On 5 October 2021, Mark Carney (COP26 Private Finance Adviser and Chair of the Glasgow Financial Alliance for Net Zero (GFANZ)) hosted a roundtable with the leading scenario and pathway developers (NGFS, IEA, IPCC, SBTi, IPR). The roundtable focused on enhancing the application of climate scenario analysis in the financial sector and alignment with the use of pathways for net zero targets — key objectives of the COP26 Private Finance Strategy.

**Climate scenarios come in two different forms:** (i) projections “What can happen (given policies and climate science)?” and (ii) goal-oriented pathways “What should / needs to happen to accomplish specific climate objectives (such as limiting temperature increases to 1.5 degrees)?” Both are increasingly important for how the financial system integrates climate change in both risk management and in aligning the provision of finance to net zero and the goals of the Paris Agreement.

**Scenario analysis is a vital tool for financial institutions to understand and price climate risks,** whose unique characteristics make them more challenging to measure than conventional risks. Firms can assess the resilience of counterparties to the net zero transition using scenarios with particular characteristics:

- **Multiple scenarios** to assess the risks of orderly or disorderly policy actions to achieve the Paris goals, or where the Paris goals are not met and more severe physical risks crystallise as a result.
- **Extended modelling horizons** because climate change, and the policies to mitigate it, will occur over much longer timeframes, and decisions taken today create risks in decades to come.
- **Integrated climate and macro-financial variables,** e.g. pathways for temperature, emissions, and climate policies to capture the underlying physical and transition risks in each scenario, integrated with financial metrics to allow firms to quantify the impact of those risks.

The discussions highlighted the growing and changing use of climate scenarios, including central banks stress testing their financial systems and economies; financial institutions testing their resilience and that of their clients; and other financial market participants (such as credit rating agencies, climate risk data providers and investment consultants) assessing firms’ resilience to the physical and transition
Climate risks. At the same time, financial institutions are increasingly setting net zero targets — 450 of the world’s biggest banks, asset owners, asset managers and insurers with balance sheets of over $130trn are now part of the Glasgow Financial Alliance for Net Zero (GFANZ) — and firms are using scenarios to guide transition plans and to judge those making such commitments.

Climate disclosure requirements, regulation on climate risk management, and growing focus on net zero commitments and transition planning will only increase the number of users and uses of scenarios across the financial sector. In this context, roundtable participants noted there are challenges with meeting the needs of these new users and uses:

- **Climate literacy** still needs to improve across financial institutions. This is exacerbated by the lack of standardisation of terminology and formatting of available scenarios. For example, there is variation in definitions of key metrics, standard time intervals, and the inclusion of non-CO₂ greenhouse gas emissions.

- The importance of clearly **distinguishing between scenarios** (possible outcomes) and **pathways** (to desired outcomes).

- The challenge of **translating climate metrics into specific financial outcomes**. Doing so is essential to integrate scenario analysis into financial firms’ risk management processes and use for credit assessments and business planning.

- Transition planning requires **sectoral-level granularity and coverage** to determine appropriate net zero pathways.

- There is also a need to ensure **sectoral-level planning adds up**. That is, sector-level climate pathways need to reflect the interdependencies, spillovers, and other interaction between sectors.

The discussions highlighted the **high level of collaboration among scenario and pathway developers** that is taking place to help address these challenges. In particular through the Network for Greening the Financial System’s (NGFS) Consortium of leading academic climate institutions that includes other leading scenario developers, such as the Intergovernmental Panel on Climate Change (IPCC). Forthcoming developments in the scenarios may also address some of these issues. For example, the latest release of the NGFS’s reference scenarios aims to link climate metrics to financial variables in a coherent way, and the World Business Council for Sustainable Development (WBCSD) is producing a catalogue of scenarios that allows firms to compare available scenarios across key metrics and outcomes.

There was strong agreement that the discussions had been valuable and warranted further engagement. In particular that it would be useful to reconvene periodically to share views on developments and challenges in this dynamic area. Participants discussed specific areas for future focus could include:

- **Greater transparency and accessibility of scenarios**, ensuring open-access to resources to support the financial sector build climate literacy and understand the purpose of scenarios and pathways, especially as they are still developing their scenario expertise.

- **More regular updates to scenarios and better communication of forthcoming updates** would help firms plan their scenario analysis and ensure they are using the most recent iteration.

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1. [www.gfanzero.com](http://www.gfanzero.com)
• **Standardisation of terminology and format of scenarios** would reduce frictions when comparing scenarios and enhance understanding of key scenario features.

• **Additional features of scenarios** would be particularly helpful for the financial sector’s needs:
  - Capturing endogeneity of the economy and financial sector reaction to the scenario;
  - Exploration of disorderly outcomes;
  - Capturing policy measures beyond simplifying into carbon price;
  - Firming up the impact of carbon price pass through;
  - Capturing liability and litigation risks;
  - Expanding coverage to other GHGs.

As these are the key areas of interest for the financial institutions in GFANZ, **GFANZ has established a workstream to catalyse successful agreement on net zero pathways** with several major global industries in order to enable clearer financial decision-making in support of transitioning sectors.

This work has four objectives:

1. Articulate the needs and expectations of financial institutions for actionable sectoral pathways
2. Represent financial sector views with sectors as sectoral pathways are being developed
3. Support the adoption and elaboration of sectoral net zero pathways
4. Support the development of mechanisms for the responsible retirement of stranded carbon-intensive assets

Participants agreed **GFANZ could play a role in helping coordinate efforts to address the challenges** across scenarios and pathways for the financial sector. Specific actions it will take are:

• **GFANZ can act as a contact point for the financial sector users** of scenarios, whose needs can be reflected and incorporated into the scenario development process. This will ensure scenarios meet the needs of the financial sector users (as outlined above), help mainstream the use of scenario analysis across the financial sector and promote consistency in the development and use of net zero pathways.

• **Reconvene this group of scenario and pathway developer and users** periodically to maintain active lines of communication – something that participants agreed would be valuable going forward.

Other actors in the financial sector can support these efforts by providing the necessary frameworks and tools. The **GFANZ Call to Action** included a number of these actions, specifically governments and regulators should:

• Issue credible and predictable sector-specific policies, targets, and transition plans to ensure concrete and effective actions.

• Set a target for TCFD-aligned risk management and disclosures, and net-zero transition plans by 2024 for public and private enterprises, including Financial Institutions and SMEs.

• Align regulatory frameworks to net zero and ensure consistency and coherence across global regulatory frameworks aligned to net zero, including disclosures, metrics, and methodologies.

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2 The NGFS scenarios seek to cover some of these features (e.g. endogeneity and disorderly outcomes), but there are of course limitations on what can be achieved at this point in time.
The Chair thanked the attendees and their organisations for their involvement in this roundtable, and for their enormous contributions to the development of this critical field, and he welcomes contributions from other stakeholders to help drive a step-change in the use of scenario analysis and net zero pathways in the financial sector.

**Roundtable attendees**

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<tr>
<th>Organisation</th>
<th>Representative</th>
<th>Position</th>
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<tr>
<td>GFANZ</td>
<td>Mark Carney</td>
<td>COP26 Private Finance Adviser and Chair, GFANZ</td>
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<td>NGFS</td>
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<td>Chair, NGFS Macrofinancial Workstream 2</td>
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<td>Jean Boissinot</td>
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<td>IPCC</td>
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<td>IEA</td>
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