




Just in Time



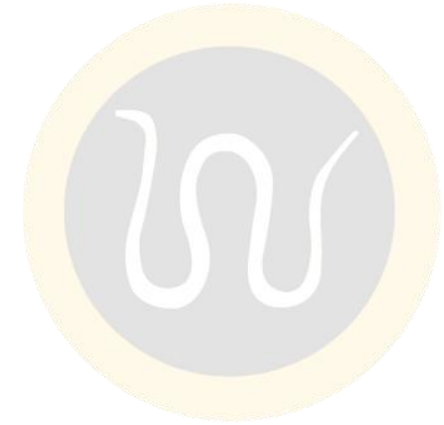
Good Practices for Climate and Nature Risk Management: Observations from the ECB's Five Year Climate and Nature Risk Programme (2020-25)

June 2026



Executive Summary

- The ECB published this [report](#) to present observed **good practices** in the management of **climate and nature-related (C&N) risks** across significant institutions supervised within the Single Supervisory Mechanism (SSM).
- The paper builds on the ECB Guide on climate-related and environmental risks issued in 2020 and reflects supervisory observations accumulated during the ECB's five-year supervisory programme conducted between 2020 and 2025.



At a Glance

01	Introduction	4
02	Business Strategy	7
03	Governance and Risk Appetite	12
04	Risk Management	15
05	Managing Nature-Related Risks	18
06	Conclusions & Take-aways	21

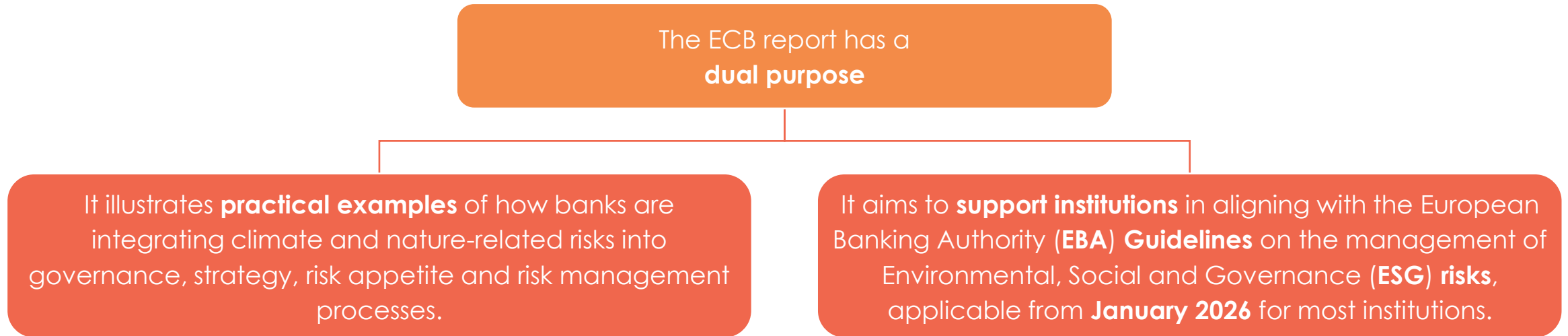
Keywords: Climate Risk, Nature Risk, ECB Supervision



01

Introduction



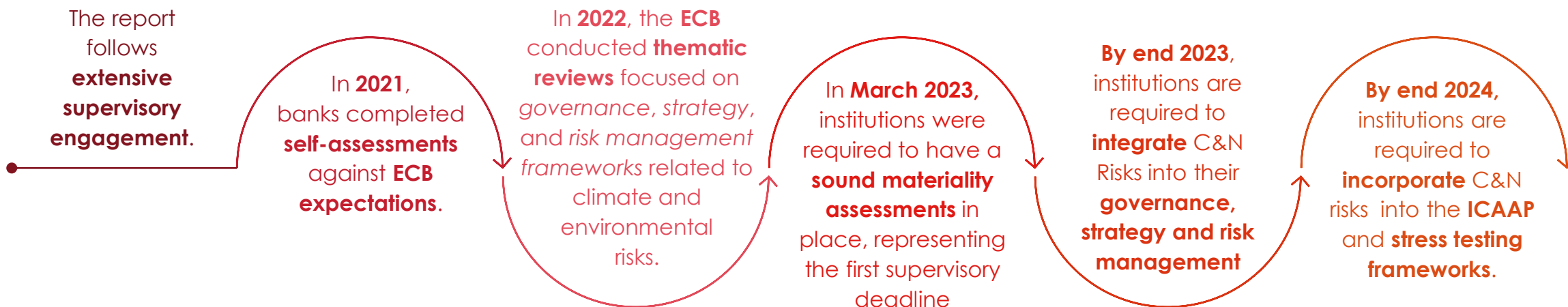


The ECB emphasizes that **the publication:**

It is **not legally binding** and does **not introduce new supervisory expectations.**

It serves as a **practical compendium** of observed market practices, highlighting approaches considered advanced or effective. Institutions remain **free to implement alternative methods** suited to their risk profile and business model.

Introduction 2/2



The ECB observes **substantial progress** since 2022. At that time, only a small minority of institutions demonstrated “leading practices”. By the **end of 2024**, more than half of supervised institutions had developed leading practices in at least some areas. This **evolution** reflects **growing maturity in climate and nature risk management** capabilities across the **banking sector**.

Nature-related risks

The ECB notes that methodologies in this area remain at an early stage, yet **institutions increasingly recognize biodiversity loss, water scarcity, ecosystem degradation, and pollution** as **financially material drivers**. Consequently, the report devotes an entire chapter to nature-related risk management (with the other chapters focusing on business strategy, governance and risk appetite, and risk management).

The ECB repeatedly stresses **three guiding principles**:

- **Proportionality**: practices should reflect institutions' size and exposure;
- **Forward-looking orientation**: risk management should extend beyond traditional planning horizons;
- **Integration**: climate and nature risks should not remain isolated sustainability topics but should become embedded within core prudential frameworks.

02

Business Strategy



The report explains that **institutions increasingly integrate climate and nature-related risks into their strategic planning processes**. Banks no longer treat sustainability exclusively as a reputational or disclosure issue; instead, they **incorporate transition and physical risks into strategic portfolio steering, target-setting, product development, and client engagement**.

Prudential Transition Planning

One of the most important developments identified by the ECB is the emergence of “**prudential transition planning**”.

Institutions increasingly establish links between:

- materiality assessments;
- risk appetite frameworks;
- client engagement;
- strategic targets;
- product offerings;
- portfolio allocation decisions.

Banks **use** these **integrated frameworks** to **manage transition risks** proactively. Institutions establish emissions reduction targets, portfolio alignment objectives, and sectoral strategies aligned with long-term climate objectives such as net-zero pathways.

The ECB highlights **several advanced practices**:

- use of **forward-looking client production plans**;
- **differentiated sectoral financing approaches**;
- **portfolio trajectory monitoring**;
- **dynamic portfolio steering mechanisms**;
- transition-related key risk indicators (**KRIs**);

Several institutions have introduced **escalation procedures** when portfolio emissions exceed predefined thresholds. Some banks **monitor financed emissions intensity** relative to selected decarbonisation pathways and trigger **management actions** if deviations occur.

Strategic Targets and Scenario Selection

Institutions increasingly rely on **science-based scenarios** such as:

- IEA Net Zero Emissions (NZE) 2050;
- IEA Sustainable Development Scenario (SDS);
- Paris Agreement-aligned pathways;
- sector-specific decarbonisation trajectories.

The ECB underlines that **scenario choice significantly influences target ambition**. Scenarios aligned with 1.5°C pathways generally require steeper emissions reductions than “well below 2°C” pathways. Banks establish **targets** across multiple sectors, including:

- automotive;
- aviation;
- cement;
- commercial real estate;
- power generation;
- shipping;
- steel;
- oil and gas.

Targets commonly involve:

- emissions intensity reductions;
- reductions in financed emissions;
- technology mix transformations;
- renewable energy exposure increases;
- alignment scores.

Institutions increasingly recognize that achieving **long-term objectives requires short and medium-term milestones integrated into operational management frameworks**.

Transition Finance Products

The ECB notes rapid growth in transition finance capabilities. Banks increasingly distinguish between:

- “already sustainable” financing;
- “transition finance” supporting decarbonisation pathways.

Transition Finance Products

Observed practices include financing for:

- renewable energy;
- electric vehicles;
- sustainable aviation fuel;
- hydrogen technologies;
- carbon capture and storage;
- green steel;
- regenerative agriculture;
- energy-efficient buildings.

Institutions increasingly develop **specialized expertise in sector-specific technologies** and establish **dedicated transition financing teams** composed of engineers, climate experts, and finance professionals. The ECB also highlights emerging use of:

- venture debt;
- blended finance;
- public-private partnerships;
- sustainability-linked lending.

Client Engagement

A particularly important supervisory observation concerns **active client engagement**. Banks increasingly differentiate clients according to **transition readiness** and **transition risk scores**. Practices include:

- assessment of client transition plans;
- targeted advisory services;
- escalation procedures for misaligned clients;
- restrictions on financing for high-risk sectors without credible transition plans;
- tailored financing products supporting decarbonisation.

Institutions increasingly seek to **improve client risk profiles** rather than immediately exiting exposures. However, some institutions establish **hard exclusions** or **phase-out targets** for thermal coal and certain fossil fuel activities.

Client Engagement

The ECB also notes that institutions **increasingly engage** clients regarding **physical risk adaptation measures**, including:

- insurance coverage;
- resilience investments;
- climate adaptation plans;
- location-based risk assessments.

03

Governance and Risk Appetite



Governance and Risk Appetite 1/2

The report emphasizes that **climate and nature-related risks** increasingly form part of **core governance structures**. Institutions are progressively embedding these risks into management responsibilities, remuneration frameworks, organizational structures, and risk appetite statements.

Management Body Responsibilities

The ECB observes that advanced institutions **ensure active oversight by the management body**.

Boards increasingly receive:

- regular climate and nature risk reporting;
- scenario analysis outcomes;
- portfolio alignment metrics;
- transition plan monitoring results;
- sectoral exposure analyses.

Good practices include:

- assigning explicit responsibilities to senior executives;
- establishing dedicated sustainability committees;
- integrating ESG expertise into governance structures;
- providing climate and nature risk training for board members.

Institutions increasingly ensure that strategic decisions reflect climate and nature considerations, particularly for high-risk sectors and long-term portfolio allocation decisions.

Remuneration Policies

Several institutions now **link variable remuneration to climate-related objectives**.

Examples include:

- portfolio decarbonisation targets;
- sustainable finance origination volumes;
- transition plan implementation milestones;
- climate-related risk management KPIs.

The ECB notes that **remuneration integration remains heterogeneous** across institutions but is **expanding rapidly**.

Organisational Structures

The report describes evolving “**three lines of defence**” models for climate and nature risks:

First line of defence

Business units increasingly own climate and nature risks directly through client origination, portfolio management, and sectoral decision-making.

Second line of defence

Risk functions develop methodologies, monitoring frameworks, stress tests, and independent oversight mechanisms.

Third line of defence

Internal audit functions increasingly review climate and nature governance, data quality, and model effectiveness.

Governance and Risk Appetite 2/2

Risk Appetite Frameworks

Institutions increasingly **integrate climate and nature metrics into formal risk appetite frameworks**.

Observed KRIs include:

- financed emissions;
- exposure to high-transition-risk sectors;
- physical risk concentrations;
- sectoral alignment scores;
- exposure to vulnerable geographies;
- climate-related collateral vulnerabilities.

Some institutions **define explicit limits and thresholds**. Others **integrate climate and nature metrics into broader portfolio steering frameworks**.

The ECB particularly highlights **growing integration of transition planning** into risk appetite structures. Institutions increasingly align strategic ambitions, sectoral policies, and operational limits.

Data Governance and Reporting

The report identifies **data governance** as a **critical challenge** and **priority area**.

Institutions increasingly develop:

- centralized ESG data architectures;
- external vendor integration;
- client questionnaires;
- geospatial datasets;
- sector-specific taxonomies;
- internal climate databases.

Advanced institutions also establish:

- dedicated ESG data governance committees;
- quality assurance processes;
- data lineage controls;
- climate data inventories.

Internal reporting increasingly supports:

- management body oversight;
- portfolio steering;
- stress testing;
- transition monitoring;
- regulatory reporting.

04

Risk Management



Risk Management 1/2

The report explains **how institutions increasingly integrate climate and nature-related considerations into traditional risk categories** including credit risk, market risk, operational risk, reputational risk, and capital adequacy processes.

Materiality Assessments

Institutions increasingly conduct **structured materiality assessments** covering:

- transition risks;
- physical risks;
- litigation risks;
- reputational risks;
- nature-related risks.

Observed practices include:

- sectoral heat maps;
- geospatial analyses;
- scenario analysis;
- concentration analyses;
- client-level assessments.

The ECB notes **increasing use** of:

- transmission channel mapping;
- vulnerability scoring;
- long-term horizon assessments;
- dynamic scenario methodologies.

Due Diligence Processes

Banks **increasingly incorporate climate and nature considerations into onboarding and credit due diligence**.

Practices include:

- client questionnaires;
- emissions data collection;
- transition plan reviews;
- supply chain assessments;
- biodiversity exposure screening;
- insurance monitoring.

Some institutions systematically monitor

controversies involving:

- environmental litigation;
- pollution incidents;
- deforestation;
- human rights concerns;
- biodiversity destruction.

Risk Classification

Institutions **increasingly integrate climate and nature indicators into internal rating systems and risk classification methodologies**.

Examples include:

- transition risk scorecards;
- physical risk ratings;
- biodiversity risk indicators;
- sectoral vulnerability metrics;
- adaptation capacity assessments.

Some banks **use** these scores directly in:

- credit approval decisions;
- pricing;
- portfolio allocation;
- monitoring frequency;
- escalation procedures.

Risk Management 2/2

Collateral Valuation and Pricing

The ECB identifies growing integration of **physical risk considerations into collateral valuation frameworks**.

Observed practices include assessing:

- flood exposure;
- wildfire risk;
- heat stress;
- water scarcity;
- building energy efficiency;
- insurance availability.

Several institutions increasingly adjust loan pricing based on sustainability performance or transition risk assessments.

Expected Credit Losses and Impairments

Institutions increasingly incorporate climate variables into **expected credit loss (ECL) methodologies** and **impairment calculations**.

Practices include:

- climate-adjusted macroeconomic scenarios;
- sector-specific overlays;
- physical risk loss tagging;
- transition sensitivity assumptions.

The ECB notes that methodologies remain under development but are becoming progressively more sophisticated.

ICAAP and Capital Adequacy

One of the report's major themes concerns **integration into ICAAP frameworks**.

Institutions increasingly assess:

- climate-related capital impacts;
- long-term solvency implications;
- portfolio resilience;
- stress test outcomes;
- economic and normative perspectives.

Observed practices include:

- longer time horizons;
- sectoral stress testing;
- physical risk quantification;
- integrated transition scenarios;
- climate-adjusted capital allocation.

Some institutions also incorporate **additional capital costs** into product pricing.

05

Managing Nature-Related Risks



Managing Nature-Related Risks 1/2

The ECB dedicates a full chapter to **nature-related risks**, reflecting the growing supervisory focus on **biodiversity loss** and **ecosystem degradation**.

Materiality Assessment

Institutions increasingly identify **exposures to sectors highly dependent on ecosystem services**, including:

- agriculture;
- forestry;
- fisheries;
- mining;
- construction;
- food production.

Banks increasingly **assess dependencies and impacts** related to:

- biodiversity loss;
- water scarcity;
- pollution;
- land degradation;
- deforestation.

The ECB notes that **methodologies** remain **immature** but are **evolving rapidly**.

Governance and Risk Appetite

Institutions increasingly incorporate nature-related metrics into **governance** and **risk appetite structures**.

Examples include:

- biodiversity KPIs;
- deforestation policies;
- water-related exposure limits;
- ecosystem impact targets;
- nature-positive financing objectives.

Some institutions align objectives with international frameworks such as:

- TNFD;
- PBAF;
- EU taxonomy;
- No Deforestation, No Peat, No Exploitation (NDPE) standards.

Managing Nature-Related Risks 2/2

Client Assessment and Risk Classification

Banks increasingly assess clients according to nature-related criteria such as:

- deforestation exposure;
- biodiversity impacts;
- ecosystem restoration commitments.
- water dependency;
- land-use practices;

Some institutions develop **proprietary biodiversity scoring models** and **project-level environmental impact analyses**.

Risk Mitigation

Observed mitigation measures include:

- client engagement;
- enhanced due diligence;
- financing conditions tied to biodiversity performance;
- exclusion policies;
- sectoral restrictions;
- adaptation financing.

The ECB also highlights emerging use of ecosystem valuation methodologies to estimate the economic impact of environmental degradation.

Capital Adequacy

A small but growing number of institutions attempt to incorporate nature-related risks into ICAAP and stress testing frameworks. However, the ECB notes that **methodologies** remain at an **early stage** due to limited data availability and scientific complexity.

06

Conclusions & Take-aways



Conclusions & Take-aways

The ECB's report demonstrates that **climate and nature-related risks are increasingly treated as core prudential risk drivers** rather than peripheral sustainability considerations. The observed evolution between 2020 and 2025 reflects a **significant maturation of supervisory expectations and institutional capabilities**.

1

Climate and nature risks are becoming embedded into core banking frameworks, including governance, strategy, ICAAP, stress testing, credit risk, and portfolio steering

2

Transition planning has emerged as a central prudential tool, linking strategy, risk appetite, client engagement, and financing decisions.

3

Institutions increasingly rely on forward-looking methodologies, including scenario analysis, portfolio alignment tools, geospatial analytics, and transition pathways.

4

Data quality and methodological limitations remain major challenges, especially regarding nature-related risks and long-term quantification.

5

Client transition plans are becoming central to credit decision-making, product offerings, and portfolio management.

6

Physical risks are gaining importance alongside transition risks, particularly regarding collateral values, insurance coverage, and geographical concentration analysis.

7

Nature-related risks are rapidly emerging as a new frontier of prudential supervision, although methodologies remain less mature than for climate risks.

8

Risk appetite frameworks increasingly incorporate climate and nature metrics, including emissions intensity, biodiversity exposure, and sectoral vulnerabilities.

9

ICAAP integration is progressing, with institutions extending time horizons and incorporating climate and nature considerations into capital adequacy assessments.

10

The ECB expects continuous improvement, emphasizing that good practices will continue evolving as supervisory expectations, scientific methodologies, and market standards mature further.

ESSENTIAL SERVICES FOR FINANCIAL INSTITUTIONS

iason is an international consulting firm that has been supporting both financial institutions and regulators in topics related to Risk Management, Finance and ICT since 2008

Strategy

Strategic advisory on the **design** of **advanced frameworks** and **solutions** to fulfil both **business** and **regulatory needs** in Risk Management and IT departments

Methodology & Governance

Implementation of the designed **solutions** in bank departments **Methodological support** to both **systemically important financial institutions** and **supervisory entities**

Solution

Advanced **software solutions** for **modelling, forecasting, calculating** metrics and **integrating** risks, all on cloud and distributed in Software-as-a-Service (**SaaS**)

KEEP IN TOUCH



Company Profile

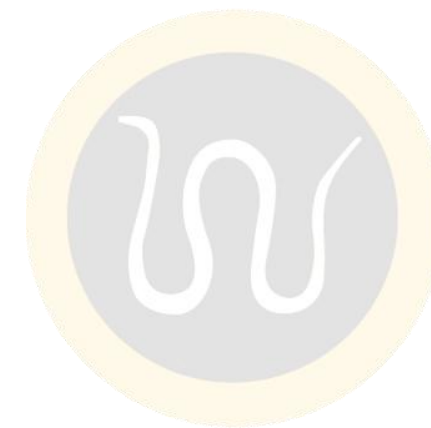
iason is an international firm that consults Financial Institutions on Risk Management.

iason integrates deep industry knowledge with specialised expertise in Market, Liquidity, Funding, Credit and Counterparty Risk, in Organisational Set-Up and in Strategic Planning.

Dario Esposito



Lorena Corna



This is an **iason creation**.

The ideas and the model frameworks described in this presentation are the fruit of the intellectual efforts and of the skills of the people working in iason. You may not reproduce or transmit any part of this document in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose without the express written permission of iason.

www.iasonltd.com