

Methodological notes to the amount of climate risks publication

1. The aim of the publication is the presentation of the results of the climate risk tools used by the MNB.
2. Publication of revisions:
 - a) The data of the publication is updated every time it is published: the reports are supplemented with the data of the new period, and the values may change retroactively as a result of the modifications sent by the data providers, or due to changes in calculation methodologies of which results in improved data quality.
3. In relation to the **1 Climate risk matrix** table:
 - a) The table includes the location of domestic credit institutions including the branches of foreign credit institution on the climate risk matrix in anonymized form.
 - b) Institutions are merged if they are part of the same group.
 - c) Climate risk matrix determines the transition risk of credit institutions based on two methodologies. On the X axis, the share of exposures towards climate policy relevant sectors are shown, while on the Y axis, the share of exposures towards high GHG-intensity activities are shown compared to total domestic non-financial corporate exposures.
 - d) Exposures are based on domestic non-financial corporate loans on outstanding principal value and owned securities and bonds on gross book value issued by domestic non-financial corporates. The source of corporate loans is the HITREG data report, and the source of bond and security exposures is the E22 data report. Only exposures with a NACE code are considered.
 - e) Methodology used for the analysis: Ritter, R. (2022): Banking Sector Exposures to Climate Risks – Overview of Transition Risks in the Hungarian Corporate Loan Portfolio. Financial and Economic Review, 21(1). <https://doi.org/10.33893/FER.21.1.32>. Last accessed: 14.11.2024
4. In relation to the **2 CPRS exposures** table:
 - a) The table includes the domestic non-financial corporate exposures of domestic credit institutions including the branches of foreign credit institution, as well intermediary institutions belonging to a banking group, broken down by climate policy relevant sectors, and by green and other exposures.
 - b) Exposures are based on domestic non-financial corporate loans (with the exception of guarantees and factoring transactions) on outstanding principal value and owned securities and bonds on gross book value issued by domestic non-financial corporates. The source of corporate loans is the HITREG data report, and the source of bond and security exposures is the E22 data report. Only exposures with a NACE code are considered.
 - c) The total domestic non-financial corporate loan exposure in the Amount of climate risks publication 2 CPRS exposures table may differ from the total domestic corporate and municipal loans value published in the Green finance volume data publication 1 GPCR overview table. The reason for the difference is that the values in the Green finance volume data publication 1 GPCR overview table are presented on the basis of fair market value, while in the Amount of climate risks publication 2 CPRS exposures table the values are presented on the basis of the outstanding principal value, and in the Amount of climate risks publication 2 CPRS exposures table only exposures with a NACE code are considered. Another reason for the difference is that the values in the Green finance volume data publication 1 GPCR overview table only includes exposures of domestic credit institutions including the branches of foreign credit institution, while in the Amount of climate

risks publication 2 CPRS exposures table also includes exposures of intermediary institutions belonging to a banking group.

- d) The definition of green credit exposures is the same as the values indicated in the green finance volume data publication 3 Corporate loan table. The green loan volume in the Amount of climate risks publication 2 CPRS exposures table may differ from the green loan volume published in the Green finance volume data publication 3 Corporate loan table. The reason for the difference is that The green finance volume data publication 3 Corporate loan table also includes green credit exposures to financial corporations, while the Amount of climate risks publication 2 CPRS exposures table only includes green credit exposures to non-financial corporations.
 - e) The green bond volume in the Amount of climate risks publication 2 CPRS exposures table may differ from the green bond volume published in the Green finance volume data publication 1 GPCR overview table. The reason for the difference is that the Amount of climate risks publication 2 CPRS exposures table includes all green bonds held, while the Green finance volume data publication 1 GPCR overview table includes only bonds included in the preferential capital treatment programme, and the values in the Green finance volume data publication 1 GPCR overview table are presented on the basis of fair market value, while in the Amount of climate risks publication 2 CPRS exposures table the values are presented on the basis of the outstanding principal value.
 - f) The classification of exposures into climate policy relevant sectors is based on the NACE code associated with the exposure. The studies underlying the sectors associated with each NACE code are:
 - i. Battiston, S. – Mandel, A. – Monasterolo, I. – Schütze, F. – Visentin, G. (2017): A climate stress-test of the financial system. *Nature Climate Change*, 7(4): 283–288. <https://doi.org/10.1038/nclimate3255>. Last accessed: 14.11.2024
 - ii. Battiston, S., Monasterolo, I., van Ruijven, B., & Krey, V. (2022). The NACE – CPRS – IAM mapping: A tool to support climate risk analysis of financial portfolio using NGFS scenarios. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4223606. Last accessed: 14.11.2024
 - g) The NACE code of the exposure is determined primarily based on the sector code of the financed loan (INSTR.FIN_AGAZAT_KOD), or, in the absence thereof, based on the debtor's main activity.
 - h) In line with legislative changes in the European Union, the data series is generated using the NACE code classifications applicable from January 1, 2025 (NACE Rev. 2.1 transition) for dates from March 31, 2025, and onward. Due to the change in the classification of main activities as of January 1, 2025, significant shifts were observed in certain sectors, which led to greater changes in the values of some CPRS sectors. Further information on the changes in NACE codes can be found in the [2025 Green Finance Report](#).
5. Questions regarding the methodologies used in the publication can be submitted to the email address zold.penzugyek@mnbb.hu.