

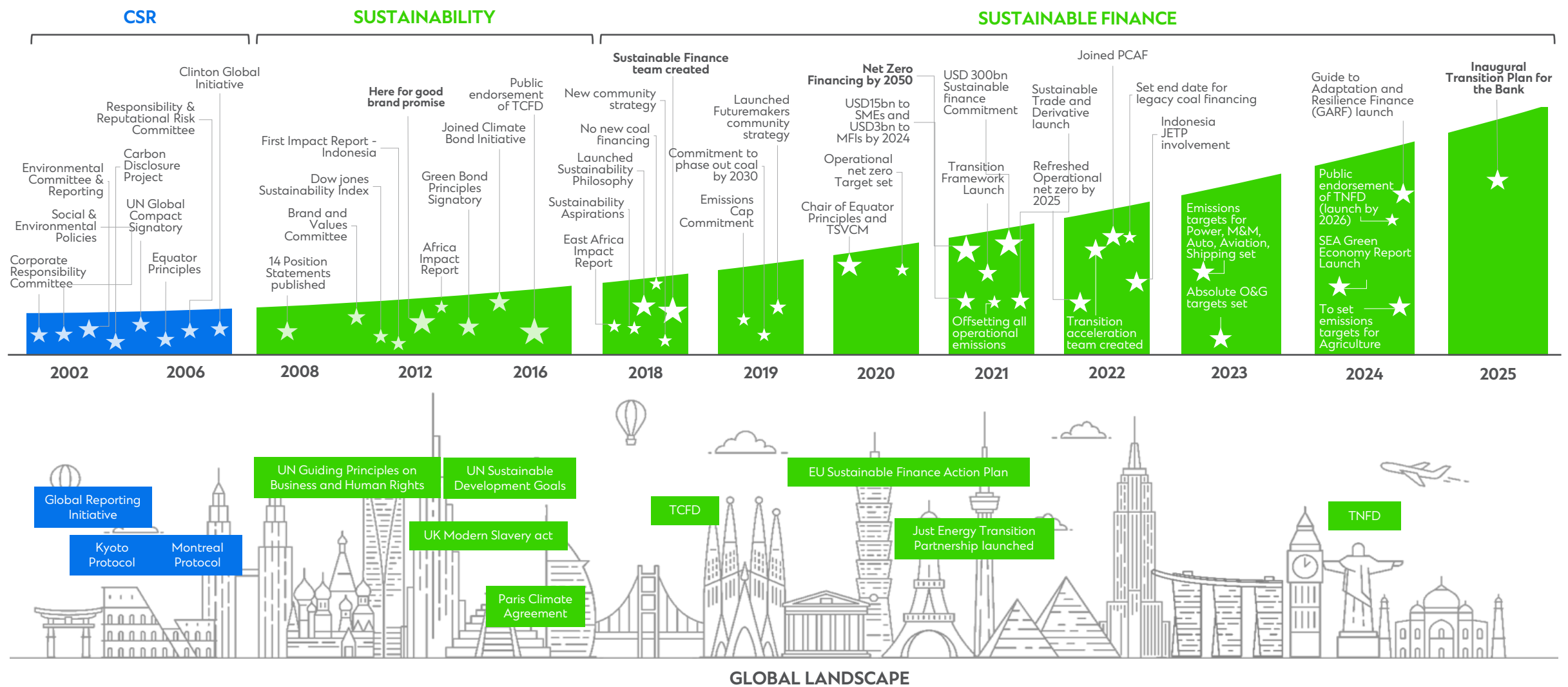
ESG, Climate Risks & Sustainable Finance

By Ayman Khalifa



Standard Chartered's Sustainable Finance Journey

From philanthropy to incorporating SDGs in our financing decisions



ESRM Framework - Overview

How does SC manage E&S risks?

External Standards & Frameworks



International Finance Corporation
WORLD BANK GROUP

Creating Markets, Creating Opportunities

Performance Standards

IFC Performance Standards on Environmental and Social Sustainability

Overview of Performance Standards on Environmental and Social Sustainability

1. IFC's Sustainability Framework articulates the Corporation's strategic commitment to sustainable development, and is an integral part of IFC's approach to risk management. The Sustainability Framework comprises IFC's Policy and Performance Standards on Environmental and Social Sustainability, and IFC's Access to Information Policy. The Policy on Environmental and Social Sustainability describes IFC's commitments, roles, and responsibilities related to environmental and social sustainability. IFC's Access to Information Policy reflects IFC's commitment to transparency and good governance on its operations, and outlines the Corporation's institutional disclosure obligations regarding its investment and advisory services. The Performance Standards also describe IFC's commitments, roles, and responsibilities related to environmental and social sustainability, providing guidance on how to identify risks and impacts, and are designed to help avoid, mitigate, and manage risks and impacts as a part of doing business in a sustainable way, including stakeholder engagement and disclosure obligations of the client in relation to project-level activities. In the case of its direct investments (including project and corporate finance provided through financial intermediaries), IFC requires its clients to apply the Performance Standards to manage environmental and social risks and impacts as part of management opportunities and enhanced. IFC uses the Sustainability Framework along with other strategies, policies, and initiatives to direct the business activities of the Corporation in order to achieve its overall development objectives. The Performance Standards may also be applied by other financial institutions.



IAEA
International Atomic Energy Agency

CERTIFIED SUSTAINABLE PALM OIL
RSPO

ICMM
International Council on Mining & Metals

ISCC
International Sustainability & Carbon Certification

And more...



Our Position Statements

Cross-sector Requirements

Our standards

Whichever sectors our clients operate in, we ask them to meet the following set of standards before we can work together:

- Laws, regulations and performance standards
- Heritage and natural values
- Human rights
- Climate change

Sensitive Sector Position Statements

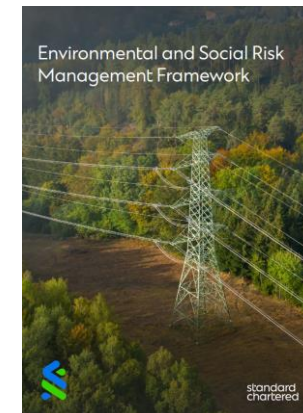
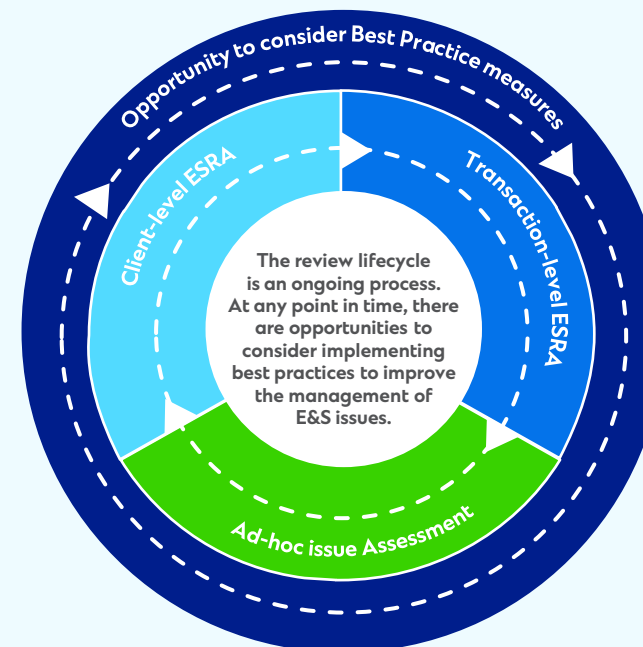
Dealing with sensitive sectors

We use these position statements to help us uphold our standards

Extractive industries Our approach to the oil, gas, mining and metals industries Read more →	Power generation Our approach to the power generation industry Read more →	Agri-industries Our approach to the food, fishing and agricultural industries Read more →
Infrastructure and transport Our approach to the infrastructure, transport and logistics industries Read more →	Chemicals and manufacturing Our approach to the chemicals and manufacturing industries Read more →	Prohibited activities When we will not provide financing Read more →

Available [here](#)

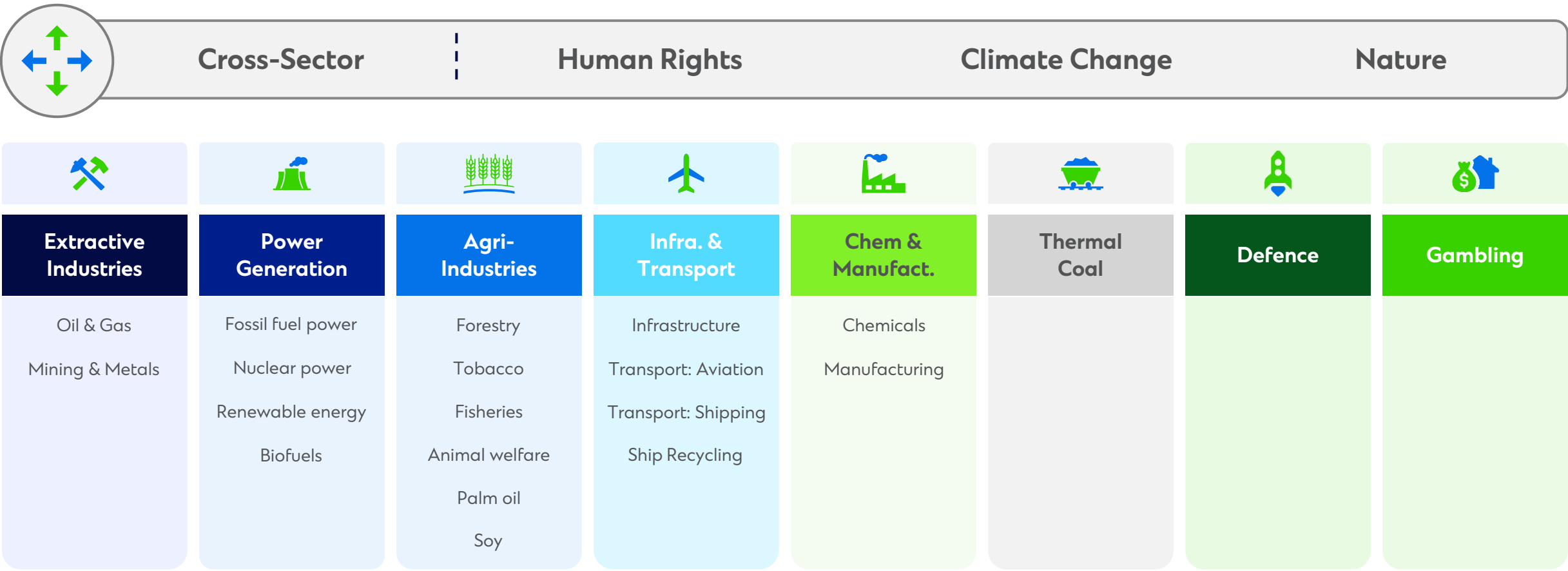
Risk Assessment Tools



Available [here](#)

Position Statements

We currently have 8 existing sectoral and 3 cross-sector Position Statements (PS)



We have published updated Position Statements in February 2024 – Available [here](#)

Applying our criteria – The review lifecycle

1. Client-level ESRA

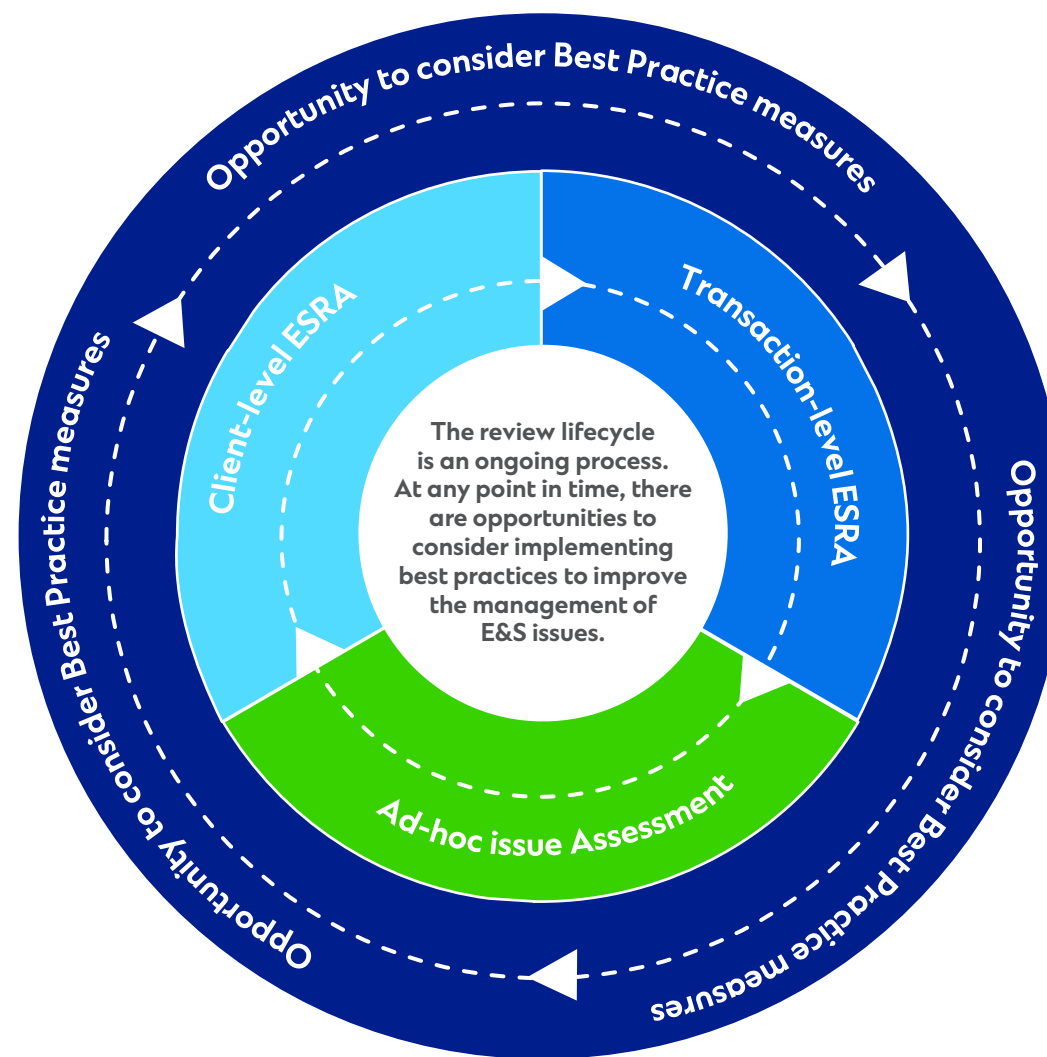
- Initial Borrowing Limits
- Annual Renewal
- Benchmarks clients' E&S risks and responses against SCB Criteria

2. Transaction-level ESRA

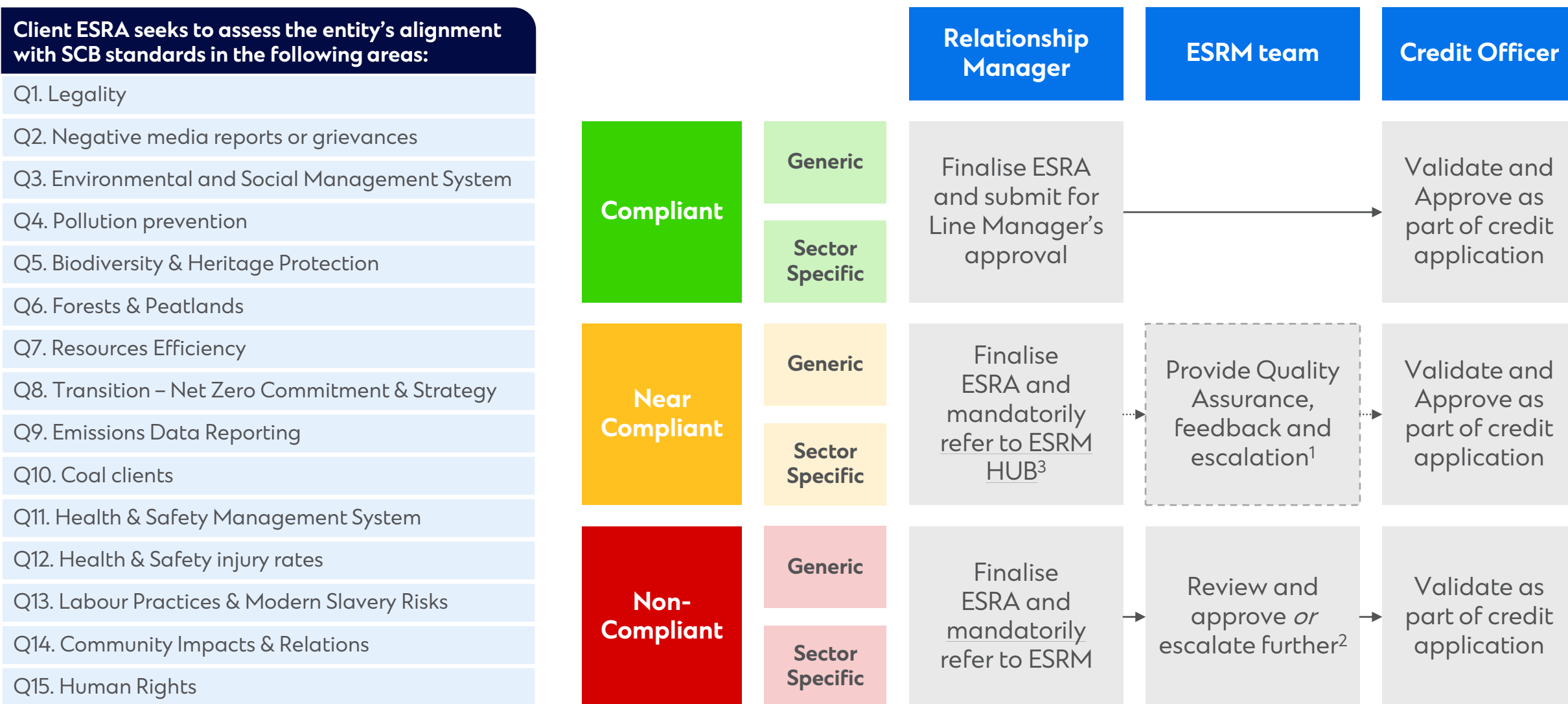
- Transaction involving a project / asset
- Equator Principles Procedure
- Benchmark project / asset E&S risks and responses against SCB Criteria

3. Ad-hoc issue assessment

- Media / NGO issue
- Determines any emerging misalignment with SCB Criteria



How a Client ESRA moves through our risk acceptance process

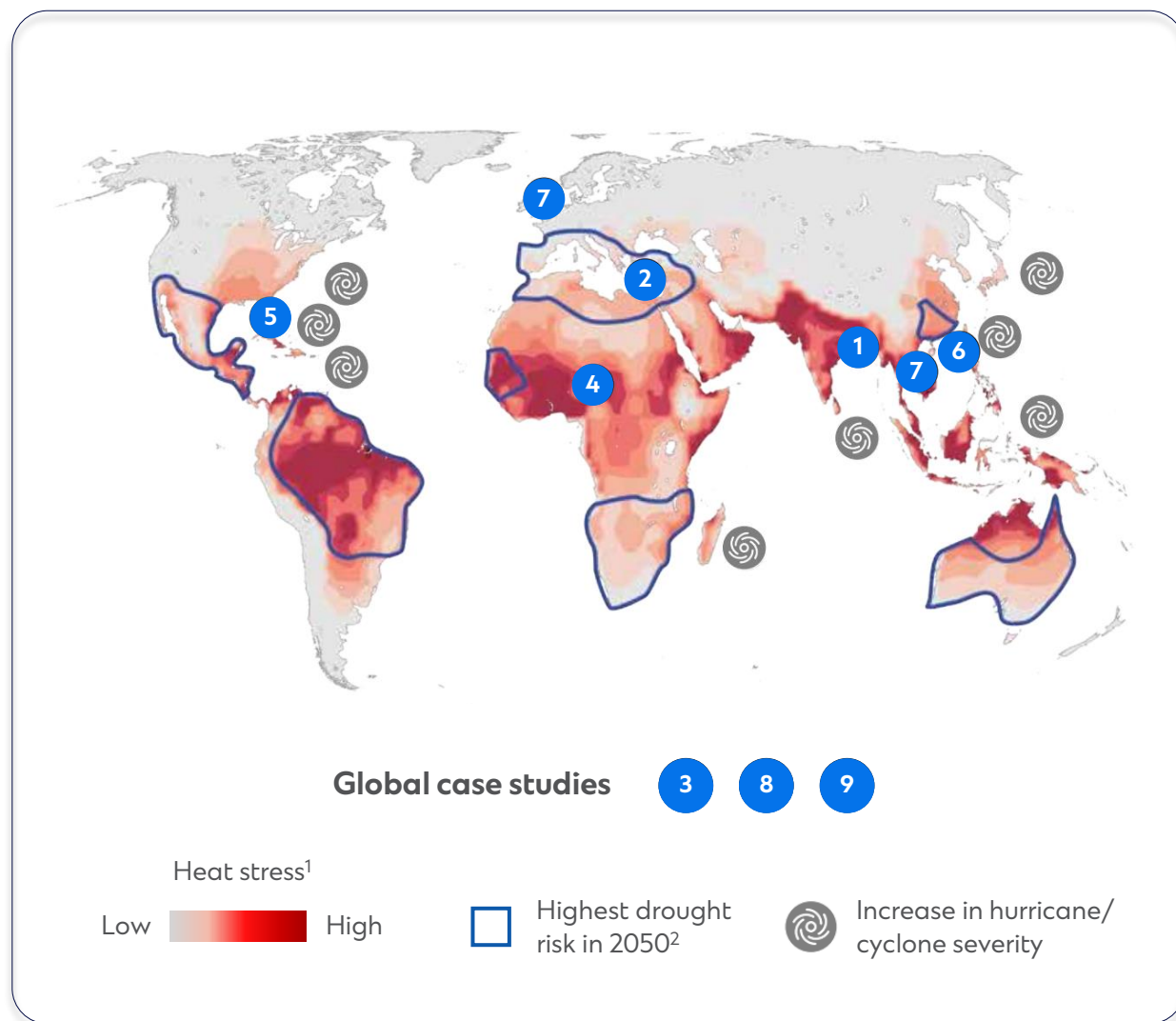


Climate Risks

Climate Risk Taxonomy

Climate Risk	The potential for financial loss and non-financial detriments arising from climate change and society's response to it.	
Physical Risk	Risks arising from increasing severity and frequency of climate and weather-related events, which can damage property and other infrastructure, disrupt supply chains, and impact food production. Additionally, they may lead to declining assets valuations and challenges with insurance claims, resulting in greater financial losses. Indirect effects on the macroeconomic environment, such as lower output and productivity, may exacerbate these direct impacts.	
	Acute	Specific event-driven weather events, including increased severity of extreme weather events, such as cyclones, hurricanes, floods, or wildfires.
	Chronic	Longer-term shifts in climate patterns, such as changing precipitation patterns, sea-level rise, and longer-term drought.
Transition Risk	Risk arising from the adjustment towards a carbon-neutral economy, which will require significant structural changes to the economy. These changes will prompt a reassessment of a wide range of asset values, a change in energy prices, and a fall in income and creditworthiness of some borrowers. In turn, this leads to credit losses for lenders and market losses for investors.	

Physical Climate Risks impact by 2030-2050



Liveability and workability

- 1 Will India get too hot to work?
- 2 A Mediterranean basin without a Mediterranean climate?

Food systems

- 3 Will the world's breadbaskets become less reliable?
- 4 How will African farmers adjust to changing patterns of precipitation?

Physical assets

- 5 Will mortgages and markets stay afloat in Florida?
- 6 Could climate become the weak link in your supply chain?

Infrastructure services

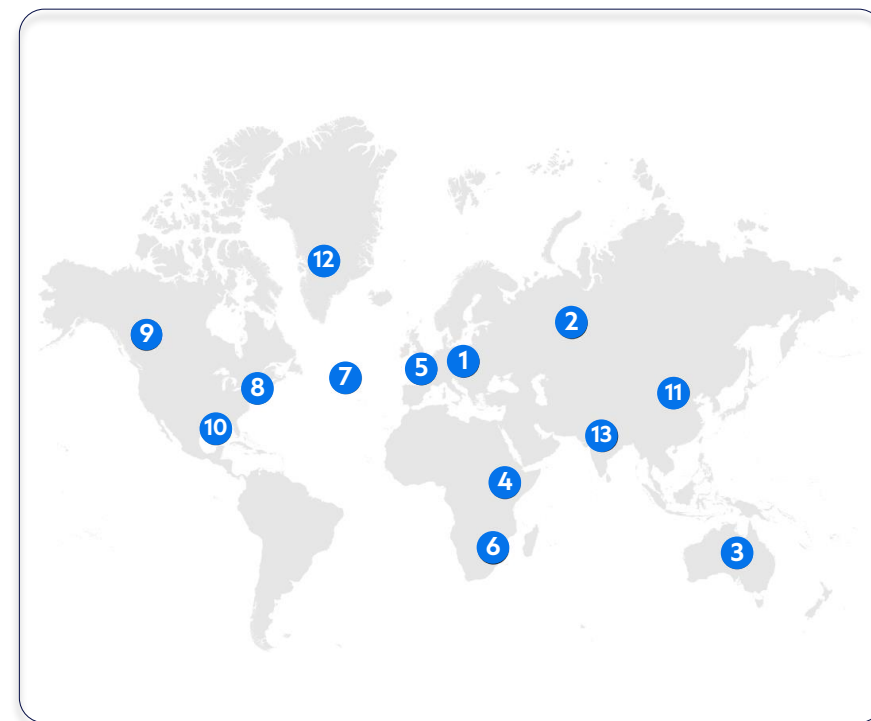
- 7 Can coastal cities turn the tide on rising flood risk?
- 8 Will infrastructure bend or break under climate stress?

Natural capital

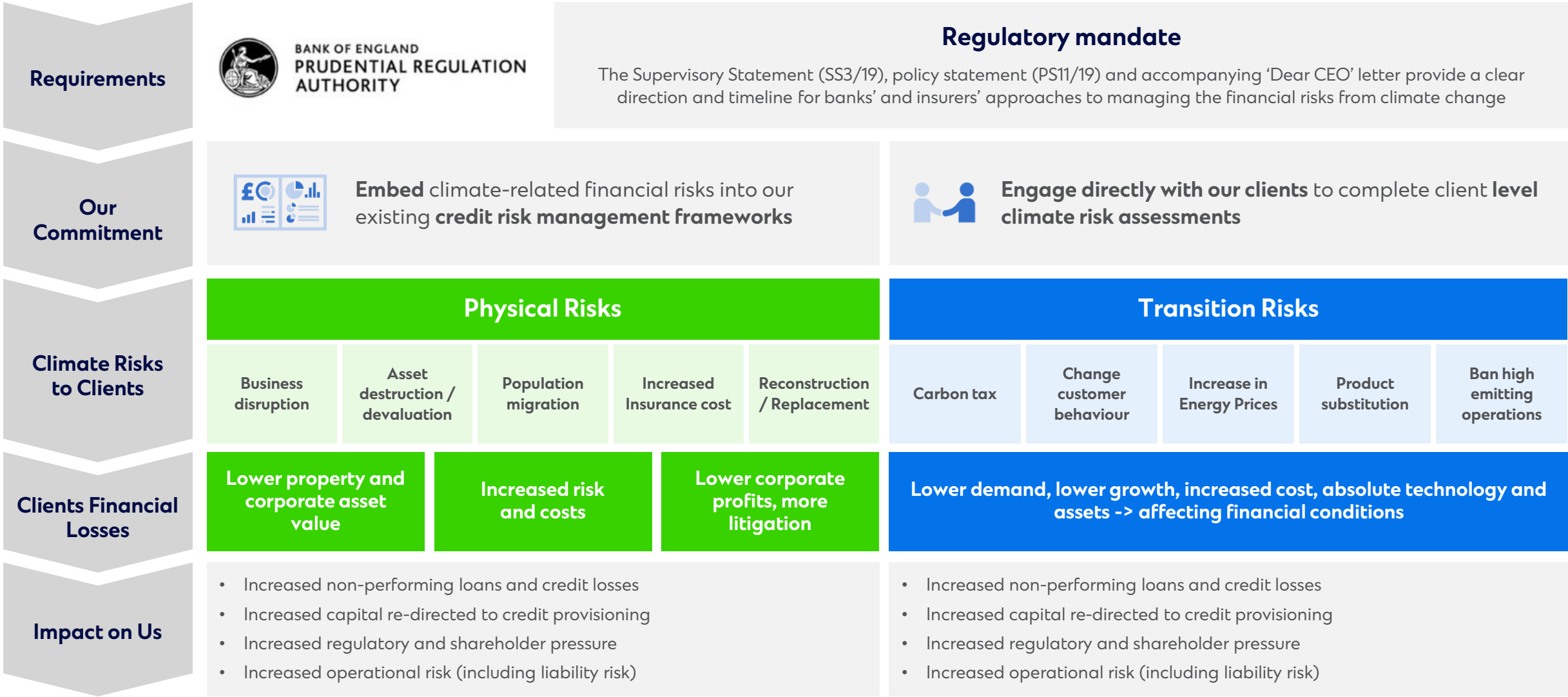
- 9 Reduce dividends on natural capital?

Socioeconomic impact of climate change is already manifesting and affects all geographies

Impact economic system		Area of direct risk	Socioeconomic impact	How climate change exacerbated hazard
Liveability and workability	1.	2003 European heat wave	\$15 billion in losses	2x more likely
	2.	2010 Russian heat wave	~55,000 deaths attributable	3x more likely
	3.	2013–14 Australian heat wave	~\$6 billion in productivity loss	Up to 3x more likely
	4.	2017 East African drought	~800,000 people displaced in Somalia	2x more likely
	5.	2019 European heat wave	~1,500 deaths in France	~10x more likely in France
Food systems	6.	2015 Southern Africa drought	Agriculture outputs declined by 15%	3x more likely
	7.	Ocean warming	Up to 35% decline in North Atlantic fish yields	Ocean surface temperatures have risen by 0.7°C globally
Physical assets	8.	2012 Hurricane Sandy	\$62 billion in damage	3x more likely
	9.	2016 Fort McMurray Fire, Canada	\$10 billion in damage, 1.5million acres of forest burned	1.5 to 6x more likely
	10.	2017 Hurricane Harvey	\$125 billion in damage	8–20% more intense
Infrastructure services	11.	2017 flooding in China	\$3.55 billion of direct economic loss, including severe infrastructure damage	2x more likely
Natural capital	12.	30-year record low Arctic seaice in 2012	Reduced albedo effect, amplifying warming	70% to 95% attributable to human-induced climate change
	13.	Decline of Himalayan glaciers	Potential reduction in water supply for more than 240 million people	~70% of global glacier mass lost in past 20 years is due to human-induced climate change



Overview of Climate Risk at Standard Chartered



Overview of the Africa and Middle East (AME)

Policy Risk is moderate throughout the region but is very much country dependent

Among the top markets in AME, only South Africa has a mandatory carbon pricing mechanism in place. Some spillovers from Europe such as CBAM will require industries to step up in their transition planning.

Transition risks continue to be driven by reliance on fossil fuel

Overall, the AME region is home to the highest concentration of fossil-fuel reliant countries, with the majority of Middle Eastern markets have high fiscal and external reliance on Oil & Gas, leading to increase in vulnerabilities to the transition away from fossil fuels. However, in-house decarbonization efforts throughout the Middle East are strong. All major Middle East countries have material plans for renewable electricity production. Banks & Investors will play significant role in this agenda.

High level of physical risks throughout the region. Wealth levels and fiscal flexibility to investment in adaptation are key drivers

AME expected to be materially impacted by physical climate risk events, with significant policy action and investment in adaptation required to limit the impact.

- Middle East is expected to face more rapid temperature rises, heatwaves and dry conditions. -> material impact on productivity, especially for outdoor sectors such as construction and engineering
- Some recent extreme temperature events 52°C in Mecca -> reported 1,300 heat-related fatalities during Haj. Increase in unseasonal rainfall events such as significant flood events in Dubai nearly 4 inches (99 mm) of rain in 12 hours > annual rainfall of 3.73 inches (94.7 mm).
- Significant flood events also occurred in East Africa causing floods, triggering landslides and displacement of over 190,000 people, alongside destruction of farmland and livestock.
- Nigeria and Pakistan also suffered significant flood events in 2022 with damage estimated at ~USD9 billion.

Situation in Egypt

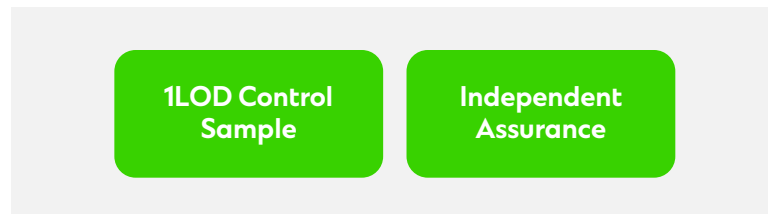


Future projections indicate Egypt will suffer from sea level rise, water scarcities and deficits, as well as an increase in the frequency and intensity of extreme weather events such as heat waves, sand and dust storms, flash floods, rock slides and heavy rains

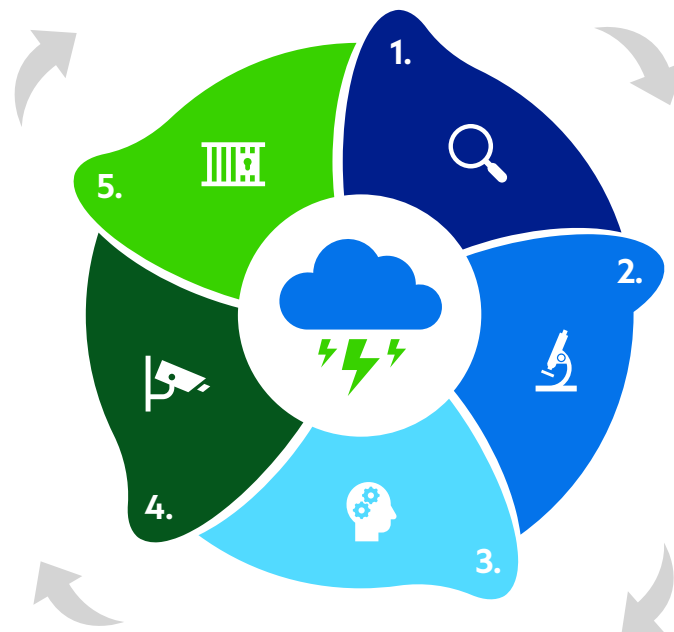
Key sectors impacted include water resources, agriculture, fisheries, health, housing, biodiversity, telecommunications, energy, tourism, and coastal zones

Assessing Climate Risk impact on Credit Risk CIB

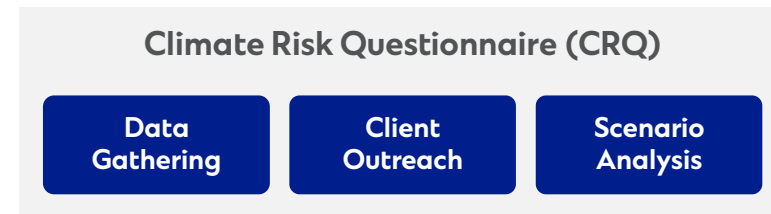
5. Controls and Assurance



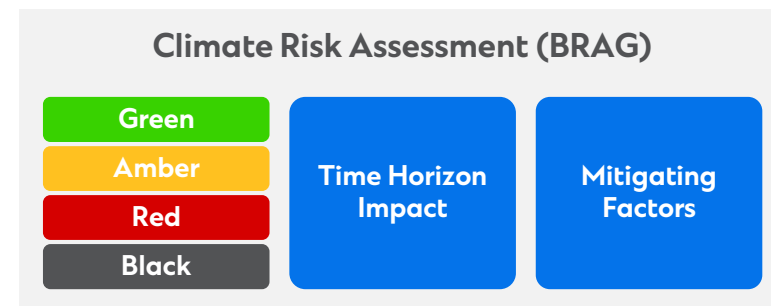
4. Portfolio Management and Monitoring



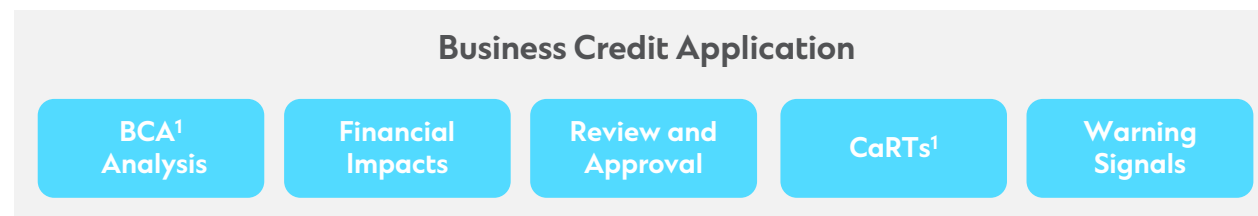
1. Identify Risks and Mitigation Plans



2. Analysing the Risk



3. Evaluating the Risk



Client level assessment key points

 Governance and Disclosures	 Gross Physical Risk	 Physical Risk Adaptation	 Gross Transition Risk	 Transition Risk Mitigation
Intent, commitment and reporting	Exposure to acute and chronic events	Mitigations to acute and chronic events	Relative emissions for sector and region	Decarbonisation plan and emission targets
• Reporting of Climate targets • Board responsibility and accountability • Management incentives to manage climate risk within the organisation	• Asset locations exposed to physical risk events (Floods, Storms, Droughts etc.,) • Model output to assess current and future risk to client's operating location	• Assessment of client's adaptation plans to its operating locations and supply chain • Insurance coverage to protect against physical risk	• Reliance on fossil fuel/carbon products • Policy environmental/ impact due to sovereign decarbonisation policy in sector • Potential financial impact from various climate scenarios	• Assess client's plans and its credibility to transition its business and supply chain • Emissions reporting targets and plan to achieve them • Capex in low carbon technologies, internal carbon pricing scenarios

Assessing Physical Risk impact on retail (WRB)

In 2024, we progressed further to embed Climate Risk into our monitoring and risk management across products and segments in the WRB portfolio. As of Sep 2024, we assessed Physical Risk for 77% and Transition Risk for 52% of overall WRB portfolio



Physical Risk management approach for WRB

A- Secured Portfolio backed by, residential commercial and industrial property .. We continue to leverage Munich Re’s Risk Suite (Natural Hazards Edition) to measure acute and chronic Physical Risk impacting each asset based on their geolocation

B- Unsecured portfolios .. we assess Physical Risk that may have the potential to drive higher credit losses through second-order impacts that affect our customers’ ability to repay, employing proxies aligned to credit portfolio risk profiles.

Impact on collateral valuation



Energy price increase



Minimum building energy efficiency regulations



Retrofitting cost

Impact on borrower repayment capability



Energy price increase



Retrofitting cost



Macroeconomic impacts

Sustainable Finance

Our Rigorous Sustainable Finance Frameworks

We developed these frameworks to guide our actions and communicate our intentions

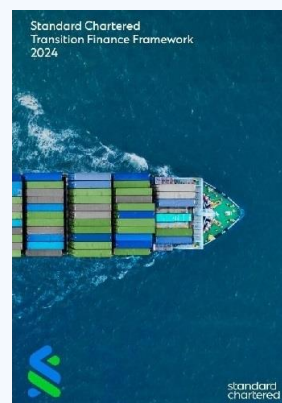
Green and Sustainable Product Framework

- Sets out the themes and activities that are eligible for labelling as 'Green' or 'Sustainable'.
- Sets out the themes under green, social and COVID-19 categories with accompanying narrative around our broader approach to sustainability at Standard Chartered, including our [Position Statements](#).
- Reviewed by Sustainalytics and is updated annually.



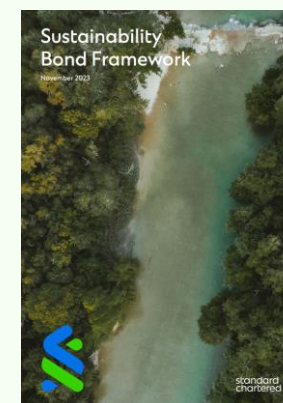
Transition Finance Framework

- Sets out the themes and activities that are eligible for labelling as 'Transition'.
- Sets out the governance processes around how we will consider assets not on the list of qualifying activities for transition labelling.
- Based on the IEA Net Zero Emissions by 2050 scenario ("NZE").
- Reviewed on at least an annual basis with expectation to evolve based on latest developments going forward.



Sustainability Bond Framework

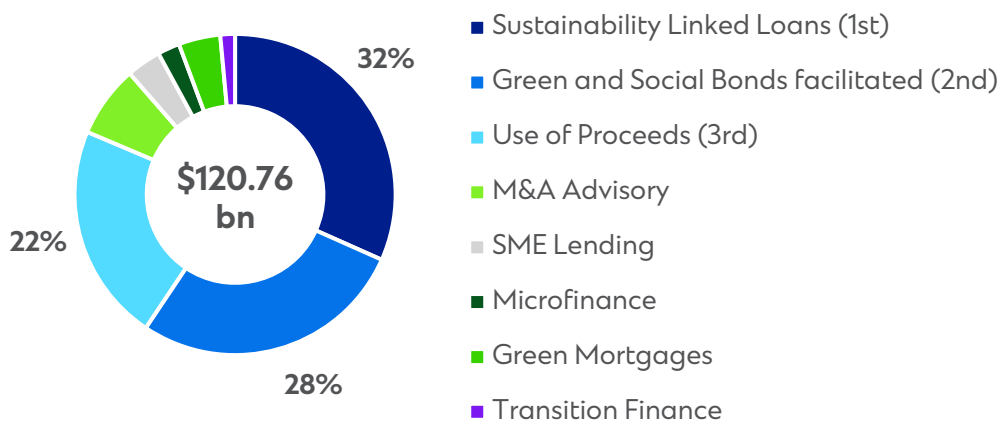
- Second Party Opinion obtained from Sustainalytics.
- Allows us to issue Group Sustainability Bonds.
- Aligns to the ICMA Sustainability Bond principles, setting out eligible use of proceeds, process for project evaluation and selection, management of proceeds, and reporting.
- Annually updated
- To date we have issued three Group Sustainability Bonds (EUR 500m in 2019; 2x USD 500m in 2021).



Our Commitment – Sustainability Aspirations:

Mobilise \$300 billion of Sustainable Finance

Total Sustainable Finance Mobilised Jan 2021 – Sep 2024



Operationalise our interim 2030 financed emissions targets to meet our 2050 net zero ambition



- All of the NZBA high-emitting sectors covered by 2030 science-based financed emissions targets
- Inaugural Transition Plan published

Enhance and deepen the sustainability ecosystem

Leadership roles in key global partnerships and initiatives



Drive social impact with our clients and communities

20,675

Decent jobs enabled and supported in 2024



Standard Chartered's Sustainable Finance Offering

Standard Chartered is supporting sustainable finance across our dynamic footprint.
We strongly believe that we can help you with innovative and sustainable solutions

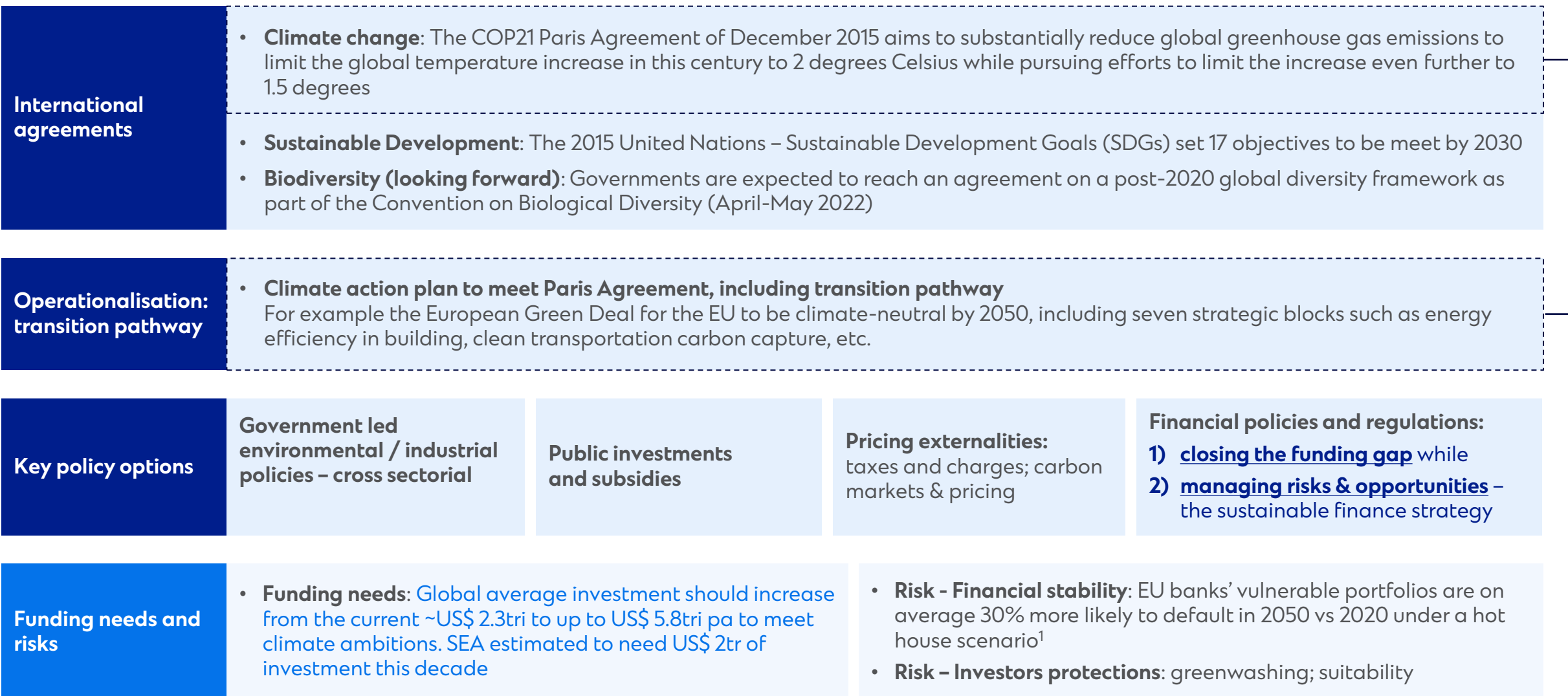


Overview

- At Standard Chartered, we have **dedicated Sustainable Finance and Transition Finance teams** working on wide range of innovative solutions. The team brings together our experience and expertise in managing ESG risks as well as spotting opportunities and structuring solutions to drive positive impact financing.
- Our **Green and Sustainable Finance Framework** is mapped to the UN Sustainable Development Goals (SDGs) and lists what we as an organisation view as sustainable activities. It is co-authored by Morningstar Sustainalytics, an independent verifier, who confirms alignment with the green, social and sustainable financing principles.
- Our **Transition Finance Framework** is based on the IEA NZE 2050 scenario and has been informed by currently available industry white papers and regional taxonomies. It lists the activities that we as an organisation view as contributing to the transition alongside setting out the approach to how Transition Finance is governed at Standard Chartered.

Product Suite				
Loans	Bonds	Deposits		ESG Advisory
Green and Social Loans: Use of proceeds Sustainability-linked Loans (SLL): Pricing is linked to ESG performance Transition Loans: for financing of companies and activities which will contribute to the transition to a low carbon economy	Green Bonds: enable capital-raising for new and existing projects with environmental benefits Social Bonds: proceeds exclusively applied to finance social projects Sustainability Bonds: bonds with a mix of social and green elements Transition Bonds: for financing of companies and activities which will contribute to the transition to a low carbon economy	Sustainable Deposit¹: Deposits which allow the customer to have their capital referenced against sustainable assets - Can be booked in: - Hong Kong - London - New York - Singapore - Dubai (inc. DIFC) - India - Bangladesh - China		Sustainable Accounts: Current and savings accounts which allow the customer to have their capital referenced against sustainable assets of Standard Chartered ESG-Linked Accounts: Current and savings accounts where the credit balance interest rate is linked to the client's ESG-related performance.
Trade Finance		Derivatives	ESG Advisory	Carbon Trading
- Sustainable end use, sustainable goods, sustainability linked, and transition structures to support your trade financing flows: - Import and export letter of credits - Guarantees - Supply chain finance programmes - Receivables services - Import Finance - Payables financing - Working capital lending - Pre-shipment finance - FI Trade Loan		Derivatives which hedge sustainable finance transactions: Derivatives that hedge market risks arising from ESG financing ESG performance linked derivatives: Derivatives that link the payoff with ESG performance	- SC provides thematic and bespoke advice to support our clients on their ESG, Sustainability and Transition journey ESG internal integration Disclosure and Reporting ESG Rating Strategic Roadmaps	- Carbon trading products that will assisting clients in the Trading, Financing, and Investment of carbon reduction/carbon credits

From sustainability commitments to financial policies and regulations



Sustainable Finance Strategy: Recipe to close funding gap

Objective 1

- ▶ Scale up domestic and cross-border investments toward sustainable assets / products

Objective 2

- ▶ Prevent and reduce the risk of 'greenwashing' / investors' protection considerations

Key policies and regulation components supporting the above key objectives

Disclosures	• Set ESG related quantitative and qualitative disclosures (eg impact reporting; taxonomy-based disclosures) to provide transparency to stakeholders	
Taxonomy	• Establish a list of environmentally sustainable economic activities and in transition activities	
Product Label	• Set requirements around (1) eligible sectors or projects; (2) use of proceed; (3) external review; and (4) disclosures.	
Capacity building	• Support capacity building, training and nurturing of local expertise on green and sustainable finance to fill skill gaps and build up market knowledge	
Benchmark	• Benchmark standards and disclosure requirements • Serve as performance benchmark for sustainability related strategies, help guide strategic asset allocation, underlying for passive investment strategies	

Sustainable Finance Strategy: Recipe to close funding gap

Objective 1

- ▶ Scale up domestic and cross-border investments toward sustainable assets / products

Objective 2

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Key policies and regulation components supporting the above key objectives

Incentives

- Changes in capital requirements, grant schemes, fiscal incentives, preferable funding rates, consistent reporting requirements and taxonomies.



Data

- Promote the availability, reliability, credibility and comparability of ESG risks data (role of CB)



Carbon markets

- Compliance market: trading of certificate by financial institutions
- Voluntary market requires an adequate market infrastructure



In 2024, Green Bonds recorded a total supply of USD 564bn, and Green Loans recorded USD 199bn, each achieving record high supply in a single year since 2013

Sustainable Finance Strategy: Managing risks & opportunities

Objective 1

- ▶ Identify, measure and manage ESG risks and opportunities at the micro and at the macro levels

Objective 2

- ▶ Prevent and reduce the risk of 'greenwashing' / investors' protection considerations

Key policies and regulation components supporting the above key objectives

Governance & strategy	• Set clear expectations and accountability for board of directors and senior managers • Implement climate-related and environmental financial risks management framework and policies	
Risk Management	• Incorporate the management of climate-related (physical and transition risks) and environmental financial risks within their risk management policies and procedures for relevant prudential risks • Identify, measure and monitor, mitigate and report	
Scenario analysis and stress testing	• Use scenario analysis and stress testing as a key tool to substantiate the risk identification process and understand the financial risks to their business model from climate change and environmental degradation	
Disclosures	• Disclose information on climate-related and environmental financial risks banks are exposed to, the potential impact of material risks and their approach to manage these risks	
Capital treatment	• Provide temporary incentive to financing toward sustainable assets via preferential capital treatment	
ESG Rating	• Support the healthy growth of third party ESG rating market	
Data	• Promote the availability, reliability, credibility and comparability of ESG risks data (role of CB)	

Transition Finance Risks and mitigation

Markets, regions and companies transition at different speeds due to:

- Public policy
- Shareholder and consumer pressure
- Energy and political security
- Access to technology
- Access to finance



Two risks

- Transition washing
- Unjust transition outcomes

Transition washing:

- Companies overstate their action related to the net zero transition

Reasons why companies would overstate their action on climate:

- To continue their social licence to operate (be perceived favourably)
- As a response to pressure from regulators, shareholders, financiers and consumers
- To secure lower financing costs

More on Just Transition

- The principle of just transition is that a healthy economy and a clean environment can and should co-exist. The process for achieving this vision should be a fair one that should not cost workers or community residents their health, environment, jobs or economic assets. Any losses should be fairly compensated - Sierra Club
- Did you know? 14 of the 17 Sustainable Development Goals (SDG) link to a just transition. Specifically, the following SDGs:
 - SDG 12 on climate actions
 - SDG 10 on reduced inequalities
 - SDG 8 on decent work and economic growth
 - SDG 7 on affordable and clean energy

When it comes to climate, nobody wins unless everybody wins

Sustainable Finance & Transition Finance Products

Integrated Offerings for Corporate Finance Needs

	1	2	3	4	5		
	Lending	Financial Markets	Treasury Markets	Transaction Banking	Client Coverage	Personal & Business Banking	Wealth Management
Sustainable Finance Products		ESG Derivatives Sustainability Repos ESG Structured Products	Sustainable Deposits – Corporates Sustainable Evergreen Deposits – Financial Institutions	Sustainable Trade Finance – Receivables, Invoice Financing, Supply Chain Financing Letters of Credit – Guarantees, Discounting, Export Sustainable CASA		Sustainable Time Deposits Retail CASA Green Mortgages Green Auto-Loans Carbon Neutral Credit Cards	Sustainable Investments (ESG Mutual Funds, ETFs, Equities, Bonds, & Structured Products)
Transition Finance Products for TF Activities	Sustainability, Green, Transition, and Social Loans	Sustainability, Green, Transition, and Social Bonds Carbon Trading		Sustainable and Transition-Linked Trade Finance Sustainable and Transition-Linked Letters of Credit	ESG Advisory Sustainability and Transition Advisory		
	Project & Export Financing Acquisition Financing	Transition-linked Hedging Deal-contingent Hedging			M&A – Acquisitions, Sales / Disposals Partnerships		
							SC Sustainability Bonds

Conclusion and recommendations

- Maximize awareness through industry events, collaboration between the Financial Sector, Government Agencies, and other relevant bodies.
- Embed ESG and Sustainability in your own operation.
- Have your Sustainable Finance framework or equivalent in place.
- Within the framework define expectations from clients, data gathering and reporting/disclosures.
- Assess high impact sectors in the portfolio and set clear GHG reduction targets.
- There are plenty of publicly available resources.
- If all banks and investors raise the Benchmark, clients will have no choice but to go green and invest in green technologies and processes.
- Remember, when it comes to Sustainability, no one wins unless everybody wins.



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