

HIGH-LEVEL POLICY DIALOGUE ON CLIMATE CHANGE

INTEGRATING CLIMATE AND NATURE RELATED RISKS IN PRUDENTIAL SUPERVISION

THE CASE OF BANCO DE PORTUGAL

20 NOV. 2024, ECB, FRANKFURT

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BANCO DE
PORTUGAL
EUROSISTEMA

1. **A PRIOR:
WHY WE MUST CARE**
2. **THE INTEGRATED APPROACH OF
BANCO DE PORTUGAL**
3. **BANKS' EXPOSURE TO
CLIMATE AND NATURE RISKS**
4. **KEY CHALLENGES AHEAD**

1

A PRIOR:
WHY WE MUST CARE

A PRIOR: WHY WE MUST CARE

“The occurrence of extreme events unprecedented in the observed record will rise with increasing global warming, even at 1.5°C of global warming.”



**European
Environment
Agency**

“Extreme weather events pose an increased risk to nature, buildings, infrastructure, and human health. These events, expected to increase in frequency and intensity because of climate change, are already causing substantial damage and loss.”

“Natural climate variability (...) can result in extreme weather and climate impacts, but climate change is leading to changes in the frequency, intensity, spatial extent, duration and timing of weather and climate extremes. Sometimes these impacts can be unprecedented.”



**WORLD
METEOROLOGICAL
ORGANIZATION**
Weather Climate Water



“As Earth’s climate changes, it is impacting extreme weather across the planet. Record-breaking heat waves on land and in the ocean, drenching rains, severe floods, years-long droughts, extreme wildfires, and widespread flooding during hurricanes are all becoming more frequent and more intense.”

A PRIOR: WHY WE MUST CARE

It affects us all. Already today.

“Different regions in Europe will experience different changes in the patterns of extreme weather:

- In northern Europe, annual precipitation and heavy rainfall are likely to increase, with droughts becoming less frequent.
- Central Europe is likely to experience lower summer rainfall, but also harsher weather extremes (heavy precipitation, river floods, droughts and fire hazards), with mixed changes in annual precipitation and aridity.
- In southern Europe, annual precipitation and summer rainfall are projected to decrease, whereas aridity, droughts and fire hazards are all likely to increase.”

Source: European Environment Agency



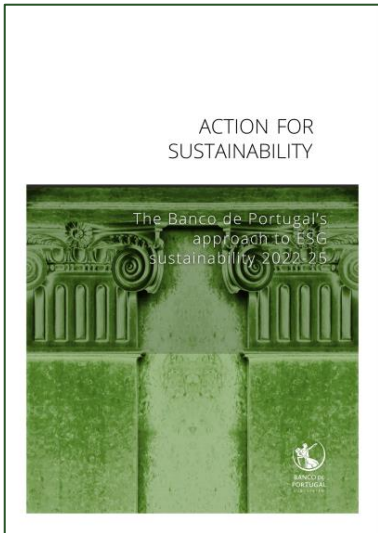
Tragic floods in Spain. Source: El País.

2 **BANCO DE PORTUGAL'S INTEGRATED APPROACH**

BdP: AN INTEGRATED APPROACH TO SUSTAINABILITY

7

2022-2025



1

Integrating climate risks into the **missions** of the Banco de Portugal

2

Reinforcing ESG sustainability in internal **management**

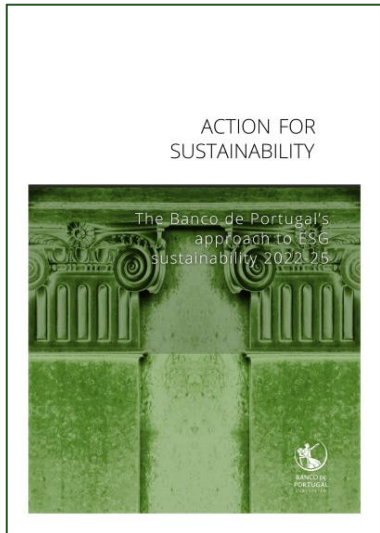
3

Promoting ESG **awareness** among employees and external stakeholders

BdP: AN INTEGRATED APPROACH TO SUSTAINABILITY

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BdP: AN INTEGRATED APPROACH TO SUSTAINABILITY

ACTION FOR SUSTAINABILITY 2022-2025

AREA 1: Integrating climate risks into the missions of the Banco de Portugal HIGHLIGHTS

<p>Taking an active part in the monetary policy work set out in the ECB's Action Plan for climate change</p> <p>(since Jul 2022)</p>	<p>Issuing an Annual Report of the Banco de Portugal on the Banking Sector's Exposure to Climate Risk</p> <p>(since Jul 2023)</p>	<p>Issuing supervisory expectations on climate and environmental risks, addressed to banks under direct BdP supervision, and following up on their incorporation</p> <p>(since Apr 2021)</p>	<p>Doing Research on climate change and providing technical assistance to the Government on the EU's agenda for sustainable finance</p> <p>(since 2019)</p>
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3 **BANKS' EXPOSURE TO CLIMATE AND NATURE RISKS**

BdP: AN INTEGRATED APPROACH TO SUSTAINABILITY

ACTION FOR SUSTAINABILITY 2022-2025

AREA 1: Integrating climate risks into the missions of the Banco de Portugal HIGHLIGHTS

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(since Jul 2022)

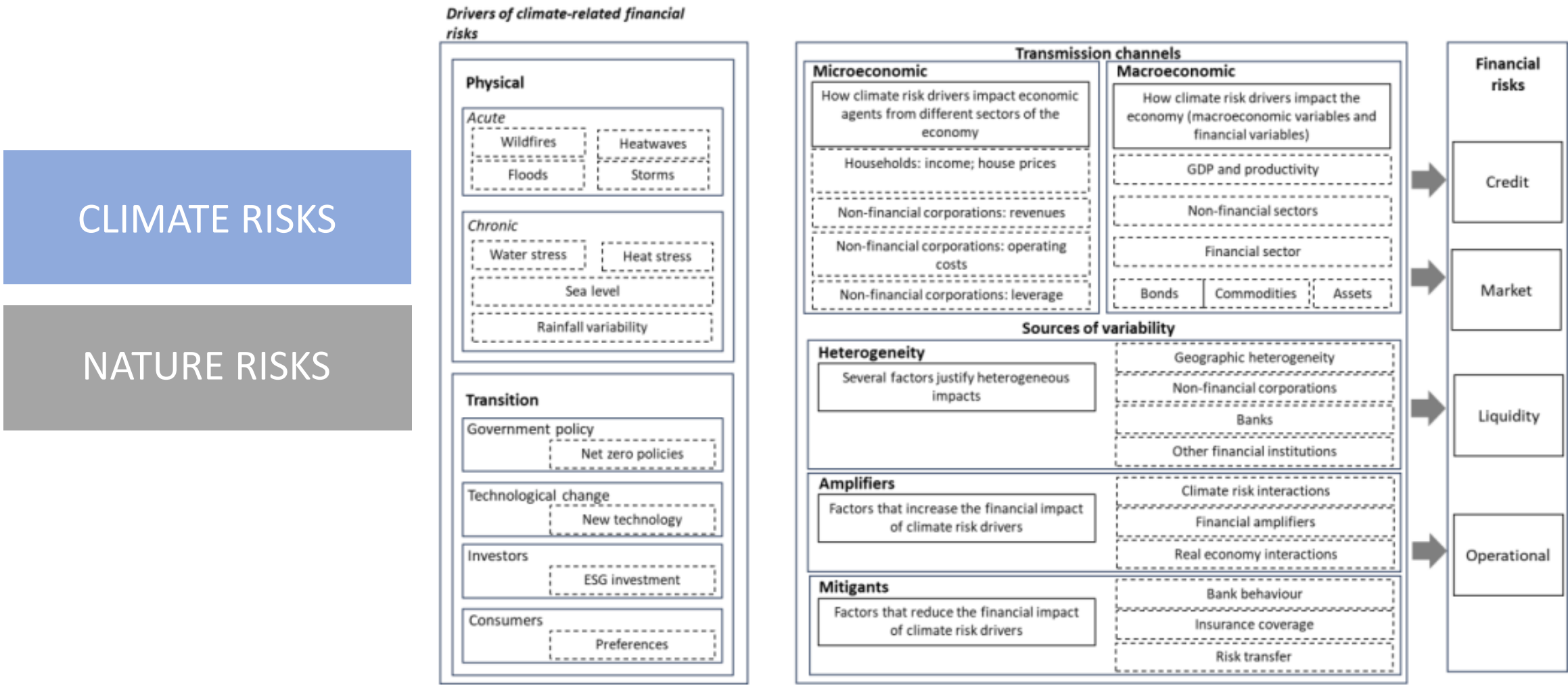
Issuing an **Annual Report** of the Banco de Portugal on the **Banking Sector's Exposure to Climate Risk**
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Issuing **supervisory expectations** on **climate and environmental risks**, addressed to banks under direct BdP supervision, and following up on their incorporation
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(since 2019)

ASSESSING BANKS' EXPOSURE TO CLIMATE AND NATURE RISKS

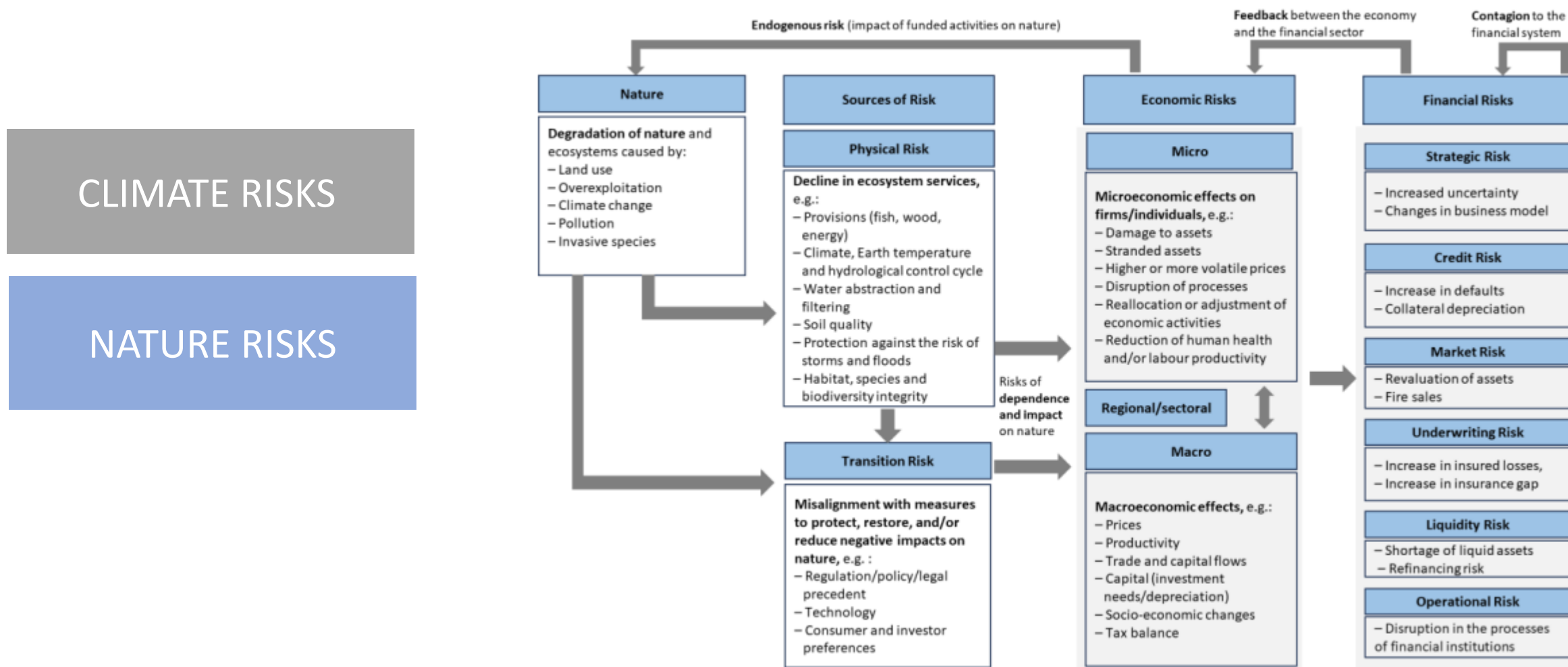
Figure I.1.4 • Financial risks from climate risk drivers



Source: BCBS (2021) (adapted).

ASSESSING BANKS' EXPOSURE TO CLIMATE AND NATURE RISKS

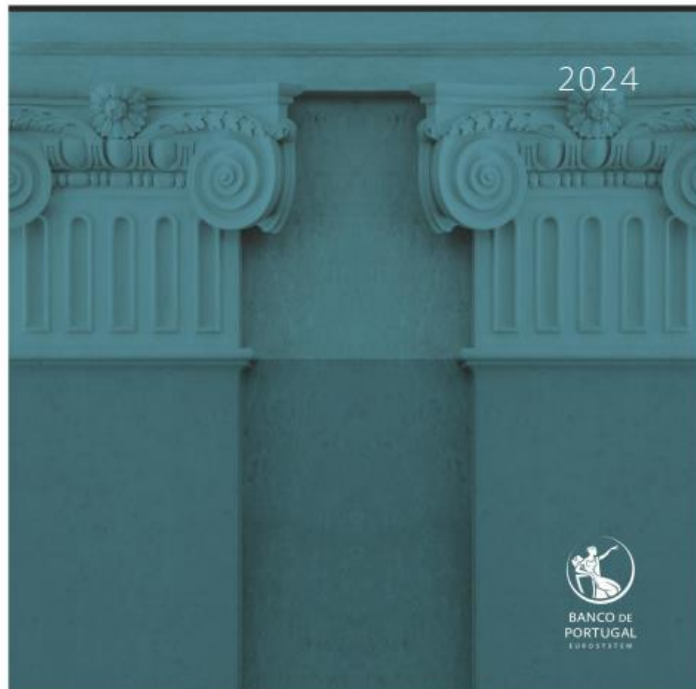
Figure I.4.1 • Transmission channels of nature-related risks



Sources: Banco de Portugal and NGFS (2024) (adapted).

ASSESSING BANKS' EXPOSURE TO CLIMATE AND NATURE RISKS

ANNUAL REPORT ON THE BANKING SECTOR'S EXPOSURE TO CLIMATE RISK



Yes, it is complex. But it can – and must – be done.

BdP publishes an annual report on the banking system's exposure, resilience and efforts to adapt to climate risks.

Covers both the macro and microprudential approaches.

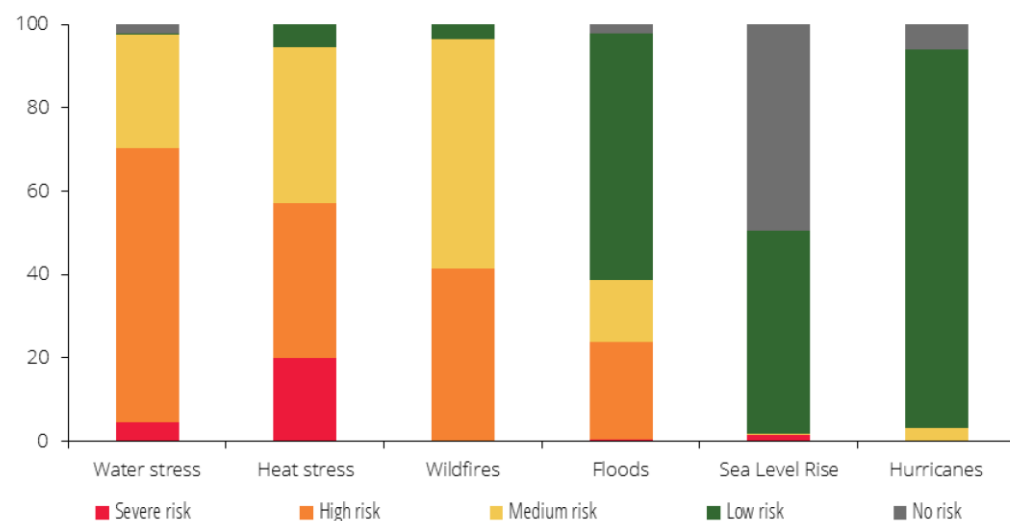
Second edition already online – have a look [here!](#)

Also in compliance with the mandate set out in Article 35(7) of the Portuguese Climate Framework Law.

ASSESSING BANKS' EXPOSURE TO CLIMATE AND NATURE RISKS

A snapshot of the results: physical and transition risks

Chart I.2.1 • Banking sector's exposure to physical risks through credit granted to firms – September 2023 | As a percentage of total credit to firms



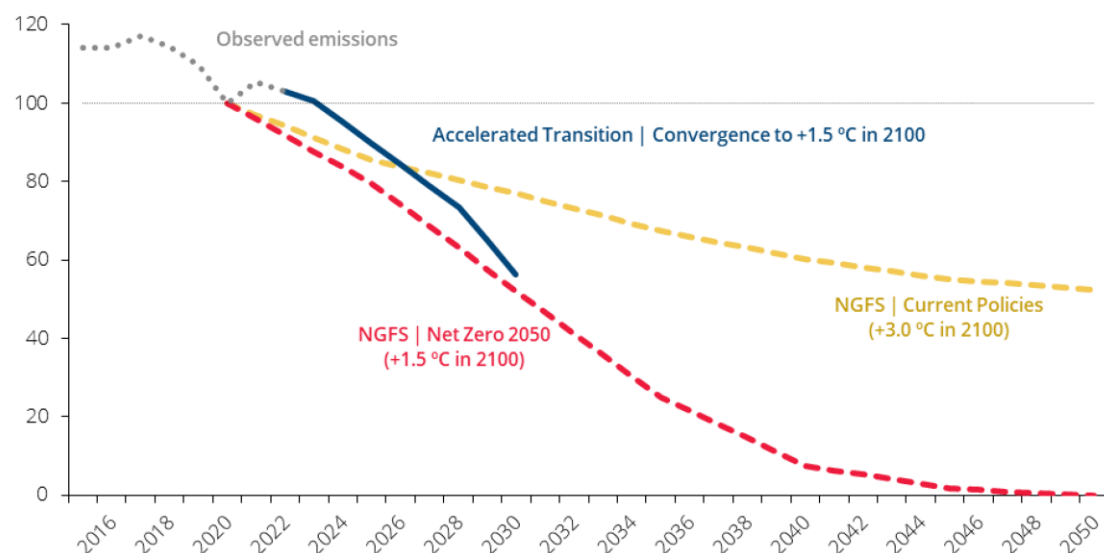
Sources: Banco de Portugal and Moody's COD. | Note: Total credit includes the outstanding amount of loans reported in the CCR, as well as debt securities held by banks from the SIET for all 50,000 firms under review.

- Climate risks are passed on to the financial system through highly complex mechanisms.
- The report shows evidence of the banking system's exposure to these risks based on indicators and on climate scenarios.
- Physical climate risks:** PT banking sector considerably exposed to firms **located** in areas vulnerable to risks stemming from water stress, heat stress and wildfires and, to a lesser extent, floods.
- Transition climate risks (carbon intensity-based indicators):** PT banking sector's exposure via the portfolio of credit to firms is limited and, overall, has been on a declining trend over the last decade. These results place PT in an intermediate position in the euro area.

ASSESSING BANKS' EXPOSURE TO CLIMATE AND NATURE RISKS

A snapshot of the results: climate scenarios analysis

Chart I.2.12 • Projection of GHG emissions in the EU under different climate action scenarios
| Share of emissions compared to 2020, 2020 = 100



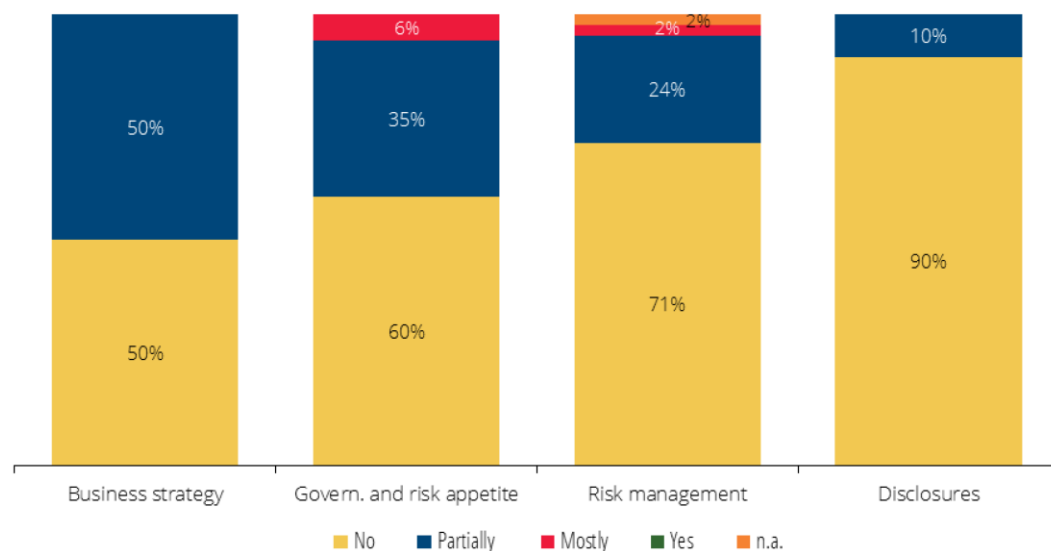
Sources: EEA and NGFS (Banco de Portugal calculations). | Notes: The GHG emissions trajectories have been constructed from observed EU emissions (dotted line) available on the European Environment Agency's [website](#) and the scenarios available on the [NGFS Scenarios Portal](#). The chart shows the GHG projections in the Current Policies scenario and under two climate transition scenarios: a gradual transition, corresponding to the NGFS's Net Zero 2050 scenario (represented herein solely to illustrate a Paris Agreement-compliant GHG emissions trajectory) and an accelerated transition scenario (Accelerated Transition). Emissions in the Accelerated Transition scenario between 2022 and 2030 have been estimated based on the rates of change in the Delayed Transition scenario from 2030 onwards. GHG emissions trajectories in the Current Policies and Net Zero 2050 scenarios are anchored in 2020.

- Climate scenarios analysis (not forecasts, but plausible projections under certain assumptions) capture interactions between climate risks, the real economy and the financial sector for different policy choices.
- 2023 edition: for the banking sector, clear **benefits of acting swiftly to reduce emissions**.
- 2024 edition: compares an Accelerated Transition scenario (introduction of more intense, fast-paced measures) with the Current Policies scenario.
- **Over the 2023-30 horizon**, reflecting the existence of initial costs from the climate transition process, firms' **credit risk is higher** under the Accelerated Transition scenario, with sectoral pockets of vulnerability (fossil-fuel, transportation and energy-intensive sectors).
- Of course, **these results do not undermine the benefits, from a banking system perspective, of acting swiftly on climate change**; they underline the importance of timely action by the banking sector vis-à-vis those risks.

ASSESSING BANKS' EXPOSURE TO CLIMATE AND NATURE RISKS

A snapshot of the results: supervisory expectations

Chart I.3.1 • Level of alignment between the institutions' current practices and supervisory expectations by area of supervisory expectations, 2023, all institutions



Source: Banco de Portugal.

Prudential supervisory expectations on climate and environmental risks:

- **ECB – SI**

Set in November 2020

Implementation: staggered timetable; end of 2024 full alignment

- **BdP – LSI**

Set in April 2021

Implementation: one additional year to achieve the same objective.

Level of implementation so far:

SI (ECB): gradual progress over the past years, although severe shortcomings remain in some cases that need to be addressed in the short term.

LSI (BdP): progress in identifying and mitigating exposure to climate risks, but important non-compliances remain in critical and priority areas.

➔ **Institutions need to step up efforts, resources and skills.**

4 KEY CHALLENGES AHEAD



THE THREE KEY PILLARS OF SUSREG ASSESSMENT



BANKING AND INSURANCE SUPERVISION

This section assesses the maturity of supervisory expectation in using various tools and measures to ensure both the safety and soundness of individual banks, insurance companies and the financial system stability, with regards to climate, environmental, and social risks. It also includes measures that regulators and supervisors themselves can take to show leadership and better understand these risks and their implications for the financial sector.



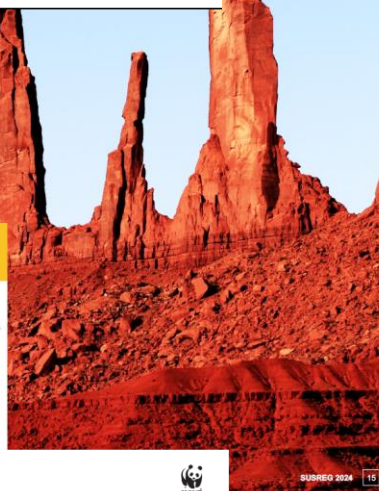
CENTRAL BANKING

This section assesses various measures that central banks can take to address climate, environmental, and social risks, in keeping with their key mandates of ensuring money supply and price stability. It also includes measures that central banks can take to show leadership and better understand these risks and their implications.



ENABLING ENVIRONMENT

This section assesses the maturity of the environment required that would be key for the financial sector to fully support the transition to a low-carbon, resilient and sustainable economy. Some of these measures may be outside the remit of central banks or financial supervisors.



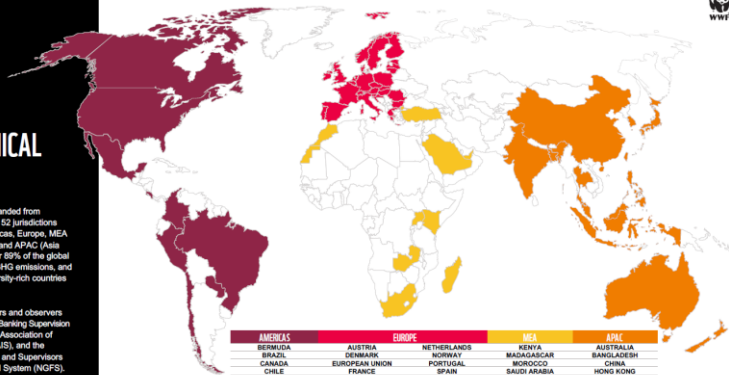
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GEOGRAPHICAL COVERAGE

The assessment has expanded from 38 jurisdictions in 2021 to 52 jurisdictions in 2024 across the Americas, Europe, MEA (Middle East and Africa), and APAC (Asia Pacific), representing over 80% of the global GDP and 75% of global GHG emissions, and 13 of the 17 most biodiversity-rich countries in the world.

Most of these are members and observers of the Basel Committee on Banking Supervision (BCBS), the International Association of Insurance Supervisors (IAIS), and the Network of Central Banks and Supervisors for Greening the Financial System (NGFS).

Please refer to Annex 1 for the detailed list of the central banks, banking/insurance regulators, and supervisors covered by this assessment.

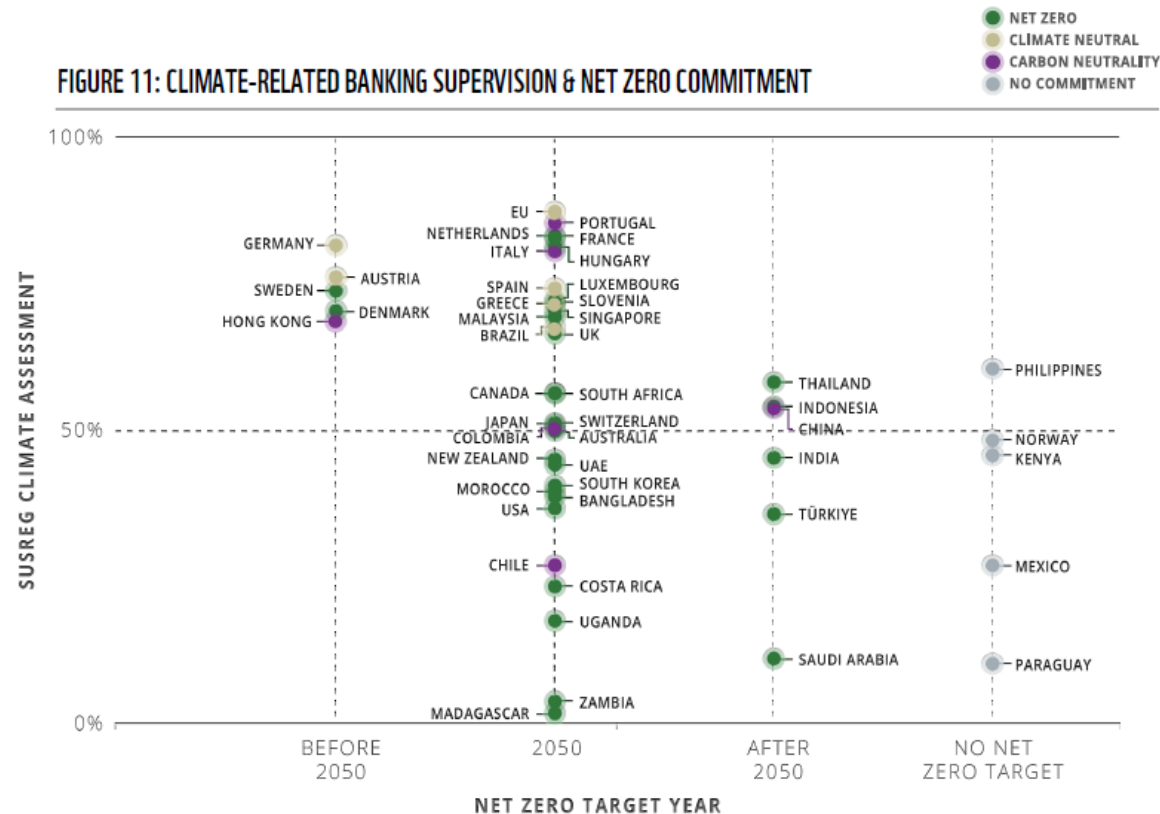


AMERICAS	EUROPE	MEA	APAC
BREITLICH	AUSTRIA	KENYA	AUSTRALIA
BRAZIL	DENMARK	MADAGASCAR	BANGLADESH
CANADA	NETHERLANDS	MOROCCO	CHINA
CHILE	PORTUGAL	SAUDI ARABIA	HONG KONG
COLOMBIA	FRANCE	SOUTH AFRICA	INDIA
COSTA RICA	GERMANY	TURKEY	INDONESIA
GREECE	HUNGARY	UAE	JAPAN
MEXICO	ITALY	UGANDA	MALAYSIA
PERU	LUXEMBOURG	ZAMBIA	NEW ZEALAND
CALIFORNIA (US STATE)			PHILIPPINES
NEW YORK (US STATE)			SINGAPORE
			SOUTH KOREA
			TAIWAN
			THAILAND

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BANKING SUPERVISORS FROM 16 COUNTRIES COMMITTING TO NET ZERO TARGET STILL LAGGING IN SUPERVISION FOR CLIMATE RISKS

FIGURE 11: CLIMATE-RELATED BANKING SUPERVISION & NET ZERO COMMITMENT



Source of countries' net zero target: Net Zero Tracker (2024) and internal verification conducted by the authors.

Note: Although Norway has not formally adopted a net-zero target, the country has established a goal to reduce its greenhouse gas emissions by 90 to 95 percent by the year 2050, compared to emission levels in the reference year 1990.



KEY CHALLENGES AHEAD

Contribute

Contribute to awareness and sense of emergency on climate transition

Address

Climate risks: address data gaps, data quality, data consistency
(>400 climate change disclosure initiatives worldwide!)

Ensure

Ensure an effective and swift implementation of regulatory and supervisory initiatives, balancing the required administrative burden

Understand

Nature risks: better understand implications and the nature-climate nexus

Boost

Boost international cooperation and coordination
(continuing the important work of the NGFS and ECCF)

BANCO CENTRAL EUROPEU

SUPERVISÃO BANCÁRIA

Guia sobre riscos climáticos e ambientais

Expectativas prudenciais relacionadas com a gestão e a divulgação de riscos

Novembro de 2020

BANKTILLSYN
BANKŲ PRIEŽIŪRA NÁDZOR BANKOWY
BANKTELLUSYLEI
SUPERVISIUN BANCAIRE
MAOIRSEACHT AR BHAINGIREACHT NÁDZOR BANAKA
BANKING SUPERVISION
SUPERVISÃO BANCÁRIA
BANKENAUFSICHT
ΤΡΑΠΕΖΙΚΗ ΕΠΟΠΤΕΙΑ
PANKKIVALVONTA
SUPRAVEĞHERE BANCĂRĂ
SUPERVISIÓN BANCARIA

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ABR. 2021

ACTION FOR SUSTAINABILITY

The Banco de Portugal's approach to ESG sustainability 2020-25

OBRIGADA
THANK YOU

BANCO DE PORTUGAL
DECARBONISATION
PROGRAMME

CLIMATE-RELATED
FINANCIAL DISCLOSURES
OF THE BANCO
DE PORTUGAL'S
OWN FINANCIAL ASSETS

ANNUAL REPORT
ON THE BANKING
SECTOR'S EXPOSURE
TO CLIMATE RISK