

Press release

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Banks must sharpen their focus on climate risk, ECB supervisory stress test shows

- Banks managed to report comprehensive and innovative information on climate risk
- Most banks do not have robust climate risk stress-testing frameworks and lack relevant data
- Stress test shows banks' losses lower in an orderly transition scenario than after delayed action

The [results](#) of the European Central Bank (ECB) climate risk stress test published today show that banks do not yet sufficiently incorporate climate risk into their stress-testing frameworks and internal models, despite some progress made since 2020.

“Euro area banks must urgently step up efforts to measure and manage climate risk, closing the current data gaps and adopting good practices that are already present in the sector,” said Andrea Enria, Chair of the ECB’s Supervisory Board.

The test, which is part of the ECB’s wider climate roadmap, is not a capital adequacy exercise but rather a learning one for banks and supervisors alike. It collected qualitative and quantitative information, with a view to assessing the sector’s climate risk preparedness and gathering best practices for dealing with climate-related risk.

“This exercise is a crucial milestone on our path to make our financial system more resilient to climate risk,” said Frank Elderson, Vice-Chair of the Supervisory Board. “We expect banks to take decisive action and develop robust climate stress-testing frameworks in the short to medium term.”

A total of 104 significant banks participated in the test consisting of three modules, in which banks provided information on their: (i) own climate stress-testing capabilities, (ii) reliance on carbon-emitting sectors, and (iii) performance under different scenarios over several time horizons.¹ The bottom-up

¹ Specifically, we asked banks to consider a three-year disorderly transition scenario resulting from a sharp increase in the price of carbon emissions, a 30-year transition scenario with various assumptions, and the physical risk of a major flood and a severe drought and heatwave over a one-year horizon.

European Central Bank

Directorate General Communications, Global Media Relations Division
Sonnemannstrasse 20, 60314 Frankfurt am Main, Germany
Tel.: +49 69 1344 7455, email: media@ecb.europa.eu, website: www.bankingsupervision.europa.eu

stress test within the third module was limited to 41 directly supervised banks to ensure proportionality towards smaller banks.

The results of the first module show that around 60% of banks do not yet have a climate risk stress-testing framework. Similarly, most banks do not include climate risk in their credit risk models, and just 20% consider climate risk as a variable when granting loans. Banks currently fall short of best practices, according to which they should establish climate stress-testing capabilities that include several climate risk transmission channels (e.g. market and credit risks) and portfolios (e.g. corporate and mortgage).

The second module of the test finds that, on aggregate, almost two-thirds of banks' income from non-financial corporate customers stems from greenhouse gas-intensive industries. In many cases, banks' "financed emissions" come from a small number of large counterparties, which increases their exposure to transition risks. Banks often rely on proxies to estimate their exposure to emission-intensive sectors. While this is a good first step to closing the data gaps, banks need to step up their customer engagement to obtain more accurate data and insights into their clients' transition plans. This is a precondition for banks to gauge and manage their exposure to climate risks going forward.

The bottom-up stress test under the third module requires banks to project losses in extreme weather events and under transition scenarios with different time horizons. It confirms that physical risk has a heterogeneous impact across European banks. Findings show that banks' vulnerability to a drought and heat scenario is highly dependent on sectoral activities and the geographical location of their exposures. The impact of this risk materialises through a decrease in sectoral productivity, e.g. in agriculture and construction activities, and an increase in loan losses in the affected areas. Similarly, in the flood risk scenario, real estate collateral and underlying mortgages and corporate loans are expected to suffer, particularly in the most affected locations.

The stress test shows that credit and market losses in the short-term disorderly transition and the two physical risk scenarios amount to around €70 billion on aggregate for the 41 banks in question. However, this significantly understates the actual climate-related risk, as it reflects only a fraction of the actual hazard, owing to: (i) the scarcity of available data at this early stage, (ii) the modelling underlying the banks' projections only capturing climate factors rudimentarily, (iii) the exclusion of economic downturns and second-round effects from the scenarios, and (iv) the exposures within the scope of this exercise only accounting for around one-third of the total exposures of the 41 banks. Moreover, given the learning nature of the exercise there were no supervisory overlays, meaning that the calculation originally proposed by banks were not changed.

Regarding banks' long-term projections under different climate risk scenarios, the results show that an orderly green transition translates into lower losses than disorderly or no policy action. However,

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banks barely differentiate between various long-term scenarios as they lack robust strategies, other than the tendency to reduce exposures from the most polluting sectors and to support lower-carbon-emitting businesses. Therefore, banks must consider direct and indirect transmission channels in their strategic long-term plans.

The results of this stress test will feed into the Supervisory Review and Evaluation Process from a qualitative point of view. There will be no direct impact on capital through the Pillar 2 guidance this year. All participating banks have received individual feedback and are expected to take action accordingly, in line with the set of best practices that the ECB will publish in the final quarter of 2022.

This exercise shows that the ECB is committed to leading European banks through the green transition, which also involves cooperating with authorities across Europe and beyond. The findings of the 2022 climate stress test will be used as a compass for European banks to boost their climate risk stress-testing capabilities and prepare for the risks and opportunities of a transition to net zero. Moreover, they will complement the results of other ongoing supervisory activities, such as the 2022 [thematic review](#) of how banks incorporate climate-related and environmental risks into their strategies, governance and risk management.

For media queries, please contact [Georgina Garriga Sánchez](#), tel.: +49 69 1344 95368 or [Simon Spornberger](#), tel.: +49 69 1344 17711.

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Sonnemannstrasse 20, 60314 Frankfurt am Main, Germany
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