



4/12/2024

UNEP Finance Initiative

PRB Climate Adaptation Capacity building programme

Asia Pacific region

Workshop 1#:
Introduction to Adaptation and Understanding your Context



UNEP FI

The United Nations partner with the global financial sector



We work with 450+ banks, insurers and investors, representing \$100+ trillion assets, to agree on frameworks and norms and provide guidance to advance market practice on sustainable finance and responsible investment.

We catalyse action across the financial system to align economies with the Sustainable Development Goals and the Paris Climate Agreement.

We co-create practical research, tools and peer-exchange forums to help financial institutions deliver on their sustainability journey for stakeholders.

Principles for Responsible Banking



The Principles are the **world's foremost sustainable banking framework** to:

Ensure that **banks' strategy and practice align** with the vision society has set out for its future in the UN Sustainable Development Goals and the Paris Climate Agreement.

Drive global momentum to **shape the future of banking** to one that is positive for people and the planet.

Help banks mainstream and **embed sustainability** into the heart of their business.

Principles for Responsible Banking



320+
Signatory Banks







~50%
of the global banking sector

\$89trn
USD Total Assets

80
countries

Source: UNEP FI

The 6 Principles for Responsible Banking

 <p>PRINCIPLE 1: ALIGNMENT</p> <p>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.</p>	 <p>PRINCIPLE 2: IMPACT & TARGET SETTING</p> <p>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.</p>	 <p>PRINCIPLE 3: CLIENTS & CUSTOMERS</p> <p>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.</p>
 <p>PRINCIPLE 4: STAKEHOLDERS</p> <p>We will proactively and responsibly consult, engage and partner with relevant stakeholders to achieve society's goals.</p>	 <p>PRINCIPLE 5: GOVERNANCE & CULTURE</p> <p>We will implement our commitment to these Principles through effective governance and a culture of responsible banking.</p>	 <p>PRINCIPLE 6: TRANSPARENCY & ACCOUNTABILITY</p> <p>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.</p>

Why become a signatory?

• 01: Be at the forefront of the industry transformation

- As a signatory, you can shape the sustainability agenda of the global banking industry and actively co-create best practice for the entire industry.

• 02: Build a future-fit bank

- Becoming a signatory signals the market of your bank's commitment to a responsible direction of travel, allowing you to take action to transition and transform your core business and portfolio to a positive direction for people and planet.

• 03: Streamline your approach to sustainability

- The unique framework of the Principles allows you to take a holistic view of your business on the issues that are affecting your customers and the environment, helping your bank to structure its approach and prepare for emerging disclosure, regulation and reporting requirements.

04: Peer exchange and access to resources

Engage with peers in a safe environment on how to embed sustainable banking practices. Access to practical, science-based and norms-based tools, guidance and methodologies, developed by peers and experts, to help you on your journey.

05: Embed changes in governance & culture

The Principles allow your bank to take all employees on board – from leadership to frontline, as well as to engage with clients and customers.

Support along the journey

Working groups & collective initiatives

Bank-led, UN-convened communities of practice providing peer support and facilitating collaborative development of collective action, tools, methodologies and guidance

Tailored Support

Capacity building workshops by region & by business model

Collective Commitments

[Net Zero Banking Alliance](#) for climate mitigation, [Commitment to Financial Health and Inclusion](#)

Cutting edge themes

Climate adaptation, biodiversity, gender equality, financial inclusion, pollution & circular economy

Individual Feedback & Support

Individual support and guidance on your bank's progress

Tools

[Impact analysis tools](#) developed by banks for banks



— Today's capacity building programme on climate adaptation

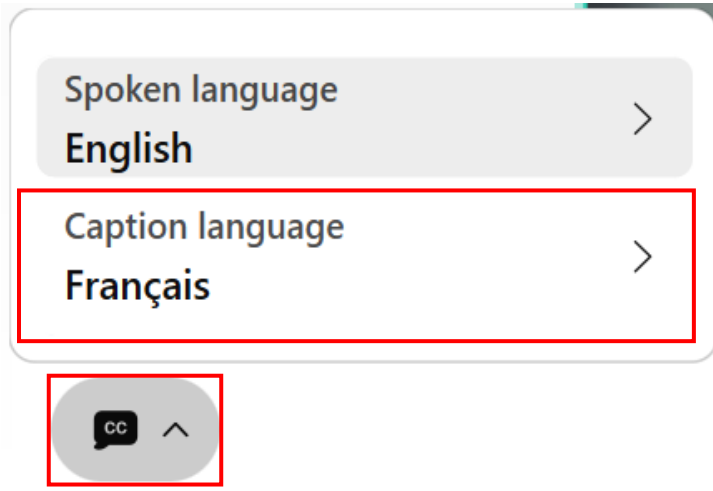
Overview of the programme



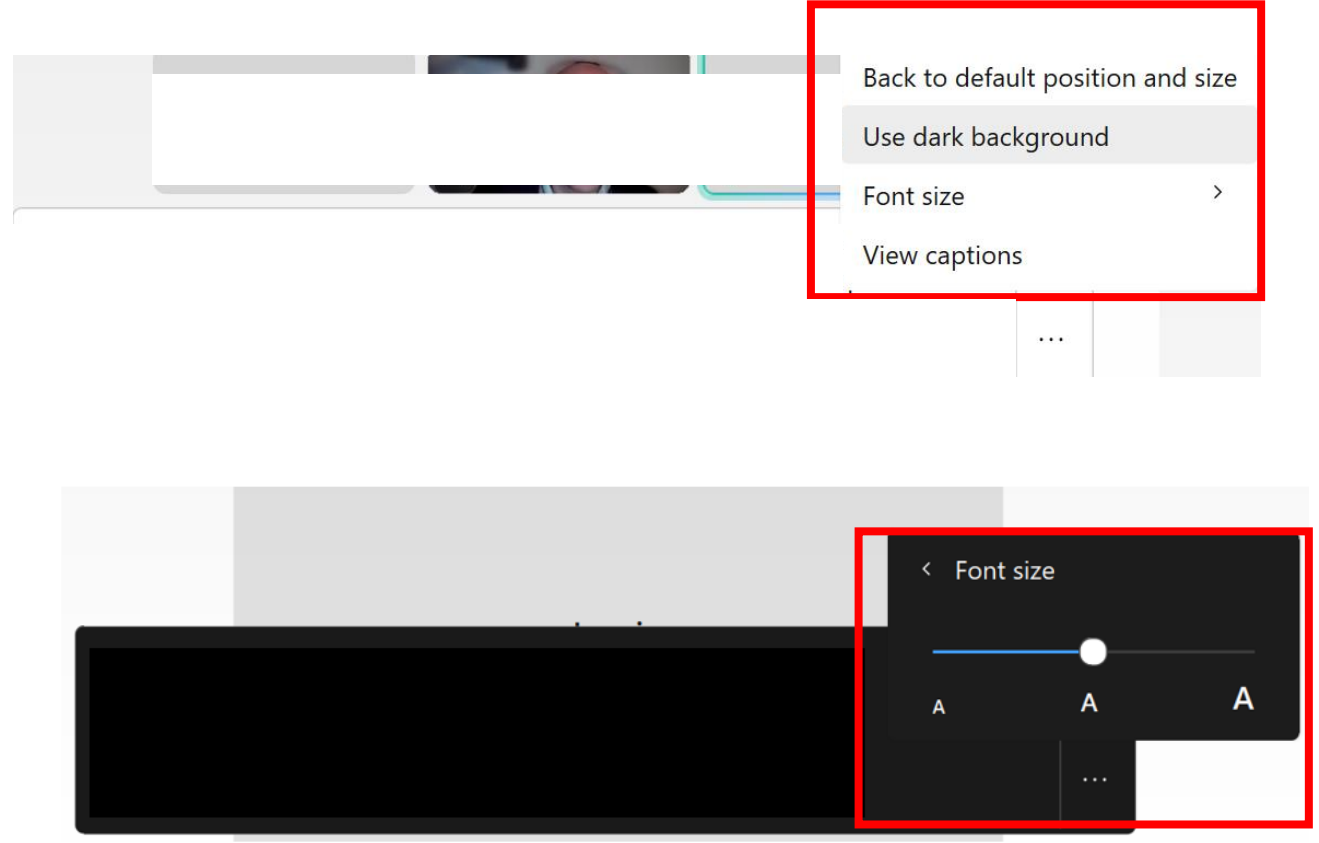
Housekeeping rules & other information

- Slides and the recording will be shared after the workshop
- Please mute yourself during the workshop to avoid background noise
- Questions and comments highly welcome during the session! You can
 - Raise your hand in Webex if you want to speak up (anytime)
 - Post questions in Webex chat (anytime)
 - Post questions on Slido.com (voting code: **999777**) (anytime) – Slido is anonymous, so you don't even need to mention your name

WebEx Translation



- Only accessible through the desktop app
- Limit of 6 languages per meeting



Objective of the capacity building program

Support PRB Banks to implement the PRB Adaptation Guidance

Why does it matter?

- Adaptation is a nascent and overlooked topic not fully integrated into banks' climate strategies.
- This program provides capacity building support for banks to implement the PRB Adaptation Guidance.
- Even if adaptation is not one of your PRB key impact areas, you *need* to address the topic.
- **Please note that this program is at a foundational level.**

Agenda of today's workshop

Introductions

Adaptation for financial institutions

- Understanding adaptation needs and urgency
- The adaptation context for banks

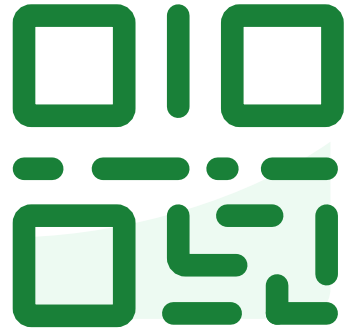
Working strategically on adaptation

- Overview of the PRB guidance
- Step 1: Understanding your context
- Step 2: Setting the baseline

— Introduction

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Please tell us about yourself - name (optional!), Bank name, Country name, Department

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If your bank is PRB signatory, has it already identified the 2 key impact areas? (You can select more than one option.)

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How is climate change impacting your clients?

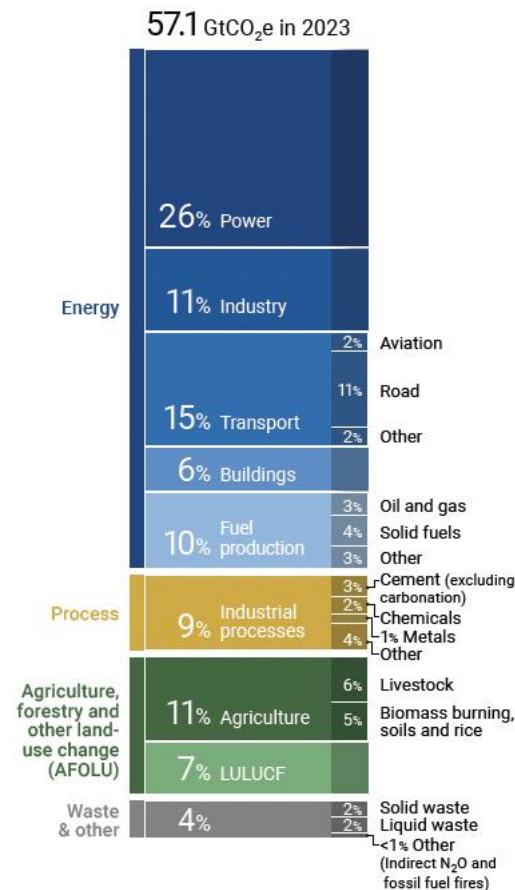
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— The climate context and adaptation

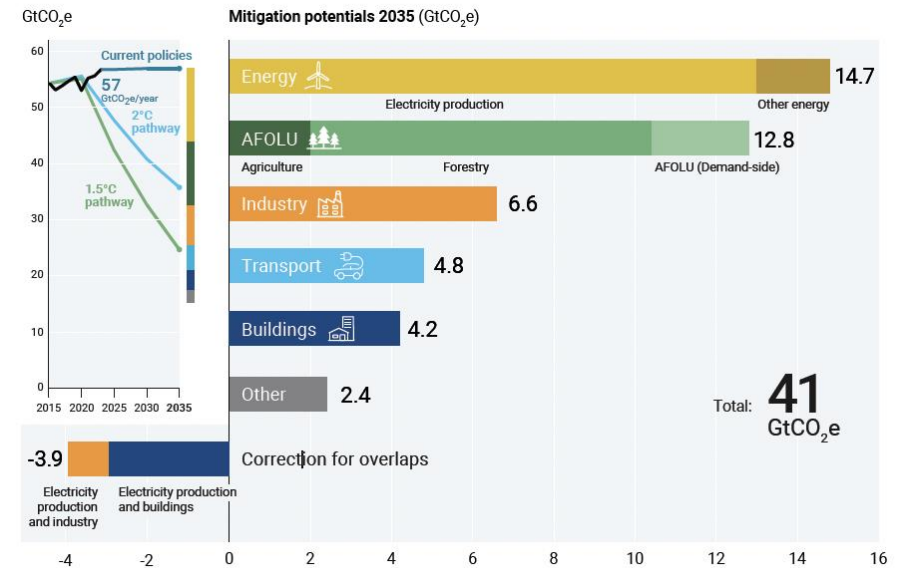
Understanding adaptation needs and urgency

The climate and mitigation context today

- Global greenhouse gas emissions set a **new record of 57.1 GtCO₂e in 2023**, a 1.3 per cent increase from 2022 levels
- Global average temperature rise is still below 1.5°C, yet climate change is already hitting communities across the world hard, particularly the most poor and vulnerable. And it will get much worse: the latest estimates put the world on course for a temperature rise of **2.6–3.1°C** this century unless there is urgent and ambitious mitigation

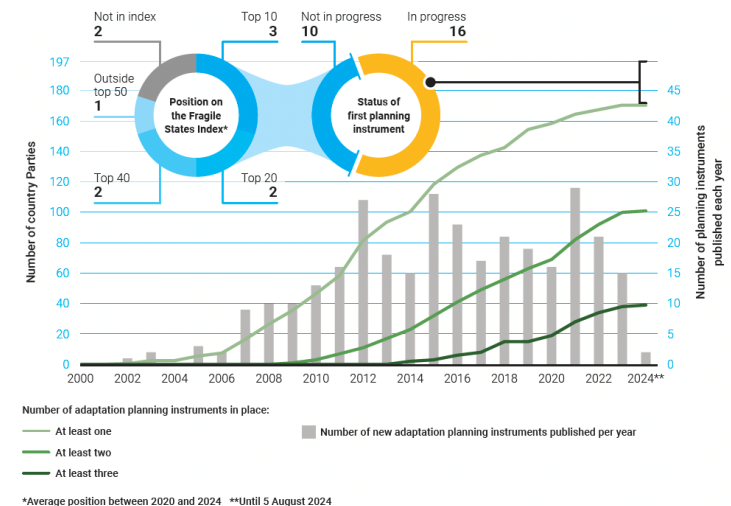


- Emission reduction potentials for 2030 and 2035 are substantial, but time is short and realizing the potentials requires overcoming persisting challenges and massively **boosting policies, support and finance**



And the associated adaptation context today

- Societies around the world are expected to face increasing climate risks and possibly **irreversible climate, ecological and societal impacts**. Catastrophic climate impacts are becoming ever more frequent and extreme, and the associated losses and damages are making it unequivocally clear how much is at stake.
- Climate adaptation can no longer be considered a future option or a distant concern, but must be seen as **one of the greatest priorities for nations and communities worldwide today**, alongside efforts to abate greenhouse gas emissions
- Progress in adaptation implementation is **slow and marred with problems**. Countries need to ramp up their ambitions to prepare for increasing climate risks.
- Approximately **two thirds** of estimated costs/finance needs for Adaptation are in areas that are typically financed by the **public sector** through international or domestic sources, because they have public good characteristics or are in social or non-market sectors.
- The remaining **one third of financing** needs exist in areas that have potential for **private financing, such commercial agriculture, water and infrastructure** (non-exhaustive examples).

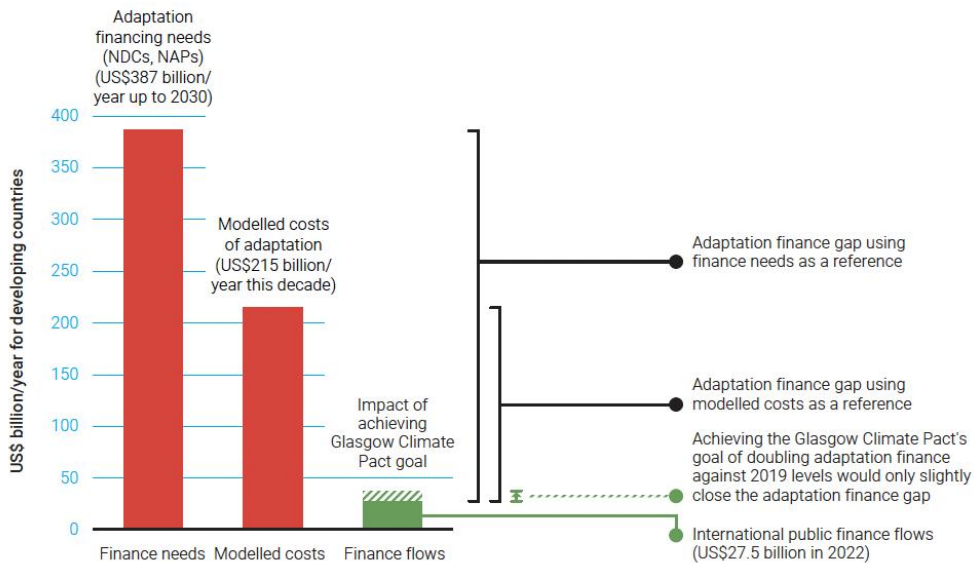


Publication of national policy instruments for adaptation over time

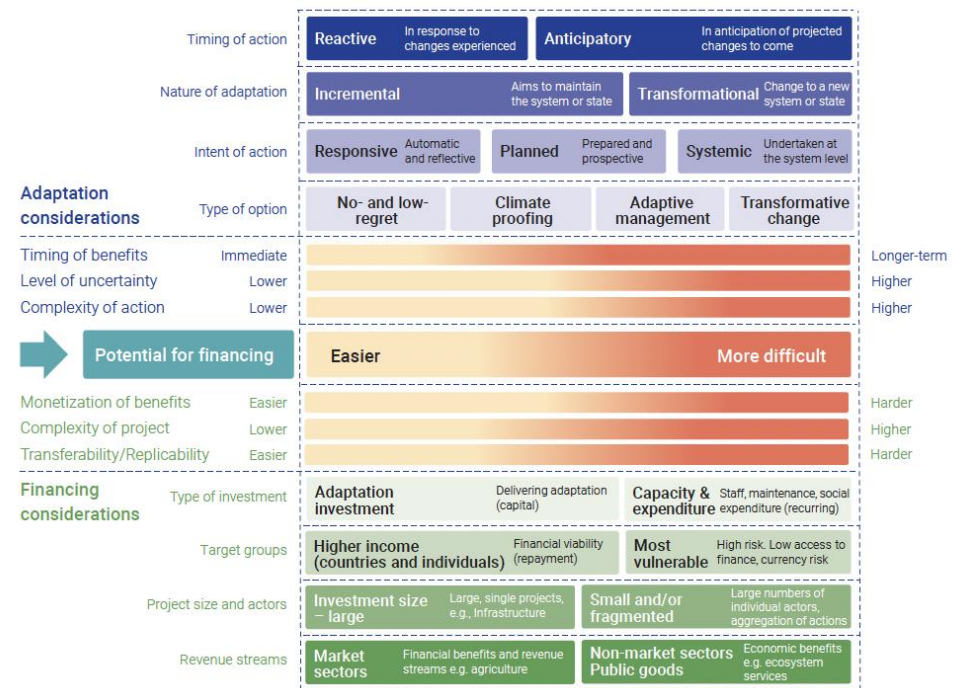
Adaptation finance needs today

The 2023 UNEP Adaptation Gap Report highlighted **US\$215–387 billion/year in adaptation finance needs** for developing countries, with a significant shortfall in financing flows observed to date.

The **adaptation finance gap remains extremely large**, and bridging this gap is a priority for the NCQG for climate finance



Meeting the climate challenge will require a **scaling up** of adaptation finance, but also a more **strategic approach to investment** - shifting from reactive-based adaptation solutions towards more challenging, anticipatory-based solutions



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What could be your bank's main motivation to work on adaptation?

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— Adaptation and financial institutions

The Adaptation context for banks

Physical Climate Risk (PCR) and Adaptation

To effectively engage on Adaptation finance banks must successfully **identify, assess and manage physical climate risk**. Banks must understand their client risks and consequently develop an Adaptation strategy that addresses their client needs.

Physical climate risk Impact channels & pathways

Direct	Client's assets/ operations/ workers	The financial risks and associated impacts vary depending on <i>frequency</i> and <i>severity</i> of climate hazards and the climate resilience of a client's assets, operations, workforce and business model.
	Supply chains	Financial risk can manifest through a client's supply chain, depending on factors such as the diversity and location of suppliers, and the natural resource intensity and shock resilience of its supplies.
Indirect	Markets of sale	Financial risks and impacts vary depending on climate-related events and climate-driven price shocks, and the company's capacity to shift customer base or pass through costs as appropriate/needed to customers.



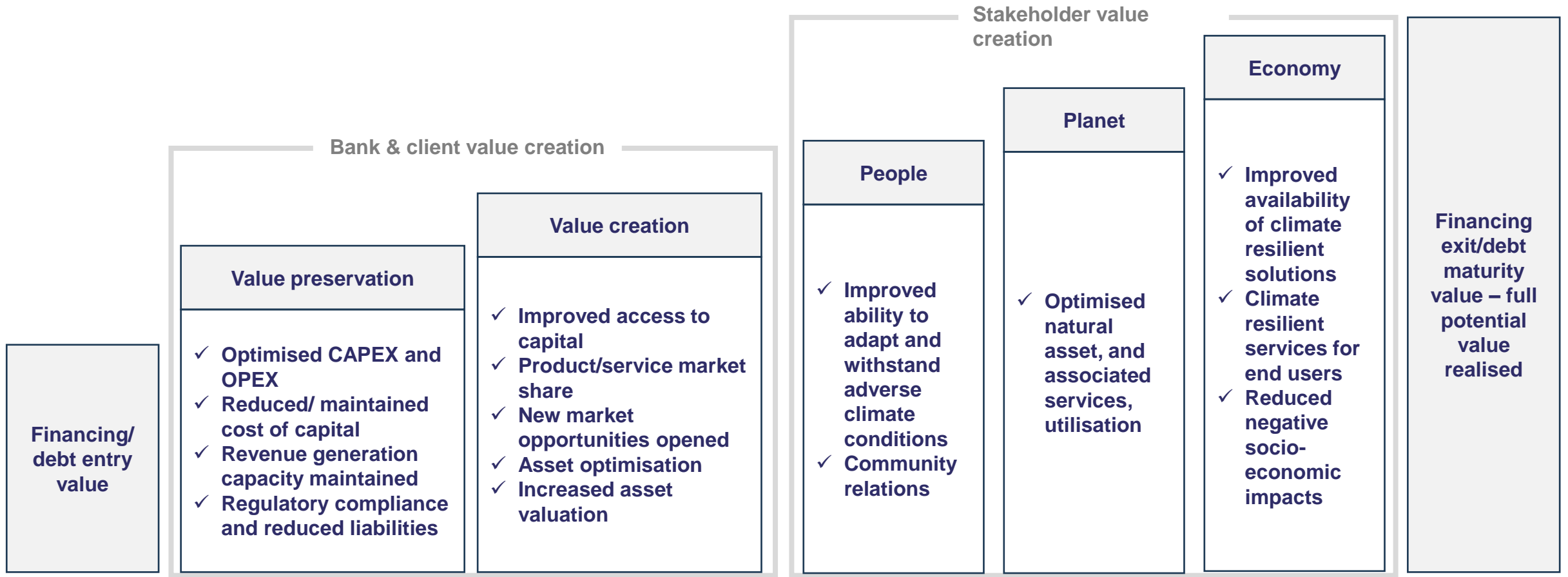
Risk to client

-  **Revenue loss**
-  **Cost increase**
-  **Decreased asset and company valuation**
-  **Increased cost of capital**

Risk to banks

-  **Credit risk**
-  **Regulatory risk**
-  **Strategic risk**
-  **Reputational risk**

Effective PCR identification, assessment and management brings value to banks, your clients and the communities you serve



Physical climate risk management value add

Illustrative sector PCR context – Commercial Real Estate (CRE)

CRE is subject to a wide variety of climate hazards globally. A contextual approach from banks is needed to effectively assess and manage physical climate risk, engaging with clients to determine their exposure and vulnerability to identified hazards, and subsequently determining appropriate mitigation strategies in collaboration with clients

1. Sea level rise and coastal flooding

Storm surges and tidal flooding, coupled with sea level rise are a risk to coastal CRE. Estimates show without adaptation, the population exposed to coastal flooding will increase by 52% by the end of the century ([Kirezci et al, 2020](#)). These risks are existential for SIDS: future damages increase up to 14 x – could lead to forced migration ([Vousdoukas et al, 2023](#))

2. Inland flooding

Inland flooding (fluvial and pluvial) represents the largest proportion of flood exposure globally >90%. Urbanisation ([Rentschler et al, 2023](#)) both increases exposure and reduces soil permeability, increasing risk. Over 2 million km of urban roads are exposed to inland flooding, which can pose a significant indirect risk to CRE ([World Bank, 2022](#))

3. Extreme storms and wind

Increased intensity and frequency of tropical storms, such as hurricanes, cyclones, and typhoons. These storms can cause direct damages to assets due to extreme wind speeds. They also pose a significant indirect risk to power networks ([Hall et al, 2024](#)) that can increase those impacted by several orders of magnitude ([Mühlhofer et al, 2024](#)).

4. Wildfires

Between 2005-2020, wildfires destroyed ~90,000 structures in the United States ([Barrett, 2020](#)). Globally, extreme wildfire occurrence has increased 2.2-fold over the last 20 years due to warming ([Cunningham et al, 2024](#)). There are also indirect impacts, as evidenced in the US east coast in 2023, where wildfire smoke caused economic disruption.

5. Subsidence

Subsidence—which occurs when the ground beneath a property sinks, pulling the foundations of a property down and causing the walls and floors to shift—has the potential to destabilise the structure of a property. Subsidence is made worse by both climate change and human activity. Coastal cities face a double threat of subsidence and sea level rise ([Nicholls et al, 2021](#))

6. Heat and water stress

About 60% of global real estate investment trusts are located in areas such as Malaysia, the Philippines, Japan, Hong Kong, and Australia, which are expected to experience high water stress by 2030 ([Blackrock, 2020](#)). Extreme heat will increase global cooling demand, particularly in Africa and countries traditionally unprepared for heat ([Miranda et al, 2023](#))

1. The destruction or covering of the ground by an impermeable material, leading to soil degradation ([European Environmental Agency, n.d.](#))

The CRE PCR business case for banks

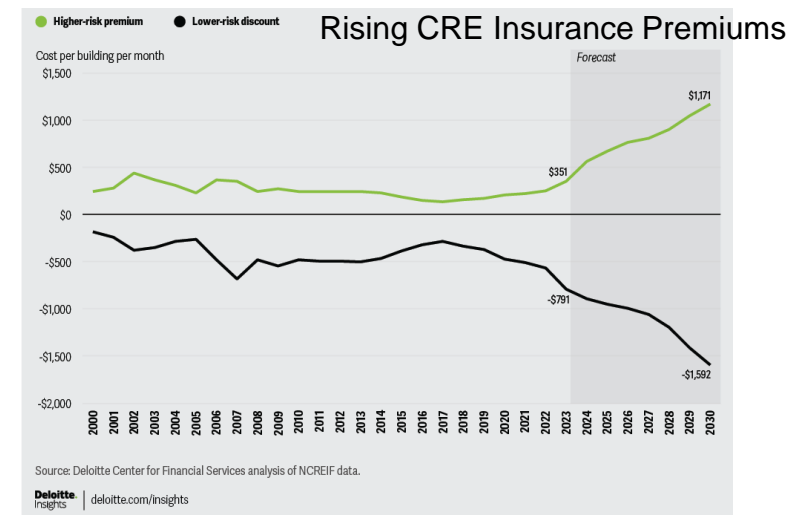
Assets at Risk

- A total of 739,699 retail, office, and multi-unit residential properties in the United States are estimated to be at risk of flood damage.
- Annual costs to repair such damage are predicted to rise 25% over the coming decades, from US\$13.5 billion in 2022 to US\$16.9 billion by 2052.
- In 2022, flood damage to commercial buildings caused an estimated 3.1 million days of lost business operations due to repairs. This is projected to rise by 29% in the next 30 years to four million days. ([First Street Foundation, 2021](#)).

Value at Risk

- Past events show that hurricanes have a significant negative impact on the value of commercial real estate with effects on property values and investor returns lasting up to five years, peaking three years after a major hurricane due to higher risk premiums and lower tenant demand ([Fisher & Rutledge, 2021](#)).
- Future cash flows are impaired by physical damage to the properties, loss operative capacity (e.g. utilities), and loss of demand (e.g. due to behaviour change or loss of access) ([Yavas et al., 2022](#)).
- In the US, both Hurricane Harvey and Hurricane Sandy led to increased delinquency rates for commercial real estate mortgages ([Holtermans et al, 2024](#)).

Insurance Cost and Dropout



- Evidence of insurance dropout: Butlins, a UK holiday resort owner is currently in a £60m dispute with insurance companies after their largest resort in Minehead was flooded resulting in major impacts on their ability to operate.

Indirect Impacts

- Analysis of flood risks in Bristol, UK show that although corporate headquarters are not directly impacted by flooding, the roads to these headquarters face significant risks, which impact the ability of employees to get to work ([McKinsey, 2020](#)).

CRE-focused Adaptation solutions

Products and services



Sustainable water use technologies (e.g. rainwater harvesting, water recycling, water retention gardens)	Low-cost modular housing or prefabricated construction
Proofing buildings for acute hazards (e.g. floods, wildfires)	High-albedo materials, green roofs and cool roofs for thermal regulation
	Wearable cooling devices and shade structures for labourers

Finance and insurance



Insurance discounts for resilience enhancement	Business interruption insurance for weather-related events
Property-assessed resilience loans	Green / resilience bonds

Intelligence



- Enhanced information to track chronic risks (e.g. temperature rise, sea level rise, air quality, etc.)
- Enhanced information to assess vulnerability (e.g. satellite imagery to identify damaged buildings)
- Enhanced information to assess exposure (e.g. AI-powered flood risk assessments, climate risk prediction tools, etc.)

Adaptation taxonomies (e.g. CBI, Tailwind)

Enabling interventions



- Updated building codes to include resilience requirements
- Improved planning processes to reduce climate risk exposure
- Training and capacity building for unions and employers on resilient building solutions
- Improved regulations for workers' health and safety

Illustrative sector PCR context – Agriculture

The agricultural sector is one of the most exposed sectors to physical climate (e.g. floods, droughts) and nature risks (e.g. pest outbreaks, loss of pollination). Many of its economic activities directly depend on ecosystem services and are therefore exposed through changes in the provision or regulation of these services (e.g. water). Given their interlinked nature, banks need to take integrated approaches in this sector to build resilience across multiple local risks.

1. Drought

Drought reduces agricultural productivity and yield. The agriculture sector absorbs 82% of the total economic impact of drought ([FAO, 2021](#)). Models show that in a pessimistic scenario, maize, soybean and rice productivity could decrease globally by 24% by the end of the century, crops such as wheat see shifting productive regions ([Jägermeyr et al., 2021](#))

2. Flooding

Extreme storms and flooding can reduce the production and quality of feed grains, pastures, and forage crops as well as exposing crops to heavy metals, chemicals, and other contaminants ([FDA, 2022](#)). Between 1982-2016, flooding accounted for agricultural production losses of \$5.5 billion in the US ([Kim et al., 2023](#))

3. Extreme storms and wind

Agricultural land can become infertile due to vegetation loss and coastal erosion from storm surges, extreme winds, and saltwater intrusion ([Ortiz et al., 2023](#)). In the US, major hurricanes caused yield declines up to 6% on average ([Bundy et al., 2023](#)). Storms can also have significant impacts on farm equipment and transport.

4. Wildfires

Wildfires can directly damage livestock, crops, and agricultural property and equipment. Agricultural land management also significantly alters fire regimes ([Kabeshita et al., 2023](#)). Wildfires do not need to directly impact agricultural land to have an impact. In 2023, US harvests were impacted by smoke from wildfires in Canada ([The Guardian, 2023](#))

5. Extreme heat

Extreme heat can disrupt crop growth during key parts of the growing cycle and lead to livestock deaths. Increased severity and frequency of heatwaves impacts farm workers and reduce productivity of labour-intensive crops ([Diaz et al., 2023](#)). Temperature can also impact food storage and transportation ([Godde et al., 2021](#))

6. Nature

Climate change increases the range of invasive species and can reduce crop and animal health, impacting agricultural systems which costs the global economy more than US\$70 billion ([IUCN, 2021](#)). Other nature-climate risks that pose a significant risk to agriculture include soil loss, water stress and pollination services.

The Agriculture PCR business case for banks

Impacts on Agricultural Productivity

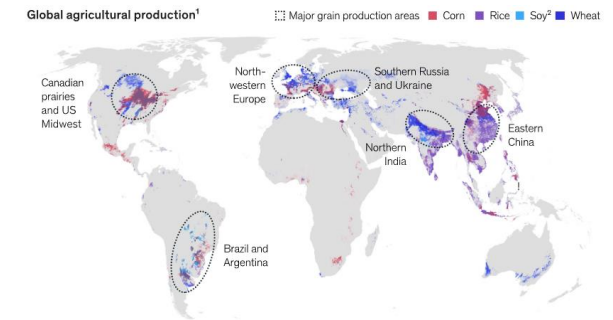
- A 2021 heatwave event in British Columbia, Canada led to a decline in the yield of key crops (e.g. wheat, barley and canola) of up to 30% and deaths of over 650,000 farm animals in one week ([White et al., 2021](#))
- To date, models typically only consider losses incurred from declines in crop yields arising from elevated temperatures, however, these losses double when considering the associated impact on labour productivity ([de Lima et al., 2021](#))
- India is currently facing a third year of falling wheat production due to extreme heat. In 2022, a compound heat and drought event lowered wheat production in India by 4 million tonnes ([The Diplomat, 2024](#))

Financial Impacts

- In Pakistan, a decrease in agricultural loan recovery has been shown to arise from negative climate conditions for crop cultivation ([Wahab et al., 2023](#))
- In a survey of agricultural finance institutions, 57% expect climate change to negatively impact the financial situations of their clients through higher probability of default and loss given default in the future ([Environmental Defence Fund, 2022](#))
- A stress test of Moroccan banks, conducted by the World Bank, found that an extreme (500-year) drought could cause NPL ratios in the agriculture sector to reach 10.53% ([World Bank, 2024](#))

Systemic Impacts

- Agricultural climate risks have systemic implications. Simultaneous climate shocks to multiple global breadbasket regions is becoming more likely due to climate change and could cause spike in global food prices ([McKinsey, 2020](#))
- Risks of simultaneous breadbasket failure vary for crops. Climate change is increasing the risk for wheat, maize, and soybean crops. Risks are decreasing for rice ([Gaupp et al., 2020](#))



Opportunities?

- The impact of physical climate- and nature-related risks on agriculture is generally negative, however in some instances business opportunities also emerge. For example, the profits of sugar cane producers in Mauritius is expected to grow by ~60% by 2030 ([FSDA-Vivid, 2022](#)).
- Shifting climates have made led to large parts of the UK become ideal wine growing regions and has led to significant expansion of the sector nationally over recent years ([Gannon et al, 2023](#)).
- Emerging cellular agriculture – increased market demand for alt-dairy, synthetic meat etc.

Agriculture-focused Adaptation solutions

Products and services



Climate resilient crops (e.g. drought-resistant seeds, new varieties including research and development expenditures)
 Drip irrigation / pressurised irrigation

Cooling sheds
 Field management (e.g., contour ploughing, bund maintenance, barrier crops)
 Integrated pest management
 Agroforestry

Finance and insurance



Farmland Investments
 Biodiversity Credits
 Parametric Insurance for Crop Loss
 Livestock Insurance

Products for Climate-Related Risks
 Green Bonds for Sustainable
 Livestock Management

Intelligence



Weather forecasting and early-warning systems for agriculture
 AI-powered predictive models of future growing conditions
 In-ground sensors to measure soil moisture
 Efficient watering systems for livestock
 Real-time herd health monitoring systems
 Software tools for pasture management

Adaptation taxonomies (e.g. CBI, Tailwind)

Enabling interventions



Advocacy for climate-resilient agricultural policies
 Farmer-to-farmer knowledge sharing networks
 Indigenous and local agricultural practice integration
 Sustainable pastureland management initiatives
 Agroforestry and silvopasture training workshops"

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Where do you see the greatest challenges and barriers to Adaptation action today?

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— Adaptation for financial institutions

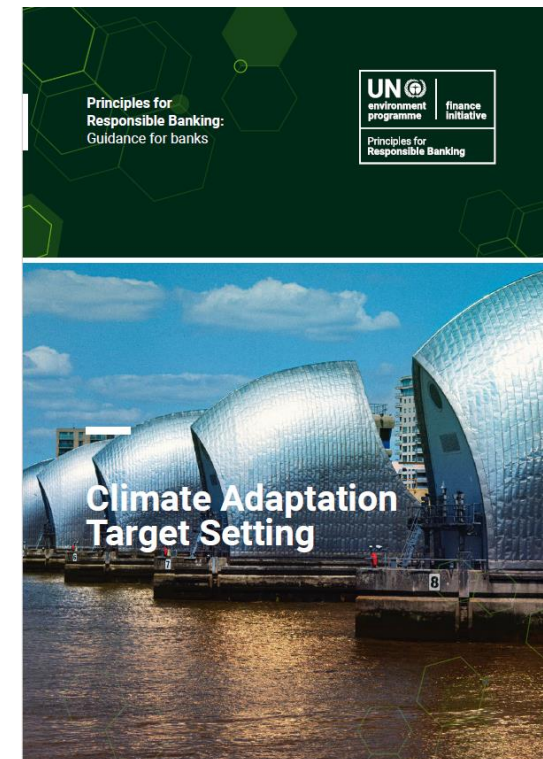
Using the PRB guidance to work strategically on adaptation

Overview of the guidance

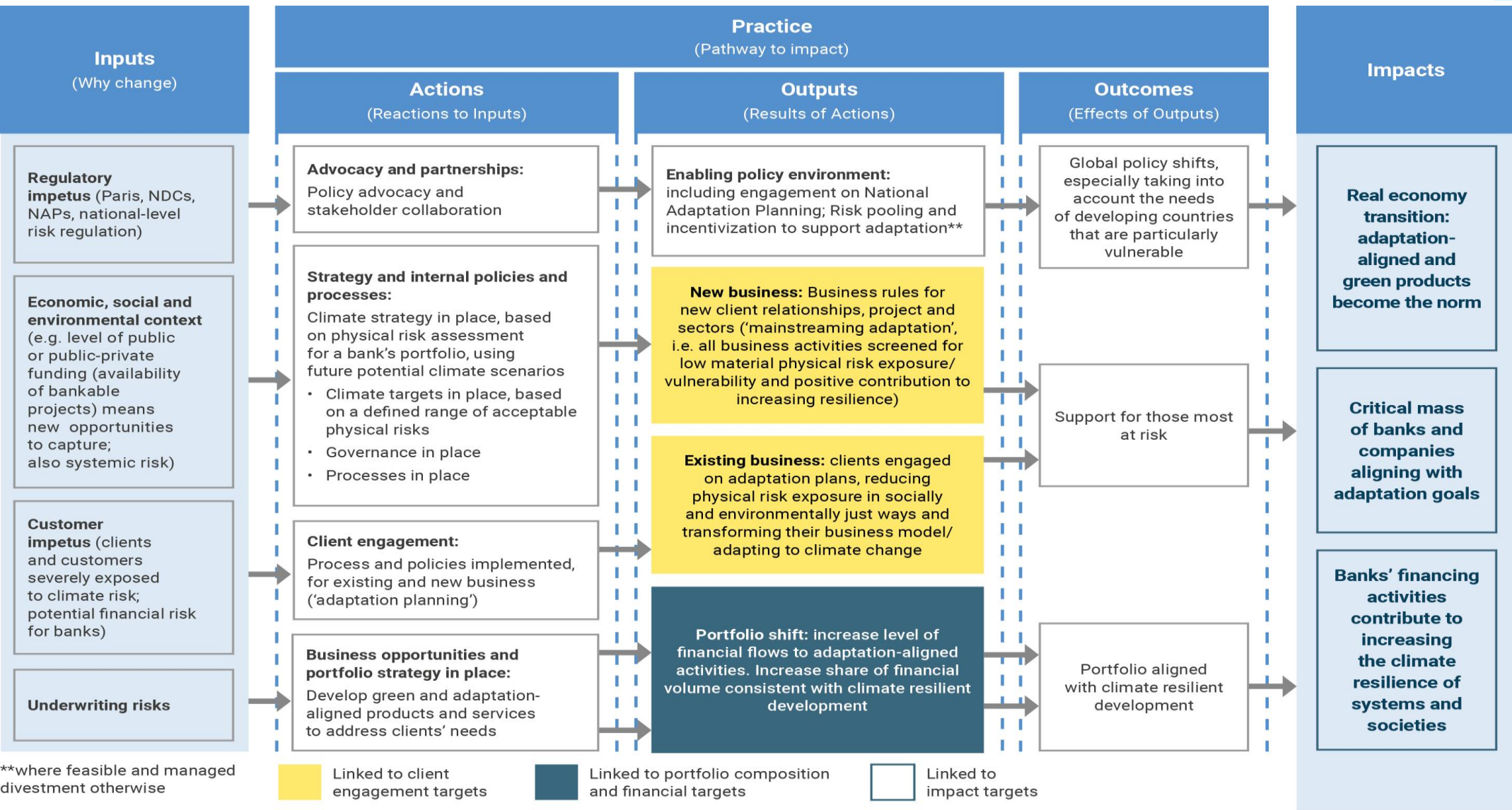
The Guidance is designed for banks that intend to **act on adaptation and resilience** and **align their activities and strategies** with the objectives of the Paris Agreement.

It was **co-developed** with 27 PRB banks from all world regions and strategic partners to ensure its applicability and alignment with other frameworks.

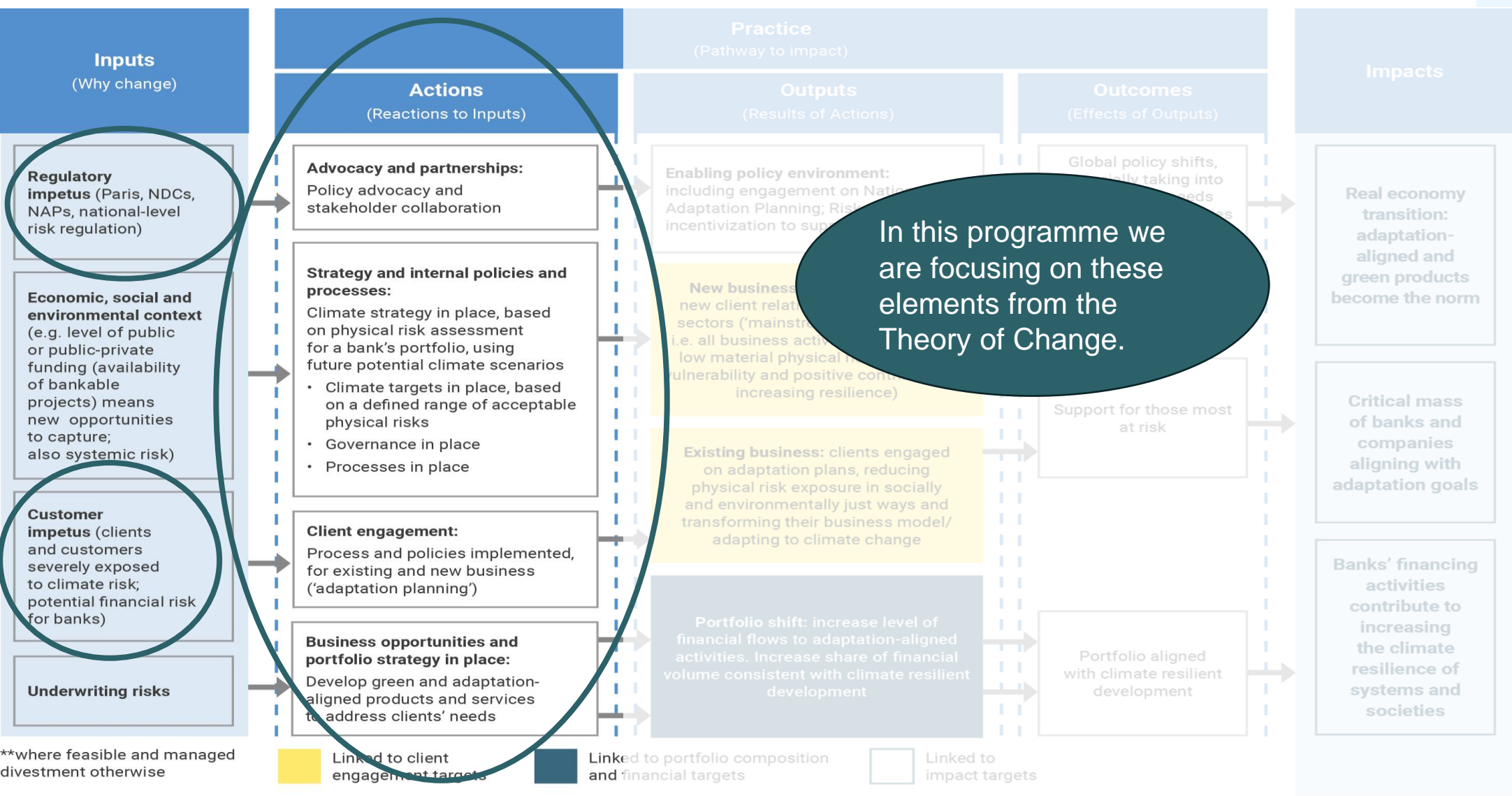
It adopts a **flexible approach** to target-setting, recognizing that banks are at different stages of progress. Examples for both banks at the early stage and more advanced banks are provided, reflecting the **urgent need for progressive action without compromising ambition**.



The theory of change for adaptation

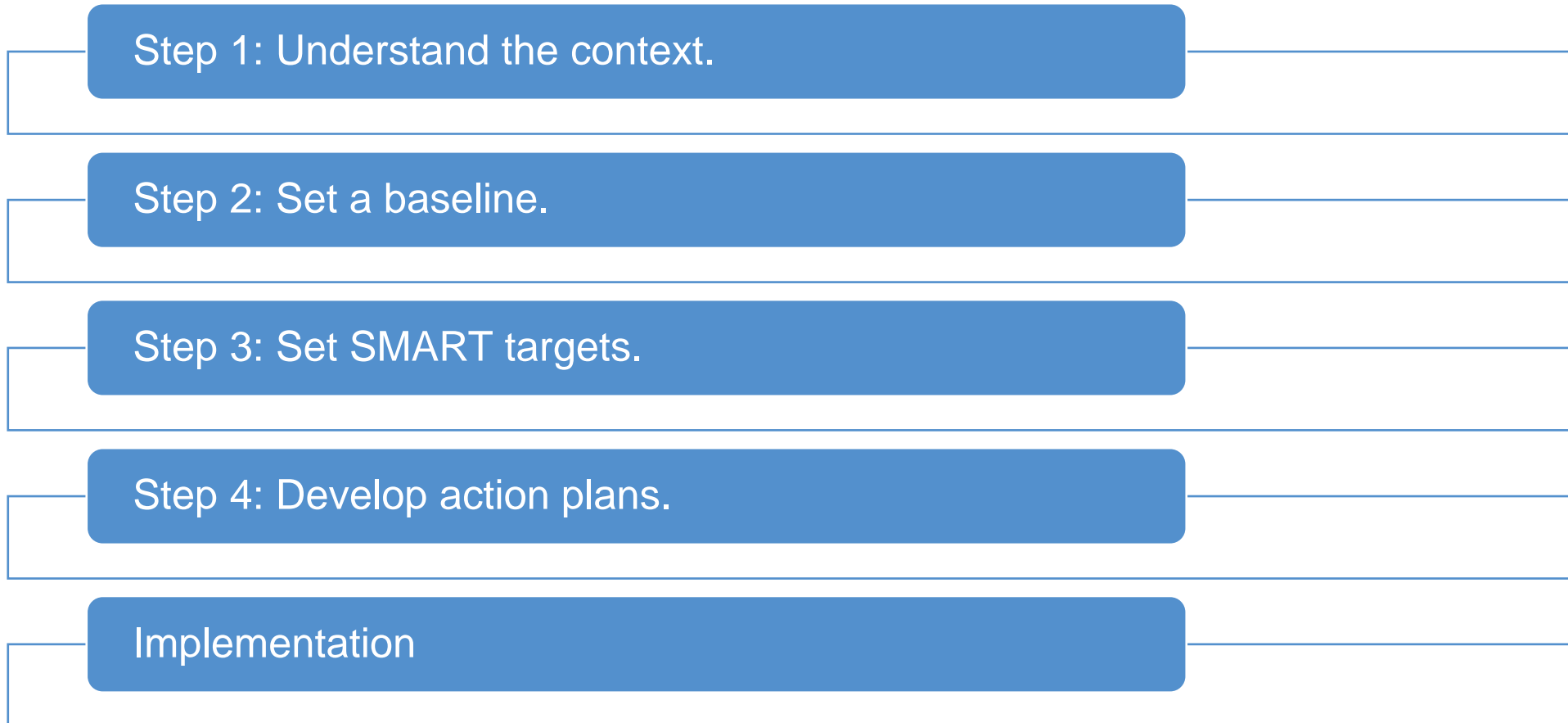


The theory of change for adaptation



**where feasible and managed divestment otherwise

PRB adaptation framework—key steps



PRB adaptation framework—key steps

Step 1: Understand the context

- Understand the climate adaptation policy context through national and regional adaptation planning and identify the most relevant goals and frameworks to align with.
- This step helps banks identify the priorities for climate resilient development in the contexts they operate.

Step 2: Set a baseline

Step 3: Set SMART targets

Step 4: Develop action plans

Implementation

PRB adaptation framework—key steps

Step 1: Understand the context.

Step 2: Set a baseline.

- Use climate risk assessments and scenario planning to understand climate impacts relevant to clients and own portfolios, utilising regulatory and/or supervisory approaches where these already exist.
- The results of the assessment are used to identify regions and sectors prioritised for developing adaptation measures.

Step 3: Set SMART targets.

Step 4: Develop action plans.

Implementation

PRB adaptation framework—key steps

Step 1: Understand the context.

Step 2: Set a baseline.

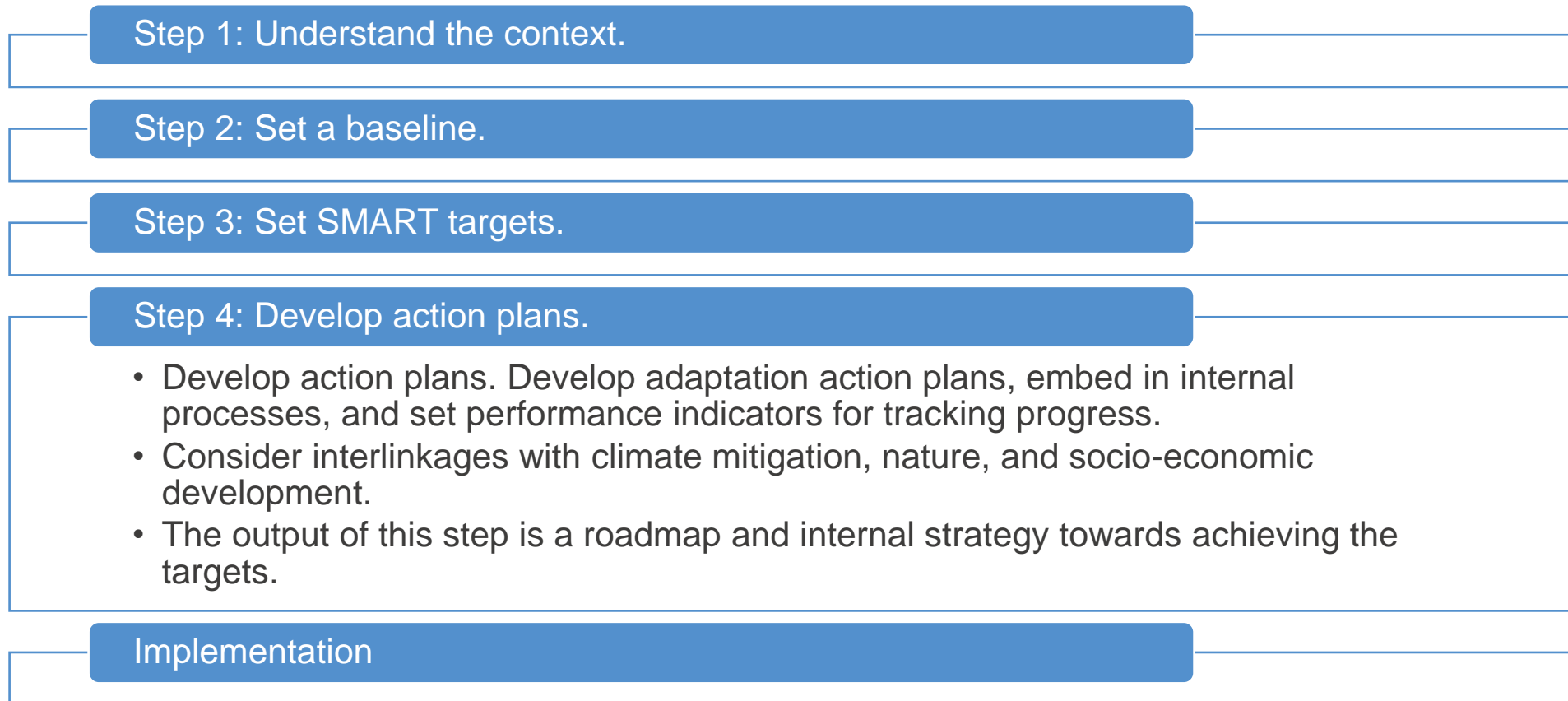
Step 3: Set SMART targets.

- Set targets that aim to align finance and investment with global goals and support national adaptation plans.
- (i) internal strategies, policies and processes including risk management; (ii) client engagement; and (iii) business opportunities and financing.

Step 4: Develop action plans.

Implementation

PRB adaptation framework—key steps



PRB adaptation framework—key steps

Step 1: Understand the context.

Step 2: Set a baseline.

Step 3: Set SMART targets.

Step 4: Develop action plans.

Implementation

- The target setting steps are supported by key actions:
- incorporate adaptation in internal policies and processes, consult with stakeholders and clients, and identify adaptation opportunities leading to mobilisation of finance.

These actions, can lead to

- Investment in adaptation projects and interventions
- Engagement with clients to understand and support their adaptation needs
- Development of new financial products and services that support adaptation
- Participation in public-private partnerships and blended finance

—
**Step 1:
Understand your context and
identify what to align with**

The adaptation challenge in Asia Pacific

APAC collectively faces several climate change driven-risks

- Australasia**
- Degradation of tropical shallow coral reefs and associated biodiversity and ecosystem service values
 - Loss of human and natural systems in low-lying coastal areas due to sea level rise
 - Impact on livelihoods and incomes due to decline in agricultural production
 - Increase in heat-related mortality and morbidity for people and wildlife
 - Loss of alpine biodiversity in Australia due to less snow

- Asia**
- Urban infrastructure damage and impacts on human well-being and health due to flooding, especially in coastal cities and settlements
 - Biodiversity loss and habitat shifts as well as associated disruptions in dependent human systems across freshwater, land, and ocean ecosystems
 - More frequent, extensive coral bleaching and subsequent coral mortality induced by ocean warming and acidification, sea level rise, marine heat waves and resource extraction
 - Decline in coastal fishery resources due to sea level rise, decrease in precipitation in some parts and increase in temperature
 - Risk to food and water security due to increased temperature extremes, rainfall variability and drought

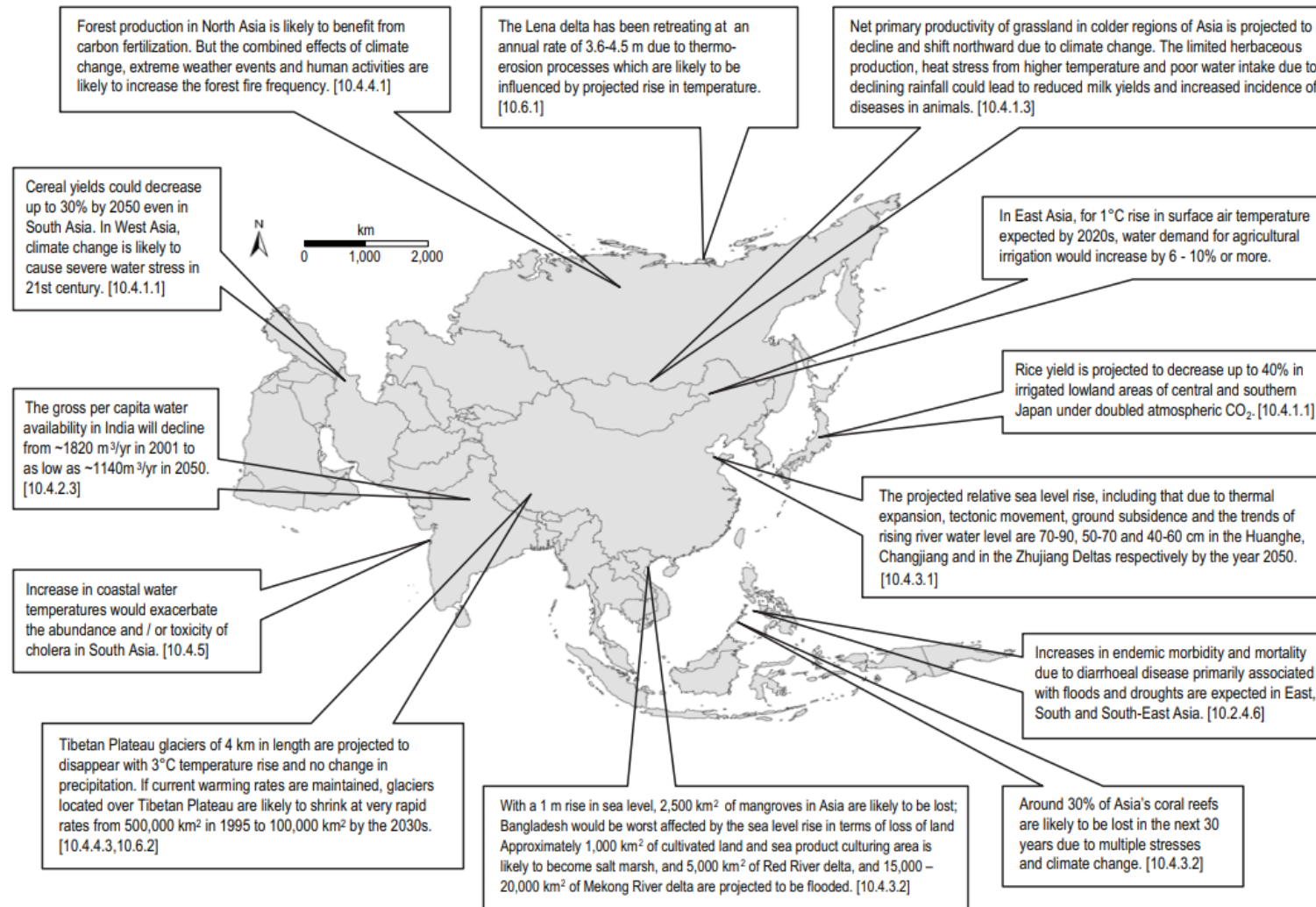
Key risks related climate change in Asia



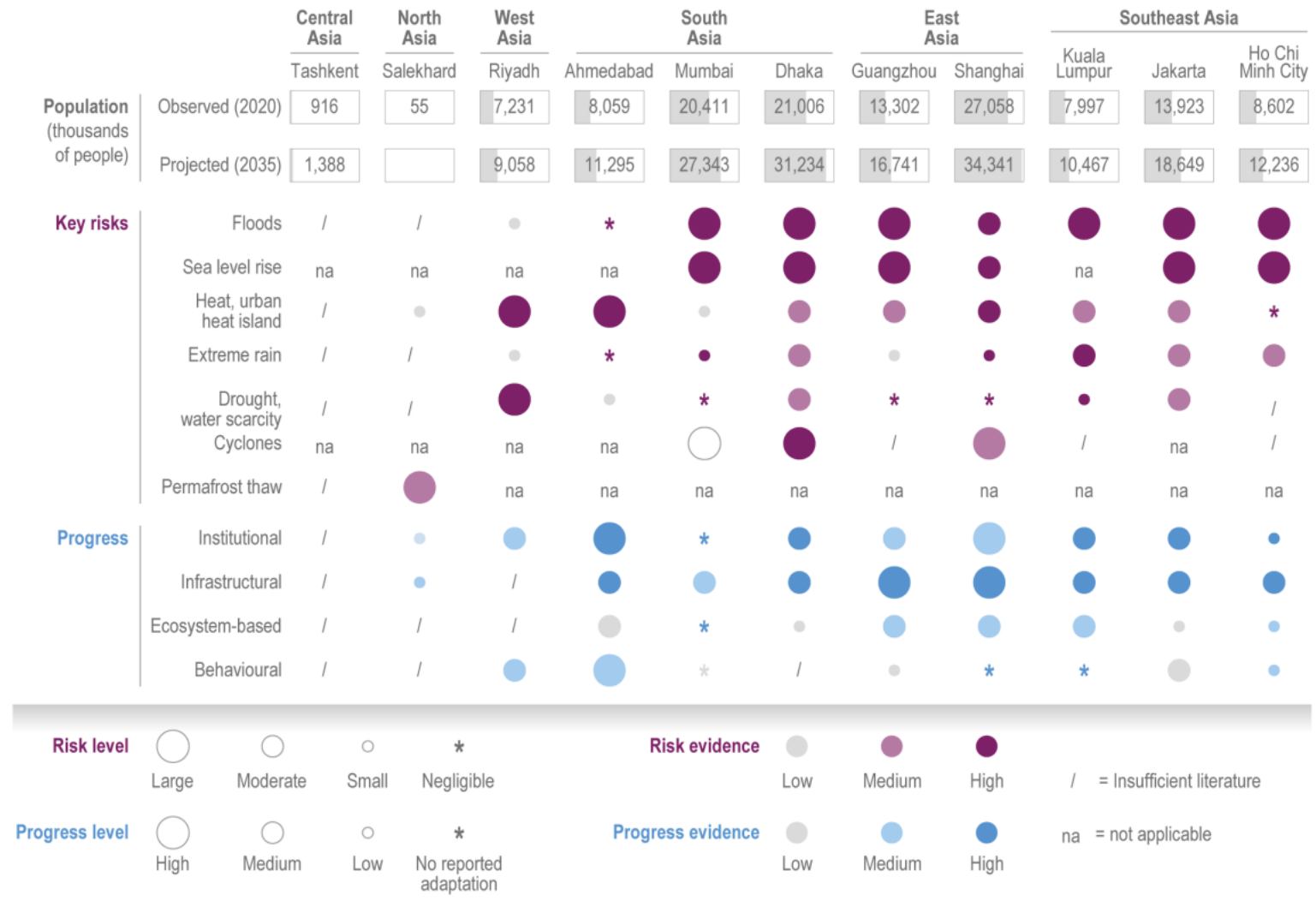
Each of these risks increases with global mean temperature rises

Source: IPCC AR6

The adaptation challenge in Asia Pacific



Key risks and adaptation options in some Asian cities



Source: IPCC AR6

How to act – begin with the national and regional context

Familiarise yourself with **national or regional adaptation priorities** for key markets, sectors and economic activities.

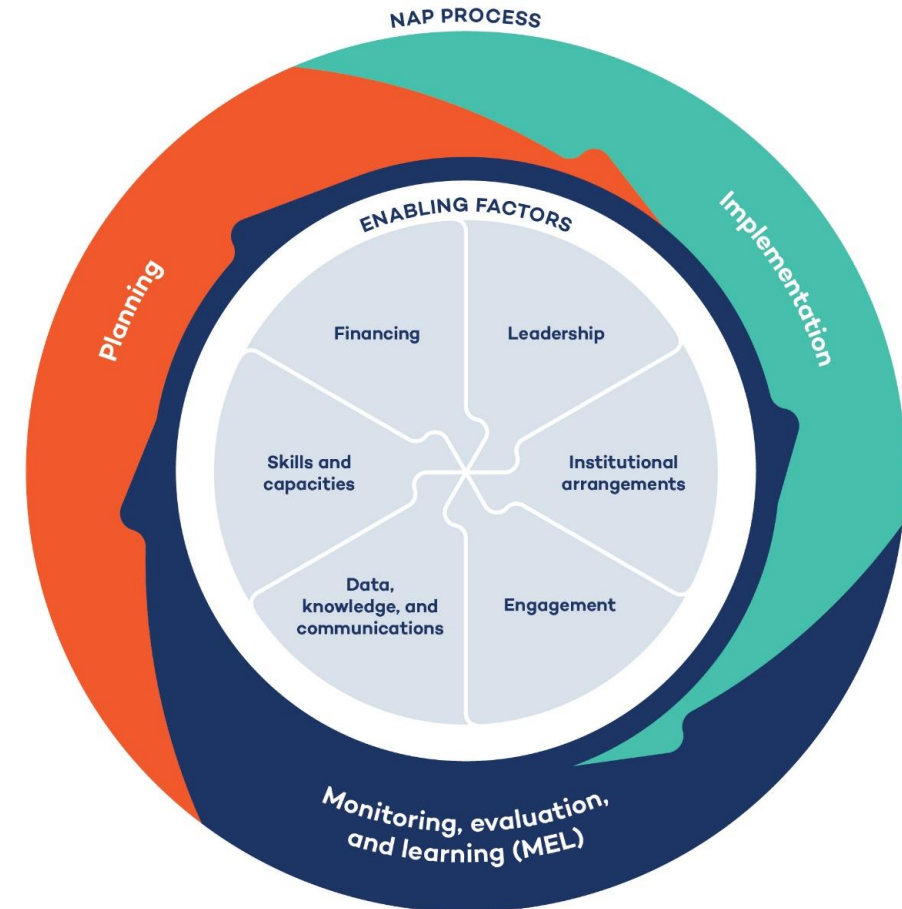


These will inform your bank's plans and roadmap towards developing its adaptation strategy.

- As a minimum, your bank could consider the Paris Agreement and Global Goal on Adaptation at international level, and national adaptation plans (NAPs) for country-level priorities.
- For practical reasons, **banks with global and diverse portfolios** could prioritise the review of NAPs in the regions that are most vulnerable to climate change and where they have significant presence.
- For **global contexts**, the Sharm El Sheikh adaptation agenda can also serve as a guide specifying the adaptation finance priorities in five key impact systems: food and agriculture, water, and nature, coastal and oceans, human settlements, and infrastructure.

A National Adaptation Plan overview

- A National Adaptation Plan (NAP) is a **strategic document developed by a country to outline its approach to adapting to the impacts of climate change**.
- NAPs are developed in accordance with the guidance provided by the United Nations Framework Convention on Climate Change (UNFCCC) and serve as a framework for a country's efforts to enhance resilience and reduce vulnerability to climate change.
- The **Paris Agreement requires all countries to develop and implement NAPs**.
- National Adaptation Plans outline
 1. The most significant climate hazards
 2. The key sectors affected
 3. Policy measures to enhance resilience.
- NAP are increasingly focusing on the **role of the private sector in financing adaptation needs**



How well do you currently know your country's physical climate risks and National Adaptation Plans?



National Adaptation Plans in the region

Status of the submitted documents to the UNFCCC

All countries in the Asia-Pacific

Documents	TOTAL (countries)	Oldest (year)	Latest (year)
NC	37 / 39	2012	2022
NDC	39 / 39	2016	2022
NAPA	13* / 10	2005	2013
NAP	6 / 36**	2016	2021
AC	7 / 39	2017	2021

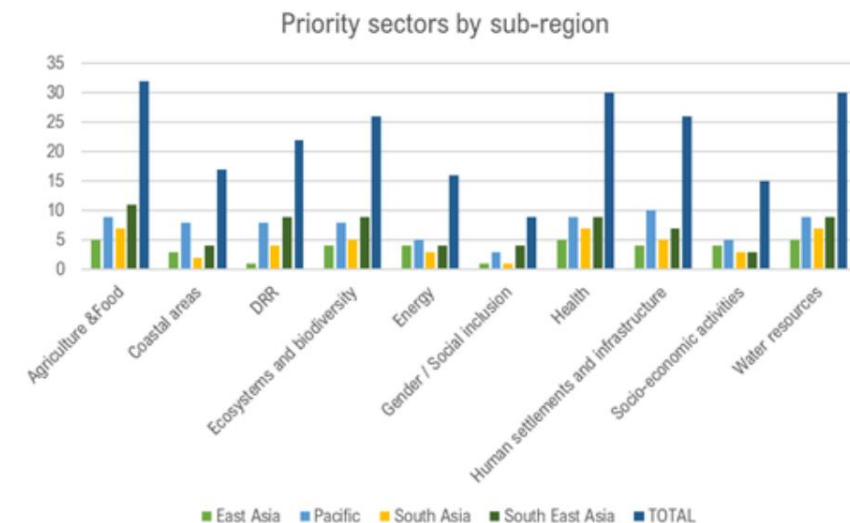
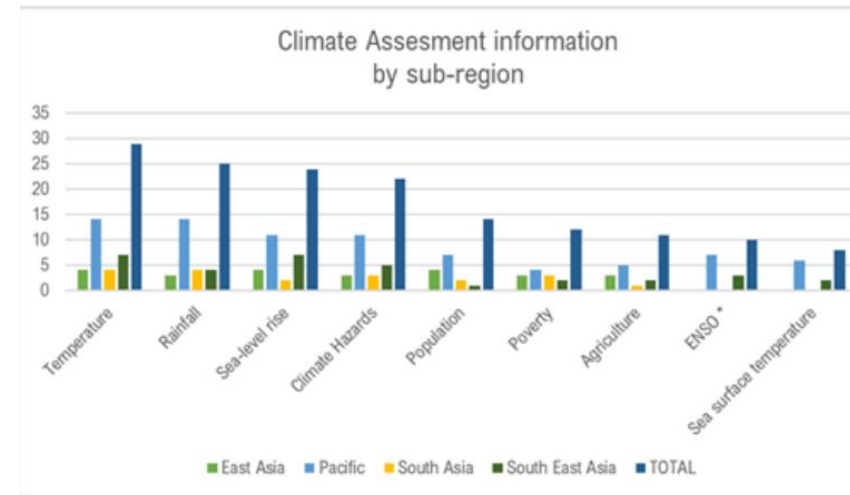
NC (National Communication)

NDC (Nationally Determined Contribution)

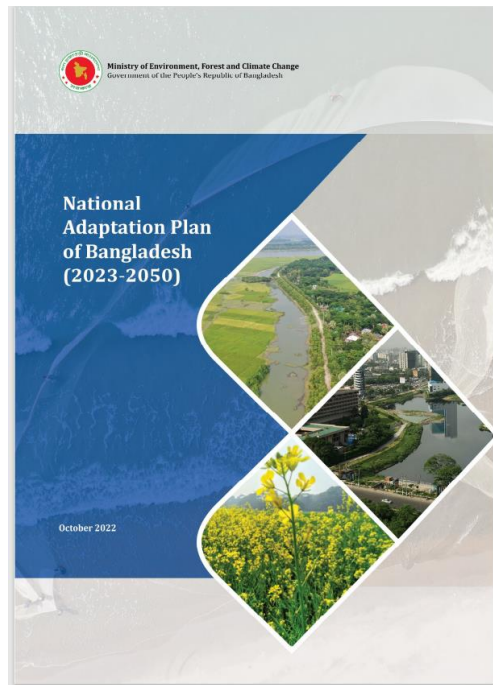
NAP (National Adaptation Plan)

AC (Adaptation Communication)

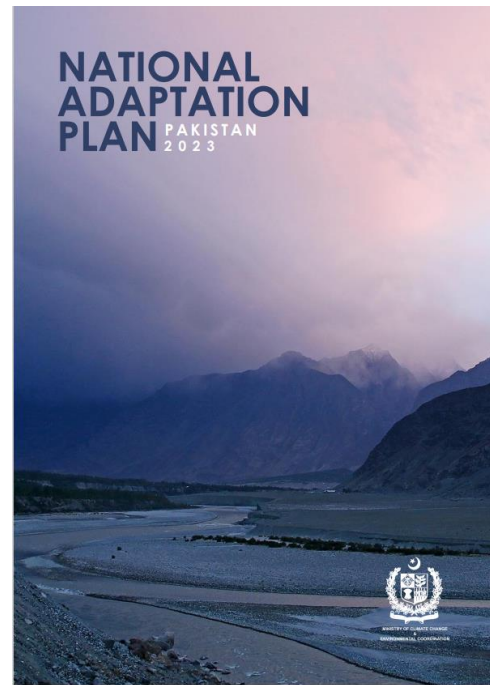
NAPA (National Adaptation Programme of Action)



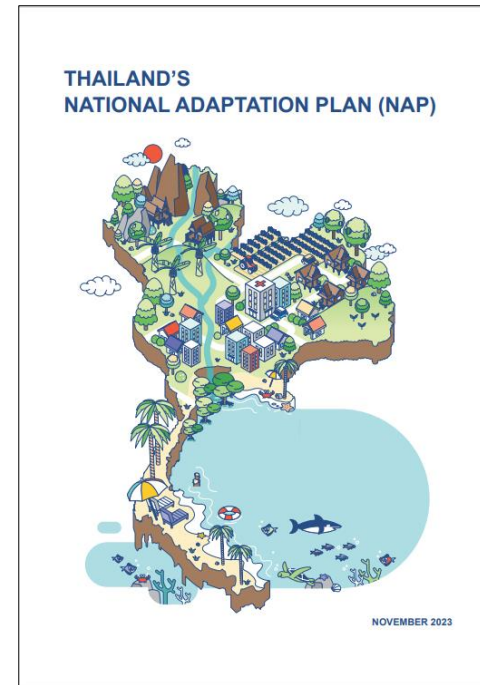
NAPs in the region – illustrative examples



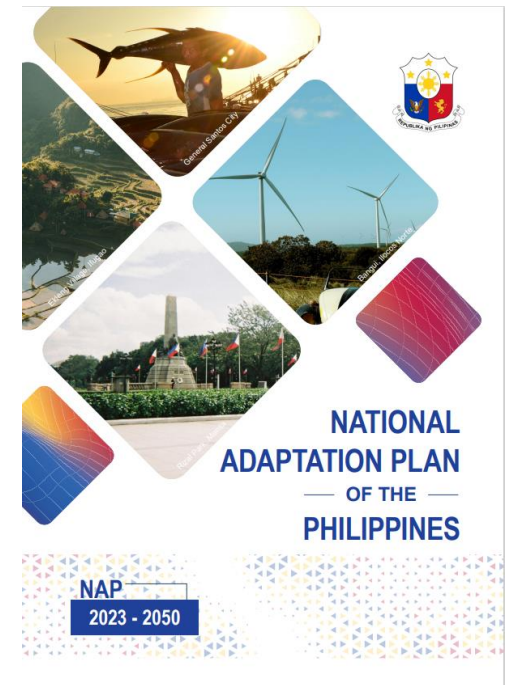
[National Adaptation Plan - Bangladesh | UNFCCC](#)



[National Adaptation Plan Pakistan | UNFCCC](#)

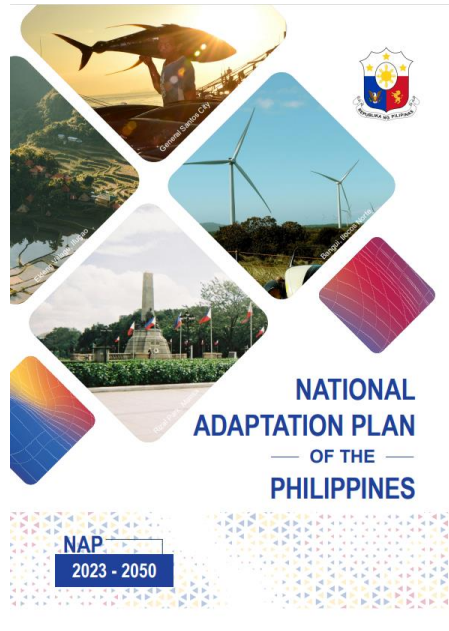


[NAP_THAILAND_2024.pdf](#)



[National Adaptation Plan - Philippines | UNFCCC](#)

Example: National Adaptation Plan of Philippines (extract)



[National Adaptation Plan - Philippines | UNFCCC](#)

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Example: National Adaptation Plan of Philippines (extract)

5.1.6 Enabler 6: Adaptation financing

Definition and Purpose

Adaptation financing involves deploying strategies to secure, allocate, access, and optimize the use of financial resources for addressing climate impacts.

Globally and particularly in highly climate-vulnerable nations like the Philippines, there is a growing need for adaptation financing. As a developing country disproportionately affected by climate change, the Philippines must utilize domestic public, international development, and private sector funds to implement adaptation solutions and sustain the NAP process.

The central focus of this enabler in the NAP is to address issues and opportunities in allocating, accessing, and utilizing each funding source. As the NAP proceeds, a national investment and financing plan will be created to quantify the funding gap and optimize allocation for priority adaptation solutions.

Key success factors

To unlock a holistic and sustainable adaptation financing strategy for the Philippines, six key success factors will be critical.

1. Utilizing a co-benefit approach: To enhance the mobilization of adaptation financing, policymakers can design priority programs and projects in a manner that not only addresses adaptation but also yields co-benefits in terms of advancing climate change mitigation, achieving the Sustainable Development Goals, disaster risk reduction, and more.

2. Mainstreaming adaptation in Public Finance Management and budgeting: Integrate climate adaptation considerations into budgeting and financial planning processes to ensure adequate and timely public funding is directed towards high-impact adaptation interventions.
3. Enabling private sector investments in adaptation: Facilitate private sector investments in adaptation projects by highlighting potential risks, returns, and benefits.
4. Leveraging innovative funding instruments: Explore a range of innovative funding instruments, especially those that help unlock private capital, by making semi-bankable projects viable.
5. Actively engage public sector and local communities throughout the process: Involve government agencies (national, sectoral, and local), local communities, and vulnerable groups in the formulation of adaptation financing strategies and prioritization.
6. Establishing robust and strategic networks: Partner with multiple Multilateral Development Banks (MDBs) and Development Finance Institutions (DFIs) to access additional funding, global project insights, technical support, and innovative funding mechanisms.



Figure 5.1.6.1 Adaptation funding sources in the Philippines

Example: National Adaptation Plan of Philippines (extract)

Private funding

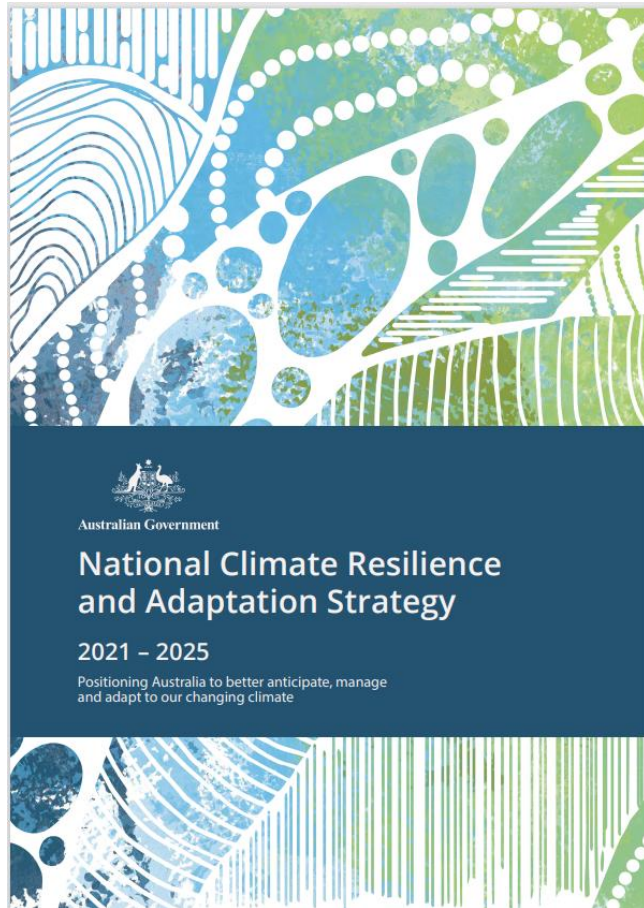
To address these concerns, the involvement of the private sector is critical. As the Global Commission on Adaptation puts it in its Flagship Report, “the public sector needs to shift its focus to include both generating finance and creating incentives to scale up private sector engagement in adaptation investments” (GCA, 2019). However, globally, corporations and institutional investors contributed a mere USD1 billion, which accounts for only 2% of the tracked adaptation finance in 2019 and 2020. This is in stark contrast to the significant 98% provided by public sources.

The private sector has good reason to focus on climate adaptation due to physical and transition risks. These risks make adaptation investments financially prudent and crucial for long-term stability. The Philippines recognizes the private sector’s role in adaptation and has established lending instruments for climate projects. Examples include the Land Bank of the Philippines’ Ecosystem Program and sub-loans via the Climate Special Adaptation Facility, as well as the Development Bank of the Philippines’ Green Financing Program.

Furthermore, the Philippines has begun implementing regulatory measures to encourage increased private sector engagement. Among these measures are the issuance of circular no. 1085 by the BSP on April 19, 2020, outlining the Sustainable Finance Framework, Circular No. 1128 dated October 26, 2021, detailing the Environmental and Social Risk Management Framework, the Green Jobs Act, the CREATE act, and Circular No. 1149 issued on August 23, 2022, providing guidelines on integrating sustainability principles into investment activities of banks. The implementation of these enabling policies has resulted in the issuance of over PHP100 billion worth of sustainable bonds in 2020.

Despite the progress made, significant challenges persist for the private sector’s active involvement in climate adaptation efforts. Private sector involvement in climate adaptation remains low in the Philippines. While financial institutions are increasingly issuing sustainability and green bonds, critical sectors (e.g., infrastructure) have yet to fully engage.

Example: National Adaptation Plan of Australia (extract)



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Our objectives

The Strategy details three objectives to enable more effective adaptation across Australia:



Drive investment and action through collaboration



Improve climate information and services



Assess progress and improve over time

Example: National Adaptation Plan of Australia (extract)

Economic Domain



Council of Financial Regulators



Photo: Eureka tower, Melbourne, Kulin Nation, Victoria

The Council of Financial Regulators is made up of The Treasury, Reserve Bank of Australia, Australian Prudential Regulation Authority, and Australian Securities and Investments Commission. The Council considers the risks of climate change as part of its discussions and initiatives.

Two current initiatives to increase the preparedness of Australian financial institutions to manage climate risks include:

- implementing regulatory initiatives to help the Australian financial sector better understand climate-related financial risks, address some of the data and standardisation challenges in climate risk assessment and reporting, and support market participants as they respond to the policy, investment and insurance challenges of climate change
- Climate Vulnerability Assessments which aim to identify risk and assist financial institutions adjust their business models.

Example: National Adaptation Plan of Australia (extract)

Australia's financial sector will continue to play an important role in shaping how we plan for and adapt to climate change:

- Banks and lenders are considering the impacts that climate change risks could have on borrowers and capital markets.
- More businesses are seeking to understand, manage and disclose climate risks, as parts of efforts to strengthen corporate governance and maintain investor confidence.
- Financial regulators are providing guidance to businesses to ensure climate risks are being appropriately managed and consumers are protected.





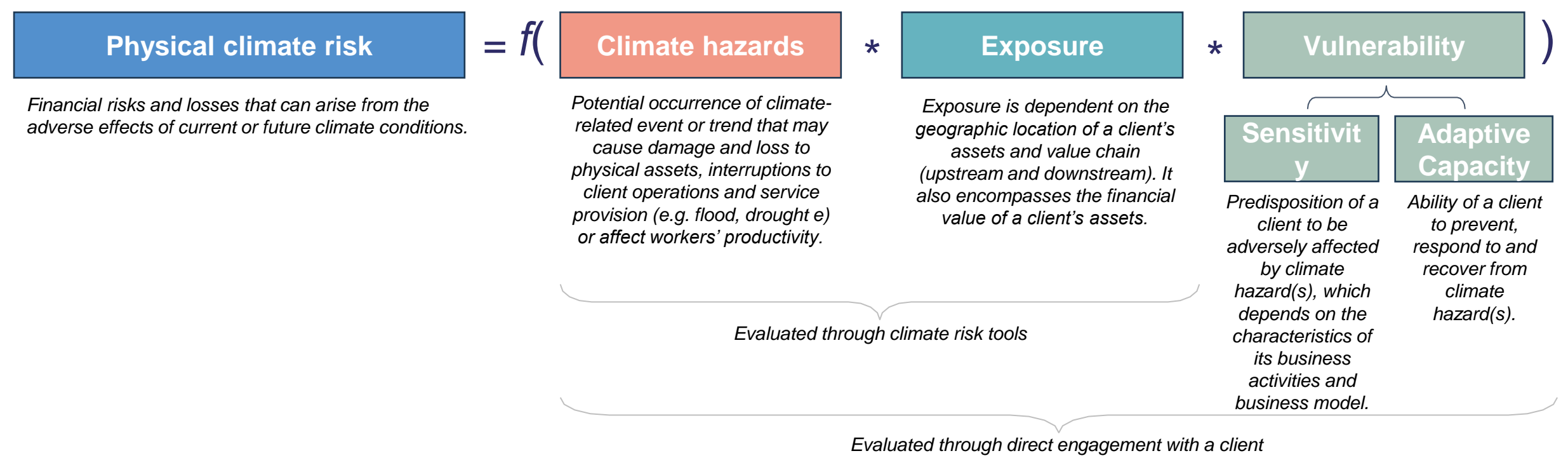
Aligning with NAPs – key takeaways

- Banks should align adaptation strategies with the **global and national adaptation goals**.
- Alignment, a core Principle under the PRB framework, in this context may include incorporating **climate resilience objectives in strategies** by considering how it affects the **bank's business model and long-term sustainability goals**.
- NAP adaptation objectives and priorities relevant to the private sector and financing needs may inform **internal policies for risk management, lending criteria and investment guidelines** and aligning action with prioritised sectors and economic activities as they relate to the bank's portfolio.
- NAPs establish national goals and pathways, but vulnerabilities and **adaptation needs can vary significantly at the local and sector levels**.
 - Where possible and practical, adaptation efforts can be tailored to local realities, especially in vulnerable and economically significant sectors.

— Step 2: Setting the baseline: Physical risk assessment

The physical climate risk equation –foundational framework supporting PCR identification, assessment and management

The physical climate risk to a client is a function of the dynamic exposure and vulnerability of the client to climate-related hazards, either individual hazards or a combination of hazards. The ‘physical climate risk equation’ provides a consistent and complete framework to assess client physical climate risk for banks.



Source: re-elaboration of the determinants of physical climate risks from the IPCC Fifth Assessment Report and its evolved version in [IPCC Sixth Assessment Report](#).

In a banking context three existing bank activities and processes can be targeted as a priority to integrate PCR identification, assessment and management

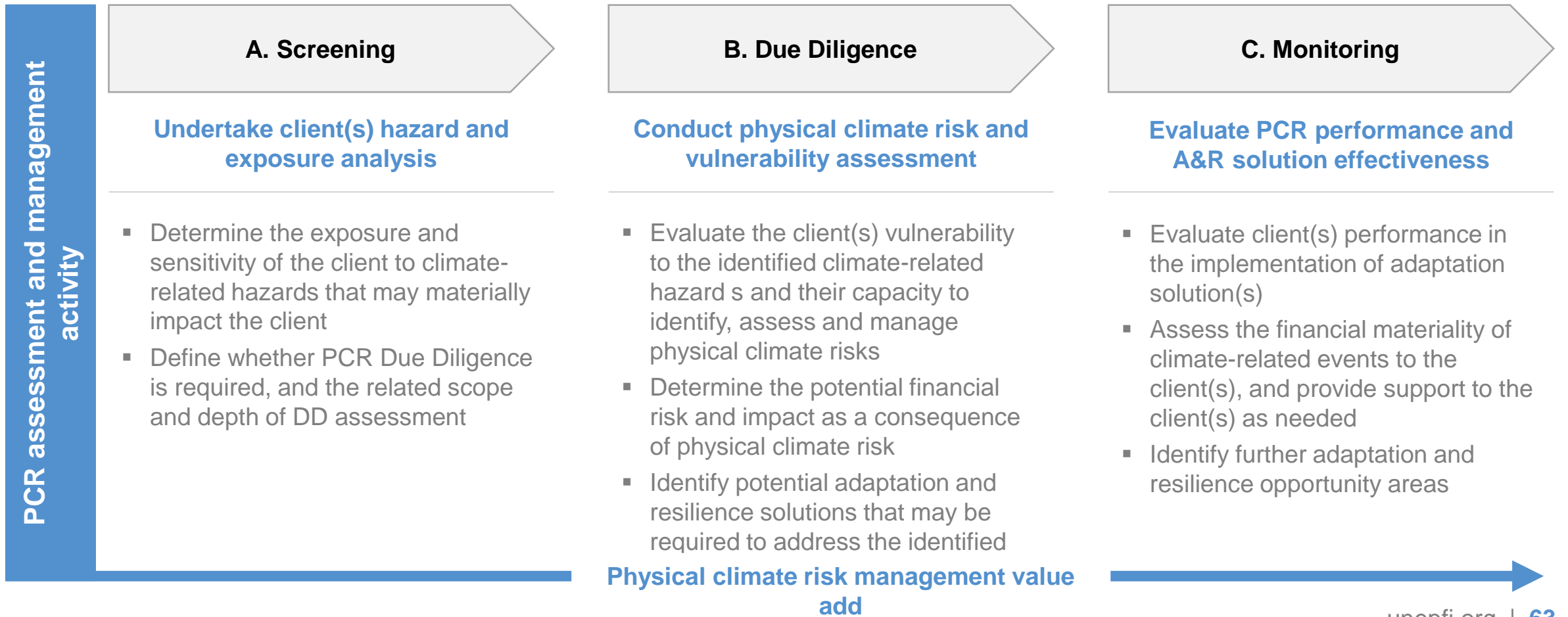
Bank activity	PCR identification, assessment and management outcomes	Target output
A. Screening	Identify the physical climate risk drivers that may materially affect the client(s) performance	Inherent physical climate risk rating ¹
B. Due diligence	Gain an enhanced understanding of client(s) exposure and vulnerability to physical climate risk and the related implications, and identify and evaluate adaptation and resilience solutions	Residual physical climate risk rating and adaptation action plan ²
C. Monitoring	Oversee and support the client(s) to implement adaptation and resilience solutions and build physical climate risk management capabilities, followed by receiving information on physical climate risk management and effectiveness	Adaptation action plan performance monitoring and residual risk rating update

The physical climate risk profile of a client(s) is continuously refined as more information is made available, and client context further understood by is this process and methodology across client/financing contexts which we will examine in subsequent Working Group sessions.

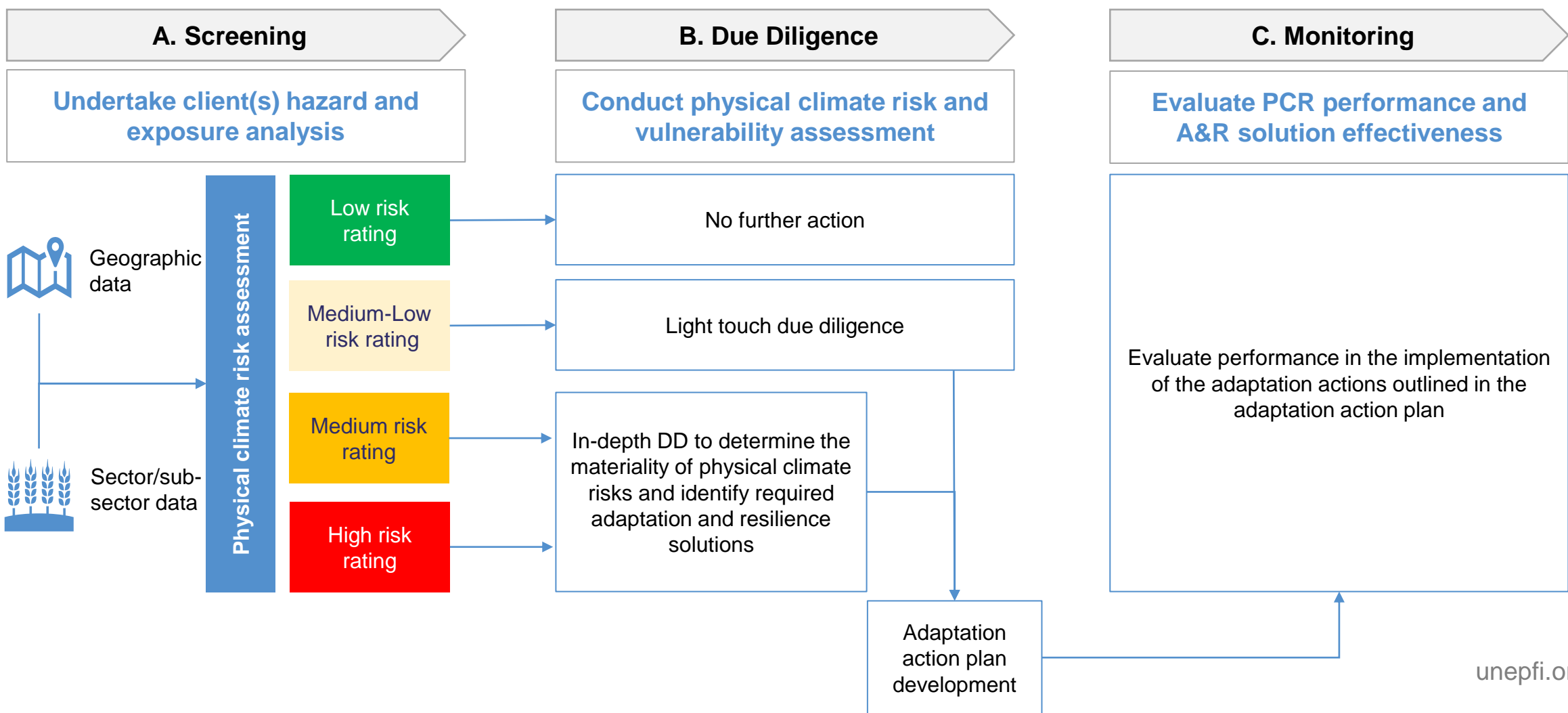
Definitions

1. The level of risk in the absence of any actions taken to alter either the impact or probability of the risk itself. It does not include any adaptation measures implemented by the client.
2. Level of risk remaining following the implementation of risk reduction efforts (adaptation and resilience interventions).

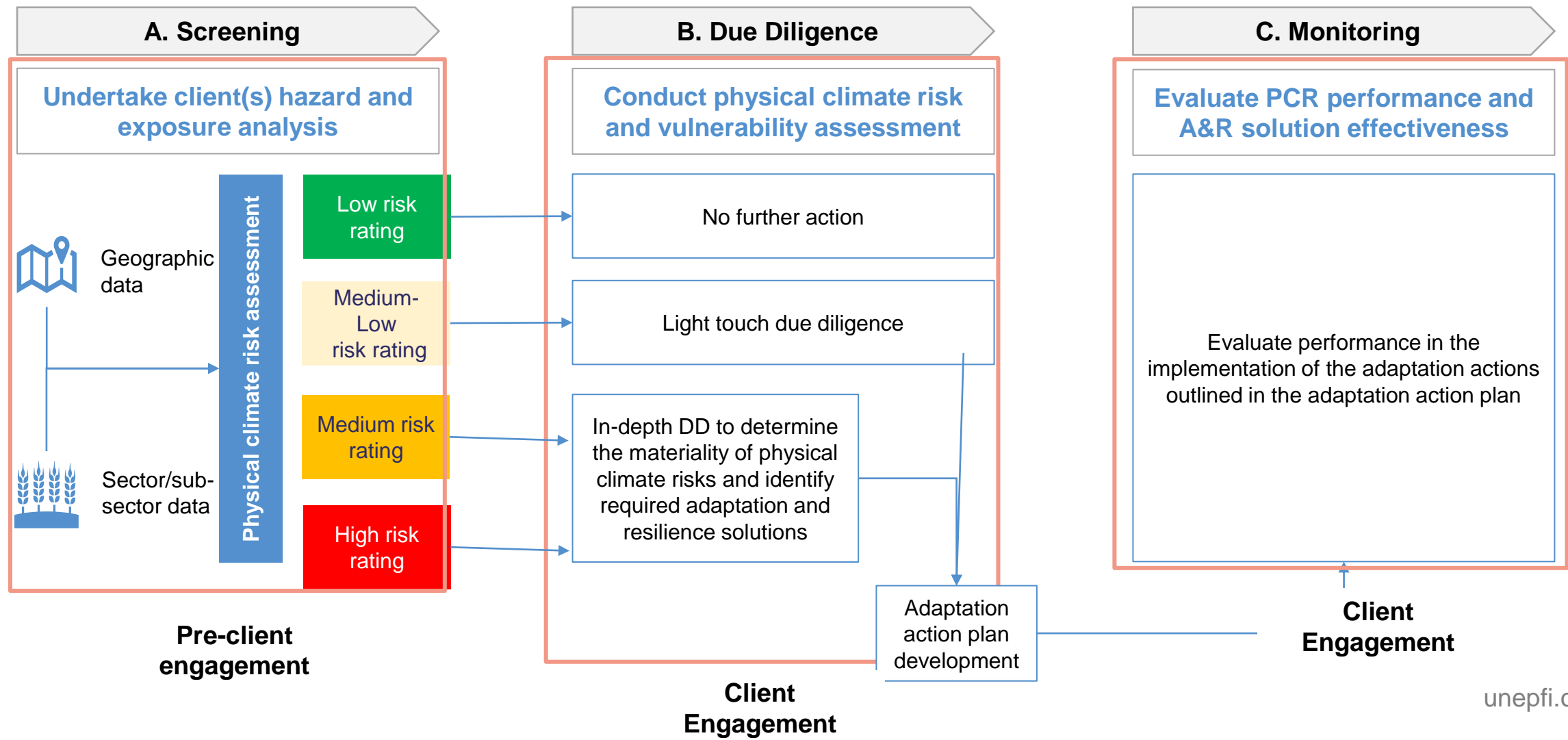
The high-level approach to PCR assessment and management for banks, with Screening outputs triggering different subsequent bank actions



A visual flowchart of the high-level PCR assessment and management approach, with Screening outputs triggering different subsequent bank actions



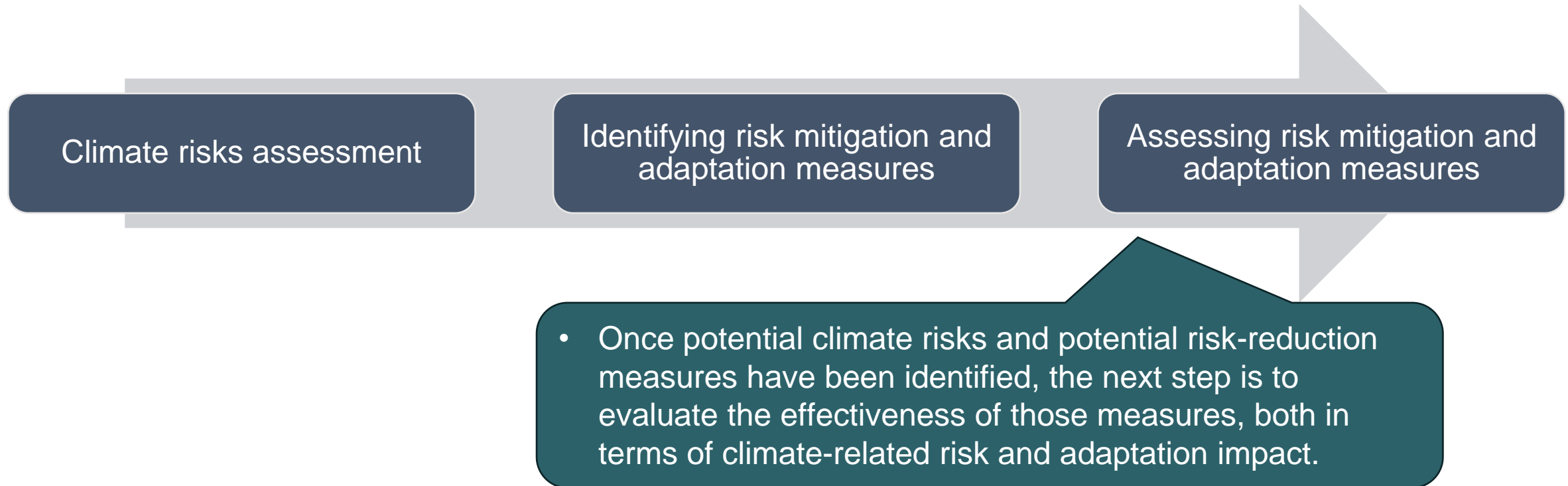
For client(s) generating Medium-Low to High risk ratings at the Screening stage further Due Diligence is undertaken, with Client Engagement required to effectively complete



Key considerations



Key considerations



Key considerations



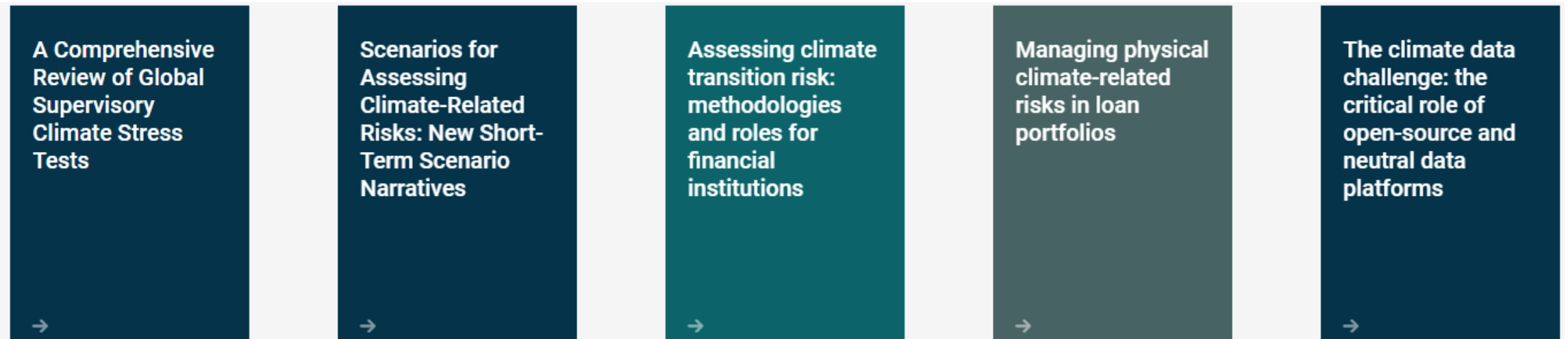
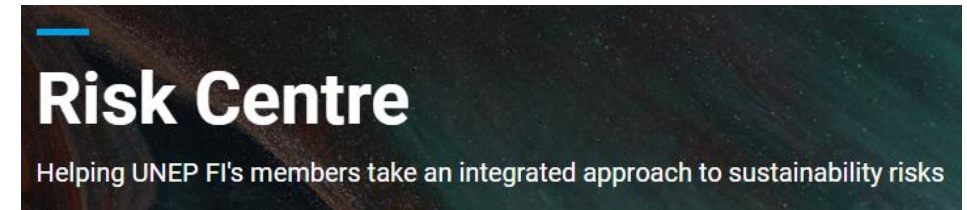
Your banks should also consider the following guiding questions:

- Are clients aware of the risks from the physical impacts of climate change?
- Are they assessing their risk from physical climate-related impacts and putting in place a risk management strategy?
- Are clients aware of how they can manage and mitigate climate-related risks?
- What are local and national governments doing to address particular climate impacts?
- What technologies or activities are available to clients to reduce their climate-related physical risks?

+ Other elements of baseline setting

A note on risk assessments

- In this capacity building program we don't cover physical risk assessments in detail
- If you need further support on risk assessment, we recommend checking the UNEP FI Risk Center's trainings and resources
- We are just going to zoom on some unique aspects that are key for your adaptation actions



Additional resources and references

Physical climate risk assessment resources

- [ARUP \(2024\), Universal Taxonomy for Natural Hazard and Climate Risk and Resilience Assessments](#)
- [How to perform a robust climate risk and vulnerability assessment for EU taxonomy reporting \(including translation matrix for climate hazards across IPCC/EEA to EU Taxonomy classification\)](#)
- [Equator principles \(2023\) Guidance Notes on Climate Risk Assessment](#)
- [EBRD \(2019\), advancing TCFD guidance on physical climate risks and opportunities](#)
- [ISO Standard 14091:2021 Adaptation to climate change — Guidelines on vulnerability, impacts and risk assessment](#)
- [British International Investment: TCFD Implementation toolkit](#)
- [UNEP-FI: Climate Risk Landscape Report 2024](#)

Sector guidance resources

- [Infrastructure](#) – Technical Guidance on Climate Proofing Infrastructures (European Commission, 2021)
- [Infrastructure](#) - IIGCC PCRAM (Physical Climate Risk Assessment Methodology) in Practice: Outputs and insights from climate resilience in action
- [Energy](#) - Hydropower Sector Climate Resilience Guide (Hydropower.org)
- [Transport](#) - Climate Risk and Ports: A practical guide on strengthening resilience (IDB Invest)
- [Water](#) - Resilient Water Infrastructure Design Brief (World Bank)

Physical climate risk screening tools

- [UNEP FI Climate Risk Tool Dashboard](#)
- Water-related risks: WWF's Water Risk Filter Tool; [WRI's Acqueduct](#)
- Wildfire risks: [ESA's World Fire Atlas](#)
- Sea Level risks: NASA IPCC Sea Level Projection Tool - [NASA Sea Level Portal](#)
- Multi-hazard: NGFS's [Climate Impact Explorer](#) by Climate Analytics
- Multi-hazard: OS-C, [Open-source Climate: Physical and Resilience tools](#)

Climate Adaptation & Resilience metrics and measurement

- [ARIC Adaptation & Resilience Impact: A measurement framework for investors](#)

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What data gaps (if any) do you have for risk assessments?

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Any ideas how to overcome these data challenges?

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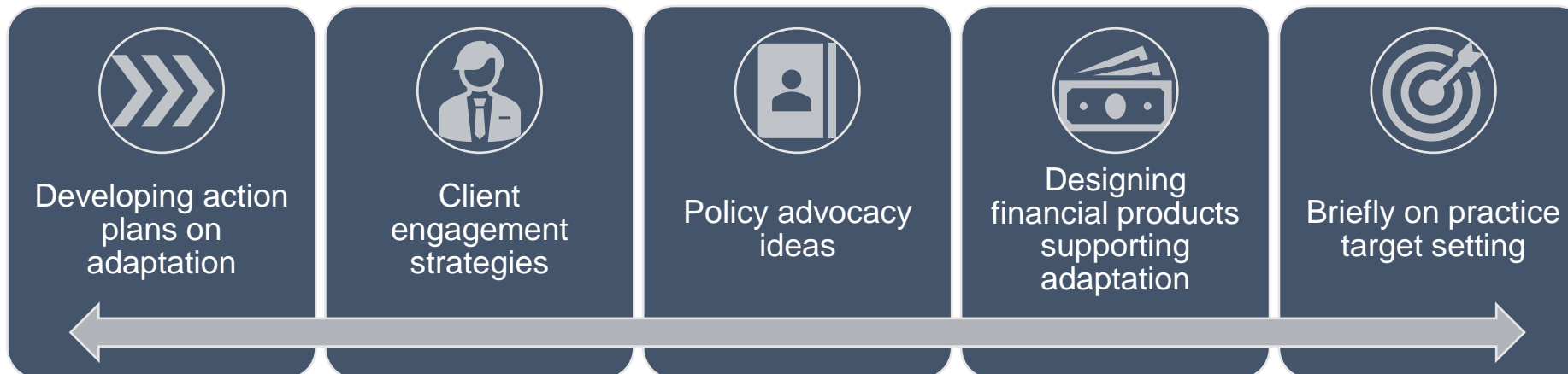
What are some of the opportunities that you see for your bank in adaptation in the context and region that you operate?

① Start presenting to display the poll results on this slide.

— Closing

Coming up next...

- We are going to send you the links to the presentation & recording in an email
- In that email we will be inviting you to work on an optional practical exercise that should help you start implementing things we covered today
- Next workshop on 18 December with key topics such as



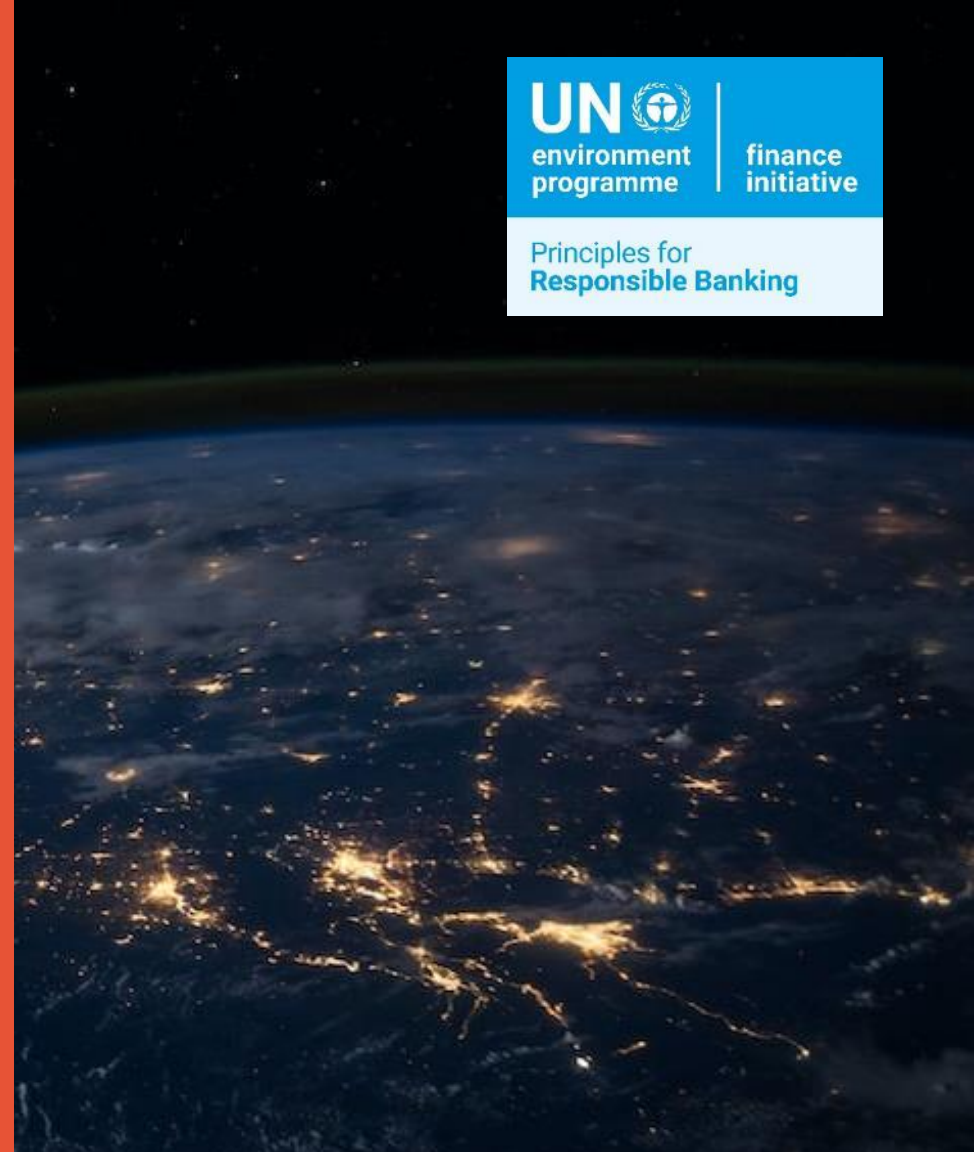
Thank you for your attention!

Slides will be shortly shared in email.

General UNEPFI contact: nirnita.talukdar@un.org
(Regional Lead for APAC)

Specifically for the climate capacity building:
gabor.gyura@un.org
(Capacity building consultant)

Please stay with us for 2 more minutes and evaluate the session on Slido (still open after the workshop). This is important for us to further develop the programme



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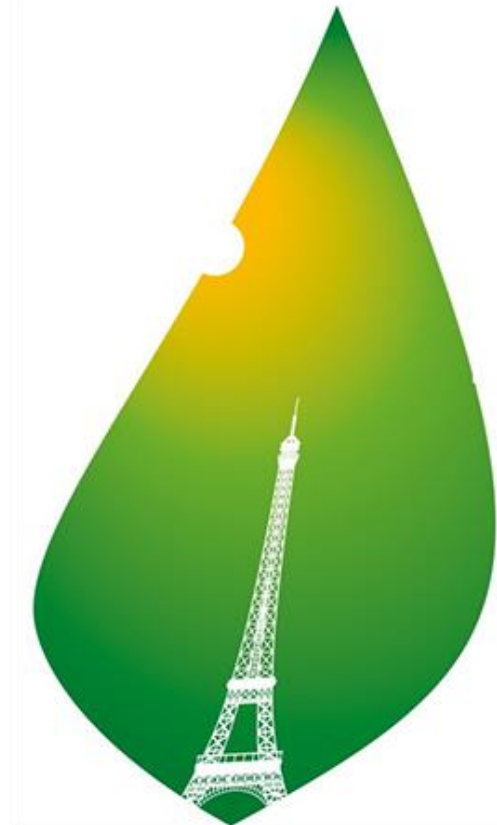


Evaluation survey

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Global frameworks for alignment

- Paris Agreement
 - Article 2.1(c) establishes the goal of making “finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development” (UNFCCC, 2015). Aligned portfolios will shift composition and financial flows towards a greater proportion of assets that are resilient to climate change.
 - **This requires assessment of the adaptation plans of individual counterparties and harmonised resilience indicators.** The priorities and measures for resilience are context dependent and developed by individual countries, however the Paris agreement should be viewed as the main overarching global framework agreement for alignment establishing the global goals and requirements for adaptation planning.



Global frameworks for alignment



- Global Goal on Adaptation (GGA)
 - Article 7.1 of the Paris Agreement established a GGA to ensure an adequate adaptation response in the context of the climate mitigation temperature goal.
 - At present, the definition is too broad to guide banks on portfolio alignment, due to the lack of frameworks and indicators defining and tracking climate risk and vulnerability reduction.
 - The 2022–2023 Glasgow-Sharm el-Sheikh (GlaSS) Work Programme aims to define the key elements of the goal, including the methodologies, indicators, metrics, and data sources to support the assessment of overall adaptation progress.
 - The agreed frameworks and indicators will enable operationalisation of the GGA and progress tracking, which allow the development of a vision for what can be achieved as a result of global adaptation efforts.

Global frameworks for alignment

- Marrakesh partnership and the Sharm El Sheikh Adaptation Agenda
 - The Marrakesh Partnership was launched in 2016 as a framework for collaboration between governments and non-state actors to accelerate climate action and achieve the goals of the Paris Agreement.
 - The Sharm El Sheikh Adaptation Agenda defines thirty global priority adaptation outcomes for 2030 in terms of "impacts" and finance mobilisation, which then need to be adapted to the bank's regional context. It focuses on five key impact systems: food and agriculture, water and nature, coastal and oceans, human settlements, and infrastructure.
 - Planning and finance goals are cross-cutting enablers across these categories, although there is no distinction between the contributions of the public and private sector.
 - Priority outcomes for Africa can serve as a complementary reference for alignment of medium-term objectives for banks operating in the region or as a guide for targeted participation in blended finance.

