



MEASURING CLIMATE CHANGE THE ECONOMIC AND FINANCIAL DIMENSIONS



**Short and medium-term approaches to closing
climate data gaps: German experiences and
conclusions on the way forward**

November 17 - 18, 2021

Elena Triebkorn
Sustainable Finance Data Hub, Directorate General Statistics

Motivation

- The **lack of good quality and accessible climate-related** data poses a challenge for policymakers, researchers, the private sector, regulators as well as compilers of climate-related data, such as official statistics in central banks and statistical offices.
- **Reports** e.g. from the Financial Stability Board (FSB) and the Network on Greening the Financial System (NGFS) have all **highlighted the need to accelerate progress in making climate-related data available.**
- Global progress on improving climate data is under way, but in the short and medium-term, **leveraging of already available data sources and approaches** is essential in order to fulfil the various data needs in monetary policy, financial stability and banking supervision.

Overview

Short and medium-term approaches to closing data gaps

Key messages: central banks' statistical response to help close climate-related data gaps

Short-term responses:

- Creating an appropriate intra-institutional organizational setting
- Taking a multi-source approach
- Improving external data availability

Medium-term responses:

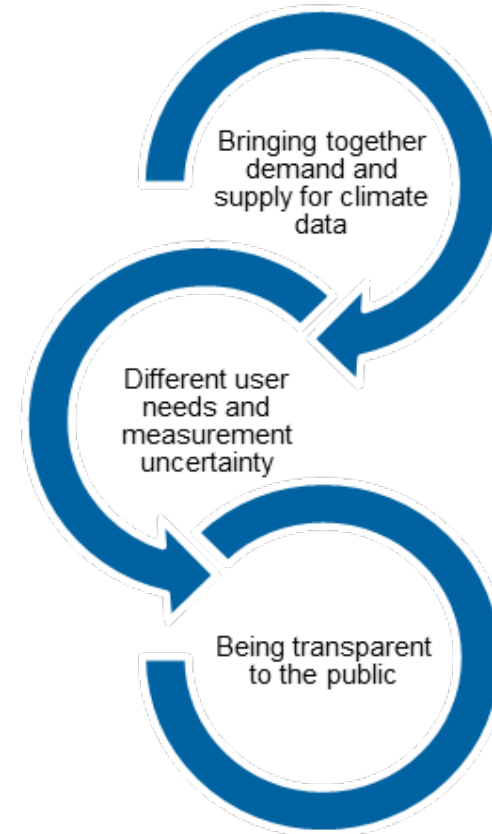
- Enhancing central bank cooperation
- Working with non-traditional stakeholders
- Fostering international cooperation and obtaining an overview

Long-term ways forward:

- Adhering to fundamental statistical principles
- Following concrete steps towards a statistical framework
- Making use of climate-related disclosures

Short-term response: We need to act fast!

- There is **an immediate need for climate-related data**. They are the **first step into analysing climate-related risks** and needs for adaptation within an economy.
- A **structured approach** within central banks is essential to address these issues and an appropriate internal as well as external data need to be examined and addressed, leveraging on the information currently available.

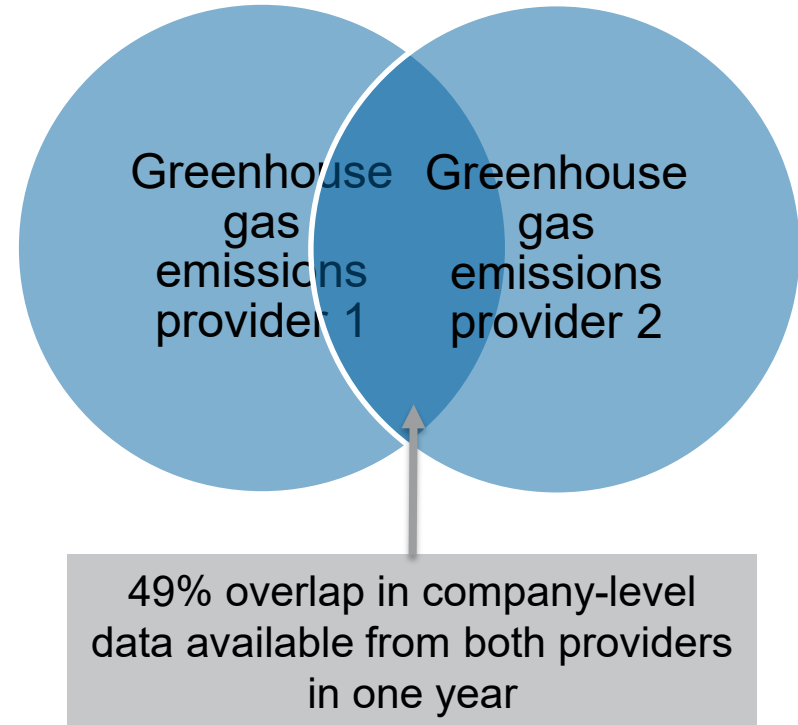


Bringing together demand and supply: Creating an appropriate intra-institutional organizational setting

- To enable climate related analytical work within the Bundesbank, a **central data hub** to collect climate related data was set up in early 2020. The Sustainable Finance Data Hub is tasked with examining market data that serve **inter-divisional and permanent needs** within the Bundesbank.
- The Data Hub is a **specialized unit** within the statistics directorate, serving varying user needs within the central bank.
- Data is provided through a **central data base** and access to this data can be requested at the data hub. It is also the **first contact point** for any methodological questions.
- In addition, we **contribute to international climate-related data discussions.**

Different user needs and measurement uncertainty: Taking a multi-source approach

- Various data providers measuring the same or closely related phenomena reveal **measurement uncertainty**.
- **Diverse user needs** call for a comprehensive set of indicators and data source to analyse climate risk.
- In addition, two different data sources can **complement** each other in terms of the type of metrics provides, as well as coverage of company level data.

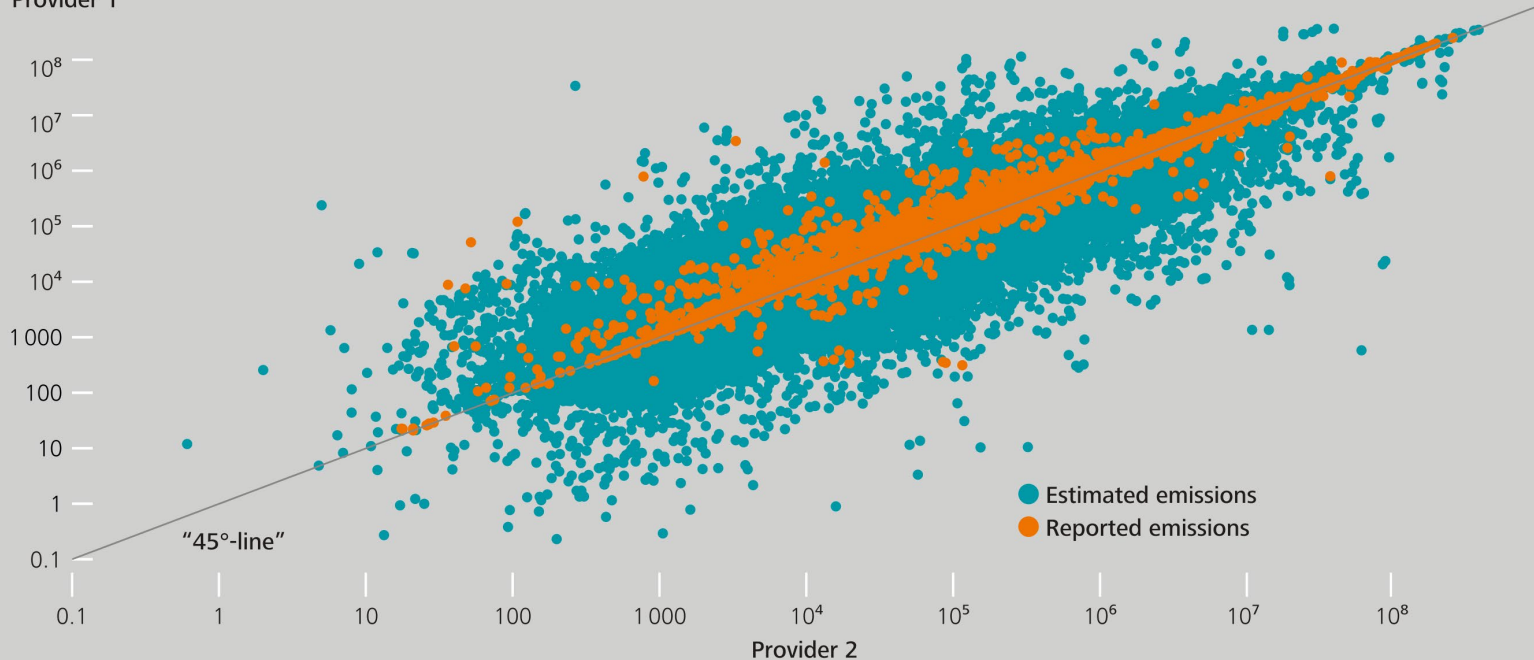


Multi-source approach: Allows for robustness checks

Comparison of greenhouse gas emissions (scope 1 + 2) as reported by two data providers

Tonnes of CO₂ equivalents, log scale

Provider 1



Deutsche Bundesbank

SOPR0019.Chart

Multi-source approach: Results from a recent in-house survey

- In September 2021 we organized an **in-house workshop, including a small survey**, with users to receive feedback on the two data providers currently available.
- Results show that **70 % of respondents use data from both providers**, mainly for robustness checks and because of a specific data package, only available from one of the vendors.
- Users value having **both access** to:
 1. A data **providers platform** to get an overview of available data and receive methodological information
 2. The **in-house database** for larger data sets as well as other services we provide, such as combined data sets and additional identifiers

Being transparent to the public: Sustainability statistics [website](#) including green finance dashboard

- Given the often scattered data sources of publicly available climate data, making data available to the general public through dashboards and underlying data can **facilitate access to existing data sources**.
- We reached an agreement with a 3rd party data provider to publish certain **aggregates on green and social bonds** on our website. This work with a non-traditional stakeholder forms part of the NGFS Dashboard on scaling up green finance, which we update annually.



Sustainability

DE

Green finance dashboard



indicators. >

This system of indicators uses a number of data items, most of them publicly available, to provide a quick overview over green finance in Germany and its latest developments. It distinguishes financial, real economic and climate-related

Global market for sustainable finance



Contains a collection of data and graphs on volumes of green and social bonds from global perspective. They form part of the NGFS (Network



The Bundesbank analyses the impact of climate change and climate policy on the financial sector, because climate risks are also financial risks. >

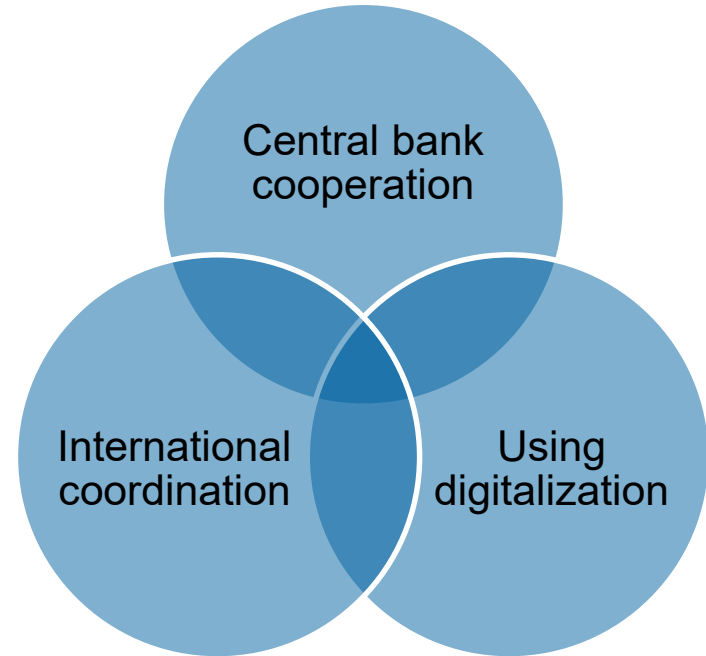


Progress report on bridging data gaps

ngfs.net

Medium-term response: We need to work together and use comparative advantages

- **Central banks** around the world **face similar challenges**, intensified collaboration can avoid duplicating work and make use of comparative advantages.
- Many initiatives are currently under way to foster such cooperation but there is a **need for greater coordination** of these efforts.
- There is the opportunity to make immediate use of **digitalisation** to bridge data gaps and working with **non-traditional stakeholders** can be beneficial for both parties.



Enhancing (regional) central bank cooperation: Joint Eurosystem procurement for up to two climate data providers

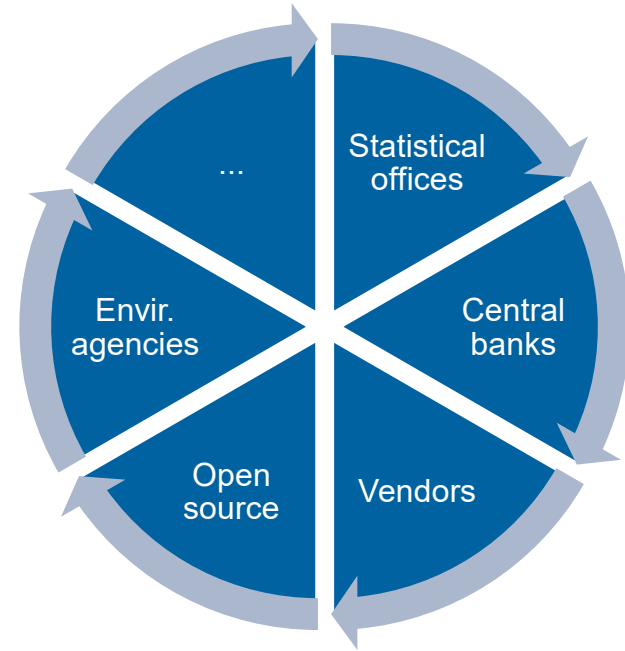
All participating central banks will have the right but not the obligation to participate in the Framework Agreements resulting from the public tender procedure.

Given that many central banks face similar data challenges such cooperation minimises duplication of efforts and achieves synergies.

In addition, it ensures consistency of analysis and improves comparability across central banks by the broad use of the same data providers.

Fostering international cooperation and obtaining an overview

- **Various work streams** have been set up to tackle climate-related data gaps and harmonizing existing data sources.
- This includes public and private initiatives, given that a **multiplicity of stakeholders** can contribute to closing data gaps.
- There is a need for **international coordination** of initiatives, to avoid duplication of works and make use of comparative advantages.



Work with non-traditional stakeholders: Promoting digitalization

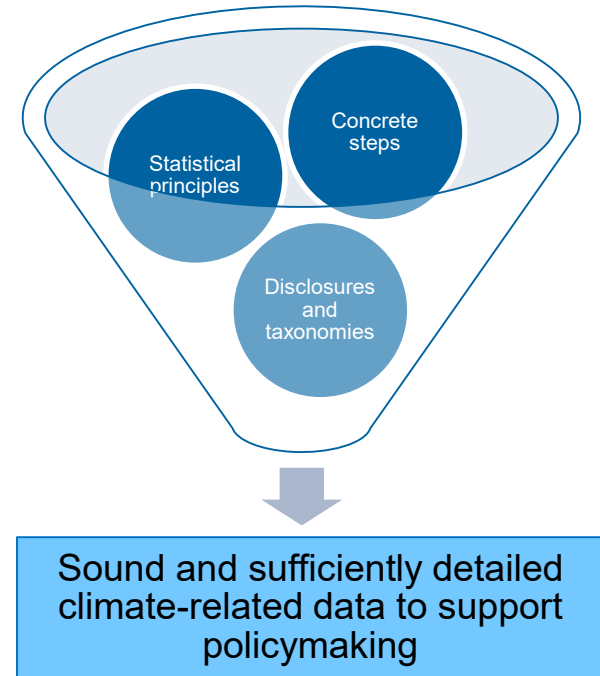
- To **promote using digitalization** to bridge climate related data gaps we submitted, together with Banco de España, a project proposal on "Information extraction applied to sustainability-related disclosures" for the envisaged **BIS Eurosystem Innovation Hub**.
- We are at the beginning of **joint projects with TU Darmstadt**, a technical university, working with international experts on natural language processing where we want to examine issues related to sustainability disclosure reports and physical risk indicators.



Such initiatives will become even more impactful, the more voluntary and mandatory climate related disclosure initiatives are under way, **paving the way for a long-term statistical response.**

Long-term ways forward: Fulfilling fundamental principles of statistics

- Given the growing importance of climate-related data for policymaking, **quality of data is a key issue.**
- Fulfilling Fundamental Principles of Official Statistics shall be an important aim for statistical work and **provide guidance on the steps we shall take** worldwide.
- Adhering to such statistical principles **requires setting up a statistical framework.** The existing frameworks for statistics related to climate change are not yet sufficiently developed to provide sound data for evidence-based policymaking.



Long-term ways forward: Concrete steps towards a statistical framework



Dashboards improve the availability of macro level climate-related data (such as IMF, NGFS and Deutsche Bundesbank). They serve different user needs, complement each other and contribute to more transparency.



In view of micro data needs and possible proprietary data issues, **data catalogues of data sources** (such as the NGFS repository) with an internationally harmonized structure contribute to facilitate access to climate related data.



We are looking forward of the follow up of the **G20 Data Gaps Initiative and concrete steps** associated with these efforts. In the end, such long-term statistical initiatives require the underlying data to be collected in a harmonized and well-structured manner.

References

- G20 Data Gaps Initiative (DGI-2): The Sixth Progress Report—Countdown to December 2021, Financial Stability Board, October 2021, Link: [G20 Data Gaps Initiative \(DGI-2\): The Sixth Progress Report—Countdown to December 2021 - Financial Stability Board \(fsb.org\)](#)
- The availability of data with which to monitor and assess climate-related risks to financial stability, Financial Stability Board, July 2021, Link: [The availability of data with which to monitor and assess climate-related risks to financial stability - Financial Stability Board \(fsb.org\)](#)
- Progress Report on Bridging Data Gaps, Network for Greening the Financial System, May 2021, Link: [progress_report_on_bridging_data_gaps.pdf \(ngfs.net\)](#)
- Dashboard on scaling up green finance, Network for Greening the Financial System, March 2021, Link: [Dashboard on scaling up green finance | Banque de France \(ngfs.net\)](#)
- International Conference on Statistics for Sustainable Finance, Programme: [International Conference on Statistics for Sustainable Finance | Banque de France \(banque-france.fr\)](#); Presentations: [Events \(bis.org\)](#)
- BIS Innovation Hub, Link: [About the BIS Innovation Hub](#)