Investor Group on Climate Change

Submission to the Department of Climate Change, Energy, the Environment and Water (DCCEEW)

Climate Scenario Guidance

17 December 2025

About IGCC

IGCC is a collaboration of Australian and New Zealand institutional investors focused on the impact of climate change on investments. IGCC represents investors with total funds under management of over $4 trillion in Australia and New Zealand. IGCC's members are the custodians of the retirement savings of around 15 million Australians.

Introduction

IGCC welcomes the release of DCCEEW's draft Climate Scenario Guidance, which addresses a critical challenge for investors: the lack of consistency in physical climate risk assessments. Investors are both preparers and users of these assessments. They must produce their own in line with Australia's mandatory disclosure requirements, and they use the disclosures of the companies they invest in for investment decision-making.

Currently, significant variability in methodologies makes these assessments difficult to compare and limits their usefulness. By providing a consistent framework for selecting scenarios and other key components of physical risk analysis, this guidance represents an important step toward improving comparability, credibility, and decision-usefulness across the public and private sectors.

Response to consultation questions

Part 1: Foundations

1.1 Please provide feedback on how we can make the foundational information more understandable and useful.

Improve clarity that this guidance is for physical risk scenario analysis only (and does not include transition risks)

On page 7, the guidance notes that "In this guide, we are concerned specifically with the impacts of future physical climate risks." This should be made clear earlier in the document. It may also be useful to reference other resources that provide guidance on transition risk scenario analysis.

Shared socioeconomic pathways (SSPs) should be recommended over global warming levels (GWLs)

Although some non-technical audiences may find GWLs more intuitive than SSPs, we submit that it is more important that disclosures are useful for decision-makers, that they are comparable, and consistent with international practice. Recommending GWLs also introduces fragmentation. Different audiences relying on different types of data

will make collaboration harder. Consistency in data and methodology is essential for enabling investors, companies, and policymakers to work together effectively[1]. Therefore, the guidance should recommend the use of SSPs over GWLs.

It may also be useful to recommend that companies disclose where core business assumptions are materially different to those in the climate scenarios (e.g., SSPs) they are using. For example, if the SSP assumes low population growth, but the company's strategy and revenue forecasts assumes high population growth.

Baselines should be disclosed to improve comparability

To improve comparability and transparency, the guidance should explicitly recommend that baselines used in scenario analyses are disclosed. This allows users to understand why analyses differ and ensures that results can be interpreted accurately across different assessments.

Multiple climate models should be used in scenario analysis

Finally, the guidance should make its recommendation to use information derived from multiple climate models clearer, in line with scientific best practice.

2.1 Please provide more details on the key hazards, impacts, tools or topics you see missing from Part 1.

No feedback.

Part 2: Developing your scenarios

1.1 Please provide feedback on how we can make the decision framework more useful.

Scenario choice should be linked to use case and risk appetite

The decision framework is broadly useful. In particular, the focus on considering the purpose of the work and risk appetite in scenario choice is welcome. However, there are multiple references to only one high warming scenario being required for scenario analysis of critical infrastructure. This recommendation appears contrary to the broader message of the guidance and does not recognise that different scenarios may be needed for different use cases (e.g., disclosures, due diligence, asset management, strategy).

[1] IGCC (2024) Activating Investment in Adaptation [link]

For example, in a soon to be released IGCC guidance on physical risk assessments to strengthen asset resilience[2], we recommend that both a moderate and high warming scenario are used. The text below is an excerpt from this guidance, which will be released in Q1 2026.

"Relevant: Select SSP scenarios which focus on a moderate (SSP2-4.5) and high warming scenario (SSP3-7.0 or SSP5-8.5).

- *The benefits of using a lower warming scenario (SSP1-2.6) are limited as the physical impacts in these scenarios will be similar to historical impacts, which infrastructure assets should already be resilient to.*
- *Utilising both a moderate and high warming scenario is strongly recommended for the risk assessment stages to illustrate a range in consequence and risk rating from each risk. This provides a view on the sensitivity of the climate scenario to the consequence and risk rating and tests the ability of the assessment methodology and risk consequence criteria to respond to changes in the climate scenario.*
- *Assessing both a moderate and high scenario does not 'lock-in' these scenarios for needing to be fully mitigated, instead it provides better quality information to support subsequent adaptation development and decision making.*

Aligned: Align the use of scenarios, projections and hazards data used in the assessment of risk (and subsequent adaptation development and decision making) with the risk profile of the infrastructure service and the corresponding risk appetite of the Board.

- *For example, some infrastructure assets may have more appetite for risk impacts (i.e., a higher risk appetite) where there are smaller flow on impacts (e.g. financial, user or reputational) if the service is disrupted or assets damaged. In these cases, using projections sourced from models representing the 'consensus case', obtaining less granular hazard data or using moderate warming scenarios to inform adaptation development (but still first assessing both scenarios) could be appropriate.*
- *In contrast, other infrastructure assets can have lower appetite for risk impacts, where there are larger flow on impacts if the service is disrupted or assets damaged. In these cases, considering projections sourced from models representing 'worser cases' alongside consensus, obtaining detailed hazard data for material risks (even at expense), and considering both moderate and*

[2] IGCC (2026) Resilient Infrastructure: Physical climate risk assessments for defensible decision-making [to be released Q1 2026]

high warming scenarios to inform adaptation development could be appropriate."

In addition, guidance should align with the with the Australian Treasury's consultation paper on climate-related transition planning guidance where possible, which acknowledged the importance of scenario analysis without being prescriptive.

2. Are there any other key variables you would like to see in the tables provided in the climate metrics section (2.4.2)?

No feedback.

Part 3: Australian climate projections datasets

1.1. Do you have suggestions to make Part 3 more useful?

Clearer recommendations on which climate projections to use should be included

The guidance should make its recommendation to use the most recent climate projections clearer. Relying on outdated science may lead to poorer decision-making and increased risk. Investors need confidence that assessments are based on the best available evidence.

More generally, while this section provides a useful overview of the climate projections available (particularly through the NESP guide on finding and selecting the right climate change information[3]), more explicit guidance on which projections to use would be useful. For example, where data exists from both state and federal governments at the same resolution and CMIP phase, which data should be used and are there significant differences between the datasets? Stronger guidance on selecting appropriate projections would significantly improve consistency and credibility across physical risk assessments.

Overall Guidance

1.1 What additional information is needed to enable you to do your own scenario analysis?

Clearer guidance on which climate projections to use, as described above.

2. What amendments could we make to the guidance to make it more useful?

Guidance on choosing scenarios should be prioritised

For many investors (and other audiences) who are already doing scenario analysis, the most useful part of the document will be the guidance on how to choose climate

[3] NESP (2025) Finding and selecting the right climate information for your needs [link]

scenarios. Therefore, this should be prioritised and moved to the start of the document. In practice, this could look like:

- Part 1: Choosing scenarios. This part would involve combining the recommendations of Part 1 (Sections 1.2, 1.3) with the guidance in Part 2 (Sections 2.1, 2.2, and 2.3)
- Part 2: Australian climate projections datasets (Part 3)
- Part 3: Conducting scenario analysis (Section 1.4)
- Appendices: Section 2.4 could be moved to appendix.

Further information

IGCC looks forward to continued engagement with DCCEEW. Please contact us for more information.

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