

Equipping the RBA for a dynamic climate risk and transition response

Submission to the Review of the Reserve Bank of Australia

Toby Phillips, Tom Arup, and Mara Hammerle.

About CPD

The Centre for Policy Development (CPD) is an independent, values-driven, and evidence-based policy institute. Our motivation is an Australia that embraces the long term now. CPD exists to solve the biggest policy challenges facing Australia and the region, and to take people on the journey solving them. Our policy development seeks to advance the wellbeing of current and future generations.

CPD's core model is three-fold: we create viable ideas from rigorous, cross-disciplinary research at home and abroad. We connect experts and stakeholders to develop these ideas into practical policy proposals. We then work to convince governments, businesses, and communities to implement these proposals. CPD has offices in Sydney and Melbourne and a network of experts across Australia.

We are not-for-profit: donations to our Research Fund are tax deductible.

More information about CPD is available at cpd.org.au

Published by the Centre for Policy Development

©Centre for Policy Development 2022.

This work is licensed under CC BY 4.0. To view this license, visit creativecommons.org/licenses/by/4.0/

Cite this paper as: Toby Phillips, Tom Arup, and Mara Hammerle (2022) *Submission to the Review of the Reserve Bank of Australia: Equipping the RBA for a dynamic climate risk and transition response*, CPD discussion paper, Centre for Policy Development.

Table of Contents

About CPD	2
Table of Contents	2
Introduction	3
Summary of recommendations	5
Climate shocks, value destruction and economic transition will be the dominant financial stability themes of the century	7
Monetary, fiscal and other policy should complement each other to ensure an orderly transition and manage climate risks	12
Central banks are more deeply considering their role in the transition to net zero emissions	14
Mandating the RBA for the climate challenges to come	17
Other issues	19

Introduction

Dear Review Panel,

Thank you for the opportunity to provide a submission to the *Review of the Reserve Bank of Australia Issues Paper* (Issues Paper). The Centre for Policy Development (CPD) is an independent, non-partisan research organisation. Our climate change work focuses predominantly on the intersection with economic and financial policy.

This submission considers how to ensure the Reserve Bank of Australia (RBA) has sufficient scope in its mandate, resources and practice to evolve its approach to climate change, particularly in light of accelerating global change. Statements from senior RBA representatives and the RBA's participation (alongside APRA) with the global Network of Central Banks and Supervisors for Greening the Financial System (NGFS)¹ demonstrate the Bank is taking its climate responsibilities seriously. This was recently reinforced by RBA Governor Philip Lowe at an appearance before the House of Representatives Standing Committee on Economics.²

CPD has engaged with the RBA on climate change over several years. In 2019, CPD hosted a landmark speech by former Deputy Governor, Guy Debelle, where he set out the interaction between climate change and the RBA's objectives.³ Senior staff from the RBA have also contributed to CPD's *Climate & Recovery Initiative* (co-chaired with Climateworks Centre), which frequently focuses on the macroeconomic impact of climate change.⁴ Earlier this year CPD published a discussion paper exploring the interaction between climate-related issues and inflation.⁵

Climate change is a first-order financial stability issue and will be the dominant economic theme of this century due to the

scale of damage and the investment opportunities in the transition to net zero emissions. It is in this context that this submission responds to the Issues Paper:

- ⇒ What changes, if any, should be made to the objectives set out in the Reserve Bank Act (1959): stability of the currency, maintenance of full employment, and economic prosperity and welfare of the Australian people - or do these remain the right objectives?
- ⇒ What improvements could be made to the set of inputs the RBA draws on to support monetary policy decision making?
- ⇒ What monetary policy tools should the RBA use in pursuit of its monetary policy objectives, and how can it use them most effectively in the future?

Many of the emerging international approaches and debates discussed in this submission – for example offering concessional finance to lending institutions for green loans – are relatively new to central banking and need to be considered within the relevant economic context, historical role of the institution, and the potential impact of monetary interventions compared to other policies. Certainly, CPD believes careful consideration of downside risks will be required before adopting some of our recommendations.⁶

However, the worsening nature of climate change impacts,⁷ alongside the acceleration of clean technologies and strengthening global emissions reduction policies,^{8,9} means the RBA will need to expand its practice *by necessity*. An accelerated and orderly transition to net zero emissions will provide significant benefits, as recently recognised by RBA Head of Domestic Markets, Jonathan

Submission to the Review of the Reserve Bank of Australia: **Equipping the RBA for a dynamic climate risk and transition response**

Kearns, who stated: “Delaying action will not only make climate change worse, it will make the implications for society, the economy and the financial system more severe.”¹⁰

An evolution of the RBA’s practice will therefore need to occur quicker than is often assumed. Further, if not properly designed and managed, RBA activities may *unnecessarily* create incentives for the continuation and expansion of emissions-intensive activities. All of this is discussed further in the body of our submission.

Summary of recommendations

The RBA should be mandated and resourced for an acceleration in practice. To do this, CPD recommends the following building blocks be put in place:

- A. The RBA should begin issuing annual climate risk disclosure consistent with international frameworks and standards, and emerging guidance for reporting by central banks (see page 10).
- B. The Treasurer should issue a specific ministerial direction to the RBA Board clarifying the Federal Government's expectations of climate risk disclosure by public authorities (see page 11).
- C. The RBA Governor and Federal Treasurer should set out how the RBA will address climate-related issues and support the net zero transition in the next Statement on the Conduct of Monetary Policy (see page 13).
- D. Climate change should be included in an RBA Board skills matrix (see page 19).
- E. The RBA should ensure there is adequate staff time, resources and in-house skills on climate change to fully address the complexity of the issues (see page 19).

In addition, CPD recommends the RBA take the following initial steps to further address financial climate risk and limit

contradictions between monetary and climate transition policy:

- F. Advocate for the further market development of green sovereign debt offerings by Australian and international issuers, with reference to appropriate standards and taxonomies (see page 16).
- G. Reinforce through formal policy development processes and other public statements the importance of optimal responses to address climate-related financial instability to avoid an overreliance on monetary interventions (see page 13).
- H. Adjust collateral eligibility rules so that only corporate bonds created by issuers who are disclosing climate-related risks with reference to best practice global standards and frameworks are accepted as collateral from counterparties (see page 11).
- I. Review all collateral eligibility rules and haircuts, including through engagement with credit rating agencies, with a view to integrating climate risk considerations (see page 15).

Finally, CPD has considered the current RBA Board objectives set out in Section 10 of the *Reserve Bank Act 1959* (the Act) as it relates to climate related-issues. Creating an explicit objective on climate issues in the Act would bring several benefits, not least negating the need for ongoing (re)-interpretation of Section 10 objectives as they relate to climate change. If the review

decides that an amendment to Section 10 is not necessary, it would still be beneficial for the Treasurer to issue a clarifying ministerial direction.¹¹ We recommend, in order of preference (see page 18):

- J1. Section 10 of the *Reserve Bank Act 1959* is amended to add the following objective - “d) an orderly transition to, and maintenance of, net zero greenhouse gas emissions, and management of climate-related risks and opportunities”; or
- J2. Objective (c) of Section 10 of the *Reserve Bank Act 1959* is amended to: “the economic prosperity, sustainability and welfare of the people of Australia”; or
- J3. The Treasurer should issue a ministerial direction to the RBA Board clarifying the government’s view of how existing objectives relate to climate-related issues.

CPD thanks the Review Panel for considering this submission and stands ready to provide any further assistance. For more information please contact Toby Phillips (toby.phillips@cpd.org.au) and Mara Hammerle (mara.hammerle@cpd.org.au).

Toby Phillips, Program Director

Tom Arup, Climate Lead

Mara Hammerle, Economic Adviser

The body of this submission follows with a discussion of the following themes, and with the above recommendations embedded throughout.

- ⇒ The implications of climate risks to financial stability and the RBA’s portfolio
- ⇒ Central bank disclosure practice
- ⇒ The interaction between monetary, fiscal and other policy in accelerating an orderly transition to net zero emissions
- ⇒ The role of central banks in the net zero transition
- ⇒ Central bank mandates and climate change

Climate shocks, value destruction and economic transition will be the dominant financial stability themes of the century

Senior RBA figures, other central banks, and economic researchers have increasingly drawn attention to the implications of climate-related issues for financial stability. In particular, central banks typically reference two types of risk: (1) physical risk; and (2) transition(al) risk,¹² although some also emphasise liability risk.¹³ Physical risk refers to losses from intensifying natural disasters and other worsening impacts of climate change, including in infrastructure and productive capacity. Transition risk is linked to action by governments, financial organisations and households to address climate change, resulting in reassessments of the value of emissions-intensive assets that may become stranded as new technologies and business practices replace legacy industries.¹⁴

The RBA is tasked with contributing to the stability of the currency, full employment, and the wellbeing of the Australian people. Worsening extreme weather and other climate impacts will lead to all objectives becoming more challenging to achieve, while also reducing the transmission of central bank monetary policy measures to the broader economy. By reducing the value of assets and wealth held by households, businesses and governments, physical risks can reduce capacity to repay loans, raise the risk of default, and increase underwriting costs for insurers. Employment levels may fall due to lower labour productivity associated with depletion of natural resources, higher temperatures, and/or impacts of climate change on wellbeing. Transition risks

increase credit risk for debt holders, in particular given the opacity of credit markets and the relatively unknown implications of climate change for asset values and risk premiums. Climate-related shocks can lead to financial instability by exposing new information about the exposure of assets.¹⁵ Balance sheet losses associated with climate-related financial risk can reduce the ability of financial institutions to respond to central bank monetary policy, thus reducing credit flows to the real economy and investment.¹⁶ Climate-related uncertainty may increase precautionary savings and reduce incentives to invest, regardless of changes to monetary policy.

Both physical and transition risk thus have large implications for the RBA's ability to achieve its current mandate. A recent report by Deloitte found that, if not addressed, climate change could cause US\$178 trillion in net present value of economic damages globally between 2021 and 2070.¹⁷ According to the Bank for International Settlements (BIS), financial climate risks may cause "green swan" events to materialise, as the risks are highly uncertain, linked to unpredictable economic, social, and geopolitical dynamics, and extreme outcomes such as financial collapse cannot be ruled out.¹⁸ These are just a handful of the studies and projections of this nature; all highlight the systemic and largely irreversible nature of climate risks, and therefore the need for a systemic response that will necessarily involve central banks in some fashion.

Another prominent mechanism by which climate change will increasingly affect central bank operations is through its impacts on inflation. The European Central Bank (ECB) outlines three sources of inflation associated with climate issues: (1) fossilflation; (2) climatflation; and (3) greenflation.¹⁹ Fossilflation is linked to the

current dependence of economies on fossil fuels: policies and financing decisions that address climate change may increase the cost of fossil fuels, while oligopolistic producers can exert market power and increase prices. Climatedflation relates to the costs of climate change itself. Reductions in agricultural productivity may result in food shortages and subsequent increases in food prices and inflation. Conversely, redistribution of capital to adaptation purposes as well as precautionary saving of households and firms may reduce investment and lower inflation. Greenflation refers to increases in demand and subsequently prices of commodities essential for a green transition. It is expected that greenflation will be a short-to-medium-term issue as energy mixes of countries increasingly favour renewable energy and other clean technologies.

Both climatedflation and fossilflation are typically associated with supply-side shocks, with which central banks have generally had less experience as compared to demand-side shocks, as flagged in the Issues Paper.²⁰ Supply-side shocks may require a different type of response from central banks and other economic actors: whereas raising interest rates in response to high inflation caused by increased aggregate demand can be successful for demand-side shocks, supply-side shocks may lead to stagflation.²¹ In these cases, central bank actions to increase interest rates in response to high prices could further reduce output and increase unemployment. Moreover, by reacting to high commodity prices and other issues caused by greenflation, central banks could increase borrowing costs for green technologies and in turn potentially slow down the net zero transition.²² Some economists have therefore started to question whether central banks need to switch from targeting inflation to targeting other indicators such as nominal income

targets to better handle supply-side shocks arising from climate change.²³

The RBA is building capacity for conducting research on the impacts of climate issues on financial institutions and financial stability. As part of the Council of Financial Regulators, the RBA has been involved with developing the Climate Vulnerability Assessment of major retail banks to analyse the impacts of climate risk on the financial system and economy through scenario analysis.²⁴ It is also working to reflect the potential impacts of climate change in its economic outlooks and collaborating with international platforms including the NGFS.²⁵ These are positive developments, and reflect clear recognition of the systemic climate risks facing the broader Australian financial system, and therefore the current objectives of the RBA. The RBA should be commended for this work and encouraged to evolve and expand this engagement - including deeper consideration of its inflation targeting practices as climate, energy and transition considerations intensify.

The RBA also carries financial climate risk in its own portfolio. For example, the value of holdings of Australian government securities (federal and state) was over half the value of the RBA's total assets as of May 2022.²⁶ Climate-related financial risks associated with sovereign debt are becoming an increasingly prominent issue for many institutional investors.²⁷ If assets owned by governments become stranded or are destroyed by worsening climate conditions, royalties from emissions-intensive exports dry up as trade markets shift, or more government spending is diverted to emergency response measures, the value of government wealth falls and governments may subsequently find it more challenging to service their loans. Further challenges to government debt servicing capabilities arise from the costs

of responding to climate change as well as the impacts of climate change on economic growth, and therefore taxation and financial stability.²⁸ The climate risk associated with sovereign debt is a new and challenging area that institutional investors and credit rating agencies are developing more tools to assess. Central banks, as large holders of sovereign debt for various reasons, may have a role to encourage remedial actions like more domestic sovereign green debt offerings or to contribute to risk measurement in these assets through their reporting and research.

Similarly, during the COVID-19 pandemic the RBA increased its holdings of asset-backed securities for repurchase agreements with financial institutions by almost seven times.²⁹ These securities come from a range of sources, including commercial and residential mortgage-backed securities, all of which are likely exposed to some level of climate-related financial risk. The RBA also accepts a range of other financial products under these collateral rules, including a modest amount of corporate bonds. While the Climate Vulnerability Assessment may go some way to assisting the RBA in understanding the climate risk associated with asset-backed securities, it is unlikely to capture their full exposure because of its relatively limited scope. The Assessment also does not capture the exposure of the broader RBA portfolio. Central banks have started to think about these risks and are changing their collateral eligibility rules and haircuts as a result, often from a precautionary perspective.

Demonstrating best practice on climate risk disclosure

The RBA, like other central banks, has been an important voice in reinforcing the importance of widespread, credible and consistent climate risk disclosure as a key tool for financial stability. Through its work with the Council for Financial Regulators, the RBA has helped reinforce guidance from APRA and the Australian Securities and Investment Commission to regulated entities about the need for climate risk disclosure. This includes establishing the importance of international frameworks and standards, including the global baseline of sustainability-related disclosure standards emerging through the International Sustainability Standards Board (ISSB). Having credible and consistent disclosure across the Australian market that is consistent with these standards and frameworks is critical for the RBA and its objectives because it:

- ⇒ Raises awareness of and prompts a response to climate risks and opportunities among financial institutions, in turn helping to reduce financial stability concerns.
- ⇒ Provides further market information to help the RBA better understand the climate risks and opportunities for the Australian economy and financial system, and its own portfolio.
- ⇒ Smooths and accelerates the net zero transition by helping establish market signals for capital investment into low-emissions assets, companies and activities, which in turn reduces the systemic climate-related financial risks facing the Australian economy and

maximises the opportunities in the transition.

The importance of central banks issuing their own climate risk disclosure consistent with the recommendations of the Task Force on Climate-related Disclosures (TCFD) is also now being recognised. Kyriakopoulou et al. state that in issuing their own climate disclosure, central banks can: “lead by example by demonstrating lessons learned from their own climate-related disclosures to other financial institutions and by using their influence over the financial rulebook to build the broader system architecture.”³⁰ The NGFS has published specific guidance to assist central banks to issue climate risk disclosures that recognises differences in mandates, resources and balance sheets and that “the scope and detail of their disclosures will improve over time as central banks build up internal capacities and data availability improves.”³¹

Other central banks have already issued disclosure consistent with the TCFD recommendations and guidance, including the Bank of England,³² Banco Central do Brasil³³ and Banque de France.³⁴ The granularity and complexity of this reporting is advancing. For example, the Bank of England is now disclosing the weighted average carbon intensity of its sovereign bond holdings against a G7 reference portfolio.³⁵ The Banque de France measures the sovereign bond component of its portfolios against indicators including: capital carbon footprint; carbon footprint per unit of GDP; weighted average carbon intensity; ESG score; and exposure to physical risks.³⁶

The RBA has made a welcome commitment to the NGFS that it will “explor[e] which climate-related financial disclosures it could publish, drawing on the recommendations of the Task Force on

Climate-related Financial Disclosures.”³⁷ The recent Council of Financial Regulators Climate Change Activity Stocktake 2022 also states: “The RBA is continuing to explore the scope to publish its own climate-related disclosures, with a view to improving transparency around its exposure to climate risks and providing another example of increased transparency.”³⁸

An accelerated issuance of climate risk disclosure by the RBA is important as it:

- ⇒ Demonstrates good practice to the broader Australian market and reinforces the RBA’s message about the importance of climate risk reporting by financial institutions.
- ⇒ Brings the RBA into line with the growing practice of its international counterparts and fulfils its commitment to the NGFS.
- ⇒ Helps the RBA further understand climate risks to Australian financial stability, the exposure of its own portfolio, and its own impact on the nature and pace of the net zero transition by virtue of needing to increase the depth of its climate risk analysis, in line with international counterparts and reporting requirements.
- ⇒ More generally enhances the RBA’s communication and transparency with the Australian people about climate-related issues and its own operations.

The RBA, like all disclosure issuers, faces data, methodology and other constraints in assessing the full breadth of its exposure to and impact on climate-related financial risks, as outlined by a recent BIS survey.³⁹ However, climate risk disclosure frameworks and guidance encourage issuers to start without waiting for

complete metrics and data to be in place.⁴⁰ Often initial disclosure is more qualitative and descriptive, and builds towards more quantitative reporting as practice and data sources improve. Where data or other uncertainties exist, good practice is to disclose and explain gaps, rather than not issue reporting altogether. Given this, the RBA should accelerate the publication of climate risk disclosure using the TCFD framework, the emerging ISSB standards and the NGFS guidance for central banks.

Recommendation A: The RBA should begin issuing annual climate risk disclosure consistent with international frameworks and standards, and emerging guidance for reporting by central banks.

The Federal Government has committed to strengthening climate risk disclosure across the Australian market,⁴¹ which will likely intensify the need for public authorities to issue similar disclosures to avoid market blindspots, demonstrate good practice and prevent double standards. The Australian Government may also be increasingly incentivised to produce its own disclosure in response to growing interest from institutional investors for better information about the climate risk exposure of sovereign bonds. In recent work on the directors' duties on climate risk for public authorities, in which the RBA can be included, CPD recommends that governments issue transparent expectations to help improve climate risk response among these entities.⁴² As the Federal Government seeks to strengthen and mandate climate risk disclosure across the Australian market, it is likely to assist the Board's understanding of reporting duties and expectations for public

authorities if the Treasurer was to issue a clarifying ministerial direction.

Recommendation B: The Treasurer should issue a specific ministerial direction to the RBA Board clarifying the Federal Government's expectations of climate risk disclosure by public authorities.

Alongside the importance of demonstrating best practice with its own reporting, the RBA can also influence the uptake and quality of disclosure in the Australian market through its collateral eligibility rules. In the first instance, it could adopt ECB practice⁴³ by only allowing counterparties to use corporate bonds as collateral if the bond issuer is providing disclosure consistent with best practice international standards and frameworks. These eligibility rules may be somewhat superseded by government efforts to mandate disclosures across the market, depending on coverage.

Recommendation H: Adjust collateral eligibility rules so that only corporate bonds created by issuers who are disclosing climate-related risks with reference to best practice global standards and frameworks are accepted as collateral from counterparties.

Monetary, fiscal and other policy should complement each other to ensure an orderly transition and manage climate risks

There is now increased interest, literature and civil society scrutiny⁴⁴ of the role of central banks and monetary policy in more actively addressing climate risks, helping to green the financial system and achieving climate-related goals. Robbins et al. have set out two primary reasons for central banks to play an active role in the net zero transition: “achieving a net-zero economy is the best way of minimising the risks of climate change to the stability of the financial system and the macroeconomy; and second, central banks and supervisors need to ensure that their activities are coherent with net-zero government policy.”⁴⁵ This recognises central banks have some influence on the pace and nature of the net zero transition through their rules, financing and monetary policy conduct, and that it is in the interests of financial stability objectives to ensure this transition occurs in an orderly fashion. Similarly, monetary policy that works against broader policy settings – in this case where it might unnecessarily delay the net zero transition or support emissions-intensive activity – may create inefficiencies, economic drag and worsen systemic risks.

It is widely recognised that fiscal policy will have a stronger influence on the net zero transition than monetary policy. This is because central banks have a limited policy toolbox compared to governments and a necessarily limited mandate, especially in democratic countries. Central banks have a critical focus on financial stability, and their monetary policy tools are more blunt compared to other areas of economic

policy.⁴⁶ The Bank of England (BoE) has stated that the primary levers for driving an orderly economy-wide transition rest with the UK Government in setting climate change policy. But the BoE also recognises “the Bank’s actions can in some circumstances help magnify the effects of UK Government climate policy, not least since a resilient financial system will be better able to support the transition.”⁴⁷ In a more illustrative fashion, the ECB has found that a global carbon tax of US\$13.6 per tonne of CO₂ would be four times more effective than the full tilting of all central bank portfolios of privately-issued bonds through green quantitative easing (QE).⁴⁸ However, the ECB finds that this green QE would complement a global carbon tax in terms of avoiding average global warming. While this is an unlikely real world scenario, it illustrates that monetary policy is only a supporting, but still complementary, policy lever for the transition to a net zero global economy.

Finally, the use of monetary policy to green the economy has been justified on a “second-best” policy option basis. This might arise where explicit carbon pricing or tighter emissions controls are not implemented by governments for political, social or other reasons. The United Nations Environment Programme and Centre for International Governance Innovation have concluded that: “If first best policies for fixing the misallocation of capital cannot be implemented, then the government may resort to a second best policy and mandate the central bank or financial supervisor to address negative environmental externalities by using the tools they have at their disposal.”⁴⁹

There are many external drivers that may justify the RBA to be active in the net zero transition in Australia. An accelerated and orderly transition would minimise financial instability and economic damage to the

country.⁵⁰ There are now legislated and international commitments to decarbonise the Australian economy by 2050.⁵¹ Australia is arguably largely engaging with “second-best” policy options after the repeal of the national carbon pricing scheme in 2014.⁵² Finally the RBA has clearly identified that climate change is a critical issue for monetary policy, financial stability and other aspects of the Bank's operations, signalling its practice will evolve over time.⁵³

Therefore, a degree of agreement and coordination between the RBA and the Federal Government on climate issues is required. Beyond the Council of Financial Regulators, the most appropriate place for this is the Statement on the Conduct of Monetary Policy (the Statement), which is due to be reissued in 2023. Through the Statement, the Treasurer and the Governor can clarify the expectations of the RBA in Australia's climate challenges, including how monetary policy fits into an ecosystem of policies guiding Australia to its legislated net zero goal for 2050, if at all. As the Statement also addresses the transparency and accountability of the RBA,⁵⁴ it may also be useful to include common agreement on disclosure expectations. Recognition of climate issues in the Statement would reinforce an evolution of the RBA's objective with reference to climate-related issues (if adopted, see discussion below), but would also be useful in its own right given the growing importance and complexities of these issues.

Recommendation C: The RBA Governor and Federal Treasurer should set out the terms for how the RBA will address climate-related issues and support the net zero transition in the next Statement on the Conduct of Monetary Policy.

There may be a further role for the RBA in clarifying the interaction of monetary and fiscal policy on climate related issues. The Seventh Statement on the Conduct of Monetary Policy notes that the Governor and the RBA “will continue to participate, where appropriate, in the development of financial system policy, including any substantial Government reviews, or international reviews, of the financial system itself.”⁵⁵ Given the importance of addressing climate risks to financial system stability, it extends that the RBA would have a perspective on broader climate policy development. Secondly, given that monetary policy interventions are commonly regarded as second-best, and come with trade offs and complexities, it is in the RBA's interests that first-best policies to address the negative externalities of greenhouse gas emissions are adopted. Therefore the RBA has a role in identifying and promoting these first-best options through policy development processes and other public interventions. This would be similar to periodic comments by Dr Lowe and other RBA officials about the importance of structural budget reform and fiscal policy in addressing inflation and other economic concerns.⁵⁶

Recommendation G: Reinforce through formal policy development processes and other public statements the importance of optimal responses to address climate-related financial instability to avoid an overreliance on monetary interventions.

Central banks are more deeply considering their role in the transition to net zero emissions

The NGFS recommends changes to both monetary and macroprudential policy to address climate-related issues, roles which are often overseen by the same national authority in many countries.⁵⁷ In Australia, there is a division of these responsibilities: with the RBA conducting monetary policy, while APRA implements macroprudential policy. This restricts the actions that the RBA could take to address climate financial risks or be a more active contributor in the net zero economic transition, however some avenues remain in its current remit, in particular (1) collateral eligibility rules; (2) sovereign debt purchasing; and (3) future unconventional monetary policy initiatives such as the Term Funding Facility.

It is worth noting the potential downside risks of central banks intervening to change relative prices of green activities and assets compared to emissions-intensive alternatives. Traditionally, central banks have focused on the principle of market neutrality to guide their monetary policy actions, meaning that they strive not to influence economic activity in specific sectors and regions but rather focus on macroeconomic indicators such as GDP, national savings, or aggregate price levels. As long as there are minimal market failures, it is asserted that microeconomic decisions about production are best made by the private sector to achieve efficient outcomes. It is also argued that actions that affect microeconomic factors should be made by an elected government in a democratic society, rather than by an unelected institution. Finally, central banks may wish to avoid being labelled as political if they do not maintain their independence

from governments, with potential ramifications for price stability if confidence is lost.⁵⁸ Other challenges for central banks pursuing more interventionist actions on climate change include trade-offs being potentially necessary when targeting both environmental sustainability and monetary policy,⁵⁹ and the Tinbergen rule, by which multiple macroeconomic policy goals can only be fully achieved through the control of (at least) an equal number of instruments – the corollary being that multiple policy targets cannot all be fully achieved through a limited number of instruments.⁶⁰

Despite this complexity, the following discussion examines different avenues and provides recommendations based on recent policy changes made by other central banks around the world and for which downside risks are considered minimal. A distinction can also be made between actions taken by central banks to proactively change the relative prices of different activities in the market and adjusting their activities to ensure they are not unnecessarily supporting or expanding emissions-intensive activities.

First, the rules governing the eligibility of financial assets as collateral at central banks affect borrowing costs across the financial system.⁶¹ By treating specific types of financial assets favourably in collateral frameworks, central banks indirectly increase demand for the assets as they are viewed as high quality and low risk by broader financial systems. This can reduce the yields of such assets and increase their values.^{62,63}

However, existing collateral frameworks can be biased towards assets that support carbon-intensive activities by not considering climate risk in their risk assessments.^{64,65} In the section above, we recommended that the RBA only allow corporate bonds from issuers that *report*

their climate-related financial risks. The Grantham Institute proposes two further mechanisms to integrate these climate-related financial risks in collateral frameworks.⁶⁶ First, under the “environmental risk exposure” approach, credit assessments for whether financial assets can be used as collateral would consider the impact of climate-related financial risks on expected default rates (much as the RBA already excludes corporate bonds from countries it considers to be high risk). Second, under the “environmental footprint” approach, eligibility of financial assets and haircuts are adjusted based on climate risk. Imposing higher haircuts for financial assets that hold greater climate risk reduces demand for these assets as they give counterparties access to lower amounts of central bank money. McConnell et al. find that such haircuts would increase sustainable investment and reduce carbon-intensive investment and emissions, while being relatively easy to implement in current frameworks.⁶⁷ Similarly, over time central banks could set more favourable eligibility rules or haircuts for low emissions companies or climate-related assets like green bonds.

Central banks in other markets are starting to reflect climate-related financial risk in their collateral frameworks.⁶⁸ The ECB, for example, has developed a multi-stage process to green the universe of assets that banks can pledge as collateral, starting with considering climate risks when establishing haircuts for financial assets as of 2022. In future years, the ECB will limit the share of assets of carbon-intensive companies that can be used as collateral before accepting only collateral that is compliant with European Union sustainable reporting standards.⁶⁹ This emerging practice might warrant a broader review of the integration of climate-related issues in the RBA’s collateral eligibility framework,

especially if CPD’s above recommendation of eligibility rules for corporate bonds and disclosure is adopted. Central banks are often reliant on credit ratings agencies to assess the risk of eligible collateral, so engaging with these actors would be an important part of any review to better understand how they are integrating climate risk into ratings and signal the need for further practice development if required.

Recommendation I: Review all collateral eligibility rules and haircuts, including through engagement with credit rating agencies, with a view to integrating climate risk considerations.

Second, the RBA could issue a preference for green sovereign debt over other forms of government securities, potentially by offering differentiated rates based on these products being de-risked from a climate perspective. The BIS, in an illustrative exercise, found that holding both green and conventional bonds for reserve management can help generate diversification benefits for central banks and in turn improve the risk-adjusted returns of traditional government bond portfolios.⁷⁰ In other markets, central banks with a larger share of corporate bonds on their balance sheets than the RBA are also implementing ways to lower the emissions intensity of these holdings. The BoE targets a 25 percent reduction in the carbon intensity of its corporate bond holdings by 2025, and net zero by 2050,⁷¹ while the ECB is reinvesting €30 billion of maturing corporate bonds each year in assets issued by low-emissions companies.⁷² The Sveriges Riksbank of Sweden is applying negative screening in accordance with

United Nations guidelines to its corporate bond purchases.⁷³

The RBA has made ongoing investments in the Asian Bond Fund, which in part seeks to encourage the development of local currency-denominated green bond markets in Asia.⁷⁴ This is a positive initiative, and the RBA could look to use this experience to encourage further issuance of green sovereign debt from Australian issuers and other international jurisdictions through similar measures or market signalling. Similarly, the RBA could also contribute to the emergence of other debt instruments for resilience and transition activities. Green and other similar bonds will need to be issued against robust taxonomies and frameworks to ensure market credibility and avoid greenwashing. In this light the RBA should continue its welcome support for the development of an Australian taxonomy.⁷⁵

Recommendation F: Advocate for the further market development of green sovereign debt offerings by Australian and international issuers, with reference to appropriate standards and taxonomies.

Thirdly, another option available to the RBA is to consider climate change when conducting unconventional monetary policy. In response to the COVID-19 pandemic, the RBA introduced the Term Funding Facility (TFF). The TFF offered low-cost three-year loans to authorised deposit-taking institutions with the purpose of encouraging lending to businesses, particularly small- and medium-sized enterprises.⁷⁶ In the future, it may be possible to offer a similar emergency or even a standing version of the TFF that subsidises lending rates for green initiatives. In this vein the Bank of Japan

(BoJ) and the People's Bank of China (PBC) provide low-interest funds to financial institutions to loan to enterprises for use in low-carbon initiatives.⁷⁷ This is a more interventionist step, and perhaps best only pursued in conditions where the prospects for first-best practice climate policy do not exist or where the RBA is concerned that finance in the Australian market is not sufficiently responding to climate risk in other ways. It is also only possible when the RBA is taking an expansionary monetary policy stance. It is unclear at this point whether any of these conditions are true and therefore adopting this step is not a recommendation of CPD at this time, but should be continued to be considered.

Finally, the potentially more active role of central banks in an accelerated and orderly transition to net zero emissions has raised questions about the market neutrality principle. However, opinions on the role of market neutrality for central banks are beginning to shift in the face of climate change. There are two emerging streams of thought on the implications of climate change for market neutrality. The ECB is moving away from the principle, with efforts to directly encourage the formation of green financial markets.⁷⁸ Conversely, the BoJ continues to stress the importance of the principle but recognises that there is inherent risk in carbon-intensive financial assets, and that this risk should be accounted for in decisions by the central bank.⁷⁹ The traditional version of market neutrality fails to consider the double materiality that arises from climate financial risks: central banks increase these risks if they continue to conduct monetary policy without considering their own impacts on climate change.⁸⁰ An updated understanding of market neutrality could consider the climate-related financial risks that impact a central bank's balance sheet and the impact of central bank activity on the environment. This is something the RBA

should consider and monitor as global practice evolves.

Mandating the RBA for the climate challenges to come

The Issues Paper asks respondents to consider whether the existing objectives of the Board - as set out in Section 10 of the Act - remain relevant to its mission. The RBA will need to intensify its climate risk integration and strategies as the implications of fossil fuel dependency, rapid green technology deployment and worsening physical impacts accelerate. In this light it is appropriate to consider whether the current objectives create sufficient space for this necessary evolution of practice. Many of the downsides of more interventionist monetary policy to green the economy, such as mission creep and limited toolkits, are also relevant to consideration of mandate change.

Dikau and Voltz have reviewed the mandates of over 130 central banks for their applicability to addressing climate risk.⁸¹ Only a modest proportion - approximately 12 percent - were found to have an explicit reference to climate or broader sustainability themes. However, other non-specific mandates allow central banks to respond to climate issues. General objectives on financial stability have allowed most central banks to take measures to address climate risks through monetary and prudential policy. And those banks with objectives to support government policy - approximately 40 percent - are mandated to take an active role in the net zero transition, where this is a government policy. Importantly, the absence of an explicit climate or policy support objective was found to restrict central banks in taking more proactive

measures on greening financial markets due to their more contested nature.⁸²

The RBA's current objectives on currency stability and economic prosperity have already enabled it to take initial steps to addressing the risk aspects of climate-related issues. The third objective of the Act could also allow the RBA to take further measures to help green the economy because the devastating economic and physical impacts of runaway climate change will harm Australians' economic prosperity and wellbeing. However, as Dikau and Voltz, and others, state, it is more likely an explicit objective would be required.⁸³ Attempting to re-interpret existing objectives would require ongoing debate and interpretation, which could cause disruptive changes in policy under different governments and RBA Boards. Given that climate issues are decades-long (transition) and perpetual (maintenance of net zero, physical risks), mandate certainty and stability is therefore preferable.

Further, where governments are pursuing net zero, it is likely beneficial for them to consider changing central bank objectives to ensure the entire economic policy ecosystem is consistent with this objective. The Federal Government is taking active steps to address climate change, for example by legislating net zero emissions by 2050 and a reduction in greenhouse gas emissions by at least 43 percent below 2005 levels by 2030.⁸⁴ The federal commitment to reaching net zero by 2050 is bipartisan, and the same goal is stated policy of all states and territories. As Lim and Sirimaneetham find: "In countries where government policies are clearly geared towards green development, the role of [central banks and finance stability authorities] can be enhanced by amending their legislative remits. This would equip them with new tools, such as green lending facilities or asset purchase programmes."⁸⁵

This can be done most clearly by adding a fourth objective to Section 10 of the *Reserve Bank Act 1959*.

Alternatively, if the RBA Review Panel does not wish to recommend adding a new item to Section 10, or if the Government does not agree with such a recommendation, it will still be advantageous to consider a more modest mandate change to the current third objective of Section 10. This change could also account for other sustainability issues that create systemic financial stability concerns, such as biodiversity and water loss. Focus on these issues, and the role of central banks in addressing these risks, is likely to intensify in coming years as impacts worsen and financial markets more readily price this risk through mechanisms such as the Taskforce on Nature-related Financial Disclosures.⁸⁶ However, terms like sustainability are more generalised and therefore may create the interpretation and policy consistency concerns noted above.

In light of these relative trade-offs, CPD puts forward three recommendations cascading in order of preference for an evolution of the RBA mandate. The first proposes full recognition of climate-related issues in Section 10 of the Act. The second proposes a more modest change to the third objective of Section 10 to recognise the importance of sustainability. The third proposes a model where the current mandate is not changed, but the Treasurer issues a ministerial direction setting out the relationship of existing objectives with climate-related issues and Australia's commitments under the Paris Agreement.

While an explicit climate change to the objectives of Section 10 would create the most ongoing certainty and stability, all options are preferable to the status quo. If Recommendation A or similar is adopted it

may be prudent to further amend Section 10 to create a conditionality or hierarchy of additional objectives so that the RBA's stability role continues to take precedence, recognising the limited scope of monetary policy. Conditionality could include inserting a qualifier ahead of some objectives such as "where it doesn't otherwise impede [the stability objective]..." as the ECB does.⁸⁷ Maintaining the preceding reference to "contributing" in Section 10 ahead of the objectives would also ensure any new climate or sustainability-related objective is contextualised and reflects the supporting nature of monetary policy.

Recommendation J1: Section 10 of the Reserve Bank Act 1959 is amended to add the following objective - "d) an orderly transition to, and maintenance of net zero greenhouse gas emissions, and management of climate-related risks and opportunities."

Recommendation J2: Objective (c) of Section 10 of the Reserve Bank Act 1959 is amended to read: "the economic prosperity, sustainability and welfare of the people of Australia."

Recommendation J3: The Treasurer should issue a ministerial direction to the Board clarifying the government's view of how existing objectives relate to climate-related issues.

Other issues

There are governance and organisational structure issues that are also relevant to how the RBA manages climate-related issues. Given recent discussion about the make-up of the Board,⁸⁸ it may be useful to develop a skills matrix to ensure an appropriate mix of members are appointed. The development of a skills matrix has been identified as good corporate practice that can help an organisation better prepare for current and future challenges.⁸⁹ If this were to occur, climate change could be included as a specific skill to be represented on the Board given its position as a first-order issue for monetary policy and financial stability. Climate change skills are an emerging concept as they relate to directors, however recent work commissioned by the Investor Group on Climate Change has gone some way to defining the concept.⁹⁰ Climate change skills can exist on a board through the targeted appointment of a qualified candidate, training of existing board members, or both.

Recommendation D: Climate change should be included in an RBA Board skills matrix.

Climate change presents new and complex challenges that are often data and time intensive, and require significant new thinking to address. This will require dedicated time, space and capacity within the RBA to address fully. This might include the hiring of more specific staff with climate change expertise, the construction of a dedicated team within the RBA on climate change, and the removal of other burdens to create more time and space for relevant personnel to address these emerging issues, such as reducing Board

meeting frequency or other administratively intensive processes. Further, it might be that specific climate training for staff across the RBA may be useful to increase organisation capacity.

Recommendation E: The RBA should ensure there is adequate staff time, resources and in-house skills on climate change to fully address the complexity of the issues.

ENDNOTES

¹ [Network for greening the financial system pledge](#), APRA and RBA, 2022.

² [Review of the Reserve Bank of Australia annual report 2021](#), House of Representatives Standing Economic Committee, 2022.

³ G Debelle, [‘Climate change and the economy’](#), RBA, 2019.

⁴ [‘Climate & Recovery Initiative Stakeholder Roundtable Nine’](#), CPD, 2022.

⁵ T Arup and F Simpson, [Discussion paper for the Climate & Recovery Initiative ninth roundtable: Interactions between inflation, energy, economic policy and climate change](#), CPD, 2022.

⁶ Central banks have many tools at their disposal, but it may not be necessary (or desirable) to use them all at once. This is explored further in: S Dikau and U Volz, [‘Central bank mandates, sustainability objectives and the promotion of green finance’](#), *Ecological Economics*, 2021.

⁷ [Climate change 2022: Impacts, adaptation and vulnerability](#), IPCC, 2022.

⁸ [Renewables 2021: Analysis and forecast to 2026](#), International Energy Agency, 2021.

⁹ [‘From Paris to Glasgow: A world on the move’](#), Climate Council, 2021.

¹⁰ J Kearns, [‘Climate change risk in the financial system’](#), RBA, 2022.

¹¹ This would be consistent with CPD’s past recommendations on the duties of publicly authority directors: A Dibley, N Young, T Phillips, [Raising the bar Managing climate change risk in public authorities](#), CPD, 2022.

¹² J Kearns, op. cit.; [‘Managing climate-related risks’](#), European Central Bank, 2022; P Monnin, [Central banks and the transition to a low-carbon economy](#), Council on Economic Policies, 2018.

¹³ C Brunetti et al., [‘Climate change and financial stability’](#), Federal Reserve, 2021.

¹⁴ [On the role of central banks in enhancing green finance](#), UN Environment Programme, 2017.

¹⁵ X Lim and V Sirimaneetham, [Securing green development: Can Asia-Pacific central banks and financial supervisory authorities do more?](#) UN Economic and Social Commission for Asia and the Pacific, 2021.

¹⁶ I Schnabel, [‘Central banks must do their part in fighting global warming’](#), International Monetary Fund, 2021.

¹⁷ [The turning point: A global summary](#), Deloitte, 2022.

¹⁸ P Bolton et al., [The green swan: Central banking and financial stability in the age of climate change](#), BIS, 2020.

¹⁹ I Schnabel, [‘A new age of energy inflation: climateflation, fossilflation and greenflation’](#), ECB, 2022.

²⁰ [Review of the Reserve Bank of Australia: Issues paper](#), Australian Government, 2022.

²¹ W McKibbin and AJ Panton, [Twenty-five years of inflation targeting in Australia: Are there better alternatives for the next twenty-five years?](#) RBA, 2018.

²² I Schnabel op. cit., 2022.

²³ W McKibbin et al., [Climate change and monetary policy: Dealing with disruption](#), Brookings Institute, 2017.

²⁴ J Kearns, op. cit.

²⁵ [Box C: Financial stability risks from climate change](#), RBA, 2019.

²⁶ [‘Liabilities and assets - Detailed - A.1.1’ and ‘Holdings of Australian government securities and semis - A.3.1’](#), RBA, 2022.

²⁷ [‘Sovereign debt’](#), Principles for Responsible Investment, 2022.

²⁸ SA Zenios, '[The risks from climate change to sovereign debt](#)', *Climatic Change*, 2022; SA Zenios, '[Understanding the climate risks to sovereign debt: From data to models](#)', European Fiscal Board, 2022.

²⁹ '[Operations in financial markets: Reserve Bank of Australia annual report](#)', RBA, 2021.

³⁰ D Kyriakopoulou, '[Central banks and climate-related disclosures: applying the TCFD's recommendations](#)', Grantham Institute, 2022.

³¹ '[Guide on climate-related disclosure for central banks](#)', NGFS, 2021.

³² '[The Bank of England's climate-related financial disclosure 2022](#)', Bank of England, 2022.

³³ '[Report on social, environmental and climate-related risks and opportunities](#)', Banco Central do Brasil, 2021.

³⁴ '[Responsible investment report 2021](#)', Banque de France, 2021.

³⁵ '[The Bank of England's climate-related financial disclosure 2022](#)', op. cit.

³⁶ '[Responsible investment report 2021](#)', op. cit.

³⁷ '[Network for greening the financial system pledge](#)', op. cit.

³⁸ '[Council of Financial Regulators climate change activity stocktake 2022](#)', Council of Financial Regulators Climate Working Group, 2022.

³⁹ '[BIS report notes existing gaps in climate risk data at central banks](#)', *Moody's Analytics*, 2022.

⁴⁰ '[TCFD workshop: Session 1 - Fundamentals and overview of TCFD](#)', TCFD, 2022.

⁴¹ J Greber and S Patten, '[Momentum builds for national approach to climate risk reporting](#)', *Australian Financial Review*, 2022.

⁴² A Dibley et al., op. cit.

⁴³ '[ECB takes further steps to incorporate climate change into its monetary policy operations](#)', ECB, 2022.

⁴⁴ '[Central Banks and Financial Supervisors Urged to Step up Action on Nature and Climate](#)', World Wildlife Fund, 2022.

⁴⁵ N Robins et al., '[Net-zero central banking: A new phase in greening the financial system](#)', Grantham Institute, 2021.

⁴⁶ R Şimandan and C Păun, '[The Costs and Trade-Offs of Green Central Banking: A Framework for Analysis](#)', *Energies*, 2021; P Wunsch, '[Climate change and the ECB: we need both enthusiasm and realism](#)', ECB, 2021.

⁴⁷ '[The Bank of England's climate-related financial disclosure 2022](#)', op. cit.

⁴⁸ R Abiry et al., '[Green QE and carbon pricing: Looking at potential tools to fight climate change](#)', ECB, 2022.

⁴⁹ '[On the role of central banks in enhancing green finance](#)', op. cit..

⁵⁰ T Kompas et al., '[Australia's Clean Economy Future: Costs and Benefits](#)', University of Melbourne, 2020.

⁵¹ '[Climate Change Bill 2022](#)', Australian Government, 2022.

⁵² K Crowley, '[Fighting the future: The politics of climate policy failure in Australia \(2015–2020\)](#)', *WIREs Climate Change*, 2021.

⁵³ G Debelle, op. cit.

⁵⁴ '[Seventh Statement on the Conduct of Monetary Policy](#)', Australian Government, 2016.

⁵⁵ *ibid.*

⁵⁶ R Clun and S Wright, '[Lowe calls for higher taxes, predicts house price falls and rising unemployment](#)', *Sydney Morning Herald*, 2022.

⁵⁷ '[A call for action: Climate change as a source of financial risk](#)', NGFS, 2019.

⁵⁸ L Bartholomew et al., '[Climate change and central banks: The case for violating market neutrality](#)', Centre for Economic Policy Research, 2021.

⁵⁹ S Dikau and U Volz, op. cit.

⁶⁰ '[On the role of central banks in enhancing green finance](#)', op. cit.

⁶¹ Y Dafermos et al., [Greening the Eurosystem collateral framework: How to decarbonise the ECB's monetary policy](#), New Economics Foundation, 2021.

⁶² L Pelizzon et al., '[Collateral eligibility of corporate debt in the Eurosystem](#)', *SSRN*, 2020.

⁶³ Y Dafermos et al., [Greening collateral frameworks](#), Grantham Institute, 2022.

⁶⁴ *ibid.*

⁶⁵ F Elderson and I Schnabel, '[A catalyst for greening the financial system](#)', ECB, 2022.

⁶⁶ Y Dafermos et al., *op. cit.*

⁶⁷ McConnell et al., '[Central bank collateral as a green monetary policy instrument](#)', 2021.

⁶⁸ '[ECB takes further steps to incorporate climate change into its monetary policy operations](#)', *op. cit.*; Banque de France, '[Greening monetary policy: Evidence from the People's Bank of China](#)', Green Central Banking, 2022.

⁶⁹ '[ECB takes further steps to incorporate climate change into its monetary policy operations](#)', *op. cit.*

⁷⁰ I Fedner et al., [Green bonds: the reserve management perspective](#), BIS, 2019.

⁷¹ '[The Bank of England's climate-related financial disclosure 2022](#)', *op. cit.*

⁷² F Elderson and I Schnabel, '[A catalyst for greening the financial system](#)', *op. cit.*

⁷³ M Andersson and M Stenström, [Sustainability considerations when purchasing corporate bonds](#), Sveriges Riksbank, 2021.

⁷⁴ [Network for greening the financial system pledge](#), *op. cit.*

⁷⁵ J Kearns, *op. cit.*

⁷⁶ '[Term Funding Facility to support the Australian economy](#)', RBA, 2022.

⁷⁷ L Kihara and D Leussink, '[BOJ rolls out climate scheme, to disburse first loans late December](#)', *Reuters*, 2021; '[The People's Bank of China launches the Carbon Emission Reduction Facility](#)', PBC, 2021.

⁷⁸ I Schnabel, *op. cit.*, 2022.

⁷⁹ H Kuroda, '[Haruhiko Kuroda: The Bank of Japan's strategy on climate change](#)', BIS, 2021.

⁸⁰ Oustry et al., '[Climate-related risks and central banks' collateral policy: A methodological experiment](#)', Banque de France, 2020.

⁸¹ S Dikau and U Volz, *op. cit.*

⁸² L Boneva et al., '[Climate change and central banks: what role for monetary policy?](#)', *Climate Policy*, 2022.

⁸³ S Dikau and U Volz, *op. cit.*; *ibid.*

⁸⁴ [Climate Change Bill 2022](#), *op. cit.*

⁸⁵ X Lim and V Sirimaneetham, *op. cit.*

⁸⁶ '[Statement on Nature-Related Financial Risks](#)', NGFS, 2022.

⁸⁷ '[Monetary Policy: Introduction](#)', ECB, n.d.

⁸⁸ J Kehoe, '[Chalmers wants RBA board "diversity"](#)', *Australian Financial Review*, 2022.

⁸⁹ [Good Governance Guide: Creating and disclosing a board skills matrix](#), Governance Institute of Australia, 2015.

⁹⁰ '[A changing climate: What investors expect of company directors on climate risk](#)', Investor Group on Climate Change, 2021.



CREATE. CONNECT. CONVINCED.

Published by the Centre for Policy Development

© Centre for Policy Development 2022

All CPD papers are released under a Creative Commons license.

CONNECT WITH US

Twitter: [@centrepolicydev](https://twitter.com/centrepolicydev)

Facebook: [centrepolicydev](https://www.facebook.com/centrepolicydev)

LinkedIn: [Centre for Policy Development](https://www.linkedin.com/company/centre-for-policy-development)

Website: [Cpd.org.au](https://cpd.org.au)

CONTACT

Melbourne

Level 16, 1 Nicholson Street,
East Melbourne VIC 3002

+61 3 9929 9915

Sydney

Level 6, 115 Pitt Street,
Sydney NSW 2000

+61 2 8199 9407