ESG LED SUSTAINABLE BANKING

GREEN FINANCE - WHY, WHEN, HOW, CHALLENGES, PROGRESS, AND IMPACTS

INTEGRATED CLIMATE RISK MANAGEMENT

RK ANAND

CRM needs Focus: Sustainable Banking – Safe Banking

Walk the 5P-SDG way: People, Planet, Prosperity, Peace and Partnership

EMERGING GREEN REGULATIONS

CBAM (Carbon Border Adjustment Mechanism) has been finalized, and only the notification is due. From 1 October this year, all exports of steel, aluminium etc., will be monitored, and Indian exporters will declare the carbon content of these products per tonne to their importers. But from 1 January 2026, taxes will begin. This means the transition period is to get the data right. The EU’s default tax rate is 100 euros per tonne," said Ajay Srivastava, co-founder of Global Trade Research Initiative (GTRI).

Envision: Transformation from Ideating and Innovating to Implementation.

RBI GUIDELINES ON GREEN BANKING

ICAI is working on an India-specific sustainability-disclosure framework that can be acceptable to global investors and other stakeholders as well. However, to achieve this, Indian professionals and businesses need to develop a mindset to be standard setters, instead of being standard followers: SEBI.

- Regulatory interest in fund names and funds' classification and disclosure obligations are ramping up globally. Spearheaded by the EU's Sustainable Finance Disclosure Regulation (SFDR) , which imposes requirements on more transparent reporting for ESG funds, other follow suit.
- **2023: Changes in ESG fund unfolding disclosure regimes hold managers to stricter account.**

- Australia, Hong Kong and Singapore, for example, have provided guidance to standardize disclosures on the integration of ESG factors in the investment-selection process.

- Regulators in the EU and Canada have gone further by seeking to classify sustainable funds, with more extensive ESG integration requiring more disclosure.

- The U.S. has taken tentative steps with a similar but not directly comparable proposal, a significant move for the world's largest fund market (representing over 60% of global fund investments). They could see USD 3.6 trillion of sustainable investments (8% of global fund assets) subject to oversight.

- For investors, this could mean better-informed decisions. But it could also lead to the emergence of a multitude of disconnected regional standards for ESG-fund classifications, a challenge for investors in pursuit of a common ESG objective across jurisdictions.

CHALLENGE

DATA: AVAILABILITY TO TRANSPARENCY

BLOCKCHAIN

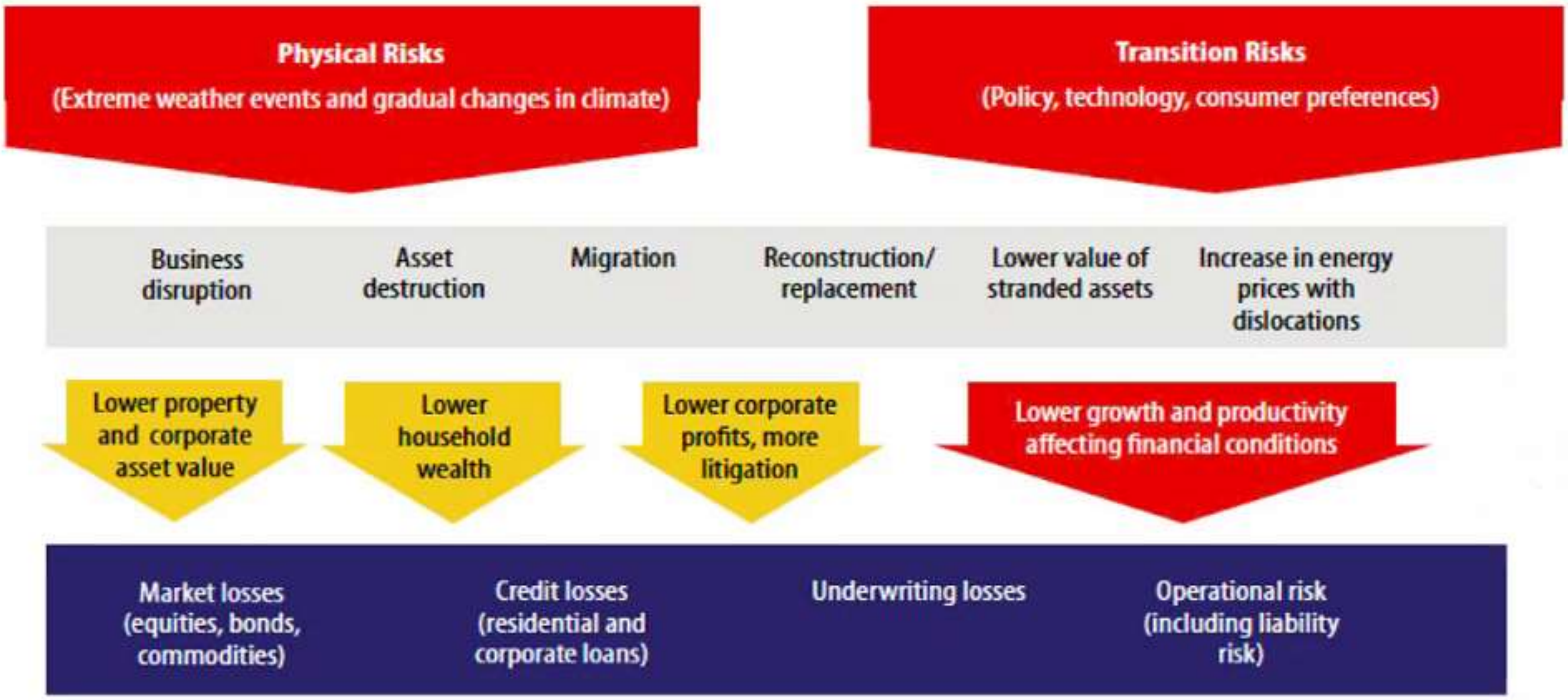
HI > AI

Solution: R & D for Conversion of Physical Data in Financial Data
Since Events are already there – Need is Data Mining around here, there and everywhere

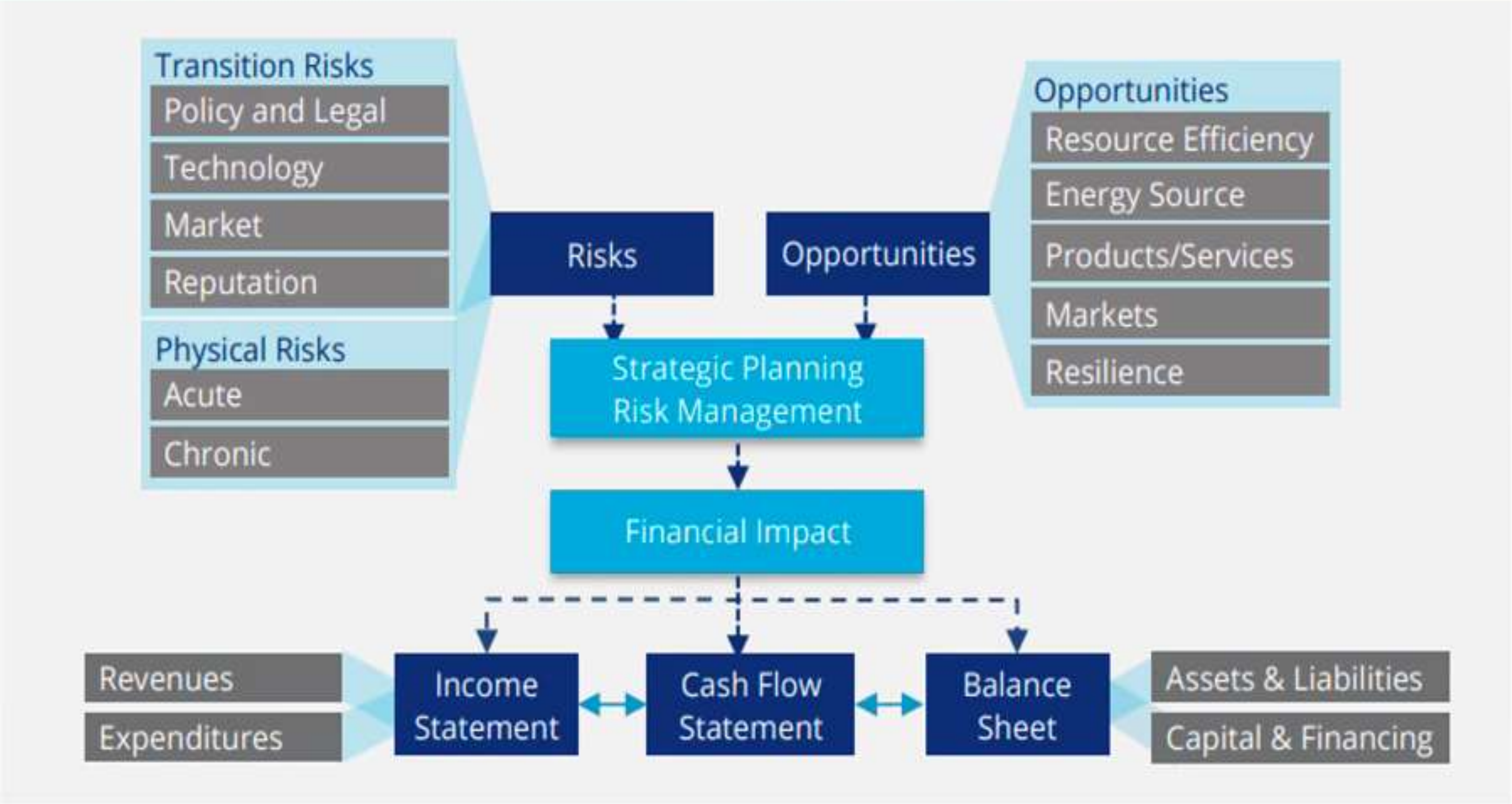
Climate-related risks			Impacts	Financial risks	Financial opportunities
Physical risks	Acute	Floods	Damages to the operations of FIs' corporate clients' manufacturing facilities and disruptions to their supply chains	Credit risk: Disruptions and damages result in increased costs and reduced revenues affecting corporations' ability to repay loans and increase loan default rates	Finance investments in climate resilience measures such as infrastructural upgrades or supply chain monitoring analytics
	Chronic	Increasing temperatures	Decrease in labour and agriculture productivity; disruptions to energy generation	Credit risk: The decline in profitability of affected corporates can lead to increase default rates and Loss Given Default for banks	Finance investments in energy efficient cooling, water-efficient irrigation systems, energy management systems
	Policy and legal risk	Introduction of a carbon tax/pricing scheme to limit utilisation of fossil fuels[2]	Higher costs for oil & gas companies and coal-fired power producers. Reduction in market demand for these companies' products	Market risk: Decrease in these companies' assets market valuation	Invest in green assets such as renewable energy infrastructures or companies aligned with the low-carbon transition

Transition risk	Technology risk	Technological innovation results in a decline in renewable energy costs[3]	Reduced market shares and pricing of fossil-fuel based companies	Credit and market risk: Reduced sales and profits lead to higher default rates and Loss Given Default and/or decreased asset value	Invest in renewable energy and supporting infrastructures and clean technology providers
	Reputational risk	Loss of clients/ investors due to fossil fuel exposure	Sentiment shifts lead to a sudden decline in price / valuation of carbon-intensive assets hold by an FI and sector stigmatisation	Liquidity risk: inability to sell such assets	Adopt and disclose in alignment with the TCFD and engage clients to decarbonise and implement the TCFD

Climate Risk – How it translates into Banking Risks



TCFD – CLIMATE RELATED RISKS, OPPORTUNITIES AND FINANCIAL IMPACT



Let Green begin: Anyway you can

Carbon-neutral: You emit but offset the emissions – buy carbon credits, plant trees, finance renewable projects, etc. It's a short-term solution.

Net-zero: You take concrete measures to reduce your emissions in a targeted manner – use renewable energy, use sustainable materials, efficiency improvements, electrification, etc. You cannot offset your emissions. This is the long-term goal.

PRINCIPLES FOR RESPONSIBLE BANKING

Creating the future of banking

The Principles for Responsible Banking are a unique framework for ensuring that signatory banks' strategy and practice align with the vision society has set out for its future in the Sustainable Development Goals and the Paris Climate Agreement.

The framework consists of 6 Principles designed to bring purpose, vision and ambition to sustainable finance. They were created in 2019 through a partnership between founding banks and the United Nations. Signatory banks commit to embedding these 6 principles across all business areas, at the strategic, portfolio and transactional levels.

RESPONSIBLE BANKING

The Principles for Responsible Banking are a unique framework for ensuring that signatory banks' strategy and practice align with the vision society has set out for its future in the Sustainable Development Goals and the Paris Climate Agreement.

PRINCIPLES FOR RESPONSIBLE BANKING

A 3-step process guides signatories through implementing their commitment:

1. **Impact Analysis:** identifying the most significant impacts of products and services on the societies, economies and environments that the bank operates in.
2. **Target Setting:** setting and achieving measurable targets in a banks' areas of most significant impact.
3. **Reporting:** publicly report on progress on implementing the Principles, being transparent about impacts and contributions.

Through the Principles, banks are convened by the United Nations to collectively produce cutting-edge guidance and pioneering tools on key areas of sustainable finance, learn best-practice from their peers, scientists and industry experts, and benefit from individual feedback and collective reviews as they progress on their sustainability journey.

ESG investing **focuses on companies that follow positive environmental, social, and governance principles**. Investors are increasingly eager to align their portfolios with ESG - related companies and fund providers, making it an exciting area of growth that also has positive effects on society and the environment.

Environmental aspect: Data is reported on climate change, greenhouse gas emissions, biodiversity loss, deforestation, pollution, energy efficiency and water management. Social aspect: Data is reported on employee safety and health, working conditions, diversity, equity, and inclusion, and conflicts and humanitarian crises,[9] and is relevant in risk and return assessments directly through results in enhancing (or destroying) customer satisfaction and employee engagement.

Governance aspect: Data is reported on corporate governance such as preventing bribery, corruption, Diversity of Board of Directors, executive compensation, cybersecurity and privacy practices, and management structure.

ESG RATING

ESG ratings is all about transparency and how companies are updated in following new trends and disclosure requirements like TCFD. At S&P we are not into primary research rather we collect the data from company own resources.

CSA(Corporate Sustainability Assessment) which is one of the standard through comparative analysis are done between companies.

Whether the information supplied by the company are according to various standards like GRI, CDP, DJSI. We cover around 13 indexes throughout the world with DJSI being the main project.

RBI- Key Learnings and Suggestions - Survey on Climate Risk and Sustainable Finance

Governance: Banks need to put in place a mechanism at either the Board or top management level for overseeing and scaling up initiatives relating to climate risk and sustainability. They could consider including KPIs on climate risk, sustainability and ESG as a part of the performance evaluation of their top management.

Risk management: Banks need to grasp the physical, transition and liability risks associated with climate risk and also actively start managing them to make their loan and investment portfolios more resilient to such risks[5]. Further, banks need to develop a strategy for managing climate risk and integrating with risk management framework.

Climate-related financial disclosures: Banks need to align their climate-related financial disclosures with an internationally accepted framework[6] to improve the comparability and consistency of the disclosures with their counterparts globally.

Opportunities from transition to a green future: Banks could consider mobilizing new capital to scale up green lending and investment or set a target for incremental lending and investment for sustainable finance.

Human Resources (HR) and capacity building: Banks need to invest significantly in the capacity building of their staff on climate risk, ESG and sustainable finance. Further, banks will require dedicated resources in this area to successfully tap the opportunities arising from climate change, sustainable finance and the growing focus on ESG.

Moving towards a low-carbon environment in banking operations: Banks could come out with a strategy to reduce emissions from their own operations[7]. In line with India's commitment at the COP26Summit[8], banks may also consider working on a timeline to move towards net-zero emissions.

INTEGRATION – ESG & SF

Climate risk as a part of the risk management framework

UN – PRINCIPLES

PRINCIPLE 1: ALIGNMENT

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.

PRINCIPLE 2: IMPACT & TARGET SETTING

We will continuously increase our positive impacts while reducing the negative impacts on, and managing the risks to, people and environment resulting from our activities, products and services. To this end, we will set and publish targets where we can have the most significant impacts.

PRINCIPLE 3: CLIENTS & CUSTOMERS

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

PRINCIPLE 4: STAKEHOLDERS

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

PRINCIPLE 5: GOVERNANCE & CULTURE

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

PRINCIPLE 6: TRANSPARENCY & ACCOUNTABILITY

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.

TCFD – RECOMMENDATIONS AND SUPPORTING RECOMMENDED DISCLOSU

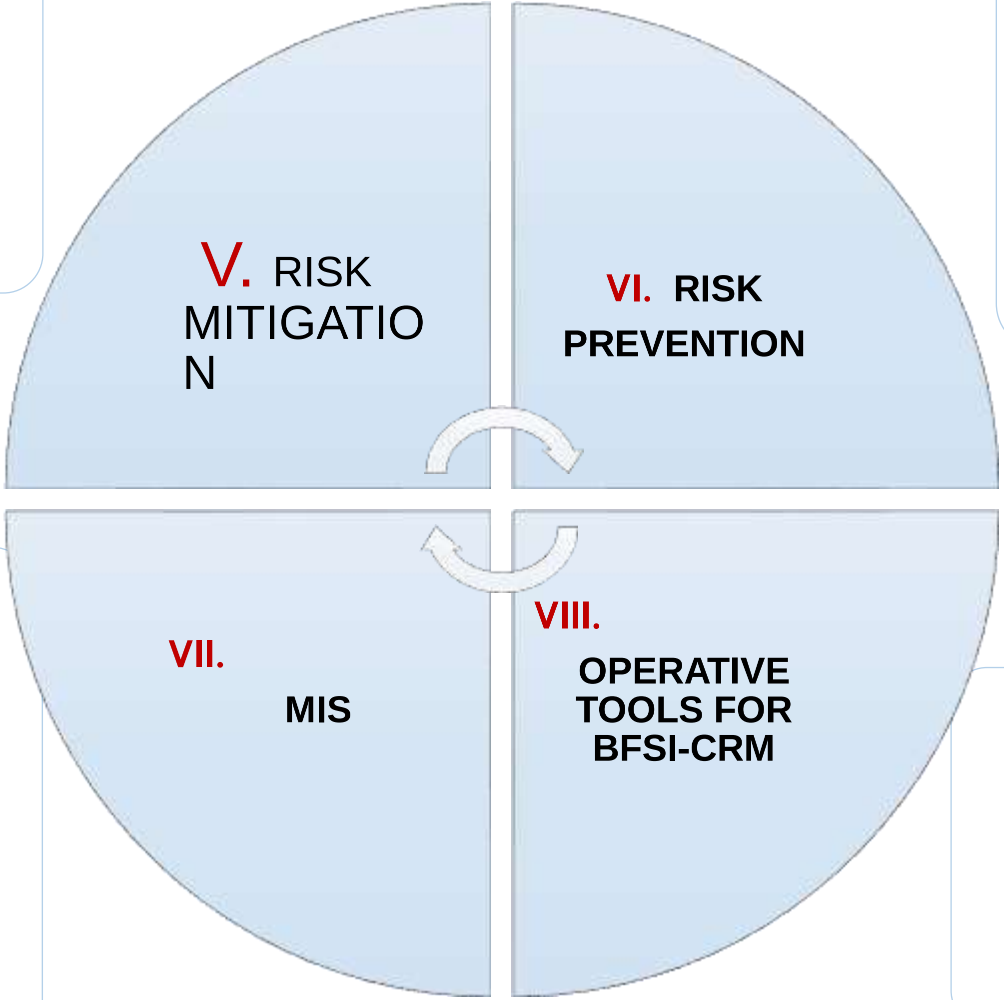
Recommendations and Supporting Recommended Disclosures

Governance	Strategy	Risk Management	Metrics and Targets
Disclose the organization's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Recommended Disclosures	**Recommended Disclosures**	**Recommended Disclosures**	**Recommended Disclosures**
a) Describe the board's oversight of climate-related risks and opportunities.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	a) Describe the organization's processes for identifying and assessing climate-related risks.	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
b) Describe management's role in assessing and managing climate-related risks and opportunities.	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	b) Describe the organization's processes for managing climate-related risks.	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

INTEGRATED ESG & BANKS' RISK MANAGEMENT

- **I**
- **Understanding CLIMATE RISK FOR FINANCE**
- **MAPPING CLIMATE RISK UNDER BASEL RISK MGT. FRAMEWORK ,GOI & RBI Regulations**
- **CRMF Policy**

- II
- PROBABLE ENTRY POINTS OF CLIMATE RISK IN ALM OF BFSIs



- **III**
- **CARBON CREDIT DATA**
- **QUANTIFICATION : DATA MANGEMENT**
- **FACTORING CLIMATE TRANSITION DATA IN RISK MODELLING**
- **PROBABILITY OF DEVEOLVEMENT ON INDIVIDDUAL SECTORS, INDUSTRIES and ACCOUNTS**

- **IV**
- **IMPACT ON CAMELS RATING OF BANK/ FI**
- **RATING INDIVIDUAL ACCOUNTs**

Integrated CRM:

- Integration of CRM – ESG in Corporate Governance
- Integration of CRM into BPRMN
- Credit Risk: CR- Stress Testing, Scenarios and Simulation Risk Models
- Market Risk: Sensitivity study to work out VaR
- Operational Risk: Redesign BPR & DRM by adding CRM
- Liquidity Risk: Likely change in Market Macros w.r.t. Climate Change
- Interest Risk: Green Banking, Finance & Investment may attract Differential Pricing
- Addition of Climate Data Points in Financial Data: Carbon Data, Credits, Taxes and Regulations

INTEGRATION – ESG EMBEDDED BRMF FOR SUSTAINABLE FINANCE

ESG PARAMETERS

BASEL RMF – THREE PILLARS

ESG – EMBEDED ALM

ESG - BASEL EMBEDDED RWAs

ESG EMBEDDED – PD, EAD, LGD, M

ESG - RAROC

ESG – BRMF DISCIPLINE & DISCLOSURES

THANK YOU