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Strengthening the Climate Information Architecture

IMF Staff Climate Note 2021/003

Caio Ferreira, David Lukáš Rozumek, Ranjit Singh, and Felix Suntheim*

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RECOMMENDED CITATION: Ferreira, Caio, David Lukáš Rozumek, Ranjit Singh, and Felix Suntheim. 2021. Strengthening the Climate Information Architecture. IMF Staff Climate Note 2021/003, International Monetary Fund, Washington, DC.

ISBN:	978-1-51359-079-0 (Paper) 978-1-51359-112-4 (ePub) 978-1-51359-093-6 (PDF)
JEL Classification Numbers:	G18, Q54, Q50
Keywords:	Climate change, data, disclosure, taxonomies.
Authors' email addresses:	DRozumek@imf.org RSingh4@imf.org CFerreira@imf.org FSuntheim@imf.org

* The note has been prepared under the guidance of Marina Moretti, Aditya Narain, and Fabio Natalucci. The authors would like to thank Leonard Chumo and Ellen Gaston for helpful discussions and comments.

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September 2021

Summary

Strengthening the climate information architecture is paramount to promote transparency and global comparability of data and thus improve market confidence, safeguard financial stability, and foster sustainable finance. This note provides a conceptual framework around the provision of climate-related information, discusses the progress made to date, and points toward the way forward. A decisive, globally coordinated effort is needed to move forward on the three buildings blocks of a climate information architecture: (1) high-quality, reliable, and comparable data; (2) a globally harmonized and consistent set of climate disclosure standards; and (3) globally agreed upon principles for climate finance taxonomies and other classification approaches to align investments with climate goals.

Introduction

Strengthening the information architecture—to support the transition to a climate-sustainable economy and to address the need for information on climate-related risks—is a global imperative (Box 1).

Unmitigated climate change poses enormous risks to the global economy and to the financial sector through exposure to corporates, households, and governments. Within this context, there is an increasing need for decision-useful information that allows for the assessment of risks from climate change and encourages urgently needed investments in climate-change adaptation and mitigation efforts. Time is of the essence because unless there are immediate, rapid and large-scale reductions in greenhouse gas emissions, limiting warming to close to 1.5°C or even 2°C above pre-industrial levels will be beyond reach (IPCC 2021).¹

There are major informational challenges for financial markets associated with climate change. Pricing climate-related risks requires detailed information that ranges from climate scenarios based on future policy actions and paths to complex data and models on socioeconomic changes—such as firms' ability to adapt, or households' preferences with respect to consumption and investment. Similarly, investors aiming to support the transition to a low-carbon economy may require detailed information about firms' current and future emissions, their climate transition commitments, and current and future investments in green products or technologies. Especially the availability of forward-looking data and disclosures are an important aspect of the information required for climate risks assessments but pose challenges for companies.

Currently there is a lack of relevant, decision-useful information, and there are limitations in terms of its quality, comparability, and consistency. Assessing physical risks requires granular information such as the location of physical assets, projection of future extreme weather events, and firms' sensitivity to these events. Similarly, assessing transition risks and opportunities requires data such as carbon emissions broken down by

¹ With the intermediate greenhouse gas emissions (scenario SSP2-4.5) and CO₂ emissions remaining around current levels until the middle of the century, global warming will very likely achieve the level of 2.1°C to 3.5°C above pre-industrial levels by the end of this century (IPCC 2021).