



## IPS Paper

### First set of Euro Area indicators for sustainable financial instruments, physical and transition risks

**Author:** Dr Julika Herzberg

**Coauthors:** Fabienne Fortanier, Julika Herzberg

**Submission ID:** 1170

**Reference Number:** 1170

#### Presentation File

[abstracts/ottawa-2023\\_efdaabae39beb05ebc2ae86fec3a47f3.pdf](https://abstracts/ottawa-2023_efdaabae39beb05ebc2ae86fec3a47f3.pdf)

#### Brief Description

IPS 1, Sustainable Finance Statistics

#### Abstract

Changes in climate and weather extremes as well as the transformation of a fossil-intense to a carbon-neutral economy are expected to strongly affect the financial system in manifold ways. As central banks want to have the full picture of all factors which may jeopardize price stability and underline their commitment to reflect on climate change and environmental sustainability more systematically in their policy framework, monitoring and evaluating climate change effects are now of high priority in the monetary policy agenda. The core ingredients for this end are reliable data and meaningful indicators.

This paper reports on the joint effort of the European System of Central Banks (ESCB) to develop their own statistical climate change indicators. The indicators are largely based on public data sources which allow for replicability and high transparency of the methodology.

In fact, three sets of statistical indicators are presented i) on sustainable financial instruments, ii) on the carbon footprint of financial institutions, iii) and their exposure to climate related physical risks. The methodology adopted, the empirical results and the relevant caveats as well as the future enhancements are outlined in this paper.

Sustainable finance indicators on the issuances and on the holdings of sustainable debt securities at EA/EU level allow to monitor in detail the evolution of the (currently still small) sustainable finance market. The results clearly demonstrate the continuous growth of this debt market, with green bonds being the market leader.

Carbon Footprint indicators monitor the evolution of emissions of non-financial debtors or issuers. They shed light on the use of the investment in a transformation process to a carbon-free economy and help to identify financed economic activities that are particularly exposed to transition risks such as an increase of the price for emission certificates.

Physical risk indicators relate to extreme weather events such as floods, storms or wildfires, which are supposed to increase in frequency and probability due to climate change.

On the basis of geospatial data mapping, three types of indicators are developed that link physical hazards to the exposure of financial institutions (loan, bonds, equities), allowing for the risk assessment from different perspectives.

The indicators are being gradually enhanced over time, in line with conceptual and methodological progress and the anticipated enhanced data availability, arising from the EU policies and initiatives in the field of environmental sustainability disclosure and reporting, as well as from the results of global initiatives to define harmonised concepts and definitions.