

Finance and CO2 data status quo, gaps and potential

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Introduction

Motivation

- Wide recognition of important role of financial sector in the energy transition – as financier, but also as being itself exposed to climate-related risks (transition, physical)
- Resulting in a wealth of policy questions, from the level of individual institutions to global trends, that all require data

Objective

Provide *objective, comparable, aggregable* statistics on the carbon emissions of financial institutions' loan and investment portfolios (& physical risks & sustainable finance indicators)

Team

ECB Statistics Committee Expert Group on Climate Change and Statistics (= Statisticians of the European System of Central Banks, mandated by the Governing Council)

- In close collaboration with other International Organisations & statistical initiatives

Approach

- Leverage on, and combine, the wealth of ESCB existing (public) data sources
- Full transparency of methodologies.
- Combine expertise across domains in the Eurosystem (and other EU institutions)

Results

First data published as analytical indicators in January 2023. Next – much improved – released scheduled for April 2024, subsequent annual releases

Carbon emission indicators link financing and corporate emissions

How does the financial sector *contribute* to the financing of high-emitting economic activities?

Financed emissions (FE)

Total greenhouse gas (GHG) emissions of a debtor/issuer weighted by the investment as a share of the company's total value.

Carbon intensity (CI)

FE divided by the production value of the company weighted by the investment in the company's activities as a share of the company's total value

How *exposed* is the financial sector to high-emitting economic activities via its portfolios?

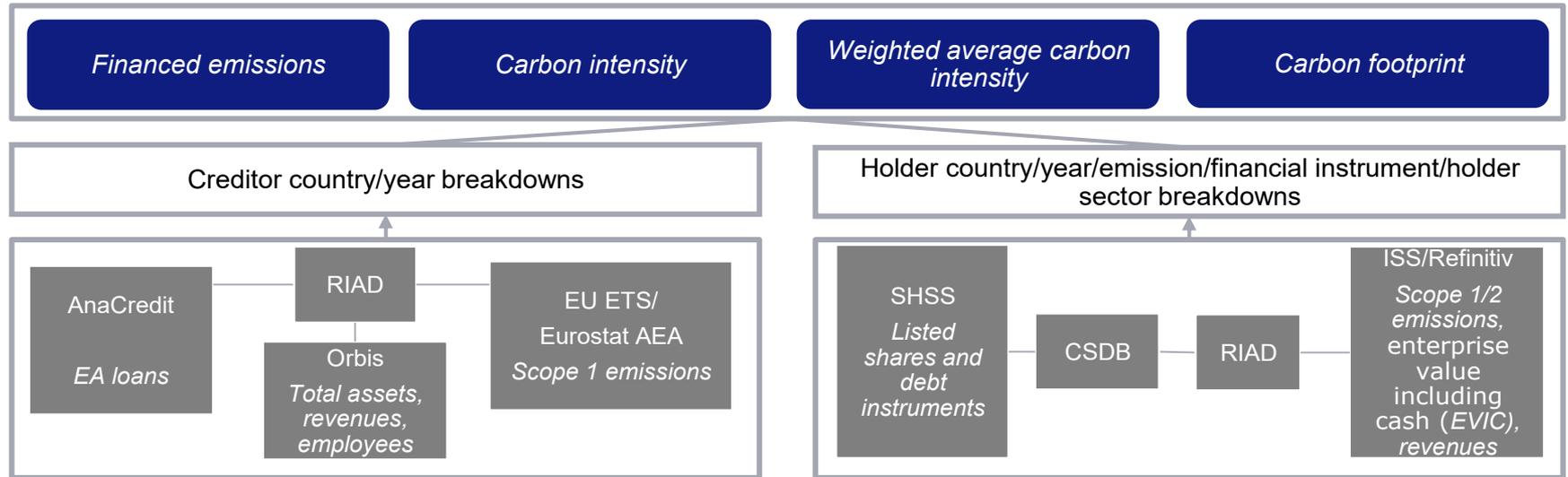
Carbon footprint (CFP)

FE standardised by the total investment portfolio value

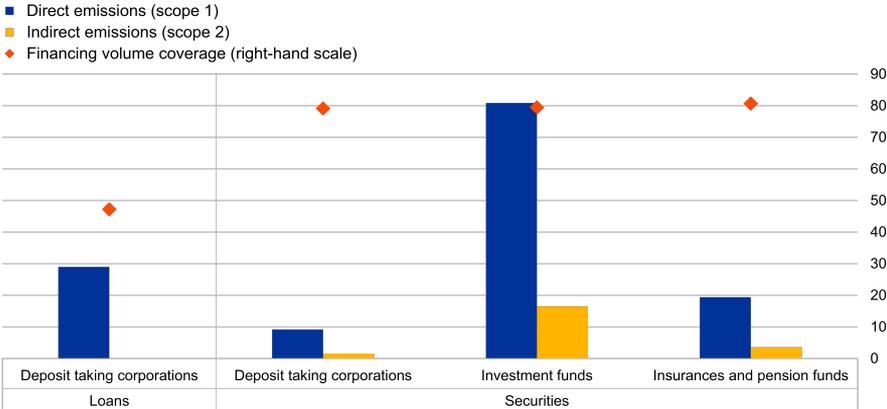
Weighted average carbon intensity

Total GHG emissions of a debtor/issuer standardised by a measure of company production value, weighted by the investment in these activities as a share of the total investment portfolio value.

Indicators constructed bottom up using micro data

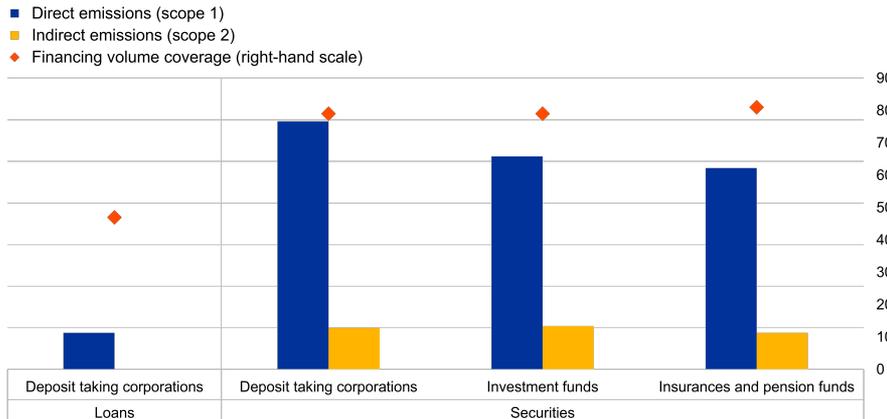


Results (2023 release)



Measure **Financed emissions:** Tons of GHG emissions financed by euro area financial institutions

Key finding Most euro area financial institutions' funding of global emissions occurs via investment funds



Measure **Carbon Intensity:** tons of GHG emissions per million EUR of revenue

Key finding In relation to their firms' revenues, banks finance the most polluting economic activities

(a selection of) Challenges & next steps

Data challenges

- CO2 emission data of low coverage and quality >> imputations included in the next release, methodology to be improved. And we eagerly await broader non-financial disclosures 😊
- Corporate structures: the entity issuing a stock or taking a loan is not always also the CO2 emitting entity >> enhanced corporate register data quality included in next release
- Scope of sectors/emissions covered: Europe vs global >> make explicit in metadata

Methodological challenges

- Definition of carbon intensity: CO2/gross output versus CO2/'value added' (=GDP)
- Changes in carbon intensity over time may reflect price changes not carbon (intensity) reduction >> next release to include corrected (and hence interpretable) time series
- Differentiating between portfolio CO2 reductions due to 'greening' of underlying NFCs or due to portfolio composition >> next release to include a breakdown
- Scope 3, forward looking indicators >> explorative work to be carried out in 2024 and beyond

Governance/organisation challenges:

- How to decide upon, produce and disseminate Europe-wide coherent statistics, including on individual countries, without revolving to the 'traditional' method of 'only' output harmonization >> plan to be developed in 2024