



FinSAC approach to GREEN FINANCE

- May 2022 -

FCI Climate Finance Offering



Disclosure & Reporting

- **Taxonomies and reporting standards** to support transparency for climate-risk informed investments.
- **Environmental credit ratings**, external review providers (e.g., verification, certification, assurance)



Risk Management

- **Climate risk finance instruments** to protect households, businesses and governments against climate shocks and disasters
- **Prudential regulations & stress testing** to manage risk, increase financial stability, and incentivize greener investments



Green Finance

- **Green finance instruments** (e.g., green bonds, green housing finance, cat bonds) to allow for investments with a positive climate impact and financial return
- **Green investors** to support institutional investors in incorporating climate into their investment strategies
- **Private capital mobilization:** co-

Analytical & Advisory Services (e.g., FSAPs, Climate and Disaster Risk Finance Diagnostics) investment partnerships global + local EMDE investors

Global Discussions (e.g., FSB, TCFD, NGFS, G7, G20, InsuResilience Global Partnership, Coalition of

Lending (e.g., IPF, DPF, CAT DDO, P4R)

FCI engagements on greening financial sectors – Country examples

FCI is supporting efforts to green the financial sector in 50+ countries through its technical assistance, analytical and lending activities

Morocco

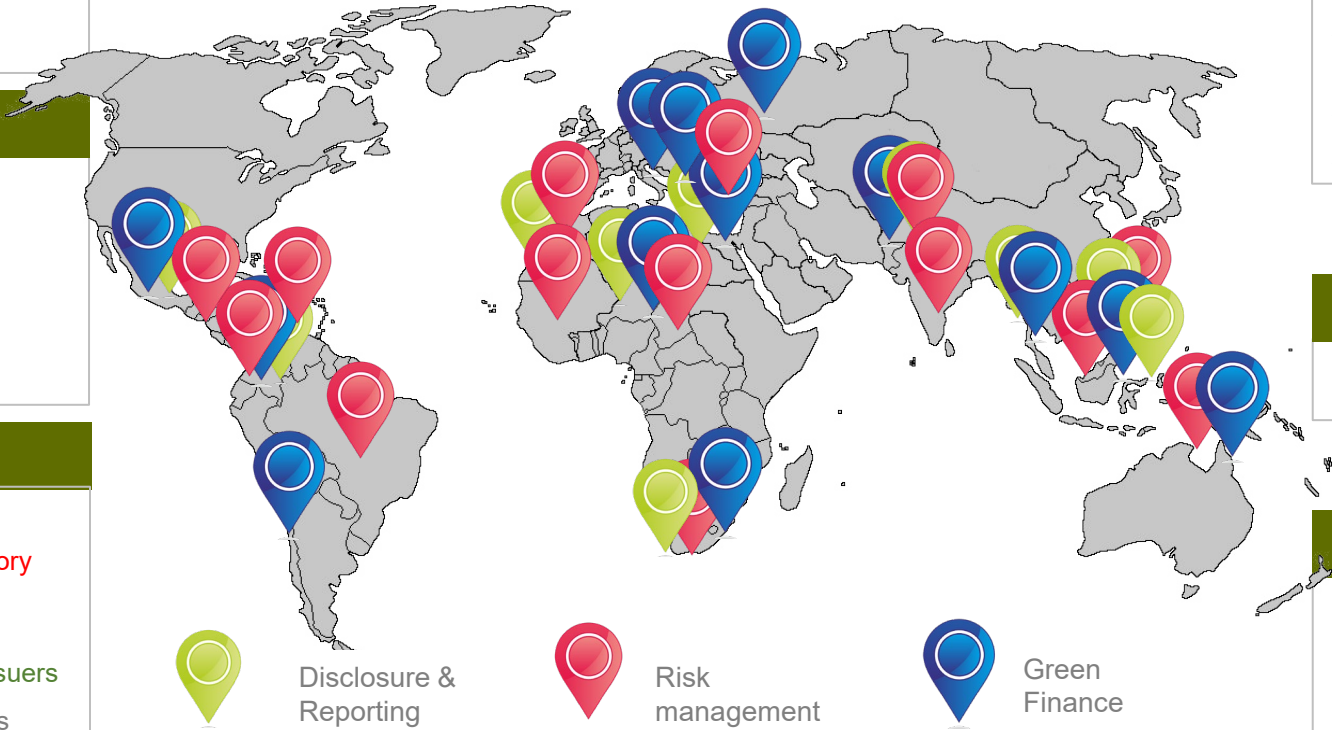
- CAT DDO / Risk Financing Strategy
- Climate vulnerability analysis and **follow up** guidance
- Training and events

Colombia

- Climate stress test and supervisory guidance for the banking sector
- Taxonomy + green standards
- Climate + ESG reporting standards investors and issuers
- Sovereign green bond

South Africa

- Disaster Risk Finance diagnostic
- FSAP climate analysis and supervisory follow up
- Implementation of climate + ESG reporting standards investors and issuers
- Training/capacity building and events



The Philippines

- CAT DDO
- FSAP climate analysis and stress test
- Supervisory guidance
- Taxonomy, ESG reporting/disclosure guidelines/ monitoring
- Diagnostic on green finance incentives
- Training and events

Balkan and Turkey

- CERO roadmaps / diagnostics

Malaysia

- Assessment of nature risks
- Green taxonomy
- Green Sukuk
- Workshops and seminars

Diagnostic Tools (CCDR/ FSAP/ Country work)

Climate and Environmental Risk & Opportunity Assessments (CERO)

Climate-related and Environmental Risks and Opportunities (CERO) Assessment

Vulnerabilities to Climate and Environmental Risks	Supervisory Response	Deepening Markets for Green Growth
<ul style="list-style-type: none"> Identifying physical and transition risks. Using qualitative and quantitative tools (e.g. exposure assessment, sensitivity analyses, stress test (in cooperation with the IMF)) Review of the sector's response to risks 	<ul style="list-style-type: none"> Benchmarking the supervisory responses in banking, insurance and capital markets, drawing on recommendations from the NGFS, and several of the international standard-setting bodies 	<ul style="list-style-type: none"> Assessment of the financing gap and barriers for green finance Options to tackle barriers and stimulate markets
<p>Examples of assessment tools</p>	<p>Aspects covered in the assessment framework</p> <ul style="list-style-type: none"> Greenhouse & Strategy Risk Identification, Assessment & Monitoring Supervisory Actions & Tools 	<p>Aspects covered in the assessment framework</p> <ul style="list-style-type: none"> Strategy & Contribution Transparency & Data Green Finance Instruments Markets for Risk Resilience

* Not yet covered in the guidance note

WORLD BANK GROUP
Equitable Growth, Finance & Institutions

Toolkits to Green the Financial System – Benchmarking Policies

TOOLKITS FOR POLICYMAKERS TO GREEN THE FINANCIAL SYSTEM

Strategy and coordination	Green Finance Roadmap	National Climate Finance Strategy		
Build skills & capacity	National Taskforce	International Networks	Paris Alignment by Fis*	
Regulation & central banks	Risk Analysis	Supervisory Practice	Supervisory Guidance	Greening Central Bank Activities
Transparency	Disclosure & Reporting; issuers	Disclosure & Reporting; investors	Taxonomy	
Greening Fis*	Greening NDDs*/ public Fis	National Green Bank		
Green Finance Instruments	Corporate Green Bonds & Equities	Sovereign Green Bonds	Blended Finance Products	Green Loans

Demystifying Sovereign ESG – Benchmarking methodologies



Climate and Disaster Risk Finance Diagnostic

Assessing Financial Protection against Disasters: A Guidance Note on Conducting a Disaster Risk Finance Diagnostic

Financial Risk Assessment (Tool 1) → Financial Response Design (Tool 2)

What could happen? → How to best respond financially?

1. How likely are worst case scenarios? → 2. How to best respond financially?

Financial Risk Assessment (Tool 1) → Financial Response Design (Tool 2)

Optimize combination of instruments: Risk Retention, Risk Transfer, Line of Contingent Credit, Insurance, Budget Reallocation, Reserve Fund

Residual Risk on top of USD 91m Ex-post Sovereign Borrowing (International Aid/Taxes)

Target ODR protection: \$10m

Examples of Economic & Financial Impact Estimates from extreme climate events

Evolution of GDP for a flood event of increasing intensity

Evolution of NPL for a flood event of increasing severity

Methodological and Analytical work in partnership with Bank of England and NGFS to support Ministries of Finance and Central Banks address, quantify and integrate (acute) physical risks into climate scenario analysis

Combining climate science + risk analytics + macro-economic + financial modeling to evaluate financial vulnerability of sectors, banks, populations to extreme climate events

Bottom-up implementation framework

Exposure mapping and risk profiling → Characterization of future extreme conditions → Definition of plausible worst-case scenarios → Impact assessment: 1st round effects → Economic and financial impact assessment: 2nd and 3rd round effects

And additional applications

- Climate Risk Financing Strategy for MoF
- Insurance and de-risking products
- Informing Climate Adaptation investments
- Sector-specific financial resilience and policies
- WBG CCDRs

Climate Physical Risk Assessment for the Financial Sector

Granular, bottom-up, model-agnostic approach to climate physical risk assessment

Climate Exposure, Hazard & Direct Economic Risk Assessment based on future extreme scenarios

Acute Climate Scenarios (e.g. 1-in-100 drought or urban flood events)

Country-specific Macro-economic modelling

Direct & Indirect Economic impact at sectoral level

Financial Sector Impact Evaluation & Stress-Testing

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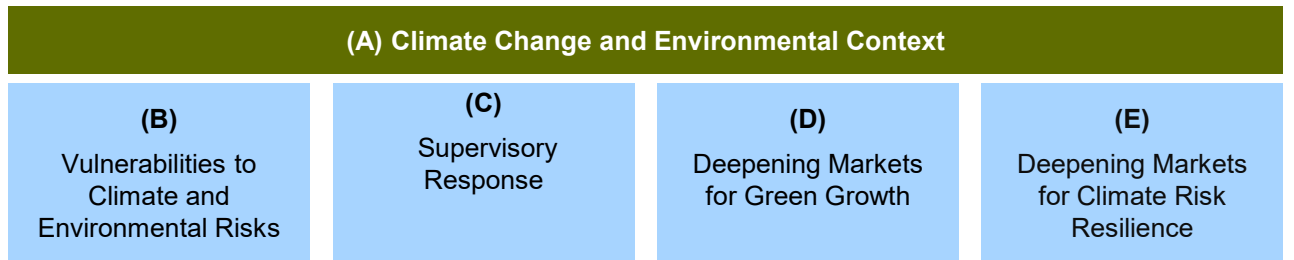
Climate Transition Risk Assessment



Climate Related and Environmental Risk and Opportunities (CERO) Assessments

- CERO methodology used as part of **FSAP, CCDR and stand alone** diagnostic in country work.
- **CERO coverage** has expanded to 18 countries with dedicated FSAP CERO TNs (WAEMU, Chile, Costa Rica, Mexico, SA, Philippines, T&T, Bangladesh), coverage in other specialized FSAP TNs (Colombia, Russia, Turkey), and stand alone assessments in Indonesia, Morocco, China and the Balkans (planned)
- **Innovative work:** WB/IMF typhoon stress test in Philippines FSAP; regional climate assessment for WAEMU; deep dive focus on green finance and regulations in Chile and South Africa
- CERO informs broader **WB strategic engagements**, including Climate Change Development Reports (CCDR), and follow up TA and DPLs (e.g., Philippines, South Africa)
- A **WB CERO Guidance Note** is finalized and will soon be released.

Scope and examples of CERO assessments



Impact of Typhoons and Pandemic on Bank Capital
(Total capital adequacy ratio in percent)

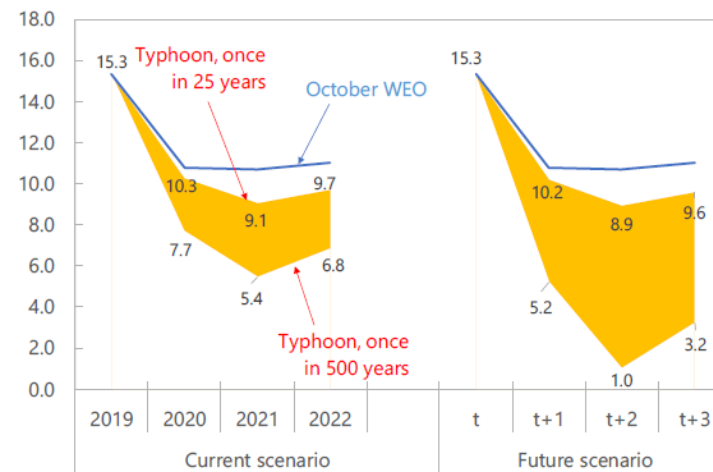


Table of Key Recommendations

Recommendations (References to Main Text)	Responsible Authorities	Time*
Supervisory response (140-61)		
1 Perform in-depth environmental risk assessments of the impact of climate and environmental risks on banks and insurers.	BSP, IC	NT
2 Improve information collection and monitoring of relevant climate and environmental risk metrics.	BSP, IC	NT
3 Develop capacity to stress test prudential impacts of climate change.	BSP	MT
4 Issue guidelines for banks on environmental risk management, governance and disclosures taking account of FSB TCFD recommendations. ⁴	BSP	NT
5 Integrate climate and environmental risks in off-site monitoring, on-site supervision and supervisory ratings.	BSP	MT
6 Consider applying for membership of the Central Banks and Regulators Network for Greening the Financial System.	BSP	MT
7 Build capacity to monitor and supervise uptake of the Sustainability Reporting Guidelines for PLCs and evaluate whether a mandatory approach is needed.	SEC	MT
8 Conduct a study on how investors are integrating sustainability factors into investment decisions and risk management.	SEC	MT
9 Develop risk-based regulation and supervision methodologies that address insurers' catastrophe risk accumulation and transfer practices.	IC	MT
10 Introduce disclosure guidelines on reporting of environmental and climate risks for insurance companies, taking account of FSB TCFD recommendations.	IC	NT
Deepening Markets for Green Inclusive Growth (162-81)		
11 Develop a strategy on green or sustainable finance.	DOF, BSP	NT
12 Set up a national platform for green or sustainable finance.	BSP	NT
13 Introduce a green finance taxonomy based on global best practices.	DOF, BSP	MT
14 Consider a mandatory labeling system for energy efficiency of buildings.	DoE	MT
15 Explore the opportunity for further prioritizing development banks for green growth.	DOF, BSP	MT
16 Consider issuing sovereign green bonds, performing a readiness and opportunity study as a first step.	DOF	NT
17 Explore the potential for blended finance instruments to stimulate green investments.	DOF	NT
18 Introduce a catastrophe insurance pool. ⁷	DOF	NT
19 Launch an NDC implementation roadmap providing clarity on pathways and investments needed for climate adaptation and mitigation.	CCC, Congress	NT
20 Consider incentives to further price externalities, including a carbon tax.	DOF	MT

* Short Term (ST) = within one year; Near term (NT) = 1-3 years; Medium term (MT) = 3-5 years.



Specific regulatory actions to assess and stress the risks from climate change

Overview

01



1st stage

- Risk Assessment Exercises
- Survey / questionnaires to the banking sector

02



2nd stage

- Preparation of a Regulation / guidelines on management environmental risks
- Request for strategic plans for assessing climate risks

03



3rd stage

- Update of the supervisory methodologies to assess climate risks
- Development of specific tools for assessing climate change risks
- On-site activities for assessing climate change

04



4th stage

- Pillar 3 reporting requirements for banks
- Climate change stress testing

05



5th stage

- Setting capital requirements for climate change risks



Capacity building



Risk analysis



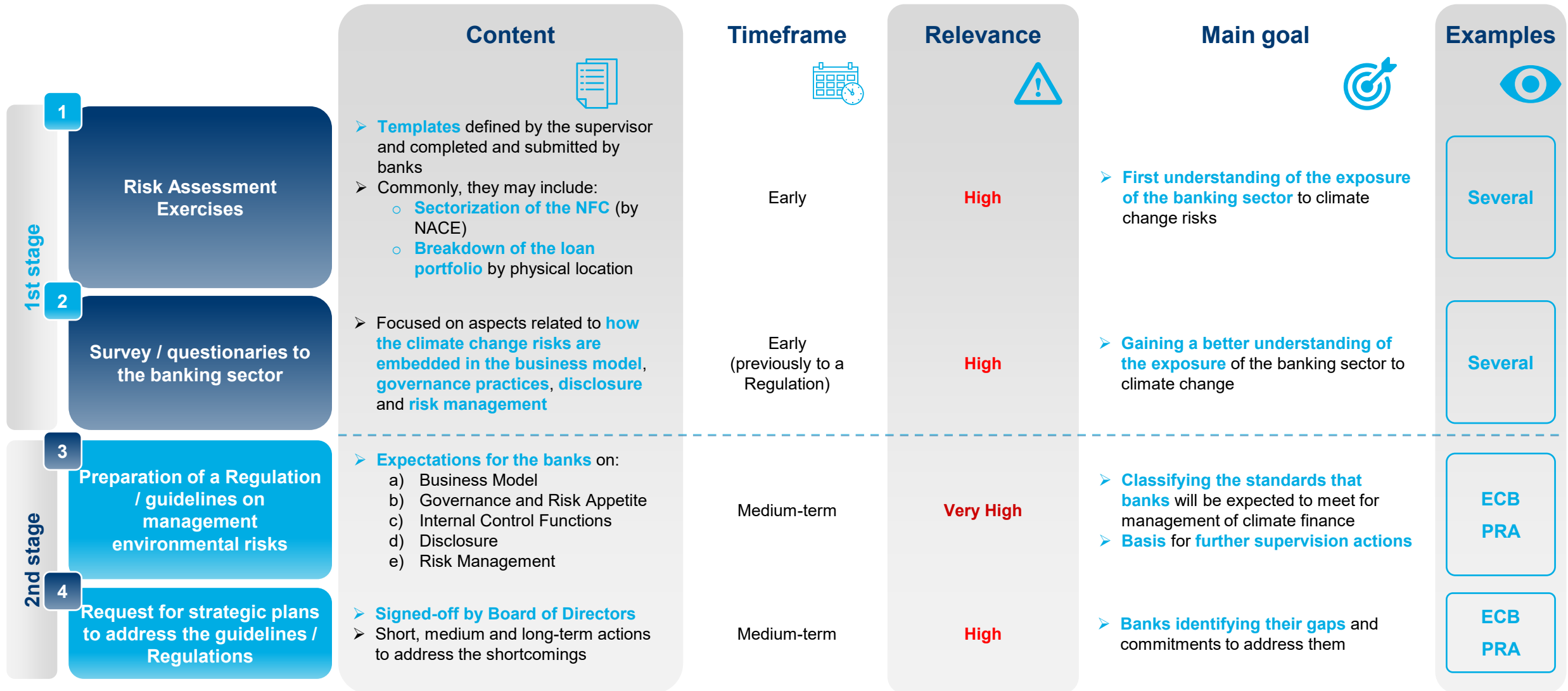
On-site activities



Off-site monitoring

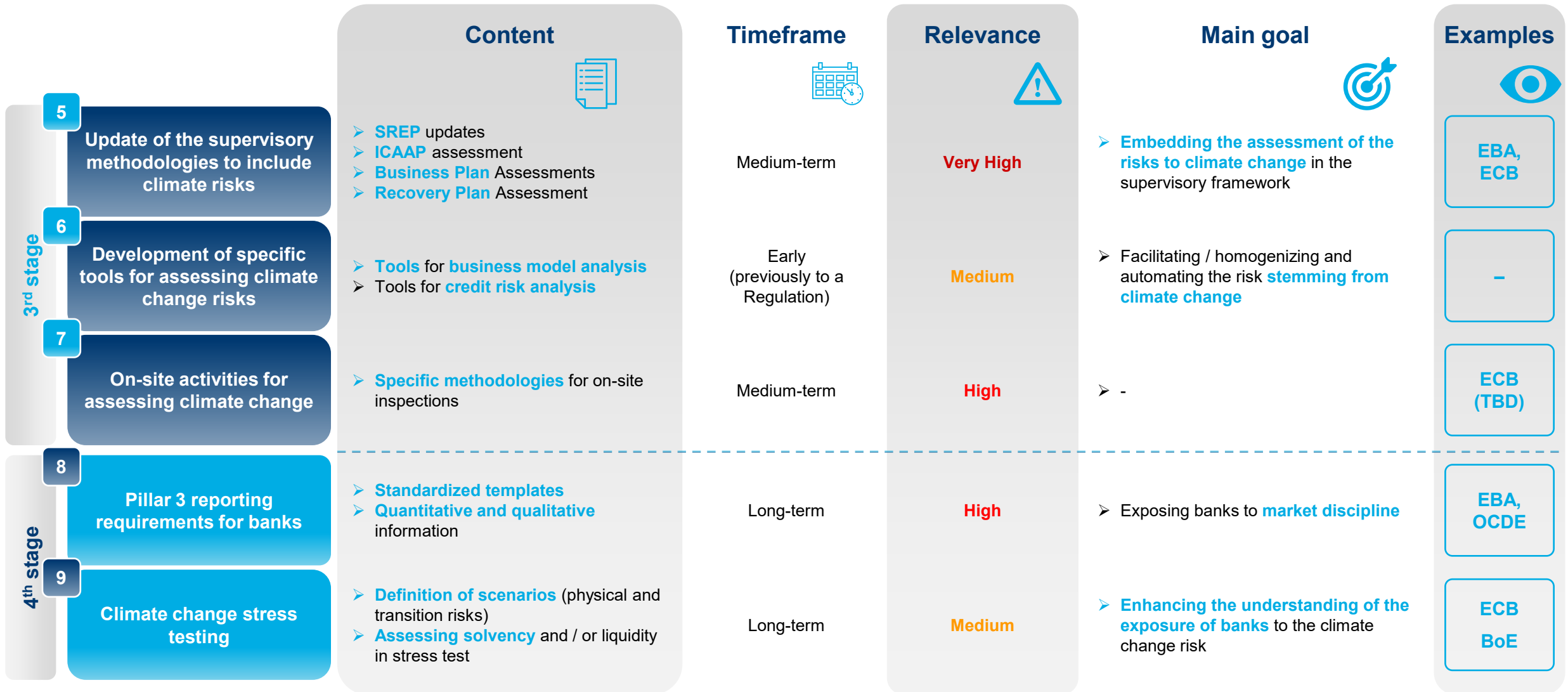
Specific regulatory actions to assess and stress the risks from climate change

Description of the different stages (1 of 3)



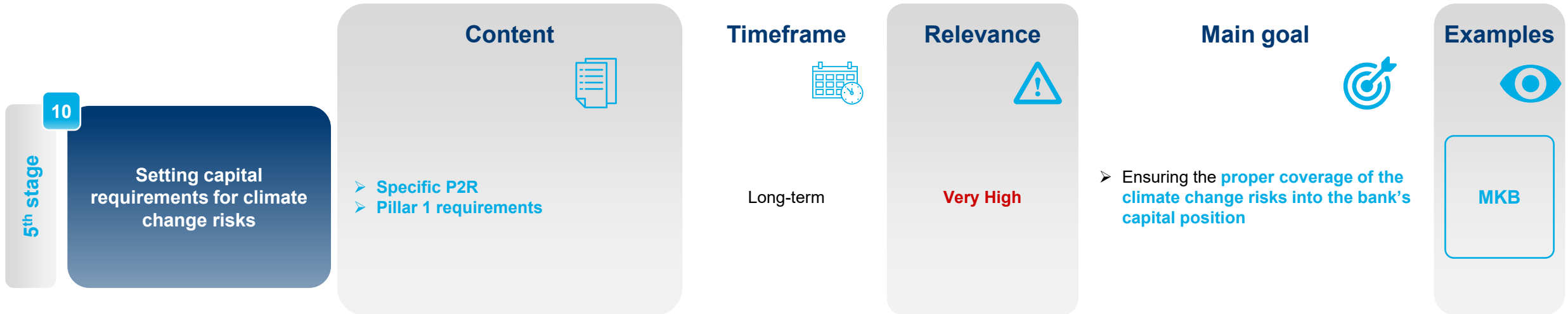
Specific regulatory actions to assess and stress the risks from climate change

Description of the different stages (2 of 3)



Specific regulatory actions to assess and stress the risks from climate change

Description of the different stages (3 of 3)



01

- The World Bank's FinSAC is a **Vienna-based Financial Centre**, that aims to provide **TA to client countries**, mainly in **Eastern and South-Eastern Europe** on:
 - ✓ **Banking prudential regulation and supervision**
 - ✓ **Banking resolution and crisis management**
 - ✓ **Financial Stability / macroprudential**

02

- WB's FinSAC has been **supporting client countries** (mainly Central Banks / banking supervisors) **in a number of areas:**



1. Implementation of a **SREP methodology and operating procedure**
2. Benchmarks and assessments of **supervisory models**
3. Development of **tools to assess**:
 - ✓ **Business model viability** and sustainability
 - ✓ **Capital assessments**
4. Approaches / development tool for **IFRS-9-based provisions**
5. Implementation / assessment **tools for ICAAP & ILAAP**
6. Implementation / assessment **tools for Recovery Planning**
7. **Operationalization of resolution units** / resolution plans
8. **Microprudential bottom-up stress testing exercises**

In this context, the World Bank's FinSAC is focusing on developing a regulatory and supervisory approach to risks stemming from climate change



Thank you