



Australian Banking
Association

Climate Risk and Capital

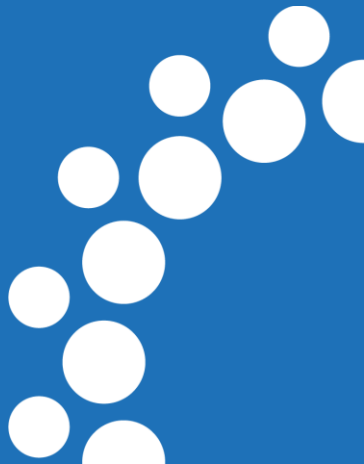
March 2023

Thought Leadership Paper
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Executive Summary

- *There is no compelling case at present for additional climate-risk specific capital overlays.*
- *There is a case for deeper work on various matters, including data and scenarios.*



Key Points

- Australian banks have a very strong capital position on an international comparable basis with (like-for-like) ratios higher than most global peers. Australian banks are therefore in a good starting position from a capital standpoint, which implies greater resilience to absorb any near-term capital impacts from climate risk.
- Pillar 1 and Pillar 2 capital frameworks have existing mechanisms for banks to account for climate risks. The greater flexibility and longer time horizon of the Pillar 2 framework, give it more degrees of freedom to capture the broader impact of climate drivers on a bank's capital position. Intrinsically, it is also suited to include climate scenarios. For climate risks to be properly included in the capital framework, the data, methodology and scenarios used in climate risk scenario analysis will need to be uplifted and will require investment from banks, government and supervisors.
- Capital requirements are an area for policy makers to maintain competitive positioning for Australian banks to facilitate financing transition investments which reflect the national circumstances. The industry is well placed on the frontier of transition investing and preserving this should be a focus with capital framework design amendments.
- The mechanisms and magnitude of climate risk impact on liquidity will need further analysis and assessment.



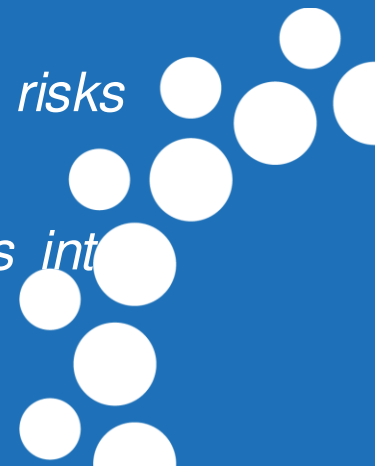
Policy Objectives

- The primary purpose of the capital framework is to ensure the stability, safety and soundness of individual banks and hence the resilience of the wider financial system.
- Capital serves as the financial cushion available to a bank to protect the bank's depositors and other debt holders from unanticipated losses during times of stress. The capital framework is not intended to be used to achieve ESG goals such as net zero carbon emissions. It is critical that banks' capital requirements fairly reflect the risks the bank is taking, and this is not distorted by other objectives.
- Using the capital framework as a way to penalise high-emitting sectors and reward low-emitting sectors may result in under-capitalisation and under-pricing of certain investments, reduce the ability of banks to provide transition finance to the high-emitting sectors that need significant capital to reduce their emissions, and exacerbate the increases in energy costs that Australians are already facing.



Supporting Analysis: Incorporating Climate Risk into Capital Requirements

- *Australian banks are starting from a strong capital position*
- *The capital framework already incorporates mechanisms to capture near-term risks due to climate*
- *Work is needed to develop scenarios to appropriately incorporate climate risks into ICAAP*



Incorporating climate risk in the capital framework

Risk Type	Description	Existing Mechanisms to capture near-term risks due to climate
Transition	<ul style="list-style-type: none"> Arises as a result of exposures to industries and sectors that are disrupted due to rapid policy changes, changes in consumer sentiment, or technological innovation. They are already beginning to crystallise and are expected to be a growing material risk in the short to medium term. 	<ul style="list-style-type: none"> Where transition risks are assessed as material for a bank in the near term, it should be consistent with, and appropriately captured by, capital requirement assessments. In such cases, the existing Pillar 1 and Pillar 2 frameworks already allow for flexibility to capture such risks via risk parameters and scenario analysis over a three-to-five-year time horizon (e.g. through adjustment in ratings to capture an increased risk of default). Growing material risks will extend beyond a five-year time horizon as indicated by the results of the APRA CVA.
Physical	<ul style="list-style-type: none"> Arises as a result of exposures to areas impacted by natural disasters where increasing frequency and severity of weather events and natural disasters can cause losses quickly. 	<ul style="list-style-type: none"> Even the worst climate scenarios result in minimal changes in temperature over a five-year time horizon, largely because scenarios depict movements in averages rather than extremes (noting that potential exposures/losses are still seen to increase by 2030). Insurance costs have been rising rapidly as these are more responsive to short term weather changes, and this could continue if bad weather experiences persist. Either way, the existing capital framework can capture these near-term impacts within risk parameters (e.g. adjusting PDs and/or LGDs to consider changes in asset valuations and insurance costs).
Liability	<ul style="list-style-type: none"> Arises as a result of fines and legal action from regulators, investors, customers, and other stakeholders that could result from climate-related issues 	<ul style="list-style-type: none"> Considered under current Operational Risk capital requirements, although current methodologies are not sufficiently granular to attribute capital for specific causes (e.g. litigation due to climate issues). It is therefore unclear whether climate would materially increase Pillar 1 capital requirements from their current calibrated levels. However, it can be explicitly considered in scenario processes and thus influence capital via the Pillar 2 framework.

Pillar 1 frameworks and tools for advanced banks allow for the consideration of near-term climate risk impacts

Risk Type	Discussion
Credit Risk	<ul style="list-style-type: none">• Given how PD and LGD parameters are derived, they have the capability to incorporate near-term climate risks, although there are some challenges in doing so.• Both PDs and LGDs are generally calibrated using historical data. As the severity of impacts continues to change, these historical periods may not capture the full extent of the climate risk on counterparty ratings.• Notwithstanding this, existing PD models do include a range of factors, many of which will capture climate-related risks to some degree.• The banking system's reliance on the insurance sector for PD and LGD mitigation is a vulnerability, with rapidly growing premiums in climate-affected areas, and the risk of under-insurance or uninsured collateral.
Market Risk	<ul style="list-style-type: none">• While climate risk is expected to impact the market value of securities in some cases (e.g. transitional impacts on commodity prices), there is currently limited evidence indicating that climate will drive market volatility in excess of that already considered by market risk capital models.
Interest Rate Risk in the Banking Book	<ul style="list-style-type: none">• The existing rate shocks to assess the vulnerability to interest rate risk are severe and are agnostic to the source of the volatility.• Given the nature of climate risk, it is not expected to materially drive interest rate risk capital requirements at this stage. Potential links between climate risk and rates are currently not well understood and the relationship needs to be further explored and revisited as data develops, noting that it is volatility in rates rather than structural shifts that could impact IRRBB capital requirements.
Operational Risk	<ul style="list-style-type: none">• Following the new APS 115, Australian banks are expected to replace the Advanced Measurement Approach and the standardised approach with the single Standardised Measurement Approach to Operational Risk by January 2023.• Operational risk capital requirements under APS 115 are assessed based on a percentage of the bank's business indicator as defined by APRA. This calculation is agnostic to the source of operational risk.



Pillar 2 is more suited to consider broader capital needs arising from climate risks

- CPG 229 recognises that climate scenario analysis is a core part of a bank's climate risk management framework.
- Stress testing and scenario analysis conducted as part of banks' ICAAP allows both standardised and advanced banks to consider a wide range of risks – including climate risk – over a three-to-five-year horizon.
- The relevance of these tools depends on the scenarios fed into the analysis. The Australian banking industry currently lacks sufficiently robust, Australia-specific scenarios within the three-to-five year range.



Supporting Analysis: Climate Scenarios

- *Localised and shorter-term climate scenarios are necessary to support their use in the capital framework*
- *To support analysis of climate risks under Pillar 2, Australian-specific shorter term climate risk scenarios will need to be developed*



Existing long-term scenarios

- Existing climate scenarios are over 30 years+ and typically designed to support policy making to manage climate change. Central banks and supervisors also use climate scenarios to explore the possible impacts on the economy and the financial system.
- Limitations include:
 - NGFS scenarios do not vary significantly from the current state in the three-to-five-year time frame, despite showing material changes in the medium to long term. Therefore, they are useful for exploring longer term risks, but less useful for capital adequacy assessment.
 - Scenarios are not specific to Australia and may not accurately reflect material physical and transition risks that are more likely in the short-to-medium term.



Opportunities for uplift

- Scenarios that are shorter-term and/or more specific to the Australian economy could be developed by central authorities (the ABA, RBA, APRA, other Government body). The key advantages of this approach are to:
 - Provide the industry with a uniform set of standards upon which to assess climate risk.
 - Reduce the need for scenario expansion by individual banks.
 - Enable regulators to make further policy decisions, including assessing climate-related stress testing outcomes vs. existing capital buffers.
- There is also a broader need for banks to improve scenario development and modelling capabilities to explore a range of possible near term climate risks and update these as the world evolves. To support this, banks will also need to collect climate-related data (both internally and externally), be able to translate these into macro-economic indicators, as well as outcomes relevant for capital (e.g. ratings transition matrices) to improve risk assessment and scenario analysis over time.





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Full Recommendations



Recommendations – Banks

Individually or at the industry level through the ABA :

- Continue to refine how climate risk can be embedded into existing capital methodologies across Pillar 1 and 2, analysing, adapting, and embedding existing frameworks and models to evolving climate regulations, market environment and data, including but not limited to:
 - Individually, review credit rating frameworks to ensure climate risks (physical, transition, and liability) and their impact on credit worthiness of bank clients are adequately considered in the rating process and outcomes.
 - Improve scenario development and modelling capabilities to explore a range of possible near-term climate risks and update these as the world evolves.
 - Collect climate-related data to improve risk assessment and scenario analysis over time.
 - Develop standards of insurance and establish systems to monitor the suitability of the cover, and monitor the currency of the insurance in conjunction with other relevant stakeholders such as the insurance industry.
- Continue to implement and embed climate risk into risk management practices, consistent with relevant supervisory standards and/or guidance, e.g. APRA CPG 229 and BCBS d532, including but not limited to:
 - Continuing to develop risk management practices to assess and, where necessary, mitigate the impacts of physical and liability risks on banks' operations and liabilities.
 - Carefully monitoring and managing risks related to the carbon derivatives market while rapidly adapting frameworks and models to this new asset type.
 - Consider including climate-related causes as part of ICAAP and stress testing, scenario analysis and funding/liquidity stress testing.



Recommendations – Supervisors

- Lead and/or assist in the development of new short-term (e.g., five year) scenarios specific to the Australian financial industry, which will enable banks to run more targeted scenario analysis that is relevant for capital adequacy purposes. Include in these scenarios appropriate macroeconomic variables to ensure more consistency across banks.
- Stay coordinated with global peers to ensure the approach to address climate risks through the capital framework remains relevant to the national circumstance and does not further widen an uneven global playing field – noting that APRA’s capital framework is already more conservative than international peers. All adjustments made to align the capital framework with international best practice should first consider local market context (e.g. capital position, data availability of Australian banks).
- Continue to consult the banking industry to explore the most optimal and feasible approaches for managing climate risk.
- Coordinate banking and insurance supervision to harmonise transparent risk sharing between the sectors, especially on property insurance. This may require standardisation of policies, and systems of recording the currency of policies and notification of policy lapses.



Recommendations – Government

- Lead and/or assist in the development of new short-term (e.g., five year) climate scenarios and data inputs (including insurance coverage data) for the Australian economy, which will enable banks to run more targeted scenario analysis that is relevant for capital adequacy purposes.
- Support facilitation with the CSIRO and Bureau of Meteorology for the provision of scenario data for community and government agencies, and industry planning.





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About the ABA

With the active participation of 23 member banks in Australia, the Australian Banking Association provides analysis, advice and advocacy for the banking industry and contributes to the development of public policy on banking and other financial services.

The ABA works with government, regulators and other stakeholders to improve public awareness and understanding of the industry's contribution to the economy and to ensure Australia's banking customers continue to benefit from a stable, competitive and accessible banking industry.

