental-Related Financial Risks.....                          | 23 |
| Annex 3: Implementation roadmap deadlines.....   | 26 |
| Annex 4: Scenarios envisaged by Network for Greening the Financial System.....                               | 27 |
| Annex 5: Examples of Climate-related and environmental financial risks and their transmission mechanism..... | 29 |

## **THE NATIONAL BANK OF RWANDA;**

Pursuant to Law n° 48/2017 of 23/09/2017 governing the National Bank of Rwanda as amended to date, especially in Articles 6 and 9;

Following the guidance of Standard-Setting Bodies and other international networks of regulators and supervisors, including the Basel Committee on Banking Supervision; Financial Stability Board, International Sustainability Standards Board, and the Network for Greening the Financial System (NGFS), which call for central banks to provide market guidance on climate-related and environmental financial risks;

Recognizing that the central aim of Paris Agreement on climate change of 12 December 2015 was to limit global warming to well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. By the year 2050, without new policies, the global greenhouse gas emissions are projected to increase by 50%, primarily due to a 70% growth in energy-related CO<sub>2</sub> emissions. The atmospheric concentration of greenhouse gas could reach 685 parts per million (ppm) CO<sub>2</sub>- equivalents by 2050. As a result, the global average temperature is projected to be 3 degrees Celsius to 6 degrees Celsius above pre-industrial levels by the end of the century, exceeding the internationally agreed goal of limiting it to 2 degrees Celsius. (OECD, 2022)

Considering that the effects of climate-related and environmental financial risks in Rwanda is evident, the Country is highly vulnerable to climate change and is increasingly experiencing climate change impacts. Rainfall has become increasingly intense, and the variability is predicted to increase by 5% to 10%. Most parts of Rwanda are expected to experience a rise in the average precipitation with shorter and more intense rainy seasons. In addition, temperature increases have also been experienced, and a rise in temperature is predicted across Rwanda in the coming years up to 2050, especially during the dry seasons. Changes in temperature and precipitation and their distributions are the key drivers of climate and weather-related disasters that negatively affect Rwandans and the overall economy. The main risks/impacts that adversely affect the population include droughts, floods, landslides and storms. These are associated with damages to infrastructure, loss of lives and property including crops, soil erosion, and water pollution. It is reported that climate change generated heavy rains, drought, flood, landslides, cropland damage and famine, between 1980 and 2017, affected more than one million people, damaged more than 15,000 ha of cropland, and destroyed 23,000 houses. (Climate change / Rwanda - Interactive Country Fiches);

Recalling that the Government of Rwanda has established a robust legal and policy framework to address climate change, reduce losses, and enhance adaptive capacity. Key institutions like Ministry of Environment, Rwanda Environment Management Authority (REMA), and Rwanda Green Fund (FONERWA) were created to respond to the impacts of climate and ensure a sustainable use of natural resources. In 2016, the National Environment and Climate Change Policy was revised to align with national, regional, and global development commitments, including the National Strategy for Transformation (NST1), Vision 2050, Green Growth and Climate Resilience Strategy (GGCRS), Nationally Determined Contributions (NDCs), Sustainable Development Goals (SDGs), Agenda 2063, and East African Community Vision 2050, providing strategic direction for environmental management, climate adaptation, and mitigation.

Acknowledging the findings of the diagnostic review conducted by the National Bank of Rwanda, which revealed that a majority of financial institutions have not yet incorporated climate-related and environmental financial risks into their governance structures, strategies, risk management as well as internal control framework;

Recognizing the imperative to offer guidance to financial institutions to include sound governance and risk management frameworks for climate-related and environmental financial risks into their existing overall risk management programs and frameworks;

## **ISSUES THE FOLLOWING GUIDELINES:**

### **CHAPTER ONE: GENERAL PROVISIONS**

#### **Article One: Purpose of these guidelines**

These guidelines aim at:

- (a) Providing guidance to financial institutions on the components of climate-related and environmental financial risks;
- (b) Setting out principles that guide financial institutions to manage and mitigate Climate-related and environmental financial risks through the entire risk management cycle; and
- (c) Providing guidance on disclosure of Climate-related and environmental financial risks.

## **Article 2: Interpretation**

In these guidelines:

- (a) “Central Bank”** means the National Bank of Rwanda;
- (b) “Financial Institution”** include a bank, a deposit-taking microfinance institution, an insurer, a pension scheme and a non-deposit taking financial service provider that grant or provides loans or similar services or products;
- (c) “IFRS S1 and IFRS S2”** refers to international financial reporting sustainability standards designed to provide additional information regarding an organization's sustainability-related risks and opportunities, which are relevant to primary users of their general-purpose financial statements to support the decision-making.
- (d) “Task Force on Climate-related Financial Disclosures (TCFD)”** means a global organization formed to develop a set of recommended climate-related disclosures that companies and financial institutions can use to better inform investors, shareholders and the public of their climate-related financial risks;
- (e) “Climate-related financial risks”** refer to the potential risks that may arise from climate change or from efforts to mitigate climate change, their related impacts and their economic and financial consequences;
- (f) “Environmental financial risks”** refer to financial risks posed by the exposure of financial institutions to activities that may potentially cause or be affected by environmental degradation (such as air pollution, water pollution and scarcity of fresh water, land contamination and desertification, biodiversity loss, and deforestation) and the loss of ecosystem services;
- (g) “physical risks”** means the economic costs and financial losses resulting from the increasing severity and frequency of:
  - (i) extreme climate change-related weather events (or extreme weather events) such as heatwaves, landslides, floods, wildfires and storms (i.e. acute physical risks);
  - (ii) longer-term gradual shifts of the climate such as changes in precipitation, extreme weather variability, ocean acidification, and rising sea levels and average temperatures (i.e., chronic physical risks or chronic risks); and
  - (iii) indirect effects of climate change such as loss of ecosystem services (e.g.: desertification, water shortage, degradation of soil quality or marine ecology);

**(h) “transition risks”** means the risks related to the process of adjustment towards a low-carbon economy. Transitioning to a lower-carbon economy may entail extensive policy, legal, technology, and market changes to address mitigation and adaptation requirements related to climate change.

### **Article 3: Scope of application**

These guidelines apply to financial institutions as defined in these guidelines.

### **Article 4: Proportionality and materiality assessment**

- (1) A financial institution develops and adopts internal frameworks for the identification, assessment, management, and disclosure of climate and environmental-related financial risks. This is done according to the nature, size, complexity of business operations and materiality of exposure to climate-related and environmental financial risks.
- (2) A financial institution shall assess and determine the materiality of climate-related and environmental financial risks within their operations and activities, considering the potential impact on financial performance, reputation, and overall risk profile, with factors such as risk magnitude, likelihood, etc.... Regular reviews and updates of materiality assessments are required to reflect changes in the business environment, emerging risks, and stakeholder expectations, conducted diligently to address both short-term and long-term implications. These assessments shall guide risk management strategies, disclosure practices, and the integration of climate and environmental factors into decision-making. Oversight of the materiality assessment process, ensuring integration into the risk management framework, is the responsibility of the institution's board of directors and senior management, crucial for a comprehensive and proactive approach to managing climate and environmental financial risks.
- (3) In assessing the materiality of the climate-related and environmental financial risk, a financial institution shall take into account geographic location, sectors of economic activities, products, nature of business operations and risk management.
- (4) A financial Institution shall document the climate-related and environmental financial risks considered, in particular, their transmission channels and impact on the risk profile. Moreover, a Financial institution shall justify an assessment of non-materiality, specifying and documenting the qualitative and quantitative information underlying that assessment.

- (5) A financial institution may be subjected to accelerate the implementation of the requirements of these guidelines by the Central Bank, taking into account the level of materiality and exposure to climate-related and environmental financial risks notwithstanding the implementation roadmap as provided in the annex 3 of these guidelines.

### **Article 5: Business models and strategy**

An effective climate-related and environmental financial risk management framework is built upon a thorough assessment of how and to what extent these risks would affect an institution's business and the environment in which the institution operates. A Financial institution, when formulating business models and strategies; should:

- (a) understand the opportunities that may arise in their business environment as well as the potential effects of significant climate-related financial risks, and take these into account in internal operations, strategies, business model, risk appetites, and other decision-making processes;
- (b) consider Nationally Determined Contributions (NDCs) of Rwanda in the business models, strategies and risk appetites where applicable; and
- (c) implement risk mitigation plan for managing the impact of climate-related and environmental financial risks on the internal operations and business models.

## **CHAPTER II: GOVERNANCE AND RISK MANAGEMENT**

### **Section One: Governance**

#### **Article 6: Responsibilities of the Board of Directors**

The Board of Directors has the following responsibilities:

- (a) to ensure that Climate-related and environmental financial risks are discussed in the full board or board committee, (i.e., risk management and or Strategy committees);
- (b) to ensure that the board of directors and senior management have a collective understanding of climate-related and environmental financial risk management;
- (c) to approve and periodically reassess the strategy and risk management frameworks for climate-related and environmental financial risks and opportunities;
- (d) to clearly define the duties and responsibilities of senior management, internal organizational structures, and board subcommittees, as necessary, for the management of climate-related and environmental financial risk;

- (e) to ensure appropriate and prompt reporting of financial risks and opportunities relating to climate change to the board and board subcommittees;
- (f) to provide specific recommendations for the types of training and capacity development programs that should be considered,
- (g) to review and consider how the climate-related and environmental financial risks shall be integrated into the existing risk appetite framework.
- (h) to incorporate climate-related and environmental financial risks into the institution's business strategy, objectives, and risk management framework while also ensuring effective oversight of these risks.

### **Article 7: Responsibilities of the senior management**

The senior management develops and implements a framework and strategies for managing Climate-related and environmental financial risks. The senior management shall:

- (a) periodically review the effectiveness of the framework, policies, tools and controls;
- (b) provide the board with periodic reports, at least once every six months, on the issues related to climate related and environmental financial risks as well as the suitability and efficacy of the framework;
- (c) have adequate resources, skills, expertise and define the requirements for the internal structures responsible for managing climate related and environmental financial risk;
- (d) establish proper training and capacity development plans. Specifically, the first line of defense (operations) and other frontlines shall have sufficient awareness and understanding to identify potential Climate-related and environmental financial risks; and
- (e) make sure that all material Climate-related and environmental financial risks are addressed on a timely basis.
- (f) include management of material climate-related and environmental financial risks within their risk management policies and procedures for relevant prudential risks.
- (g) update existing risk management framework and relevant policies to embed climate-related and environmental financial risk considerations in accordance with level of materiality and potential impacts.
- (h) put in place written policies and procedures that allow for the proactive management of climate-related and environmental financial risks.

### **Article 8: Role of internal control functions**

(1) Three lines of defense are given responsibility for managing climate-related and environmental financial risks in accordance with the established risk governance arrangement:

- (a) The first line of defense: This is composed of business units where risks are taken. In conducting climate-related financial risk assessments during client on-boarding, relevant staff shall have sufficient awareness and understanding to identify and assess potential climate-related financial risks;
- (b) The second line of defense: This is provided by independent and effective risk or compliance functions and is primarily responsible for overseeing climate-related and environmental financial risks in business activities, on-going risks monitoring and reviewing relevant policies and procedures. The second line of defense specifically risk function shall undertake independent climate-related and environmental financial risk assessment and monitoring, including challenging the assessment conducted by the frontline/risk owners, and monitoring compliance with applicable laws, regulations and internal policies;
- (c) The third line of defense: This is provided by an independent internal audit function, which is responsible for providing assurance and periodic audit evaluation on the effectiveness of the institutions' climate-related and environmental financial risk management (including both first and second line of defense)

(2) A financial Institution that has not yet set the above functions shall assign a skilled staff to manage climate-related and environmental financial risks.

## **Section 2: Risk management**

### **Article 9: Risk management framework**

A financial Institution shall integrate climate-related and environmental financial risks into existing risk categories within the risk management framework. This integration shall focus on long-term management, monitoring, and mitigation, with regular reviews. A Financial Institution shall identify and quantify these risks as part of their capital adequacy assurance. Clear processes for managing climate-related and environmental financial risks shall be established across the entire risk management cycle, which includes:

- a) Risk identification;
- b) Risk analysis and measurement;
- c) Risk evaluation and mitigation;
- d) Risk reporting and monitoring.

## **Article 10: Risk identification**

A financial institution shall have internal framework for identifying, understanding the impact of climate-related and environmental financial risk drivers on their business model and balance sheet. The framework covers at least:

(a) the process for identifying risks associated with climate-related and environmental financial risks; clear definitions and thresholds for materiality in accordance with the counterparty, business lines, industries, and geographical location where it is appropriate.

(b) consideration of the potential impacts of climate related and environmental financial material risks in short, medium as well as in long term;

(c) the climate-related and environmental financial risk identification process entails thorough assessment of how climate change, quantifiable or non-quantifiable, tends to affect institutions through main risk categories. Therefore, at the minimum a financial institution shall consider the below traditional risk as per institution's category:

(i) Credit risk: A financial institution shall establish clear credit policies and processes to address significant climate-related and environmental credit risks. These measures include identifying, measuring, evaluating, monitoring, reporting, and mitigating the impacts of these risks on credit exposures, including counterparty credit risk. A Financial Institution should integrate consideration of these risks throughout the entire credit life cycle, including client due diligence during onboarding and ongoing risk profile monitoring. Additionally, they must manage concentrations of these risks within and between different risk types, potentially using metrics or heat maps to assess exposure. To mitigate these risks, a financial institution may adjust credit underwriting criteria, engage with clients, or impose restrictions like shorter-term lending, lower loan-to-value limits, or discounted asset valuations. A Financial Institution should also consider setting limits or applying alternative risk mitigation techniques to exposures that do not align with their business strategy or risk tolerance. Overall, a financial institution should incorporate climate-related and environmental financial risks at all stages of the credit-granting process and continuously monitor them within their portfolios.

(ii) Market risk: A financial institution shall assess how climate-related and environmental financial risk factors could impact the value of the financial instruments in portfolios. This assessment includes evaluating the potential for losses and increased portfolio volatility and establishing effective processes to control or mitigate these impacts. To better understand the relevance of these risks, a financial institution should analyze sudden shock scenarios that

consider variations in liquidity and the speed at which exposures can be closed out for assets exposed to such risks. When evaluating mark-to-market exposure to these risks, a financial institution should also consider how the pricing and availability of hedges might change under different climate and transition pathways, including disorderly transitions. Continuous monitoring of climate-related and environmental factors' impact on market risk positions and future investments is expected, along with the development of stress tests that incorporate these financial risks.

(iii) Liquidity risk: A financial institution shall evaluate how climate-related and environmental financial risks can affect net cash outflows, such as increased credit line drawdowns or accelerated deposit withdrawals or policy cancellation, as well as the value of assets in liquidity buffers. If these impacts are significant and relevant, a financial institution should include them in the calibration of liquidity buffers and integrate them into liquidity risk management frameworks. In other words, a financial institution should consider the potential impact of climate-related and environmental risks in liquidity positions and incorporate this consideration into risk management practices.

(iv) Operational risk: A financial institution shall evaluate how climate-related and environmental financial risk factors can affect overall operations and ability to maintain critical functions. This includes analyzing how physical risk drivers can impact business continuity and incorporating climate-related and environmental financial risks into business continuity plans.

(v) Strategic risk: A Financial Institution may lose competitiveness and fail or delay to achieve different strategical objectives as a result of failing to respond appropriately to the changing market environment along with increasing scrutiny and preference towards climate-friendly solutions and responsible practice;

(vi) Insurance/underwriting risk: An insurer may face far-reaching effects, examples for general insurance include among others increased premiums or inability to find affordable reinsurance capacity, due to greater exposure to natural catastrophic events, increased burden on health insurers from greater heat stress, poorer air quality together with increased direct casualties from natural catastrophes. Examples for life insurers include Increased seasonal mortality (e.g., due to seasonal extreme weather events like floods)

(vii) Concentration risk: A financial institution shall consider climate-related and environmental financial risk concentrations in comprehensive risk management. For instance, a financial institution may have concentrated exposures in sectors with high greenhouse gas

emissions, like electric utilities and power generation, due to their vulnerability to transition policies. They may also have geographic concentrations in areas prone to specific physical events, such as flood-prone regions.

(viii) Other risks: A financial institution shall assess how climate-related and environmental financial risk factors can influence other risks, including reputational, regulatory compliance, and liability risks. If these climate-related and environmental financial risks are significant, A financial institution should integrate them into risk management and strategy-setting processes. In essence, a financial institution needs to consider the broader consequences of climate-related and environmental financial risks and incorporate them into their overall risk management and strategic decision-making.

### **Article 11: Risk analysis and measurement**

A financial Institution establishes a framework for measuring and monitoring of climate-related and environmental financial risks. This covers at least the following:

- (a) the appropriate risk indicators to group businesses, industries, and regions according to the degree of financial risks associated with climate change and environment,
- (b) the suitable risk indicators to group counterparties, sectors, and geographical areas according to the severity of financial risks related to climate change,
- (c) The adequate risk monitoring process that makes use of qualitative and quantitative analytical tools and metrics to monitor relevant risk indicators and exposures to financial risks related to climate change and environment in relation to the overall strategy and risk appetite for these kinds of risks and to support decision-making;

### **Article 12: Risk evaluation and mitigation**

A Financial Institution shall have and implement procedures to evaluate and mitigate exposures to risks associated to the climate change, taking into account their business strategy and risk appetite. At this level, a financial institution considers the following:

- (a) At sector-level

A Financial Institution shall take into account control measures for industries that do not fit into its risk appetite or climate strategy, such as imposing limitations, establishing thresholds, and adopting a tilting policy. A financial institution may also develop sector-level policies to encourage consistent risk management practices.

(b) Counterparty and transaction-level measures

A Financial Institution shall determine the appropriate mitigation measures at the counterparty or transaction level, where the counterparties are not in line with the institution's climate strategy or risk appetite, for example, any financial institution may decide to price in the risks associated with climate change. Furthermore, any institution may also impose attractive covenants or financing conditions to encourage customers to take climate change into account. Examples of such requirements include preparing a transition plan, following to regulations, or setting performance goals. A financial institution may think about creating policies and processes about how it interacts with clients and responds in order to handle any reputational risk issues brought on by controversies involving their activities. A financial institution may also consider about supporting their clients as they move to low-carbon activities, in order to help them build climate resilience, for example, by establishing with clients' specific objectives like increasing energy efficiency and lowering carbon emissions. Another option is to motivate customers to improve their climate-related disclosures, which might assist to understand the risks that customers face.

(c) Measures for preventing disruption to the operation

A financial institution takes appropriate measures to ensure business continuity in the event that severe weather affects its own facilities, operations, or significant outsourced services. A financial institution can also think about moving crucial functions to places that are less exposed to climate-related and environmental financial risks.

**Article 13: Risk reporting and monitoring**

(1) General requirements

(a) A financial institution shall proactively engage with clients and counterparties to gather more information about its exposures and risk profiles to climate-related and environmental financial risks. In cases where reliable or comparable climate-related and environmental data are lacking, institution may use reasonable proxies and assumptions as interim measures in their internal reporting. This approach helps institution improve their understanding of risk, even when complete data is not readily available.

(b) To make sure that climate-related and environmental financial risk exposures are consistent with risk appetite, a financial institution shall have procedures to monitor and report exposures to risks associated to climate change. A financial institution shall monitor the evolution of climate-related financial risks given their dynamic nature and make sure that

the risk monitoring procedure keeps up with the most recent developments in climate change (e.g., in respect of emission pathways policies).

(c) To facilitate monitoring and to provide early warning signals for necessary actions, a variety of quantitative and qualitative methods and metrics shall be taken into consideration to enhance supervision and regular reporting.

## (2) Monitoring at portfolio level

(a) The indicators like the percentage of exposures to high-risk sectors and the carbon intensity of projects may be taken into consideration to assist comprehensive portfolio monitoring.

(b) A financial institution may think about keeping a monitoring list of counterparties with high-risk profiles at the counterparty level. A financial institution may then concentrate on these counterparties and think about performing enhanced due diligence on these clients, such as keeping track of the status of transition through direct interaction and publicly available data.

## (3) Monitoring of exposure of operation to physical risks

A financial institution shall take into account the proper indicators that give management an early warning of operational risk concerns while monitoring the physical risk exposures of its own facilities, activities, and significant outsourced arrangements.

## (4) Monitoring the evolution of climate-related and environmental financial risks

A financial institution shall monitor the evolution of climate-related and environmental financial risks and assess their potential effects. This is due to the fact that materiality of Climate-related and environmental financial risks depends upon the global emission can be reduced on a pathway consistent with a 2°C warming and the changes in the climate system and policy responses. For example, continuously rising emissions might lead to a more significant global temperature increase and, thus, more severe governmental responses. In the interim, a region's vulnerability to change to low-carbon economy and its economic composition may impact its vulnerabilities to transition.

## (5) Capital and Liquidity

(a) A financial institution shall consider and record any material impact on capital and liquidity as a result of climate-related and environmental financial risks.

(b) The Central Bank acknowledges that climate-related and environmental financial risks will probably be incorporated into financial institutions' internal capital and liquidity adequacy assessments iteratively and progressively, as the methodologies and data continue to mature over time and analytical gaps are addressed. To this end, a financial institution starts building risk analysis capabilities by identifying relevant climate-related and environmental financial risk drivers that may materially impair their financial condition, developing key risk indicators and metrics to quantify exposures to these risks, and assessing the links between climate-related and environmental financial risks and traditional financial risk types such as credit and liquidity risks.

### **CHAPTER III: SCENARIO ANALYSIS AND STRESS TESTING**

#### **Article 14: Application of scenario analysis and stress testing**

(1) A financial institution shall perform scenario analysis in order to:

- (a) explore the impacts of climate change and the transition to a low-carbon economy on the institution's strategy and the resiliency of its business model;
- (b) identify relevant climate-related and environmental financial risk factors;
- (c) measure vulnerability to climate-related and environmental financial risks and estimating exposures and potential losses;
- (d) diagnose data and methodological limitations in climate-related and environmental financial risk management; and
- (e) inform the adequacy of the institution's risk management framework, including risk mitigation options.

(2) A financial institution applies scenario analysis and stress testing as a crucial tool to validate the risk identification process and understand the exposure of climate-related and environmental financial risks to their business core functions.

(3) A financial institution applies scenario analysis and stress test to understand the effects of climate related and environmental financial risks and assess the vulnerability of institutional business models, an institution considers at least the following:

- (a) the results of several transitional pathways and different channels including those through physical and transitional risks,
- (b) the short, medium, and long-term time periods associated with Climate related and environmental financial risks,

(c) considering both historical data and forward-looking information, and

(d) evaluate how various scenarios may affect income, assets, counterparties, liquidity, and capital position levels.

(4) A financial Institution with material climate-related and environmental financial risks is expected to evaluate the appropriateness of their stress testing, with a view to incorporating them into their baseline and adverse scenarios. A financial institution shall consider NGFS scenarios as the starting point, as specified in Annex 4 of these guidelines.

(5) A financial institution should be aware that the field of climate scenario analysis is highly dynamic, and practices are expected to evolve rapidly, especially as climate science advances. Climate scenario models, frameworks and results should be subjected to challenge and regular review by a range of internal and/or external experts and independent functions.

#### **CHAPTER IV: DISCLOSURES AND REPORTING OF CLIMATE AND ENVIRONMENTAL FINANCIAL RELATED INFORMATION**

##### **Article 15: Approach for disclosing climate-related and environmental financial risks information**

(1) To enhance transparency, a financial institution develops a suitable approach for disclosing climate-related and environmental information. Each financial institution shall, at a minimum, align its climate-related and environmental disclosures with the detailed TCFD's recommendations, as well as the requirements of both IFRS S1 and IFRS S2 (ISSB).

(2) The TCFD's recommendations mainly focused on (governance, strategy, risk management, metrics and targets) to address financial risks and opportunities posed by climate change. IFRS S1 requires disclosure of sustainability-related information useful for resource allocation decisions, while IFRS S2 requires disclosure of information that could affect cash flows, financing access, or capital costs in the short, medium, or long term, collectively known as 'prospect-affecting climate-related financial risks and opportunities. For instance, a financial institution's disclosures might include information about the individuals or committees responsible for climate-related matters, the processes for informing the board, senior management's roles, the organizational structure, and significant climate-related financial risks and opportunities.

(3) A financial institution shall provide information related to climate and environmental financial risks to which they are exposed, as well as how they intend to manage such risks in their integrated/annual reports as guided in annex 1 of these guidelines.

(4) A financial institution shall regularly improve their disclosures to enhance their informativeness, considering stakeholders' needs and their evolving understanding of climate-related and environmental financial risks. The disclosure includes mainly:

- (a) Governance;
- (b) Strategy;
- (c) risk management;
- (d) metrics and targets.

### **Article 16: Governance**

A financial institution is required to disclose their governance procedures for risks associated with the climate-related and environmental financial risks. This includes the overall responsibilities of senior management and board of directors.

### **Article 17: Strategy**

A financial institution discloses:

- (a) climate-related and environmental financial risk strategy, and
- (b) the identified Climate-related and environmental financial risks, opportunities and expected impacts on strategy and financial planning.

### **Article 18: Risk Management**

A financial institution discloses:

- (a) the procedures for identifying, assessing, and managing climate-related and environmental financial risks,
- (b) the elements considered during the assessment of Climate-related and environmental financial risks, and
- (c) how the entire risk management framework incorporates the Climate-related and environmental financial risks.

### **Article 19: Metrics and targets**

A financial institution discloses:

- (a) Key Risk Indicators (KRIs),
- (b) the status of Key Risk Indicators against internal targets, and

(c) the methodologies, definitions, assumptions and other associated with metrics and target included in the disclosure.

### **Article 20: Risk reporting**

- (1) A financial institution shall have a framework in place for reporting climate-related and environmental financial risks. This framework shall, at the very least, include timely submission of pertinent information to their board of directors and senior management on both opportunities and material risks on annual basis.
- (2) The board and senior management shall receive timely and frequent reports on climate-related and environmental financial risk exposures, including information on compliance with risk appetite, the status of strategic and business plans, and details on the implementation of control and mitigation, to facilitate their decision making. A financial institution shall also determine their risk reporting requirements, while taking into account their own business models and risk profiles. The reports shall, at a minimum, address all significant climate-related and environmental financial risks that have been identified, as well as compliance with risk appetite and risk limits, any risk assessments to be made in the future, and the use of both qualitative and quantitative methods. A financial institution shall educate itself of any need to improve the risk reporting framework so that it may more effectively gather, aggregate, and report exposures related to climate change.

## **CHAPTER V: MISCELLANEOUS, TRANSITIONAL AND FINAL PROVISIONS**

### **Article 21: Self-assessment for Climate-related and environmental financial risks**

- (1) A self-assessment process is a critical tool for financial institution to evaluate their exposure to such risks, prior to the first reporting and disclosure of Climate-related and environmental financial risks.
- (2) A financial institution shall perform the initial self-assessment (that includes the level of materiality as per article 4 and as per annex 2 of these guidelines). The results of the self-assessment shall be submitted to the Central Bank within the timeline set in the implementation roadmap provided in annex 3 of these guidelines.
- (3) A financial institution shall perform a self-assessment on a regular basis (at least annually) and update the Central Bank on the current materiality status. The Central Bank reserves the right to review the materiality status of a financial institution and require reassessment where necessary.

**Article 22: Compliance with the provisions of these guidelines**

- (1) The Central Bank through its supervisory tools (Off & Onsite supervision) shall ensure the compliance of financial institutions to the provisions of these guidelines.
- (2) Non- compliance with the provisions of these guidelines may lead to supervisory corrective actions.

**Article 23: Monitoring the implementation roadmap**

- (1) A financial institution shall implement these guidelines in phases as per annex 3 of these guidelines, demonstrating its full commitment to a structured and effective integration process.
- (2) The Central Bank oversees the implementation of the roadmap.

**Article 24: Entry into force**

These guidelines come into force on the date of its signature.

**Done at Kigali on 29<sup>th</sup> November 2023**

**RWANGOMBWA John  
Governor**

## **ANNEXES**

### **Annex 1: Example of Annual Climate-Related and Environmental Financial Disclosure Reporting Format**

**[Regulated Financial Institution Name]**

**Note:** A financial institution may choose to have this report as a separate report or as part of a financial institution's annual or integrated report

**Date of Reporting: [Insert Date]**

#### **1. Executive Summary**

[Provide a concise overview of the key climate-related and environmental financial risks, opportunities, and strategies of the institution considering the institution's size and complexity.]

#### **2. Governance**

[Describe how climate-related and environmental issues are integrated into the organization's governance structure while considering proportionality.]

a. Board Oversight: - Explain the role of the board in overseeing climate-related financial risks and opportunities. - Highlight any board-level committees responsible for climate and environmental issues.

b. Management Responsibilities: - Specify which executive or management team members are responsible for climate-related matters and what their roles are.]

#### **3. Strategy**

[Describe the institution's approach to addressing climate-related and environmental financial risks and opportunities.]

a. Risk Assessment: - Describe the methodologies used to assess climate-related and environmental financial risks, including physical, transition, liability and other risks. - Provide information on the outcomes of risk assessments, including key findings.

b. Business Strategy: - Explain how climate considerations are integrated into the overall business strategy. - Discuss the organization's approach to sustainable finance and investments.

c. Climate-related and environmental Goals, metrics, and Targets: - Present any climate-related objectives, goals, metrics or targets set by the institution. - Provide information on progress toward meeting these goals.]

#### **4. Risk Management**

[ Outline the processes and strategies employed to manage climate-related and environmental financial risks in the institution's size and complexity.

a. Risk Mitigation: - Detail initiatives and actions taken to reduce the institution's carbon footprint and enhance climate resilience. - Include information on investments in low-carbon technologies and sustainable practices.

b. Scenario Analysis: - Describe the scenarios used to assess climate related and environmental financial risk exposure. - Explain how the institution has stress-tested its portfolio against various climate scenarios tailored to the institution's operations.]

#### **5. Metrics and Targets**

[ Present key performance indicators (KPIs) and metrics related to climate impact.

a. Disclosure of Climate Metrics: - Provide quantitative data on own and financed greenhouse gas emissions, energy consumption, and other relevant metrics proportional to the institution's capacity. - Include historical data and trends where available.

b. Climate Targets: - State any climate-related targets and milestones, including emissions reduction targets considering the institution's resources.]

#### **6. Financial Impacts**

[ Discuss the actual and potential financial impacts of climate-related financial risks and opportunities on the institution.

a. Financial Analysis: - Provide information on the financial implications of climate and environmental financial risks, including potential asset devaluation or stranded assets. - Discuss the potential impact on revenue and costs.]

#### **7. Disclosures in Financial Filings**

[ Explain how climate-related information is disclosed in financial statements, annual reports, and other financial filings.]

#### **8. Appendix**

[Include any additional information, data, or references that support the disclosures made in the report.]

#### **9. Assurance (Optional)**

[State whether the disclosures have been independently assured or reviewed by external parties.]

## **Annex 2: Self-Assessment for Climate and Environmental-Related Financial Risks**

### **1. Introduction:**

Recognizing the increasing importance of climate-related and environmental financial risks, financial institutions are expected to proactively assess, manage, and disclose these risks. A self-assessment process is a critical tool for financial institutions to evaluate their exposure to such risks and develop effective strategies for resilience. This annex outlines the guidelines for financial institutions to conduct self-assessments for climate-related financial risks, including the key components of a self-assessment report.

### **2. Establishing a Self-Assessment Team**

- Financial institution shall designate a dedicated team or responsible individuals to lead the self-assessment process.
- This team shall include experts in risk management, sustainability, finance, and compliance to ensure comprehensive coverage.

### **3. Scope and Objectives:**

- Define the scope of the self-assessment, considering all relevant climate-related and environmental risks, such as physical, transition, and liability risks.
- Clearly outline the objectives of the self-assessment, including risk identification, quantification, and mitigation.

### **4. Data Collection and Analysis**

- Gather relevant data on the institution's exposure to climate-related and environmental financial risks.
- Analyze the data to identify potential risks and their financial implications.
- Assess the materiality of identified risks to prioritize further actions.

### **5. Risk Identification**

- Identify and categorize climate-related and environmental financial risks.
- Consider both short-term and long-term risks, taking into account regulatory, market, and operational factors.

### **6. Risk Assessment and Scenario Analysis (where required)**

- Conduct scenario analysis to model the potential impact of different climate scenarios on the institution's portfolio.
- Assess the financial consequences of various climate-related scenarios, including physical, transitional, and liability risks.

- Evaluate the potential effect of different emission pathways and temperature scenarios. You may consider using NGFS Scenarios that are part of the current guidelines – Annex 4. Where impracticable, the initial assessment may not include scenario analysis. In this case, the initial assessment will mention why the use of scenarios was impracticable.

## **7. Stress Testing (where required)**

- Perform stress tests to assess the resilience of the institution's portfolio under adverse climate and environmental conditions.
- Test various stress scenarios, including extreme weather events, policy changes, and shifts in consumer preferences.
- Where impracticable, the initial assessment may not include stress testing. In this case, the initial assessment will mention why conducting stress testing was impracticable.

## **8. Mitigation Strategies**

- Develop strategies to mitigate identified risks, including reducing carbon exposure, diversifying investments, and enhancing risk management practices.
- Prioritize actions based on risk materiality and feasibility.

## **9. Reporting and Disclosure**

Prepare a comprehensive self-assessment report that includes:

- a. Executive Summary: A concise overview of the self-assessment process and key findings.
- b. Risk Identification and Analysis: Detailed information on identified climate-related financial risks.
- c. Scenario Analysis (Where used): Results of scenario modelling and stress tests.
- d. Mitigation Strategies: Actions planned or implemented to mitigate risks.
- e. Data and Assumptions: Transparency on data sources and assumptions used in the assessment.
- f. Materiality Assessment: Explanation of the materiality criteria applied.
- g. Next Steps: The institution's plan for ongoing risk management and disclosure improvements.

## **10. Review and Validation**

Ensure that the self-assessment report undergoes internal validation or external review to enhance credibility and reliability.

## **11. Integration with Governance and Strategy**

Align the outcomes of the self-assessment with the institution's governance and strategy, ensuring that climate-related and environmental financial risks are integrated into decision-making processes in line with these guidelines' implementation roadmap.

### Annex 3: Implementation roadmap deadlines (Early adoption recommended)

| Phases                                   | March - 24  | Oct-24  | Jan-25  | Apr-25   | Jan-26   | Apr-26   | Sept-26                                       | Jan-27   | Apr-27  | Dec-27   |
|--|---|---|---|--|--|--|---|--|---|--|
| Governance, Strategy and risk management | Establishment of a dedicated team/staff to follow up implementation of the guidelines (Immediate for All institutions)          |   |   |  |  |  |   |  |   |  |
|  | Capacity building_ (Immediate & continuous for All institutions)  | Submission of self-assessment results to National Bank of Rwanda (Tier 1) | Submission of self-assessment results to National Bank of Rwanda (Tier 2) | Submission of self-assessment results to National Bank of Rwanda (Tier 3)  | Submission of self-assessment results to National Bank of Rwanda (Tier 4)  |  |   |  |   |  |
|  | Commencement of Data collection & Initial Self-Assessment of climate-related & environmental financial risks (All institutions) |   |   |  |  |  |   |  |   |  |
|  |   |   |   | Integration of climate related and environmental financial risks in the institution's governance, strategy, and risk management (Tier 1) | Integration of climate related and environmental financial risks in the institution's governance, strategy, and risk management (Tier 2) | Integration of climate related and environmental financial risks in the institution's governance, strategy, and risk management (Tier 3) |   | Integration of climate related and environmental financial risks in the institution's governance, strategy, and risk management (Tier 4) |   |  |
|  |   |   |   |  |  |  | Scenario analysis and stress testing (Tier 1) |  | Integration of risks in ICAAP*, ILAAP** & ORSA*** (Tier 1)                  |  |
| Reporting & Disclosure                   |   |   |   |  |  | Reporting & Disclosure as per the requirements of these guidelines (Tier 1)  |   | Reporting & Disclosure as per the requirements of these guidelines (Tier 2)  | Reporting & Disclosure as per the requirements of these guidelines (Tier 3) | Full implementation of the guidelines (Where applicable) |

\*Internal Capital Adequacy Assessment Process / \*\*Internal Liquidity Adequacy Assessment Process / \*\*\* Own Risk and Solvency Assessment

Tier 1: Banks, General and life insurance & Public Pension; UMWALIMU Sacco / Tier 2: Deposit Taking Microfinance companies, Captive insurers, Micro insurers, Private pension schemes

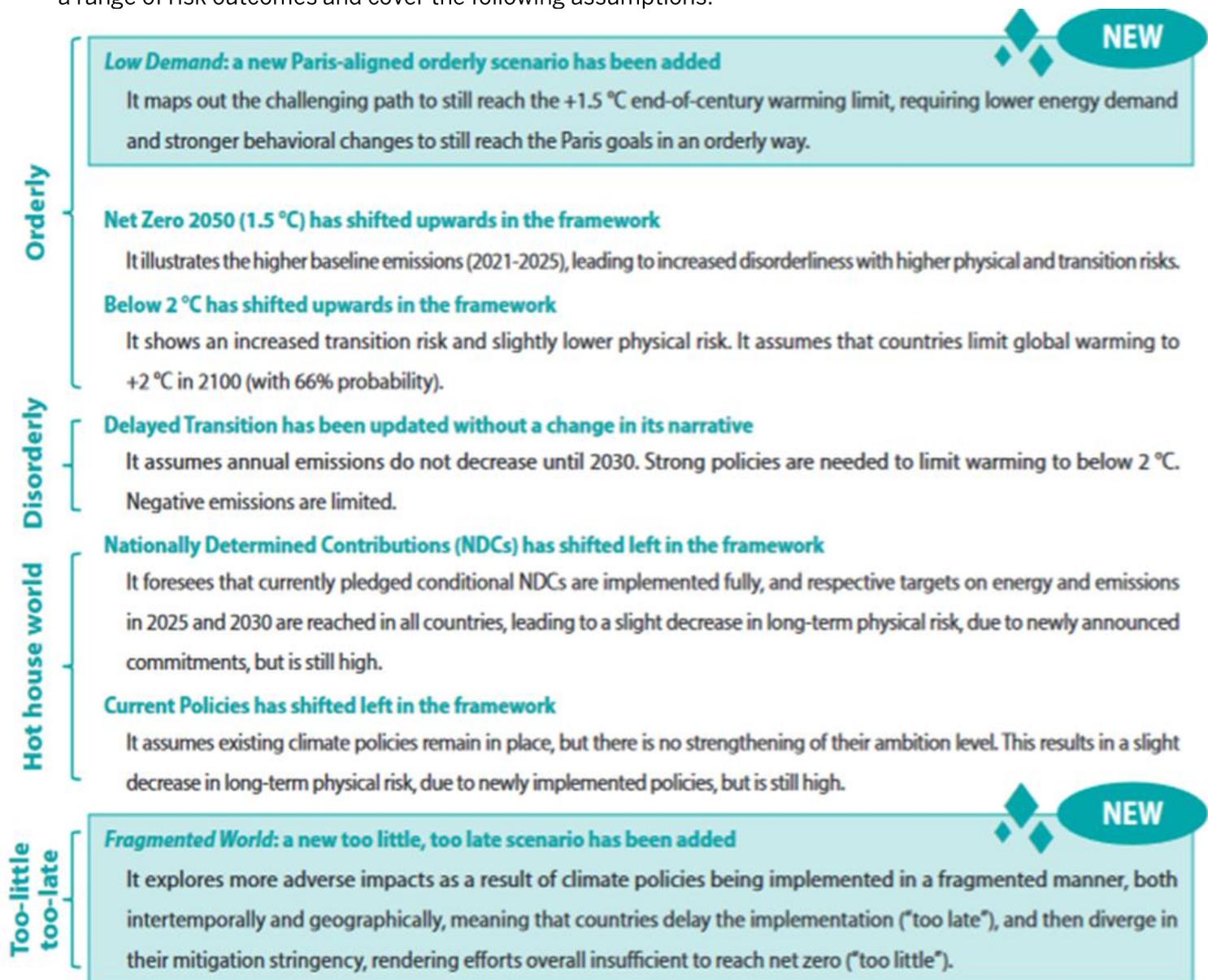
Tier 3: Non-Deposit Taking Financial Service Providers, UMUGANGA SACCOS, Mutual Insurers and Health Management Organizations

Tier 4: Umurenge SACCOS and Non Umurenge SACCOS

**BNR RESTRICTED**

## Annex 4: Scenarios envisaged by Network for Greening the Financial System (NGFS)

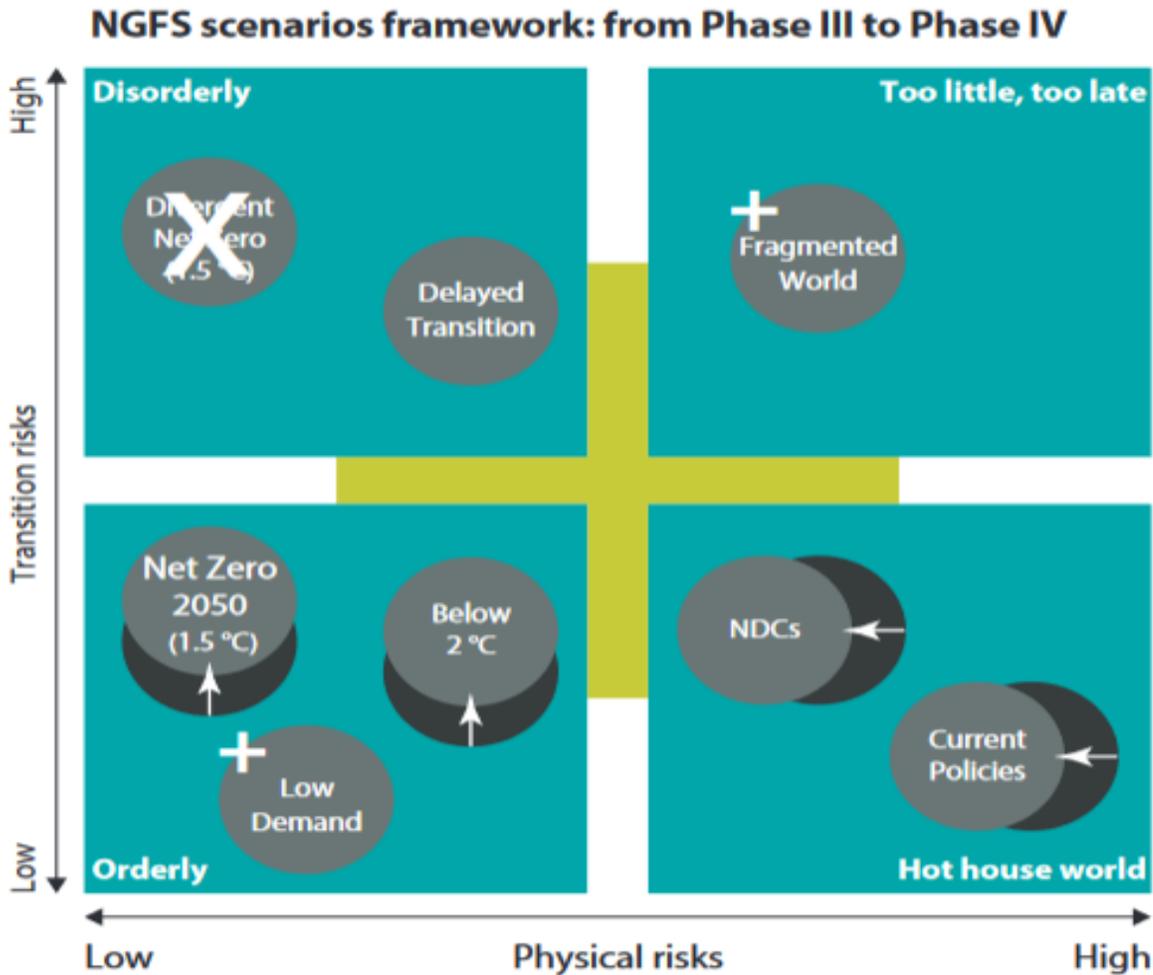
In its publication, 'NGFS Climate Scenarios for central banks and supervisors' of November 2023<sup>1</sup>, The NGFS scenario narratives have been updated and further expanded to capture more adverse disruptions and different potential futures. Two new scenarios have been designed. The scenarios were chosen to show a range of risk outcomes and cover the following assumptions.



<sup>1</sup> [NGFS Climate Scenarios for central banks and supervisors - Phase IV | NGFS](#)

❖ **NGFS scenarios framework**

The Divergent Net Zero (1.5 °C) scenario, previously included in Phase III, has been phased out in this new fourth vintage given the reduced likelihood of a successful uncoordinated transition (this is marked with a cross in the framework).



Positioning of scenarios is approximate, based on an assessment of physical and transition risks out to 2100.

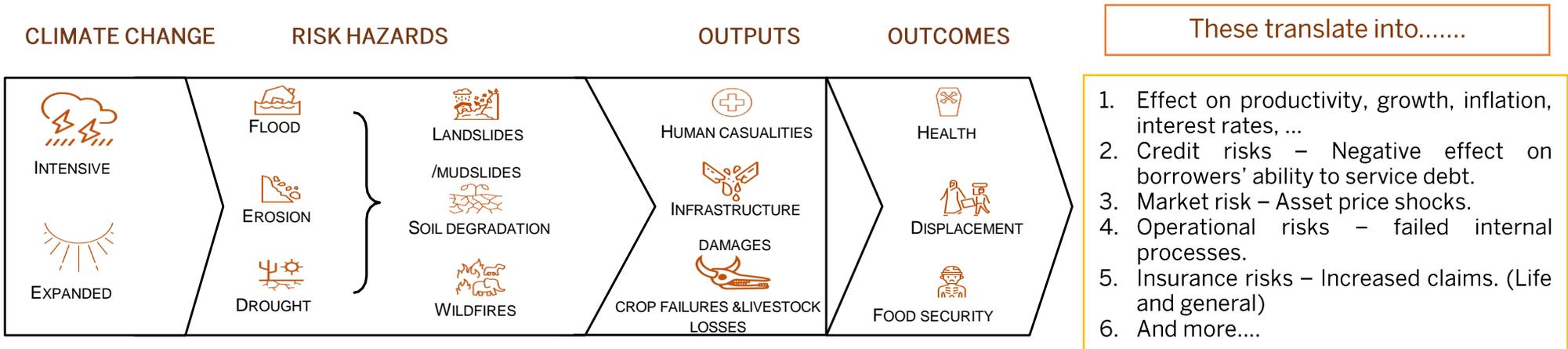
**Annex 5: Examples of Climate-related and environmental financial risks and their transmission mechanism**

| Risk drivers   |   | Transmission Channels   |   | Financial/Prudential Risks   |
|--|---|---|---|--|
| <b>1. Physical risks</b>   |   |   |   |  |
| <b>1.1. Climate -related</b>   |   |   |   | <p><b>Credit risk</b></p> <ul style="list-style-type: none"> <li>•Physical - Negative effect on borrowers’ ability to service debt after climate event.</li> <li>•Transition - Transition measures may trigger substantial adaptation costs and lower profitability, which may lead to an impact on the ability to repay as well as lower collateral values.</li> </ul>        |
| <p>Acute (floods, droughts, storms, landslides)<br/>Chronic (sea level rise, temperature increase)</p>   | ➔ | <p>Physical and transition risks transmit to financial risks through both Macro and Micro Economic Channels. Physical impacts are not just risks for the future and they are already impacting the economy and financial system today. Estimates suggest that in the absence of action to reduce emissions, the physical impact of climate change on the global economy in the second half of the century will be substantial. Further, transitioning to low carbon economy also brings risks and opportunities. understandably, the economic costs of the transition would stem from a disruptive transition and the need to switch to – initially more expensive – low-carbon technologies in some sectors. Nevertheless, the estimated costs are likely to be small compared to the costs of no climate action. Below are some examples of Micro and Macro Economic Transmission Channels:</p> | ➔ | <p><b>Market risk</b></p> <ul style="list-style-type: none"> <li>•Physical - Severe physical events may lead to Asset price shocks and increased market volatility.</li> <li>•Transition - Transition risk drivers may generate an abrupt repricing of securities and derivatives, for example for products associated with industries affected by asset stranding.</li> </ul> |
| <b>1.2. Environmental</b>  |   |   |   |  |
| <p>Air pollution, Water pollution, Water stress, Land contamination, Degradation of soil quality, Desertification, Deforestation, Biodiversity loss, Resource scarcity</p> |   |   |   |  |
| <b>2. Transition risks</b>   |   |   |   | <p><b>Operational risk</b></p> <ul style="list-style-type: none"> <li>•Physical - Failed internal processes due to climate events like floods</li> <li>•Transition - Increasing legal and regulatory compliance risk associated with climate-sensitive investments and businesses</li> </ul>   |

| Risk drivers  | Transmission Channels  |   | Financial/Prudential Risks  |
|---|--|---|---|
| <p><b>2.1. Climate -related</b></p>   | <p><b>Microeconomic</b></p> <ul style="list-style-type: none"> <li>• How climate-related and environmental risk drivers impact households, corporates and issuer-specific financial assets (Lower household revenue and wealth, Lower corporate profitability and increased litigation, Lower residential and commercial property values, corporate devaluation...)</li> </ul> | <p><b>Macroeconomic</b></p> <ul style="list-style-type: none"> <li>• How climate-related and environmental risk drivers impact macroeconomic variables (Business disruptions that affect productivity and growth, inflation-Increase in commodity prices, interest and exchange rates, migration and unemployment, reinvestment and replacements...)</li> </ul> | <p><b>Liquidity risk</b></p> <ul style="list-style-type: none"> <li>•Physical - customers demand for liquidity in order to finance damage repairs.</li> <li>•Transition - Ability of FIs to liquidate assets to transition to green assets</li> </ul>   |
| <p>Government policy (carbon tax, Other green energy transition measures...)<br/>         Technological change (electric vehicles...)<br/>         Shifting market or customer sentiment with preferences for greener alternatives(e.g. preference to flying or not...)</p> <p><b>2.2 Environmental</b></p> |  |   | <p><b>Insurance risks</b></p> <ul style="list-style-type: none"> <li>•Physical - Increased claims (Life and general), direct financial losses and claims experience resulting from greater claim frequency and / or severity due to weather events</li> <li>•Transition - the cost of complying with climate change-related legislation such as climate change financial risk disclosures.</li> </ul> |

| Risk drivers  |  | Transmission Channels   |  | Financial/Prudential Risks   |
|---|--|---|--|--|
| Policy, legislation, and regulation changes:<br>o Pollution control<br>o Pesticide control<br>o Environmental conservation measures<br>Technological changes with shift to greener alternatives |  | <b>Sources of variability</b><br><br>• <b>Geographic heterogeneity:</b> risk drivers, economies, and financial systems, ...<br>• <b>Amplifiers:</b> non-linearities, herd behavior in markets, ...<br>• <b>Mitigants:</b> insurance and hedging, depth of capital markets, capital buffers... |  | <b>Other types of risks</b><br><br>•Reputational and litigation risk e.g., Failed internal processes, past environmental conduct.<br><br>•Business Models - Transition risk drivers may affect the viability of some business lines and lead to strategic risk for specific business models if the necessary adaptation or diversification is not implemented.<br><br>•Liability risks: Climate change could also expose FIs to litigation and resulting damages from failing to comply with relevant climate change-related legislation or even failure to act. |

**Note:** While considering the above examples of climate-related and environmental risks, FIs shall be aware that Rwanda with its low industrial power and agriculture as the main economic activity, Rwanda is mainly exposed to physical rather than transition risks mainly considering the climate change risks drivers illustrated below.



**SEEN TO BE ANNEXED TO GUIDELINES N° 2600/2023 – 00036 [616] OF 29/11/2023 ON CLIMATE-RELATED AND ENVIRONMENTAL FINANCIAL RISKS MANAGEMENT FOR FINANCIAL INSTITUTIONS.**

**Done at Kigali on 29<sup>th</sup> November 2023**

**RWANGOMBWA John  
Governor**