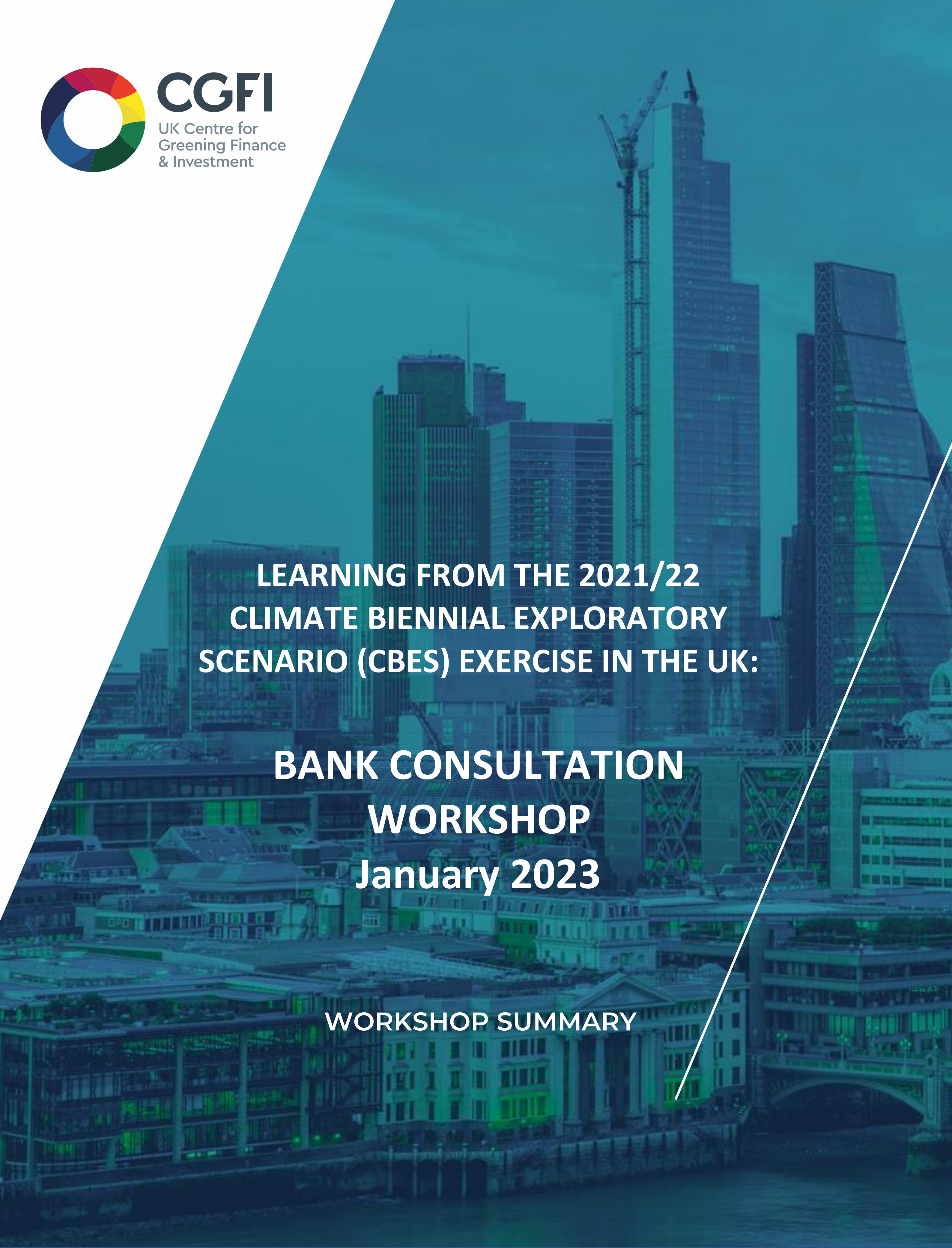

CGFI

UK Centre for Greening Finance & Investment

LEARNING FROM THE 2021/22 CLIMATE BIENNIAL EXPLORATORY SCENARIO (CBES) EXERCISE IN THE UK:

BANK CONSULTATION WORKSHOP

January 2023

WORKSHOP SUMMARY

University of Bristol · Imperial College London · University of Leeds · University of Oxford · University of Reading · Catapult Satellite Applications · The Alan Turing Institute · UKRI Science and Technology Facilities Council

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LEARNING FROM THE 2021/22 CLIMATE BIENNIAL EXPLORATORY SCENARIO (CBES) EXERCISE

BANKS CONSULTATION WORKSHOP: JANUARY 2023

WORKSHOP SUMMARY

Authors:
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INTRODUCTION

This document provides a summary of the discussions at the Bank workshop on January 16th 2023 for the project: "Learning from the 2021/22 Climate Biennial Exploratory Scenario (CBES) Exercise". This report includes discussion that went beyond the information captured in the survey report and the recommendations report, so should be read alongside those reports. The workshop was facilitated by the UK Centre for Greening Finance and Investment (CGFI) in collaboration with the Climate Financial Risk Forum (CFRF) and hosted by the Centre for Climate Finance and Investment (CCFI) at Imperial College London as part of the CCFI Finance Sector Roundtables. The goal of the workshop was to gain feedback on the draft survey findings and recommendations. In particular, it aimed to validate the findings of the survey and ensure the interpretation provided in the survey report was correct. A further goal was to test and augment the recommendations developed by CGFI based on the survey. The workshop was held under Chatham House rules. As such, no comments have been attributed.

ATTENDEES

Banks represented: Barclays, HSBC, Lloyds Banking Group, Nat West, Nationwide Building Society, Santander UK, Standard Chartered (and UK Finance)

CGFI team: Nicola Ranger (Oxford), Iain Clacher (Leeds), Michael Wilkins (Imperial), Christophe Christiaen (Oxford), Ivana Popovic (Imperial), Ralf Toumi (Imperial), Alex Koberle (Imperial), Yllka Hysaj (Imperial) *(in the room)*, Jimena Alvarez (Oxford), Mark Bernhofen, Gireesh Shrimali (Oxford) *(online)*

CFRF team: Ben Carr (Aviva) and Jo Paisley and Maxine Nelson (GARP)

WORKSHOP SUMMARY

<u>Part 1: CBES Findings</u>

General:

- Participants stressed the key challenges of the exercise around resource and data requirements, as well as the timing of the exercise (during COVID and with other regulatory requirements)
- But they also stressed the positive impact that the exercise had. It was designed with the best intentions and given the state of knowledge and capability at the time it was a good design, particularly if one recognises it was fundamentally a learning exercise. It was '*of its time*'. The design was adequate given the resources and data available at the time. Participants stressed that there is now a huge amount happening within their organisations as a result of CBES.

- The nature of the interaction between industry and the regulator throughout the CBES exercise was very seen as collaborative and positive
- Participants made a specific request for more granular feedback from the BoE on CBES and discuss its short-comings to encourage learning. For example, the BoE released results saying that counterparty risks can be ten times different in the results at a specific counterparty level; it would be good to know why. PDs assumptions or something else? This learning would be very beneficial to FIs.
- CGFI staff noted that the preliminary interviews conducted in the Spring 2022 had slightly different results to Summer 2022. For example, interviewees appeared to be more positive about the CBES results after the results were announced in May (note that the survey was also conducted after the publication of CBES results). In addition, there was more focus on systemic risks and shocks in the latter interviews, potentially related to the Ukraine crisis.

Impact of CBES at client/counterparty level

- It was noted that it was unrealistic to expect CBES to deliver a lot of impact at the client/counterparty level. This impact can come later, through engagement with clients around the CBES results after the CBES exercise is completed.
- Participants noted that the accuracy/granularity of the exercise was not sufficient (alone) to enable dialogue with companies, investees and clients.
- Participants noted that there is a difference between client engagement and impact and that delivering real-world impact was not explicitly a stated objective of CBES. It was noted that engaging with a client is as much about learning as impact.
- Participants noted that the aspiration of the BoE at the beginning of the process (1,000s counterparties) versus the end of the process (200 counterparties) changed.
- There was nothing in CBES for clients. No feedback processes. It would be helpful for gaining an institutional mandate for climate stress testing if there were something in it in terms of client interaction and engagement.

Design of the CBES exercise

- Participants noted that best practice on scenario analysis evolved significantly from the start of CBES to now and so in some ways it seems unfair to comment on the scenarios now given that the level of sophistication has changed so much since then. It was also noted that the processes that CBES drove were more important than the quantified results. It was an important learning curve.
- Noted that the results on physical risk were surprisingly low. Capability to model risks was low as this is new to most banks and the required data to specify risks is missing. But there seemed to be a disconnect between what we are perceiving in our (real) lives as climate risks vs the quantified numbers coming out of these exercises. Participants felt there needs to be more exploration of why this is. There also needs

to be more research around the impact of physical risks on collateral and PDs; which is more relevant to bank credit risk analyses.

- In discussing the need to better represent physical risks, there were divergent views. Some banks were already working to fill the gaps and better quantify physical risks to inform international risk management, whereas others felt it is not their role to 'size the climate crisis' and that using just NGFS scenarios was sufficient (despite the missing risks).
- A big issue in scenarios was around the disconnect between physical and transition risk. It is important to analyse transition and physical risks together and model what triggers the transition risks. For example, big physical events will trigger policy reforms – i.e. governments/citizens pushing the panic button. This type of scenario – which seems more likely – is not captured in the CBES (or other) scenarios. There is a need to represent potential 'Minsky moments' was raised by some participants. One participant gave an example of stress testing exercises in Asia that did capture this.
- Inconsistencies in scenarios were also noted. For example, assumption of a 90% GVA loss in the power sector that seemed inconsistent and unrealistic.
- Dilemma over transition scenarios. Participants argued that current scenarios do not reflect the reality of 1.5C – i.e. that this is at the optimistic end of scenarios. The elephant in the room is that the necessary policy response to achieve 1.5C is not there, so CBES doesn't allow banks to assess what it really means for balance sheet resilience. Some participants asked: *'What is the point of 1.5 degree scenarios given all governments are all lagging behind so much with their climate action'* – this is not a realistic scenario and could lead banks to underprepare for the risks ahead.
- Data: key challenge for banks is that they don't have the asset-level data for their corporate loan books; this effects both physical risk assessment and transition risk assessment. There are also big gaps on supply chain data. Analysing risk meant connecting across datasets that had not been connected before and this took a lot of work. There is a need to do more to integrate data. The lack of transition plans and adaptation plans were noted as a further major barrier.
- Another key issue that needs to be resolved for future exercises is the lack of prescriptiveness of the counterfactual.

Future scenario design

- There was a strong call from participants for NGFS to evolve and address the short-comings in scenarios. It was noted that the NGFS phase 4 scenarios are beginning to cover some of the gaps highlighted in the CBES, but there is a lot more to do. One specific issue raised by participants was that all NGFS scenarios are underpinned by SSP2, which seems unrealistic given current socioeconomic trends. There was also a call for more transparency in the process and approaches of the NGFS, particularly given that their scenarios are now used by FIs all over the world.

- Participants want short-term scenarios, as it is difficult to engage frontline colleagues beyond a 5 year time horizon, but it was noted that long-term scenarios are also needed, particularly to setting business strategy at the executive level. The nature of CBES exercise – i.e. very stylised, very long-term scenarios - didn't really resonate with 'frontline' colleagues and more traction could be achieved with short term scenarios.
- Participants also called for scenarios that allow them to explore how do shocks amplify impacts. *'In the future, the more these scenarios focus on shocks, the more people can relate to them'.* Noted that current scenarios were based on averages and this is not useful for financial institutions scenario analyses.

Interpretation of CBES results

- It was noted that the absolute CBES results should be interpreted with caution as they depended on a lot of assumptions that were not fully tested. For example, the physical risk results were very dependent on the insurance industry absorbing these costs/risks. The transition risks were dependent on government reactions to achieving their commitments and also excludes the risk of missing targets (therefore seeing both high transition risk and high physical risk).

On the role of third-party suppliers

- Noting CGFI's result on the high use of third-party suppliers to complete the CBES exercise, participants agreed that understanding what the third-party suppliers are doing is essential. They also noted that regulators are becoming more concerned about the use (and understanding of firms) of models provided by third-parties.
- Participants noted that using third-party suppliers is not a problem, it's how you use their data and modelling that is important. Third-party suppliers will continue to play an important role. This means that understanding what third-party suppliers are doing is essential.
- It was noted that there is a difference between data and modelling providers, and the approaches to working with each will be different. For example, data providers will always be essential, even if firms build in-house model capability. It is therefore essential to treat these separately in any recommendations.
- Many of the banks are building in-house capacity, particularly on data and methods.
- How suppliers manage transparency is a big issue. The lack of transparency in model methodologies created issues. The participants felt there is a need for action (e.g. from regulators potentially or industry bodies) around how third-parties manage transparency and how to overcome barriers to transparency. Also noted the need for more information on uncertainties in results and assumptions behind models.
- Another difficulty with third-party suppliers was that their model set-ups were not compatible with CBES requirements and bridging the gap was challenging. Call for regulators to gain a better understanding of what suppliers are doing and what assumptions are being made and how this could affect systemic risks to the UK. For physical risk, it was also noted that suppliers were currently providing information

from an insurance perspective – there is a need to change the narrative and focus – e.g. moving away from (annual) premiums as an output.

Design of future scenarios and exercises

- Static balance sheet assumptions: the static balance sheets assumption means your counterparties would not react at all to any transition and FIs are unable to change their balance sheets – this leads to overestimation of risk. A challenge is that as soon as you remove this assumption, there will be a lot of additional assumptions that would have to be described and defined by the regulator within an exercise. The idea to use static balance sheets was to improve comparability and to simplify modelling exercise - particularly over 30 years (how do you model that dynamically?). FIs can use dynamic balance sheets for internal (risk management) purposes. Recommendation for regulators/CFRF to convene a process that would explore approaches to modelling dynamic sheets and test this.
- Noted that CBES played a critical role in accelerating process through providing scenarios. Scenario selection is another key challenge and raises a lot of internal debate that can stall progress. Therefore, someone (the Bank of England) giving you a scenario makes it easier. BoE can continue to add value here. Standardised and best practice methods are also helpful alongside scenarios.
- It was noted that different scenarios are needed for different things. For example, IFRS9 requirements - different requirements than stress testing and risk management – and different to business strategy development. Need more best practice on appropriate scenario development for different use cases. Participants discussed the challenges now being encountered around implementing IFRS9 in selecting appropriate scenario.
- Participants discussed the role of probabilistic scenarios**.** It was noted that it can be contentious to apply probabilities to scenarios. Some noted problems in how to assign probabilities to the scenarios, e.g. sometimes effectively 100% given to the central (current scenario) and 0% to other scenarios, but this is not correct and not best practice. But participants discussed whether there was actually a need for probabilities versus just using a range of scenarios; some participants felt that actually probabilities are just as important as the range. But it was noted that the more scenarios you have to consider, the more resources you will need so there is a feasibility barrier to the idea of using multiple scenarios to explore uncertainties.
- Should there be more or less standardisation/prescriptiveness in scenarios? It is likely that the right balance will be different for large versus small firms and this is something to consider as regulatory requirements become more widespread. Smaller firms might prefer less prescriptiveness if this made scenarios harder to apply to them. With less standardisation, different views being aggregated may mask the nuance within the different types of participants (e.g., smaller vs larger banks)

On future CBES-like exercises

- There was a clear ask for the Bank of England/PRA to give clear objectives for any future exercise and for the design of the exercise to be appropriate to the objectives. BoE should consider if the CBES objectives were met and would a future exercise help and how.
- The objectives of any future exercise should be reframed versus CBES. Also benefits in co-designing exercise with participants to ensure it will meet the objectives. Do not repeat what has already been done, but focus on what needs to be done. Some participants suggested that more focused exercises in future would be more beneficial than more exercises like CBES, now that the CBES has been completed.
- Regulatory requirements and exercises like CBES motivate FIs to conduct a scenario analysis - this gives teams a top-down mandate and allows them to engage across the organisation from top to bottom. CBES was very important in this respect. There was a discussion on whether in the absence of another exercise like CBES, banks would continue to develop their capabilities. The FI participants noted that while CBES was critical in accelerating the process, there is no excuse for FIs now to avoid assessing climate-related risks today, and *indeed* there are now more reasons to do so (besides just the CBES exercises): (i) evolving regulatory requirements (supervisory vs regulatory drivers, including TCFD and SS3/19); (ii) net-zero commitments; (iii) the final pull is the commercial opportunity - all institutions are developing new products and there is an opportunity to use the climate analytics to also support clients. This is also highlighted by the GARP survey i.e. moving beyond risk management to commercial opportunity. Now there is less optionality on whether you do it, but what you do is more optional. But the sticks and the carrot are still important. The stick is regulation. The carrot is government legislative action and client engagement.
- Should scenarios be more or less prescriptive? Note that if everyone is using the same (and more prescriptive) scenarios then the results are more comparable. Yet, for own internal risk management and e.g. IFRS9, use tailored scenarios.

<u>Part 2: Recommendations</u>

Addressing data gaps

- Some participants felt that the priority should be to enhance disclosure requirements to close data gaps. However, others were concerned that increased disclosure requirements might cause FIs to publish less since they can be held accountable for what they publish as part of public disclosures and this pushes more risk onto FIs.
- Participants agreed that there is a strong public interest justification for investment in Geoasset data
- Noted greenwashing risk around data (which may be unintentional). Counterparties are not disclosing their own climate risk properly which means

FIs are exposed to more actual risk than they actually think/model. This could lead to a conduct risk for FIs if accused of greenwashing due to poor data.

Enhancing scenario analysis and stress testing capabilities, usability, and application

- The FIs lack the capability to develop scenarios themselves. Right now, NGFS is doing significant work in this area; effectively sitting between FIs and those scientific institutions that generate the scenarios. This is important as scenarios from scientific institutions require a lot of translation, but there is a lack transparency right now over the process and assumptions NGFS is embedding. Participants felt that this needs to be addressed given the influence NGFS has.
- A prescribed scenario (e.g., NGFS scenarios) is good, but FIs would benefit from having a choice of options and understanding the reasoning behind them.
- Some participants also called for more narrative scenarios, and avoiding scenarios based on cost-optimising models that do not represent the real world.
- It is important to encourage more knowledge sharing between and among different actors, including between FIs and FIs and scientific institutions.
- More guidance on how to select, interpret and use scenarios for a particular use case, including their underlying assumptions would be much welcomed.
- Scenarios for scenario analysis vs stress testing. Requires a different approach and both require further development. Essentially, stress tests are scenario analyses, but with more extreme projections. But it was noted that depending on the jurisdiction, there might be some differences in definitions.
- Agreement that it is important to ensure that the level of complexity of the exercises is justified by the availability of granular data and inherent uncertainty in the models underpinning the scenarios and analysis

Detailed design considerations for future scenario

- Consider using narrative approaches to scenario development. Noted again that cost optimisation approaches to developing scenarios (e.g. based on IAMs) are not right and not capturing the downside risks appropriately.
- To enhance usability of scenario analyses, it is important to better represent and consider the macroeconomic impacts of climate change.
- Go beyond SSP2 in scenario formation
- Represent climate versus non-climate drivers in scenarios
- Develop ways to track if the world is heading toward one scenario or another (e.g. tracking shadow carbon price and government actions)
- Foster a (predictable) approach to refresh scenarios after material events, e.g. the Ukraine crisis.

- Need to look at high physical and high transition risk, as this is looking likely and is not captured in current scenarios.
- Change the narrative on physical risk – include events happening now

Collaboration in developing best practice

- Participants noted that to do this (above) requires a collective effort.
- Participants called for more sharing of learning outcomes. *'FIs should learn more from each other'.*
- There was a strong call for the CFRF and BoE to support the development of shared best practice and appropriate standard methods, data and scenarios.
- There was support for CGFI recommendations around a role for the CFRF in convening FIs to share knowledge and work collaboratively – including with scientific institutions – to develop methods, best practice and scenarios.