EUROPEAN CENTRAL BANK

EUROSYSTEM

Press release

26 November 2026

Climate change indicators: November 2026

- Carbon emissions financed by euro area banks and investment funds declined between 2018 and 2025
- Physical risk indicators highlight rising heat and wildfire risks under future climate scenarios
- Latest release further improves quality and coverage of climate risk indicators

The European Central Bank (ECB) has published updated statistical climate indicators to assess developments in transition and physical risks related to climate change. These updates incorporate enhanced methodologies, new data sources and more detailed information, enabling more precise tracking of decarbonisation efforts and the impact of climate-related hazards. The sustainable finance indicators, which form part of the statistical climate change indicators, are scheduled to be updated by January 2027.

Transition risk indicators

The latest release of carbon emissions and transition risk indicators confirms a continuation of the downward trend in climate-related exposures and risks in the portfolios of euro area financial institutions. In particular, the latest results point to an ongoing reduction of greenhouse gas (GHG) emissions embedded in banks' portfolios, without a reduction in their lending volumes to the emitting non-financial companies.

For banks' loan portfolios (Chart 1, panel a), the latest calculations and estimates show that financed direct emissions (Scope 1) decreased by more than one-third between 2018 and 2025. They fell by 36%, from 221 to 142 million tonnes of CO_2 equivalent.[1] Thanks to methodological enhancements, the

[1] CO_2 equivalent (CO_2 eq.) is a unit of measurement used to compare the warming effects of different greenhouse gases. Emissions are converted into the amount of CO_2 that would have the same global warming impact over a 100-year period.

European Central Bank
Directorate General Communications
Sonnemannstrasse 20, 60314 Frankfurt am Main, Germany
Tel.: +49 69 1344 7455, email: media@ecb.europa.eu, website: www.ecb.europa.eu

Reproduction is permitted provided that the source is acknowledged.

carbon emissions indicators now additionally cover indirect emissions (Scopes 2 and 3) embedded in banks' loan portfolios. These emissions followed a similar downward trend: emissions associated with energy consumption (Scope 2) declined by 56%, while those linked to other production inputs consumed (upstream Scope 3) declined by 32% over the same period.

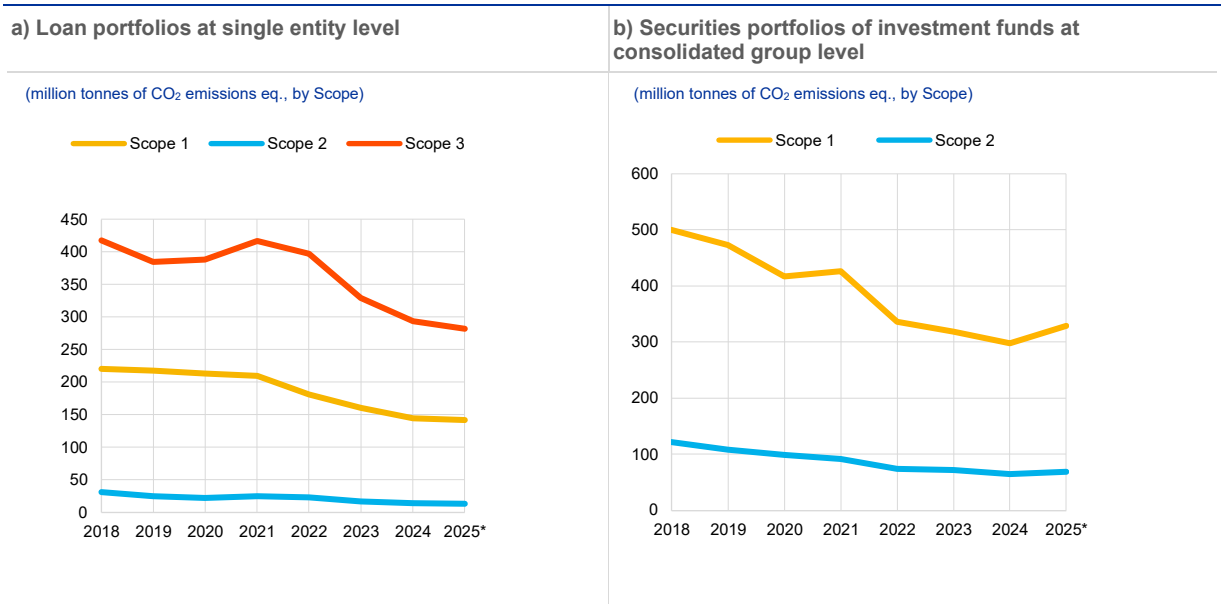
Similarly, for the securities portfolios of non-money market investment funds (Chart 1, panel b), the latest calculations and estimates show that financed direct emissions decreased by 34% between 2018 and 2025, from 499 to 328 million tonnes of CO_2 equivalent. Indirect emissions (Scope 2) declined by 44%, from 121 to 69 million tonnes of CO_2 equivalent.

These reductions in financed emissions occurred despite increases in the value of the portfolios of in-scope instruments: 17% for bank loans and 95% for investment funds' securities portfolios. These increases were mainly driven by price effects.

A downward trend is also evident in the carbon intensity of creditors' portfolios, measured as emissions per unit of revenue using the weighted average carbon intensity (WACI) indicator. This provides a further indication of the decarbonisation of euro area financial portfolios.

Chart 1

Financed emissions in the loan portfolios of euro area banks and securities portfolios of investment funds



Sources: European System of Central Banks (ESCB) calculations based on data from Anacredit, the Register of Institutions and Affiliates Data, the EU Emissions Trading System, Eurostat air emissions accounts, the Full International and Global Accounts for Research in Input-Output Analysis and Securities Holdings Statistics by Sector and Institutional Shareholder Services.
Notes: Securities include listed shares and debt securities. "Banks" excludes central banks. "Investment funds" covers all collective investment funds, except money market funds, that raise capital from the public by issuing shares or units. * Values for 2025 are nowcasted. As these values are estimated, the observed developments may reflect the imputation methods used rather than real-world changes in underlying emissions and financial data.

European Central Bank
Directorate General Communications
Sonnemannstrasse 20, 60314 Frankfurt am Main, Germany
Tel.: +49 69 1344 7455, email: media@ecb.europa.eu, website: www.ecb.europa.eu

Reproduction is permitted provided that the source is acknowledged.

Physical risk indicators

Physical risk indicators measure euro area financial institutions' exposure to climate-related risks arising from natural hazards such as floods, windstorms and wildfires, as well as phenomena like droughts and water stress.

Europe experienced extreme heatwaves during the summer of 2026, while several countries faced significant wildfire activity. These extreme weather events illustrate the potentially severe consequences of temperature extremes and wildfire hazards for economic activity, productivity, asset values and financial exposures.

Against this backdrop, the physical risk indicators have been enhanced with new cooling degree day metrics and improved wildfire indicators. Cooling degree days, introduced in this release alongside heating degree days, provide a proxy for the impact of rising temperatures on energy demand and related operating costs for firms. Wildfire estimates have also been improved through the use of updated data sources and methodological improvements, enabling a more comprehensive assessment of current and projected wildfire risk.

Chart 2, panel a) illustrates the increase in energy demand associated with cooling needs. It shows average risk scores across debtors and issuers, weighted by the corresponding loan and securities exposures. Countries that already experience high cooling demand are also projected to see the largest increases in cooling requirements under an intermediate climate scenario (RCP 4.5).[2] Greece records both the highest current level of cooling-related risk, as measured by the average risk score, and the largest projected increase under future climate conditions, followed by Croatia, Italy, Spain and Portugal. At the other end of the spectrum, northern countries such as Estonia and Finland remain less exposed. Nevertheless, cooling requirements are projected to increase across the entire euro area.

Turning to wildfire risk, the share of portfolio exposures under the same climate scenario (RCP 4.5) highlights additional vulnerabilities in southern euro area countries, particularly Portugal, Italy, Spain and Greece (Chart 2, panel b). In Portugal, 27% of financial institutions' portfolios are exposed to high wildfire risk, followed by 12% in Italy. Greece records the highest overall exposure when all risk categories are taken into account. While financial institutions in central euro area countries are generally less exposed to high wildfire risk, their exposure to medium-risk areas remains significant, reaching 40% of portfolios in Belgium and 27% in France.

---

[2] RCP stands for representative concentration pathways. RCP 4.5 represents a scenario in which radiative forcing reaches 4.5 W/m² by the end of the century. It is considered a moderate climate scenario. For further details, please see the technical annex.

European Central Bank
Directorate General Communications
Sonnemannstrasse 20, 60314 Frankfurt am Main, Germany
Tel.: +49 69 1344 7455, email: media@ecb.europa.eu, website: www.ecb.europa.eu

Reproduction is permitted provided that the source is acknowledged.

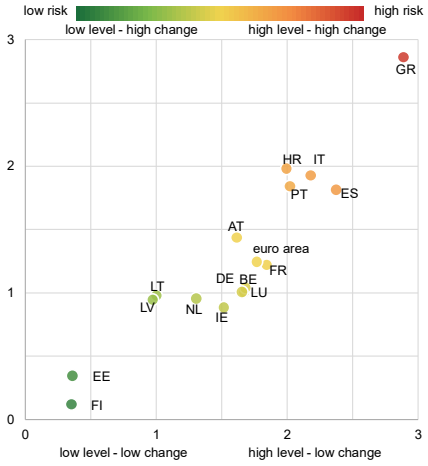
These patterns broadly reflect the geographical distribution of heat and wildfire hazards and underscore the differing risk profiles across the euro area.

Chart 2

Physical risk exposures of euro area financial institutions under an RCP 4.5 climate scenario

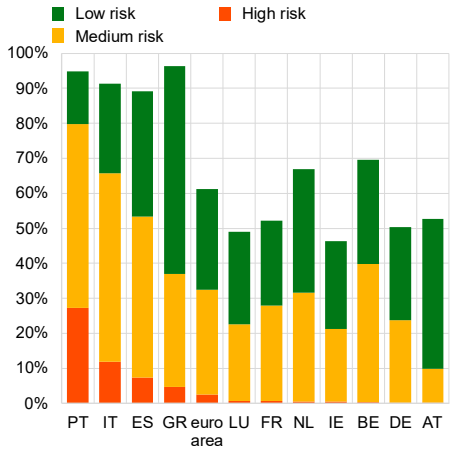
a) Cooling degree days: historical levels and projected changes in exposure-weighted average risk scores

(x-axis: historical level, average risk score from 0 - no risk to 3 - high risk; y-axis: average risk score for the projected change in cooling degree days relative to the historical baseline under RCP 4.5, 2021-2040)



b) Wildfire risk scores across euro area countries under RCP 4.5, 2041-2050

(percentage of portfolio)



Sources: ESCB calculations based on data from AnaCredit, the Register of Institutions and Affiliates Data, Securities Holdings Statistics, IPCC Interactive Atlas. Wildfire estimates are based on ESCB calculations using Burger, C., Herzberg, J. and Nuvoli, T. (2024), *Climate Change Risk Indicators for Central Banking: Explainable AI in Fire Risk Estimations*, working paper, updated data from the Copernicus Climate Change Service (C3S), MODIS MCD64A1 (Giglio et al., 2021) and NASA LANCE FIRMS MCD14D, as well as distances to the nearest cities and roads collected by Batista e Silva et al. (2019).
Notes: Portfolio exposures cover loans, debt securities and equity portfolios of euro area financial institutions vis-à-vis non-financial corporations. Indicators are calculated from the creditor-country perspective and may therefore include exposures to non-resident debtors. Consequently, a country's reported exposure may reflect hazards outside its territory, particularly where cross-border exposures are substantial. Financial institutions include deposit-taking corporations except central banks (S122), non-money market fund investment funds (S124), insurance corporations (S128) and pension funds (S129). Risk scores are not comparable across hazard types, as they are based on different methodologies and data sources. Some countries have been removed owing to confidentiality constraints and the limited relevance of the hazard.
The reference period for portfolio exposures is December 2025. For details on climate scenarios, please refer to the technical annex.

For media queries, please contact: Benoit Deeg, tel.: +49 172 1683704.

Notes

- To access the statistical climate indicators, visit the ECB's website. For further details on the methodologies, data sources and findings, consult the accompanying statistics paper and refer to the technical annex.

European Central Bank
Directorate General Communications
Sonnemannstrasse 20, 60314 Frankfurt am Main, Germany
Tel.: +49 69 1344 7455, email: media@ecb.europa.eu, website: www.ecb.europa.eu

Reproduction is permitted provided that the source is acknowledged.