

Draft Guide on climate-related and environmental risks: Supervisory expectations relating to risk management and disclosure

European Central Bank (ECB)

Abbreviations

Abbreviation	Meaning
ECB	European Central Bank
EU	European Union
EC	European Commission
UN	United Nations
SDGs	Sustainable Development Goals
SSM	Single Supervisory Mechanism
LSIs	Less Significant Institutions
NCA	National Competent Authorities

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Introduction and context

Since the signature in 2015 of the Sustainable Development Agenda and the Paris Agreement, the EU has been making strides to promote the transition towards a sustainable economy, set in the EC's Green Deal and Action Plan on Financing Sustainable Growth



- In 2015 the **Sustainable Development Agenda for 2030** was established at the United Nations (UN), which sets 17 sustainable development goals (SDGs), including one regarding climate change mitigation, as well as 169 targets.
- The **Paris Agreement** was also signed in 2015. Its mission is to reinforce the international response to the threat of Climate change and establishes the objective of a maximum temperature increase of 2°C in the XXI century relative to preindustrial levels.
- The financial sector is expected to play a key role in the transition towards a climate neutral economy, as established in the **European Commission's Action Plan on Financing Sustainable Growth**. This plan has three main goals:
 - Reorienting capital flows toward a more sustainable economy.
 - Mainstreaming sustainability in risk management.
 - Fostering transparency and long-termism.
- The European Commission (EC) presented in 2019 the **European Green Deal**, which aims to promote a circular and sustainable economy, as well as to reduce the Union's net emissions to zero in 2050.

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Executive summary

In this context, the ECB has launched a public consultation on the Draft Guide on climate-related and environmental risks, outlining the regulator's understanding of the safe and prudent management of such risks



- Transitioning to a low-carbon and more circular economy entails important risks and opportunities for the economy and the financial system and its stakeholders. For the second year, **the European Central Bank (ECB) has identified climate-related risks as a key risk driver on the Single Supervisory Mechanism (SSM) Risk Map for the euro area banking system.**

- The ECB has launched a **public consultation** on the **Draft ECB Guide on climate-related and environmental risks** outlining its understanding of the safe and prudent management of such risks under the current framework. The document sets the regulator's expectations on how institutions should address this matter.

Scope of application

The expectations set out in this guide are to be used in the ECB's supervisory dialogue with **significant institutions directly supervised**. Additionally, this guide has been **developed jointly by the ECB** and the **national competent authorities (NCAs)** and therefore, they are recommended to apply the expectations established in this guide in their supervision of **less significant institutions (LSIs)**, proportionately to the risk profile and business model of the institution.

Supervisory expectations

The expectations set out in this guide are divided into four key pillars:

- Supervisory expectations relating to **business model and strategy**.
- Supervisory expectations relating to **governance and risk appetite**.
- Supervisory expectations relating to **risk management**.
- Supervisory expectations relating to **disclosures**.

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Definition and concept

Climate risks can be categorised in physical and transition risks. These risks are in turn drivers of prudential risk, in particular credit risk, operational risk, market risk and liquidity risk

- Climate change and environmental degradation are sources of structural change that affect economic activity and, in turn, the financial system. Climate-related and environmental risks are commonly understood to comprise two main risk drivers: **physical risk and transition risk**.
- Climate risks impact economic activities, which in turn impact the financial system, either directly or indirectly. Additionally, climate risks can trigger other losses stemming from legal claims– liability risk- and reputational loss. Consequently, **physical and transition risks are drivers of prudential risk, in particular credit risk, operational risk, market risk and liquidity risk**.



Physical risk

- It refers to **the financial impact of a changing climate**, including more frequent extreme weather events and gradual changes in climate, as well as of environmental degradation, such as air, water and land pollution.
- It is categorised as “**acute**” when it arises from extreme events, and “**chronic**” when it arises from progressive shifts.



Transition risk

- It refers to an **institution’s financial loss that can result from the process of adjustment towards a lower-carbon and more environmentally sustainable economy**. This could be triggered, for example, by a relatively abrupt adoption of climate and environmental policies, technological progress or changes in market sentiment and preferences.

Supervisory expectations

Overview



This guide outlines the ECB's supervisory expectations regarding climate-related and environmental (CR&E) risk management, organised in four key pillars

Key pillars	Supervisory expectations			
Business models and strategy	<ul style="list-style-type: none"> ▪ Business environment: understand the impact of CR&E risks on the business environment in which they operate in the short, medium or long term. ▪ Business strategy: integrate CR&E risks that materially impact their business environment in the business strategy. 			
Governance and risk appetite	<ul style="list-style-type: none"> ▪ Management body: the management body should consider CR&E risks when developing the business strategy, business objectives and risk management framework, and exercise effective oversight. ▪ Risk appetite: explicitly include CR&E risks in the risk appetite framework. ▪ Organisational structure: responsibility of CR&E risks within the organisational structure in accordance with the 3 lines of defence model. ▪ Reporting: report aggregated risk data that reflect their exposures to CR&E to the management body. 			
Risk management	<p>Credit risk: consider CR&E at all stages of the credit-granting process and monitor the risks in their portfolios.</p>	<p>Operational risk: Consider adverse impact on business continuity, reputational and/or liability risks.</p>	<p>Market risk: monitor impact on current market risk positions and future investments,</p>	<p>Liquidity risk : incorporate into liquidity risk management and liquidity buffer calibration.</p>
Disclosure	<ul style="list-style-type: none"> ▪ Risk management framework: incorporate CR&E as drivers of established risk categories into their existing risk management framework: Identify and quantify these risks within their overall process of ensuring capital adequacy (ICAAP). ▪ Scenario analysis and stress testing: incorporate CR&E to stress-testing scenarios risks (into their baseline and adverse scenarios) ▪ Disclosure policies and procedures: publish meaningful information and key metrics on CR&E considering (as a minimum) EC's Guidelines on non-financial reporting: Supplement on reporting climate-related information. 			

Supervisory expectations

Business model and strategy

The ECB expects institutions to understand the impact of CR&E risks on their business environment, as well as to integrate these risks in their business strategy. Finally, this consideration should be registered and documented



- Institutions are expected to understand the impact of climate-related and environmental risks on the **business environment** in which they operate, in the short, medium and long term, in order to be able to make informed strategic and business decisions.



Requirements and actions

- **Identify risks arising from climate change and environmental degradation** at the level of key sectors, geographies and products and services.
 - Institutions are expected to **understand how CR&E risks affect their business environment in the short, medium and long term.**
 - Institutions should also take into account:
 - The relevant time horizon.
 - Scientific insights.
 - Monitoring of relevant policy initiatives.
- When **determining and implementing their business strategy**, institutions are expected to integrate climate-related and environmental risks that materially impact their business environment. To this end, institutions should:
 - Determine **which risks are material in the short, medium and long term** using, for example using **stress scenario analysis.**
 - **Establishing monitoring KPIs that reflect material CR&E risks** and are cascaded down to relevant business lines and portfolios in the implementation of the institution's business strategy .



Documentation and reports

- Institutions are required to **document material factors that impact their business environment**, and they should be aware that CR&E risks are one of these factors.
- **Document the materiality assessment of CR&E risks for their business environment**, for example in their regular monitoring of material emerging risks or in management board discussions.
- The institution's understanding of how CR&E affect their business environment is expected to be **reflected in business strategy processes**, demonstrated for example by **management body meetings and discussions.**

Supervisory expectations

Governance and risk appetite



The ECB expects institutions to consider CR&E risks by the management body, in the risk appetite framework, as well as within the organisational and the reporting structures

Consider CR&E risks when developing the business strategy, business objectives and risk management framework, and to oversight

- Allocate roles and responsibilities.
- Ensure the embedding of CR&E risks in business strategy and risk management framework.
- Consider specific objectives such as the Paris Agreement or the EU Green Deal.
- Exercise effective oversight.



Explicitly include CR&E risks in the risk appetite framework

- Develop a description CR&E risks in their risk appetite statement.
- Develop KRIs and set limits for CR& E risks.
- Develop metrics that consider the long-term nature of climate change, particularly different paths of temperature and GHG emissions.
- Ensure that their remuneration policy stimulates behaviour consistent with their CR&E risk approach.

Responsibility of CR&E risks within the organisational structure should be distributed in accordance with the 3 lines of defense model.

- Assign and document responsibilities for CR&E risks.
- Ensure these functions have appropriate resources.
- Describe the tasks and responsibilities of each relevant function.

Report aggregated risk data that reflect their exposures to CR&E to the management body

- Develop a holistic approach to data governance for CR&E risks.
- Adapt their IT systems to collect the necessary data.
- Reflect these risks in risk reports.

Supervisory expectations

Risk management framework

Institutions are expected to incorporate CR&E risks as drivers of established risk categories into their existing risk management framework. Further, institutions should identify and quantify these risks within their overall process of ensuring capital adequacy



Institutions are expected to have a **holistic and well-documented view** of the impact of CR&E risks on existing risk categories (both financial and non-financial risks)



Institutions are expected to conduct a **proper climate-related and environmental due diligence**, both at the inception of a client relationship and on an ongoing basis



Institutions are expected to **adequately quantify the CR&E risks** that the institution is exposed to.



Institutions are expected to **assess the impact** of CR&E risks and any **concentration** within and between those risks on their **capital adequacy** from an economic and a normative perspective.



Institutions are expected to adopt a **strategic approach** to managing and/or mitigating CR&E risks in line with their business strategy and risk appetite, and to **adapt policies** (e.g. setting limits on financing certain sensitive economic sub-sectors), **procedures, risk limits and risk controls accordingly**.



Institutions are expected to evaluate the appropriateness of their **identification, measurement and mitigation instruments** for CR&E risks in their periodic reviews (e.g. in the context of the ICAAP).







Supervisory expectations

Risk management framework



Due to the fact that physical and transition risks are drivers of prudential risks¹, in particular credit, market, operational and liquidity risks, institutions are expected to integrate CR&E risks on their existing risk management frameworks

Risks affected	Physical		Transition	
	Climate-related	Environmental	Climate-related	Environmental
	<ul style="list-style-type: none"> ▪ Extreme weather events ▪ Chronic weather patterns 	<ul style="list-style-type: none"> ▪ Water stress ▪ Resource scarcity ▪ Biodiversity loss ▪ Pollution ▪ Others 		<ul style="list-style-type: none"> ▪ Policy and regulation ▪ Technology ▪ Market sentiment
 Credit	The PD and LGD of exposures within sectors or geographies vulnerable to physical risk may be impacted (e.g. lower collateral valuations in real estate portfolios).		Energy efficiency standards may trigger substantial adaptation costs and lower corporate profitability , which may lead to a higher PD as well as lower collateral values.	
 Market	Severe physical events may lead to shifts in market expectations and could result in sudden repricing, higher volatility and losses in asset values on some markets.		Transition risk drivers may generate an abrupt repricing of securities and derivatives , for example for products associated with industries affected by asset stranding.	
 Operational	The bank's operations may be disrupted due to physical damage to its property, branches and data centres as a result of extreme weather events.		Changing consumer sentiment regarding climate issues can lead to reputation and liability risks for the bank.	
 Other risk types (liquidity, business model)	Liquidity risk may be affected in the event of clients withdrawing money from their accounts in order to finance damage repairs.		Transition risk drivers may affect the viability of some business lines and lead to strategic risk for specific business models if the necessary adaptation or diversification is not implemented. Abrupt repricing of securities may reduce the value of banks' high quality liquid assets affecting liquidity buffers.	

Supervisory expectations

Risk management framework: Credit risk



In their credit risk management, institutions are expected to consider CR&E risks at all stages of the credit-granting process and to monitor the risks in their portfolios

Credit risk management

- **CR&E risks are expected to be included in all relevant stages of the credit-granting process and credit processing.** Specifically, institutions are expected to form an opinion on how these risks affect the borrower's probability of default (PD) risk, where key factors should be identified and assessed.
- Institutions are expected to **adjust risk classification procedures in order to identify and evaluate, at least qualitatively, CR&E.** In this sense, institutions should define appropriate general risk indicators or ratings for their counterparties that take into account CR&E. Critical exposures should be highlighted and where applicable, considered under various scenarios.
- Institutions are expected to consider **CR&E in their collateral valuations.** In this regard, institutions are expected to give particular consideration to the physical locations and the energy efficiency of commercial and residential real state.
- Institutions are expected to **monitor and manage credit risks and critical CR&E risk exposure in their portfolios under different scenarios,** for example, through sectoral/geographic concentrations analysis, exposure limits, deleveraging strategies and scenario-analysis and/or stress testing.
- **Institutions' loan pricing frameworks** are expected to reflect their **credit risk appetite and business strategy with regard to CR&E factors.** Furthermore, institutions may also consider to **incentivize their clients** to properly consider CR&E risks so as to improve the creditworthiness and resilience towards such risks.
- **Institutions' loan pricing** is expected to reflect the **different costs driven by CR&E risks.** Environmentally sustainable assets may, for example, be funded by dedicated instruments, such as green (covered) bonds, and thus incur different funding costs. Areas exposed to increasing physical climate risks (e.g. floods or droughts) may see an increase in credit loss.

Supervisory expectations

Risk management framework: Operational and market risk management



Institutions are expected to consider how climate-related events could have an adverse impact on business continuity and should monitor the effects of CR&E factors on their current market positions and future investments

Operational risk management

- Institutions are expected to assess the **impact of physical risks on their operations** in general. The assessment of the materiality of operational risk arising from physical risk applies in particular to outsourced services and IT activities.
- Institutions are expected, within this assessment, to **review business continuity plans** and to **consider the ability to quickly recover from these operational risks** and whether these could affect their ability to process transactions, provide services or cause legal liabilities for damage to third parties, such as customers and other stakeholders. Business resilience should be reviewed.
- Institutions are expected to consider the **extent to which the nature of the activities** in which they are involved increases the risk of future **reputational damage or liability**. Institutions associated with social or environmental controversies could face reputational risks as a result of changing market sentiment in relation to CR&E risks.
- Institutions should review their exposure to **compliance risk regarding CR&E risks**, and ensure their **alignment with relevant regulation**.

Market risk management

- Institutions are expected to consider that CR&E risks could lead to **potential shifts in supply and demand for financial instruments** (e.g. securities or derivatives), products and services, **with a consequent impact on their values**. **Internal stress testing** could be usefully applied to better understand and assess the relevance of climate-related risks for an institution's trading and banking book.
- In assessing their exposure to market risk, **institutions are expected to include**, as a minimum, **risks arising from debt, equity and equity-related financial instruments in the regulatory trading book**, as well as **foreign exchange positions** and **commodities risk positions** assigned to both the **trading and banking book**.
- Special attention should be given to CR&E risks' potential impact on credit spreads and commodity trading.

Supervisory expectations

Risk management framework: Liquidity risk and stress test



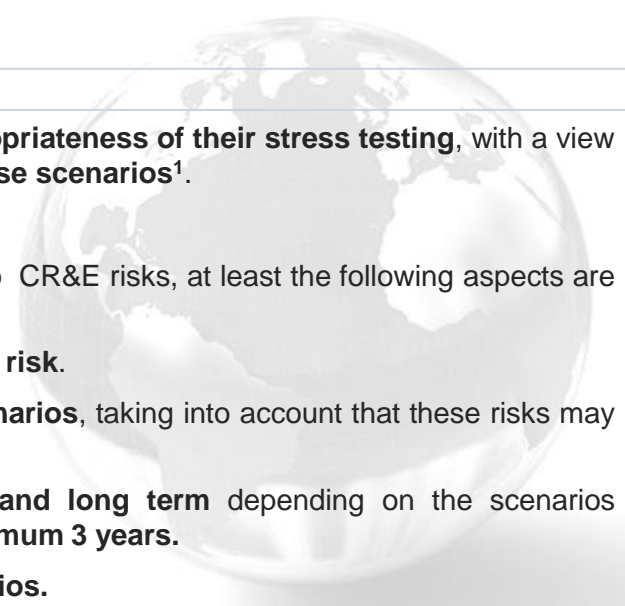
Institutions are expected to assess whether material CR&E risks could cause net cash outflows or depletion of liquidity buffers. Further, institutions are expected to conduct a tailored an in-depth review of their vulnerabilities through stress testing

Liquidity risk management

- To ensure robust **liquidity risk management**, institutions are expected to consider the direct or indirect impacts of CR&E risks on their **liquidity position**. In this sense, they are expected to assess whether CR&E risks could have a **material impact on net cash outflows or liquidity buffers**, and in that case, incorporate this into their liquidity risk management and **liquidity buffer calibration**.
- These assessments are expected to be conducted in a **forward-looking manner**, assuming both business-as-usual and stressed conditions, and to consider in particular severe but plausible scenarios that may occur in combination, with a focus on key vulnerabilities.

Stress test

- Institutions with material CR&E risks are expected to **evaluate the appropriateness of their stress testing**, with a view to incorporating physical and transition risk into their **baseline** and **adverse scenarios**¹.
- Integrate CR&E risks stress testing and scenario analysis to **ICAAP**.
- **When conducting scenario analysis and stress** testing with respect to CR&E risks, at least the following aspects are expected to be considered:
 - How the institution might be **affected by physical and transition risk**.
 - How CR&E risks might **evolve under various temperature scenarios**, taking into account that these risks may not be fully reflected in historical data.
 - How CR&E risks **might materialize in the short, medium and long term** depending on the scenarios considered. It should include a forward-looking **timespan of minimum 3 years**.
 - **Integrate potential impacts in recovery and resolution scenarios**.



(1) For physical risk, institutions are expected to consider using scenarios that are in line with scientific climate change pathways, such as IPCC or IEA scenarios

Supervisory expectations

Disclosure

Institutions are expected to publish meaningful and metrics on CR&E risks, considering as a minimum EC's *Guidelines on non-financial reporting: Supplement on reporting climate-related information*



- For the purposes of their regulatory disclosures, institutions are expected to **publish meaningful information and key metrics** on CR&E risks that they deem to be material, as a minimum, in line with the *European Commission's Guidelines on non-financial reporting: Supplement on reporting climate-related information*. In this regard:
 - Institutions are expected to specify in their disclosure policies key considerations that inform their **assessment of the materiality of CR&E risks**, as well as the frequency and means of disclosures.
 - In case an institution deems climate-related risks to be **immaterial**, the institution is expected to document this judgement with the available **qualitative and quantitative information underpinning** its assessment.
 - When institutions disclose figures, metrics and targets as material, they are expected to **disclose the methodologies, definitions and criteria** associated with them.
 - When institutions commit to contribute to CR&E goals, they are also expected to provide a **comprehensive overview of the climate and the environmental impact of the entity as a whole**.

Content of CR&E risk disclosures



- Disclose climate-related risks that are financially material in line with the EC's *Guidelines on non-financial reporting: Supplement on reporting climate-related information*, which integrate the recommendations of the TCFD and is consistent with the NFRD.
- Disclose the institution's Scope 1, 2 and 3 GHG emissions¹⁰⁷ for the whole group in line with the GHG Protocol.
- Disclose the KPIs and KRIs used for the purposes of their strategy-setting and risk management, as well as their current performance against these metrics.
- Explicitly consider the need for further disclosures.

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Relevant information and next steps

**The guide will be primarily used in the supervisory dialogue with significant institutions directly supervised, although NCAs are recommended to apply it in their supervision of LSIs.
The guide will be applicable from its date of publication**



- Comments to this public consultation should be submitted by **September, 25 2020**.
- Following the end of the public consultation, the ECB will publish the comments received together with a feedback statement.
- **This guide will be applicable as of its date of publication.**
- Where needed, significant institutions are expected to promptly start adapting their practices.
- As from end-2020, **significant institutions will be asked to inform the ECB of any divergences of their practices from the supervisory expectations described in this guide.**

Correspondence with the ECB's general prudential framework:

- This guide describes the ECB's understanding of the safe and prudent management of CR&E risks under the current prudential framework. In that respect, the following regulation is particularly relevant:
 - **Capital Requirements Directive (CRD)** - Directive 2013/36/EU of the European Parliament and of the Council on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms.
 - **Capital Requirements Regulation (CRR)** - Regulation (EU) No 575/2013 of the European Parliament and of the Council of on prudential requirements for credit institutions and investment firms.
- Additionally, the EBA has adopted several guidelines which complement the abovementioned directives. Where the ECB's guide makes reference to those guidelines, the reference should be read in conjunction with the directives.