Closing the climate data gap*

*Explaining the ECB's new climate-related indicators.

SHRUTI BHARGAVA

Contributors: Dr. Inna Amesheva, Dr. Kieran Brophy, Isabel Verkes and Min Low

esgbook

In 2022, the European Central Bank (ECB) pioneered a climate risk stress test carried out among the most significant financial institutions in Europe as part of its annual stress testing exercise. Building on the test's findings, the ECB launched last month a set of climate-related statistical indicators. The announcement forms part of the ECB's mandate to incorporate climate change considerations into its monetary policy framework, which includes transitioning nearly €350 billion in corporate bond portfolios towards issuers with improved climate performance , according to ECB's Climate Action Plan.

The indicators are aimed at making it easier for the financial sector to evaluate portfolios on important climate-related metrics such as acute risks or issuances and holdings of debt securities. The metrics were made publicly available by the ECB to encourage wider discussion for future improvements of the methodology. Aware that this was its first attempt at setting out concrete statistical climate-related standards, the ECB classified the three sets of indicators into 'experimental', and 'analytical', designating them a work-in-progress and clarifying that the analytical indicators would be subject to limitations and caveats in terms of being implemented by financial institutions.

The intention of the European Banking Regulator is that all indicators should be built on open-source data to ensure public accessibility and replicability, complementing the ongoing focus on climate-related indicators. A summary of the indicators, together with their objectives and limitations, is provided below:

INDICATOR	AIM & DESCRIPTION	CAVEATS & LIMITATIONS
Experimental indicators on sustainable finance • Issuances of sustainable debt securities • Holdings of sustainable debt securities	• The indicators provide time-series information on outstanding amounts and financial transactions relating to issuances and holdings of sustainable debt instruments • Enable analysts to understand debt instruments as investment opportunities	• Since assurance degrees can vary and are not always clearly available, usage of the indicators may not be suitable for those looking at stringent sustainability criteria • Some of the breakdowns such as breakdown by sustainability classification (green, social, sustainability, and sustainability-linked) are available for the EU area only • Sector and country breakup is available for only green debt securities
Analytical indicators on carbon emissions • Indicators on financing carbon-intensive activities • Indicators on exposures to transition risks	• Identify 'how' and 'by how much' financed carbon-intensive activities will reduce their emissions as we transition towards net-zero	• Does not detail if the financing intended to green the businesses • In absence of categorization of emissions across business activities, proportioning is not possible • Affected by inconsistencies arising from using revenue data to calculate emission intensities instead of production undertaken by the entity itself
Analytical indicators on physical risks • Normalised exposure at risk (NEAR) • Potential exposure at risk (PEAR) • Risk scores (RS)	• Measure the percentage of risk and exposure of a portfolio and assign risk scores associated with a risk class • Help assess the impact physical risks could have on the financial stability of an organization	• Risk or overestimation for those with adequate adaptation measures and underestimation for those with inadequate measures. • Does not account for compound effects of multiple disasters • Does not account for future improvements in adaptation or mitigation measures • Does not account for collateral assets and limited information available on insurance affects the granularity • Limited availability of hazard data • Chronic hazards have not been considered

The ECB indicators can be accessed on the ECB website along with the technical annex.

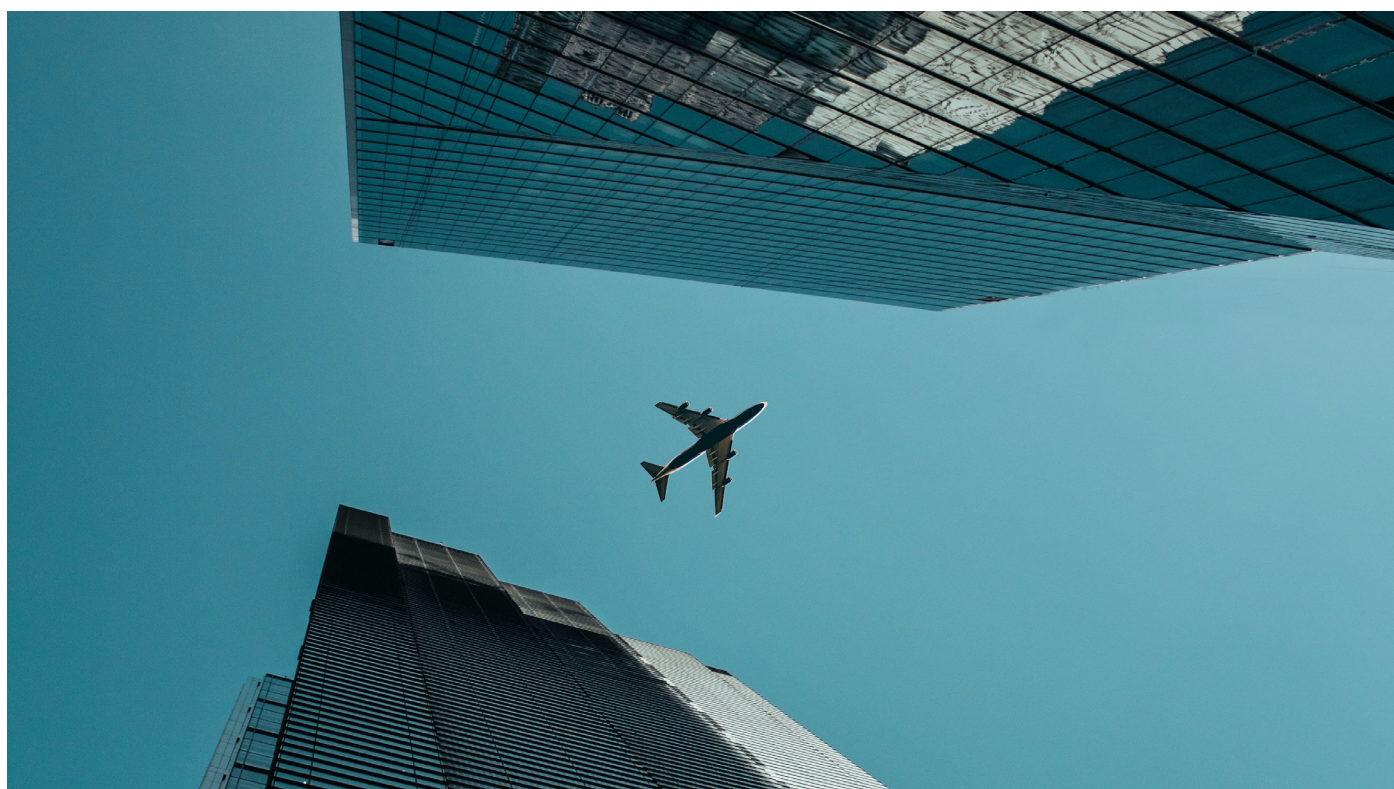It is worth noting that the ECB guidance on emissions estimation has scope to develop further, for example use of the Waterfall imputation methodology. . Although theoretically relatively simple in terms of calculation - divide the number of employees an entity has by total employees in its sector, then apply that fraction to the sector's emissions - there are numerous pitfalls with this approach.

- Firstly, the obvious one, emissions do not necessarily scale linearly with employees. As companies grow, they can often put more resources into efficiency savings, hence emission per employee will likely decrease over time.
- Secondly, the ECB provides no guidance on sector classification. Since emission profiles are highly dependent on sector, the more granular the classification, the better. An example of the importance of this is that an airline will usually emit much more emissions per employee than a rail company, even though both, in some sector classifications, will fall under 'Transport'.

ESG Book analysis has shown that including the above classification into a model that estimates emissions, yields more accurate estimates.

Having said the above, limited availability of information such as hazard data for all regions, or the general lack of corporate emission disclosures pertaining to entity-level figures impede the applicability of current analysis across the globe. While the ECB's statistical indicators may currently not possess the level of detailed inputs needed to make them widely applicable, the effort is a start in the journey towards obtaining better quality data over time. With Task Force on Climate-related Financial Disclosures' (TCFD) recommendations being more qualitative in nature and the IFRS® Sustainability Disclosure Standard building on similar lines, the quantitative trend analysis expected from these statistical indicators will certainly help the banking and financial sector better evaluate the performance of their portfolio.

With the launch of the second version of Partnership for Carbon Accounting Financials' (PCAF) Global GHG Accounting and Reporting Standard for the Financial Industry last month, the EU Taxonomy Regulation disclosures for European corporates now mandatory, and the release of the UN PRI 2023 Reporting Framework earlier this year, it's clear that the world of climate change accounting is rapidly becoming more organised.

EXPLAINING THE ESB'S NEW CLIMATE-RELATED INDICATORS

esgbook