

Workstream Scenario Design and Analysis

Chair of The Workstream: Livio Stracca (European Central Bank)

A. Objective

The objective of The Workstream is to help NGFS members in their journey to ***undertake climate scenario analysis and promote its use within the financial system more broadly***. The forward-looking nature of climate change-related risks and the inherent uncertainty about future events make it difficult to assess them using standard risk modelling methodologies. Climate scenario analysis therefore offers a flexible ‘what-if’ methodological framework better suited to exploring risks that could materialise in different possible futures.

B. Relevance to the work of the NGFS

The Workstream will contribute toward addressing the NGFS’ recommendations set out in its [Call for Action](#) published in April 2019. The Workstream will directly contribute to the **NGFS’s strategic priorities in 2026-2028**. Acting as a **center of expertise on climate scenarios** development for central banks and the financial sector, the NGFS is making climate scenarios available for NGFS members and the broader public. This will **contribute to the NGFS’ strategy as technical incubator** to deliver robust progress on technical issues related to climate change and central bank and supervisors’ mandates, potentially including nature impacts in collaboration with TF Nature. Besides, The Workstream will **further strengthen its capacity building activities on climate modelling and scenario analysis and continue contributing to this core mission of the NGFS**.

The first iteration of the NGFS climate scenarios, published in June 2020, was the first set of climate scenarios that included both physical and transition risks that were modelled over an extended time horizon. In the [second vintage](#) a year later, the modelling was refined, country-level data (rather than just regional) was made available and a dedicated macroeconomic model was included to produce more detailed macroeconomic projections. Since 2022, successive iterations of the NGFS climate scenarios have progressively strengthened the modelling of acute physical risks, incorporated updated NDCs, and improved sectoral granularity and data accessibility, with the latest update published in November 2024.

In parallel to developing long-term climate scenarios, The Workstream laid the ground for the first generation of NGFS short-term climate scenarios with the publication of a [conceptual note](#) in

October 2023. The [first vintage](#) of NGFS short-term scenarios was published in May 2025. They are the first publicly available tool offering a dedicated framework to analyse the potential near-term impacts of climate policies and climate change on financial stability and economic resilience.

The NGFS long- and short-term scenarios and related data are publicly and freely available through the IASA scenario explorer¹ and the [scenarios portal](#) explorer and a data handling tool. Technical documentations are publicly available for long- and short-term NGFS scenarios. A comprehensive [Climate Scenario Analysis User guide](#) is also publicly available and was updated in 2025.

C. Tasks

1. Improve the NGFS climate scenarios

The Workstream will seek to improve the NGFS short and long-term climate scenarios. These improvements will seek to promote greater usability of the NGFS climate scenarios for all regions, and in particular Emerging Markets and Developing Economies (EMDEs). To achieve its goals, it will continue to collaborate with a Consortium of academic and research institutes.

The Workstream will also conduct exploratory work on the integration of nature-related risks into the NGFS climate scenarios framework, in collaboration with the Task Force on Nature-related risks.

2. Update of the NGFS short-term and long-term climate scenarios

The Workstream will update the short-term and long-term climate scenarios on an alternating biennial basis to account for updates in governments' ambitions and policies, evolution of the economic environment and new technologies, and updating the documentation to support the users (see [FAQ section](#) for the long-term scenarios). Updates can also incorporate, for example, model improvements, or changes to the narratives to respond to user needs.

3. Provide methodological guidance on scenario-based climate risk analysis for macroeconomic and financial stability surveillance

The Workstream will share methodological guidance on climate scenario analysis, stress-testing, and use of the NGFS climate scenarios.

4. Promote the use of the NGFS climate scenarios within the broader financial system

The Workstream will seek to better understand the needs of NGFS climate scenarios' users, how the NGFS climate scenarios relate to other reference scenarios and will provide guidance on usage of NGFS scenarios. It will also increase capacity building efforts for climate modelling and climate scenario analysis within the NGFS and the broader financial community.

¹ Long-term scenario data is accessible [here](#) and short-term scenario data is accessible [here](#).

NGFS scenario governance framework

