

SUBMISSION: SETTING, TRACKING AND ACHIEVING AUSTRALIA'S CLIMATE TARGETS – CONSULTATION

PRI-COORDINATED COLLABORATIVE SOVEREIGN ENGAGEMENT ON CLIMATE CHANGE

June 2023

The information contained in this briefing is provided for informational purposes only and should not be construed as legal advice on any subject matter. Except where expressly stated otherwise, the opinions, recommendations, findings, interpretations and conclusions expressed in this report are those of PRI Association, and do not necessarily represent the views of the contributors to the briefing or any signatories to the Principles for Responsible Investment (individually or as a whole). To inform this briefing, the following investor group has been consulted: PRI-Led Collaborative Sovereign Engagement on Climate Change Advisory Committee. This consultation is not an endorsement or acknowledgement of the views expressed in this briefing.

PRI Association

Registered office: 25 Camperdown Street
London, UK, E1 8DZ Company no. 7207947
T: +44 (0) 20 3714 3220 W: www.unpri.org E: info@unpri.org



**United Nations
Global Compact**

INTRODUCTION

We thank the Climate Change Authority (the Authority) for the opportunity to make this submission. It is critical for institutional investors with significant stakes in the Australian economy that an orderly transition to net zero emissions occurs consistent with the Paris Agreement goals to ensure portfolio climate risks and opportunities can be managed for beneficiaries. Ensuring an accelerated and orderly transition will also help Australia maintain its competitiveness in global markets and the confidence of international investors in the performance of its sovereign bonds, companies and other investable assets.

This submission has been prepared with the input of the Advisory Committee for the Principles for Responsible Investment (PRI)-Coordinated Collaborative Sovereign Engagement on Climate Change.¹ Institutional investors represented on the Advisory Committee are responsible for a combined US\$2.6 trillion in assets under management (AUM) and include:

- Aviva Investors
- BNP Paribas Asset Management
- Brandywine GLOBAL
- HESTA
- Investor Group on Climate Change
- Nordea
- Robeco
- Schroders

The engagement is coordinated by the PRI, a United Nations-supported global network of investors demonstrating their commitment to responsible ownership and long-term, sustainable returns, consisting of 5000 signatories, responsible for over US\$120 trillion in AUM.

About PRI

PRI works with its international network of signatories to put six Principles for Responsible Investment² into practice. PRI's goals are to understand the investment implications of environmental, social and governance (ESG) issues and to support signatories in integrating these issues into investment and ownership decisions. The PRI acts in the long-term interests of its signatories, of the financial markets and economies in which they operate, and ultimately of the environment and society as a whole. The PRI develops policy analysis and recommendations based on signatory views and evidence-based policy research.

The six Principles for Responsible Investment are a voluntary and aspirational set of investment principles that offer a range of possible actions for incorporating ESG issues into investment practice. The Principles were developed by investors, for investors. In implementing them, signatories contribute to developing a more sustainable global financial system.

¹ <https://www.unpri.org/collaborative-engagements/collaborative-sovereign-engagement-on-climate-change-australian-pilot/10525.article>

² <https://www.unpri.org/about-us/what-are-the-principles-for-responsible-investment>

About the Collaborative Sovereign Engagement on Climate Change

This collaborative sovereign engagement initiative has been convened by PRI and global investors to assist governments to take all possible steps to mitigate greenhouse gas emissions and build resilience to climate damage in line with the Paris Agreement and stabilising average global warming to 1.5°C.

Since September 2022, the initiative has had a pilot focus on Australia and participating investors have met with almost 20 sovereign, sub-sovereign and other related entities across the market. Participating investors are grateful for the constructive dialogue that Australian officials and others have provided to date.

Investors are seeking sovereign engagement to reduce exposure to risks associated with a failure to rapidly transition to a net zero global economy, including:

- Risks to investments in Australian sovereign debt (including downgrade).
- Where it harms the competitiveness of the Australian economy (including the enabling environment for investee companies).
- Where it contributes to systemic or systematic risks that diversified or universal investors face through their exposure to the global economy.

Through the engagement, investors are seeking that sovereign responses to climate change:

- Close the gap between current action and a Paris-aligned emissions reduction trajectory.
- Establish detailed, credible and economy-wide national net zero transition plans with supporting policy mechanisms, budget expenditure and investment structures.
- Build climate adaptation and resilience to avoid worsening economic and social disruption and damage from physical risks.
- Improve disclosure of sovereign exposure to climate risks and opportunities consistent with international standards.

International investors welcome policy progress on greenhouse gas emissions mitigation in Australia at the national and state-level. Australia has been an attractive market to invest in for many reasons and this will be enhanced by advancing an orderly Paris-aligned transition and a concerted effort to develop and expand those export industries relevant in a net zero world.

Investors are seeking to engage with Australian sovereign entities because they want to maintain and grow their investment footprint in the market and believe that addressing climate change risks and maximising transition opportunities can enable greater capital flows, ensure sustainable returns for beneficiaries and help contribute to the goals of the Paris Agreement.

About this consultation

Australia's Climate Change Authority has released a paper³ consulting on a series of issues and frameworks relevant to its 2023-24 work program. This includes the Authority's advice to inform the Federal Government's 2023 Annual Climate Statement and the development of emissions reduction targets for Australia's next Nationally Determined Contribution (NDC), alongside reviews of the country's legislated offsetting and emissions reporting schemes.

Many components of the Authority's 2023-24 workplan are critical to the objectives of the collaborative sovereign engagement.

This submission provides some framing comments and a recommendation about integration of sovereign climate risk and capital cost issues to assist the Authority in considering economic and social factors that may influence its advice on the next NDC. This is followed by short responses to select questions posed by the Authority that are most relevant to the sovereign engagement.

For more information, please contact:

Tom Arup
Senior Stewardship Specialist (Sovereign Climate Engagement)
PRI
tom.arup@unpri.org

³ https://storage.googleapis.com/files-au-climate/cca/p/prj269666b7ef74faa9fbef5/public_assets/Issues%20Paper%202023%20-%20Setting,%20measuring%20and%20achieving%20Australia's%20emissions%20reduction%20targets.pdf

OVERVIEW COMMENTS

Institutional investors are increasingly aware of, concerned about, and tracking climate change risks and clean industry opportunities across their portfolios. A growing number of institutional investors have also committed to transition their portfolios to net zero emissions by 2050 or sooner through common global frameworks such as the UN-convened Net Zero Asset Owners Alliance,⁴ the Paris Aligned Asset Owner Commitment⁵ and Net Zero Asset Managers Initiative.⁶ This is driving deeper consideration of the climate performance of all asset classes and their potential decarbonisation pathways, including sovereign bonds.

Investor Practice

Investors, industry data providers and rating agencies are now using increasingly sophisticated approaches to assess sovereign climate exposure and performance that are in turn influencing investment decisions. To achieve net zero goals, realign portfolios and ensure sustainable long-term returns for beneficiaries, investors will increasingly direct investments towards equities, bonds and other assets from issuers with credible net zero transition policies and plans, and who can demonstrate clear progress against them.

This practice is evolving rapidly. Investor assessments of sovereign climate risk are typically conducted using a mix of quantitative measures, such as emissions and related activity data, with qualitative overlays that capture policy decisions and other information, contextualising scores and enabling forward looking judgements. Qualitative overlays have allowed investors to increase the complexity of their assessments as they can be updated in real-time and account for developments that do not lend themselves to quantification. Importantly, these overlays can also be informed by sovereign engagement.

ASCOR

The Assessing Sovereign Climate-related Opportunities and Risks (ASCOR) project is also in development. ASCOR is intended to be a public framework and database to help investors assess countries on climate change.⁷ In early-2023, the ASCOR team – made up of investors, academic institutions, the PRI and other networks – released a draft assessment framework, underpinned by a series of metrics.⁸ These metrics seek to capture sovereign performance on managing climate change and financing their response. Indicative examples of the types of metrics being proposed by ASCOR include:

- The five-year annual percentage change in a country's absolute greenhouse gas emissions.
- The five-year percentage change in a country's GDP emissions intensity.
- A country's 2030 emissions target alignment with 1.5°C national benchmark scenarios.
- The percentage of a country's electricity coming from fossil fuels.
- Does a country's national climate strategy involve social dialogue with affected workers.

⁴ <https://www.unepfi.org/net-zero-alliance/>

⁵ https://www.parisalignedassetowners.org/media/2022/11/PAAO-Progress-Report-November2022_Final.pdf

⁶ <https://www.netzeroassetmanagers.org/>

⁷ <https://www.ascorproject.org/>

⁸ <https://www.ascorproject.org/ascor-consultation-to-assess-sovereign-debt-issuers-on-climate-change>

A set of preliminary ASCOR country assessments, including for Australia, will be conducted following consultation on the metrics and framework. Given the benchmark's public nature it is expected ASCOR will further advance and consolidate investor practice on sovereign climate risk. ASCOR will create a baseline standard on which investors can add additional metrics and overlays via in-house frameworks and external data products

Table 1. Draft ASCOR framework for assessing sovereign climate alignment

Performance of countries on managing climate change		Financing countries' climate risks and opportunities
<i>Pillar 1: Emission pathways (EP)</i>	<i>Pillar 2: Climate policies (CP)</i>	<i>Pillar 3: Opportunities to finance the transition (OFT)</i>
<i>EP 1: Emission trends</i>	<i>CP 1: Mitigation</i>	<i>OFT 1: Financing mitigation</i>
<i>EP 2: 2030 targets</i>	<i>CP 2: Adaptation</i>	<i>OFT 2: Financing adaptation</i>
<i>EP 3: Net zero targets</i>	<i>CP 3: Just transition</i>	<i>OFT 3: Financing transition opportunities</i>

Source: ASCOR⁹

Transmission of climate risk to sovereign risk

This growing investor practice is underpinned by a burgeoning field of research detailing clear transmission between climate risk and sovereign risk. The European Central Bank has for example warned that climate risks can have a negative impact on public finance through lower tax revenues, higher public debt and the reallocation of funds from other investments. This could trigger explicit and implicit contingent liabilities that hit public finances and weigh on debt sustainability and borrowing costs.¹⁰ The Centre for Sustainable Finance et al. have similarly identified six transmission channels between climate risk and sovereign risk, as set out in Figure 1.¹¹

As a result, several studies have demonstrated that climate risk vulnerability is already having an impact on sovereign borrowing costs. To date this remains mostly contained to emerging economies and their exposure to worsening physical risks,¹²¹³ though some find evidence that transition risks are affecting the 10-year bond yield rates of some developed nations.¹⁴

⁹ <https://transitionpathwayinitiative.org/publications/112.pdf?type=Publication>

¹⁰ https://www.ecb.europa.eu/pub/financial-stability/fsr/special/html/ecb.fsrart202305_03~f51dd11fd7.en.html

¹¹ https://eprints.soas.ac.uk/33524/1/Climate%20Change%20and%20Sovereign%20Risk_final.pdf

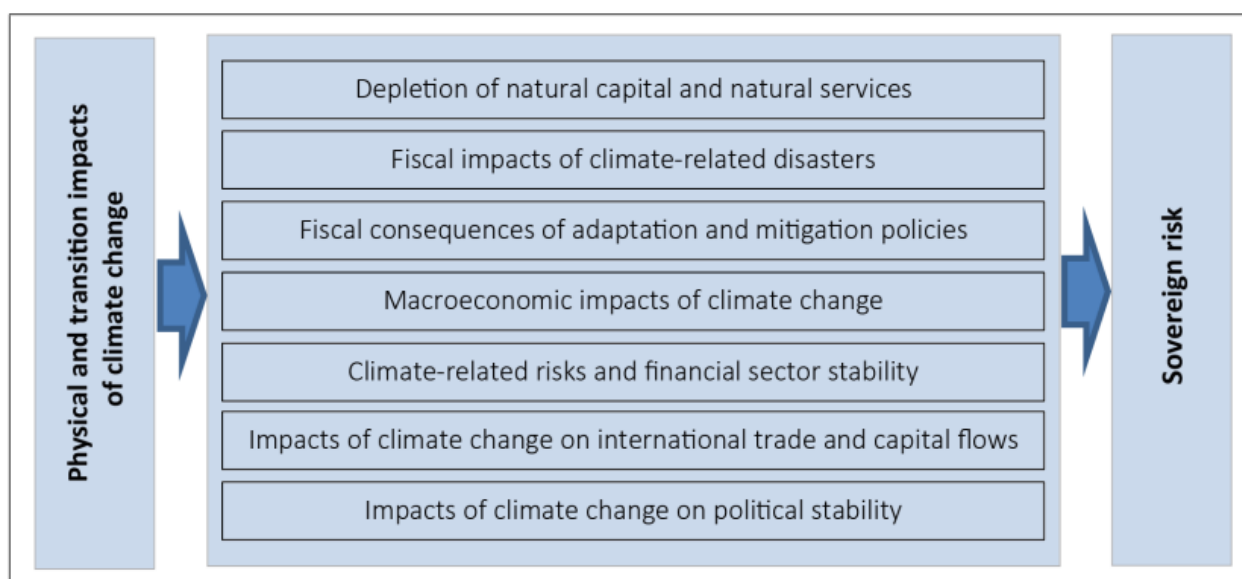
¹² *ibid.*

¹³ <https://wedocs.unep.org/handle/20.500.11822/26007;jsessionid=190ACDE6E11081B52A255378FBAF33A1>

¹⁴

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3861350#:~:text=Is%20climate%20transition%20risk%20factored,incur%20a%20lower%20borrowing%20cost.

Figure 1. Transmission of climate risk to sovereign risk



Source: *The Centre for Sustainable Finance et al.*¹⁵

Exposure for all markets will worsen as global warming intensifies. Over time the drag on sovereign bond performance will be felt more widely across developed markets like Australia. FTSE Russell, for example, has found Australia could face significant rises in its debt-to-GDP ratio with worsening transition and physical risks in coming decades, and even the prospect of default under some disorderly transition scenarios.¹⁶ Battiston and Monasterolo have found “countries whose revenues derive directly or indirectly from fossil fuel-based energy production or consumption, have a positive climate spread and thus higher yields on the sovereign. This, in turn, negatively affects the value of the sovereign portfolio of investors exposed to such countries.”¹⁷ Assessing OECD country-bonds, these authors found those from Australian and Norway, as nations with an economic over-reliance and exposure to fossil fuel industries, are exposed to the largest negative value shocks under a disorderly transition to a 2°C world.

Australian performance

Australia more generally performs poorly in sovereign climate risk assessments compared against peer nations in the developed world. Investors’ assessments of sovereign climate performance highlight the emissions intensity of the Australian economy, reliance on fossil fuels and that policies to deliver net zero by 2050 are comparatively underdeveloped, even with recent progress on targets and policies to 2030.

As a result, some Australian-issued debt has been excluded from some funds by some investors, notably in the case of Queensland and Western Australia-issued bonds by Sveriges Riksbank in

¹⁵ https://eprints.soas.ac.uk/33524/1/Climate%20Change%20and%20Sovereign%20Risk_final.pdf

¹⁶ https://content.ftserussell.com/sites/default/files/anticipating_the_climate_change_risks_for_sovereign_bonds-part_2_final.pdf

¹⁷ https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3376218

2019.¹⁸ Investors have subsequently demonstrated that positive steps in climate strategy can lead to an increased appetite to invest or reinvest in Australian markets. For example, Western Australia's commitment to close two coal power plants before 2030 and make public investments in renewable energy and battery storage was recently cited by investors as reason to participate in the state's green bond issuance.¹⁹

The investment concern created by sovereign climate risk is not contained to sovereign bonds. Australia has the joint highest emissions intensive economy in the Organisation for Economic Co-operation and Development (OECD) alongside Canada.²⁰ As a result, passive investment in the ASX200 exposes investors to about double the carbon intensity per dollar invested as other major markets.²¹ Universal owners are exposed to all global climate risk and damage created by the failure of major markets to cut emissions consistent with the Paris Agreement goals. Australia contributes to this global risk given the size and emissions intensity of its economy, and its outsized contribution to global emissions through fossil fuel exports.²²

Where investors can find equivalent opportunities in alternative markets with stronger climate alignment, Australia will increasingly face a higher cost of capital or miss out. This has been recognised by the Commonwealth Treasury, who advised in 2021:

"Given the carbon-intensive nature of Australia's economy, as these trends accelerate to 2050, they will impact Australian firms that access global equity and debt markets, as well as the investment preferences of global and local institutions operating in Australian markets. They could also impact demand for Australian Government debt, resulting in higher financing costs."²³

Treasury estimated that the capital risk premium associated with poor Australian transition policies could range from 100 to 300 basis points by 2050. Subsequent modelling conducted for the Federal Government found the lower end of this premium could lead to a 17 percent reduction in average investment by around 2030, which would in turn reduce economic activity and national income.²⁴

Australia performs well on many other measures that investors use to assess sovereign performance such as governance and fiscal strategy. Poor climate performance will otherwise increasingly weigh down Australian competitiveness in global markets.

Recommendation

These investor practice, capital cost and competitiveness issues are critical to the development of Australia's next NDC and the Authority's economic and social considerations in its advice. At a time when other jurisdictions, notably the United States, China, the European Union and Japan, are

¹⁸ <https://www.ft.com/content/076e9978-06c2-11ea-9afa-d9e2401fa7ca>

¹⁹ <https://www.afr.com/markets/debt-markets/bond-investors-impressed-by-wa-s-compelling-green-turnaround-20230615-p5dgp1>

²⁰ https://stats.oecd.org/Index.aspx?DataSetCode=AIR_GHG

²¹ <https://igcc.org.au/wp-content/uploads/2022/09/IGCC-Policy-2025-PrioritiesWeb.pdf>

²² <https://grattan.edu.au/news/global-emissions-from-australian-carbon-exports-dwarf-any-declines-in-australias-domestic-emissions/>

²³ <https://www.dcceew.gov.au/sites/default/files/documents/australias-long-term-emissions-reduction-plan-modelling.pdf>

²⁴ *ibid.*

committing large amounts of public finance to attract investment into domestic clean energy and other industries, Australia will need to remain competitive in this global race to attract capital to fund its net zero transition, manage its debt and underpin domestic economic performance.

The downside investment risk for Australia exists predominantly in a failure to target, plan for, and drive an accelerated and orderly transition to net zero emissions consistent with the Paris Agreement goals. Similarly, there is enormous investment upside in Australia accelerating its transition to fully capture the value of the nation's natural advantages in export materials and industries.²⁵ As the Authority itself noted in 2021: "It no longer makes sense to think about lowering carbon emissions as a cost. It is a source of competitive advantage."²⁶

As has been widely documented, there is an important minority of workers and communities in regional Australia who will be disproportionately affected by an inevitable transition to net zero due to their communities' historic reliance on fossil fuel industries.²⁷ The Authority and policy makers need to consider and respond to the specific concerns of these communities. But this should not influence the overall NDC ambition and instead consist of coordinated measures for community transition, social support, new employment and increased investment in these regions.

Arguments that equate the narrower interests of some emissions-intensive industries and companies with Australia's broader economic competitiveness, that in turn may lead to consideration of a weaker NDC outcome, are not substantiated by the trends in investor practice and global capital markets detailed above.

Recommendation: The benefits of an accelerated, orderly and Paris-aligned NDC for Australia's sovereign climate risk profile, economic competitiveness and future cost of capital should be reflected by the Authority in its final advice to the Federal Government.

²⁵ <https://bze.org.au/wp-content/uploads/2021/09/Beyond-Zero-Emissions-Export-Powerhouse-Summary-Report.pdf>

²⁶ <https://www.climatechangeauthority.gov.au/sites/default/files/2021-10/Paris%20Plus%20Insights%20Paper%20FINAL.pdf>

²⁷ https://cpd.org.au/wp-content/uploads/2022/01/whos_buying_report_full.pdf

RESPONSE TO SELECTED QUESTIONS

5. What are the other challenges and opportunities the global context presents Australia with in responding to climate change?

As noted in Overview Comments, there is considerable evidence that the cost of capital for Australian governments and companies is affected by the market's assessment of sovereign climate alignment. This profile is determined by the nature and pace of the transition to net zero emissions, the exposure of the economy to physical and transition risks, and the ability to seize opportunities in clean industries and technologies. There is competition for global capital, and stronger sovereign climate performance will make a market more attractive for investment.

In this context Australia should be conscious of the significant increase in public expenditure in many major markets towards developing and expanding clean industries and technologies. Most notably large pools of public finance and other incentives have been established in China, the United States, the European Union and Japan, among others.²⁸ Many of these policies and incentive packages have come in response to developments in other markets, indicating it is being driven by a global competition that has been characterised by the Inevitable Policy Response as a “race to the top” on clean energy.²⁹

Investors welcome additional Australian public support to bring forward clean technologies and help decarbonise households contained in the 2023-24 Federal Budget. Investors also recognise the views of some domestic industry representatives, like the Clean Energy Council and the Investor Group on Climate Change, who have noted Australia's response to date has not reflected the scale and pace of global developments.^{30,31}

Finally, institutional investors who are exposed to global climate change risks and opportunities are increasingly conscious of the interlinkages between different sovereigns and their contribution to global mitigation via trade, technology transfer and finance. To this end, investors also track the Scope 3 emissions of sovereigns and assess their potential for future export earnings from net zero consistent products in their assessments.

As the Authority has noted in its consultation paper, Australia makes an outsized contribution to global climate change risk through fossil fuel exports. Similarly, investors recognise Australia is blessed with natural advantages in critical minerals and potential clean energy production that could in turn help trading partners meet their own decarbonisation objectives. Accelerated Australian investment in clean energy industries would also assist in bringing critical technologies down the cost curve like forecasts of the impact of the US Inflation Reduction Act.³²

²⁸ <https://igcc.org.au/wp-content/uploads/2023/04/Full-Report-IGCC-Funding-an-Australian-Climate-Tech-Boom.pdf>

²⁹ <https://www.unpri.org/download?ac=17824>

³⁰ <https://www.cleanenergycouncil.org.au/news/australia-remains-in-the-race-to-meet-europes-growing-green-energy-demand-for-now>

³¹ <https://igcc.org.au/wp-content/uploads/2023/04/Full-Report-IGCC-Funding-an-Australian-Climate-Tech-Boom.pdf>

³² <https://media-publications.bcg.com/BCG-Executive-Perspectives-US-Inflation-Reduction-Act-16August2022.pdf>

6. What role is there for corporate action to 2030 and beyond?

Collaborative investor engagement with investee companies through initiatives like Climate Action 100+ have resulted in significant corporate progresses on climate change across many industries and markets, including in Australia.³³ However, investor-investee dialogue and voluntary corporate responses to climate change are frequently responsive to the enabling policy environment. Some large capex, project or transition decisions need market signals like strong national targets, mandatory policies and public investment to give company decision makers greater confidence to make structural change. Weak policy environments can create a “policy ceiling” for investor engagement with their listed equities holdings, limiting their ability to manage climate risk exposure except via divestment.

The Safeguard Mechanism remains the primary regulatory signal to Australian companies on climate change. The recent reforms of the Mechanism have been welcomed by investors and associated networks, including PRI.³⁴ However, further reform may be required to ensure baselines are set to 1.5°C trajectories for specific-industries and that offsetting arrangements do not provide a disincentive to structural transition.

In the absence of other more explicit pricing signals, such as a mandatory economy-wide emissions trading scheme, the Australian Government could consider further efforts to accelerate corporate transition by:

- Adopting clear industry decarbonisation pathways consistent with the Paris Agreement goals with industry-specific targets. This would help investors understand the progress of companies, crowd investment into specific-sectors at the right time, guide research, development and deployment priorities, and assist governments establish further industry-specific policies.
- Using the 2025-6 review of the Safeguard Mechanism to close the gap between current industry emissions trajectories and Paris-aligned pathways.
- Creating a clear framework for developing and disclosing climate transition plans which supports a whole-of-economy transition aligned with limiting global temperatures to 1.5°C. This would include introducing best practice regulatory guidance and minimum requirements for transition plan disclosure in Australia.

8. How could the Authority best strike a balance between ambition, domestic considerations and the international context in its 2023 NDC advice?

As noted in Overview Comments, the downside economic risk for Australia exists in a failure to drive an accelerated and orderly transition that is consistent with the Paris Agreement. NDC targets and supporting policies consistent with Australia’s commitment to the Paris Agreement temperature goals will make the country more competitive in global capital markets and result in a lower cost of capital, including for servicing national and state debt.

³³ <https://www.climateaction100.org/>

³⁴ <https://iqcc.org.au/wp-content/uploads/2023/03/SM-Joint-Statement-FINAL-W-LOGOS59.pdf>

The Authority's four pillar Target-setting Framework contains many metrics that investors use to assess sovereign climate alignment. In addition to its Framework, the Authority could also consider application of equity-based and least cost transition pathways to ensure its framework is consistent with global assessments of sovereign climate alignment. For example, the ASCOR project has stated it will assess sovereign climate targets against country-specific 1.5°C-aligned mitigation scenarios and a fair share allowance.³⁵

9. What do you think Australia's 2035 target should be and why?

The PRI-coordinated sovereign engagement does not hold a position on the exact target Australia should adopt for 2035. Through the 2022 Global Investor Statement to Governments on Climate Change, over 600 investors have called on all governments to align NDC targets with the goal of keeping global temperature rise to 1.5°C.³⁶ Similarly, this engagement seeks all sovereigns, including Australia, to progressively bridge the gap between current emissions trajectories and a 1.5°C pathway.

The strength of the 2035 target should therefore be consistent with Australia's commitments to the Paris Agreement goals and stabilising average global warming to 1.5°C. Doing this would avoid future capital cost premiums and help mitigate worsening climate damage to the economy. Goals that are inconsistent with the Paris Agreement will lead to a more disorderly transition, and in turn more economic risk, greater capital costs and less investment.

10. What are some leading indicators of progress towards net zero emissions?

Investors use a wide range of quantitative and qualitative metrics to assess sovereign climate alignment that may be applicable to the Authority's tracking of Australian progress. For example, these metrics can include:

- The level and trend of absolute emissions and emissions intensity (including alignment with the Paris Agreement temperature goals).
- Emission reduction targets (including Paris alignment).
- Policy frameworks and progress in key sectors (for example in transport: combustion vehicle phaseout policies, consumer and/or industry incentives, share of vehicle sales that are low emissions).

Alongside these increasingly standard metrics, the Authority should consider measures that specifically track the emissions associated with Australian economic activity, exports and national budget revenue. These metrics will help indicate whether the structure of the Australian economy, its contribution to climate change, and its exposure to climate risks, is appropriately transitioning. On this theme, the ASCOR project proposes to assess sovereign climate alignment in part with finance-related metrics including the country's exposure to the low-carbon transition as measured by the International Monetary Fund.³⁷

³⁵ <https://transitionpathwayinitiative.org/publications/112.pdf?type=Publication>

³⁶ <https://theinvestoragenda.org/wp-content/uploads/2022/08/2022-Global-Investor-Statement-.pdf>

³⁷ <https://transitionpathwayinitiative.org/publications/112.pdf?type=Publication>

As noted in the response to Question 5, investors consider emissions contributions beyond national borders as a component of sovereign climate risk. Therefore, it would be prudent for the Authority to track and report on the Scope 3 emissions of Australian exports, as one proxy measure of transition risk exposure.

11. What are some leading indicators of progress towards preparing for and adapting to climate change?

Metrics to assess climate adaptation performance can be complex given the importance and interaction of a range of economic and social factors that determine this such as supply chains, access to health care and other community support and infrastructure standards. Metrics used by investors assessments include the presence, quality, scope and frequency of national climate assessments and associated expenditure. The draft ASCOR metrics also include metrics on the economic preparedness for worsening climate damage by tracking projected GDP loss due to climate damage.³⁸

The World Risk Index has established a wide set of metrics across themes like exposure, vulnerability coping capability and adaptive capabilities to assess risk exposure to worsening natural disasters.³⁹ It may be that the Authority could use a series of existing composite indexes for physical risk as ASCOR has proposed to adopt.⁴⁰

14. What are the most important things to consider when assessing the adequacy of a country's NDC?

Please see Overview Comments and the answer to Question 9.

16. What do you see as the challenges and opportunities from a phase out of fossil fuel production? What should the Government consider when determining a plan for the phase out of fossil fuels?

This submission has already set out a series of benefits from the phase out of fossil fuel production for Australia's competitiveness in global capital markets. It is also critical that Australian governments have a clearly articulated budget strategy for inevitable change in the relative rates of economic activity associated with fossil fuels and clean industries. As noted by the European Central Bank, climate-related issues are expected to have direct and indirect impacts of sovereign balance sheets,⁴¹ which may affect the performance of sovereign bonds over time.

Australia has a significant but not unmanageable sovereign balance exposure to climate risks. While there is significant exposure through physical risks, developed countries are also exposed via fiscal reliance on revenue from fossil fuel-related activities. Australia is the sixth largest producer of fossil fuels and the fourth largest exporter following Russia (on pre-war data), the United States and Saudi

³⁸ *ibid.*

³⁹ https://weltrisikobericht.de/wp-content/uploads/2022/09/WorldRiskReport-2022_Online.pdf

⁴⁰ <https://www.oecd-ilibrary.org/docserver/58665de0-en.pdf?expires=1686290949&id=id&accname=guest&checksum=B84208E61B3CB7DA74DB6322AB3A5252>

⁴¹ https://www.ecb.europa.eu/pub/financial-stability/fsr/special/html/ecb.fsrart202305_03~f51dd11fd7_en.html

Arabia.⁴² As a result, coal and gas is forecast to make up 47 percent (AU\$219 billion) of total Australian energy and resource exports (AU\$464 billion) in 2022-23,⁴³ representing a third of the total value of exports (AU\$594 billion).⁴⁴ Australian governments (state and federal) received AU\$20 billion in royalties from fossil fuel resource production in 2019-2020, not including corporate tax payments from associated companies.⁴⁵ While these royalties will have risen in recent years due to price rises associated with the Russia-Ukraine conflict, and recent changes to the Petroleum Resource Rent Tax⁴⁶ and some state royalties,⁴⁷ they should remain a small proportion of total government income (they accounted for approximately 3 percent in 2019-20).⁴⁸

The Australian Government has recognised in the 2023-24 Federal Budget that a structural shift for the economy and the tax base will occur with the inevitable net zero transition.⁴⁹ Australia has sizable opportunities in alternative industries and export products, including critical minerals for low-emissions technologies. For example, the Office of the Chief Economist has noted that in 2027-28 the value of lithium and base metals will be equal to the export value of coal.⁵⁰ Over a longer period, it has been estimated that Australia could develop industries that will result in AU\$330 billion in annual green exports, eclipsing even the currently inflated value of fossil fuel exports.⁵¹ It is therefore critical that Australian governments are seeking to encourage and accelerate this alternative economic activity and have a clearly articulated strategy to ensure diminishing fossil fuel-related budget revenue is progressively replaced by alternatives to ensure ongoing fiscal stability.

As noted in Overview Comments, investors recognise the transition issues connected with those workers and communities who have traditionally relied on fossil fuel extraction and power production industries. A failure to ensure an equitable transition that sufficiently assists these workers and communities to find equivalent economic opportunities in industries aligned with a net zero emissions economy increases the likelihood of a disorderly transition and in turn the systemic risk investors face from climate-related issues.⁵² The Australian Government's commitment to establishing a Net Zero Authority is critical step to addressing these issues.⁵³

20. What types of targets do you see as important and/or problematic, and why?

Investors derive confidence in a market where targets have a legal basis and clearly defined policy and expenditure plans to achieve them. Sovereign targets that are framed as ambition, do not affect real policy or market change, and/or are not substantiated with clear economy-wide plans, create less market confidence.

⁴² <https://onlinelibrary.wiley.com/doi/full/10.1111/1467-8489.12503>

⁴³ <https://www.industry.gov.au/sites/default/files/2023-04/resources-and-energy-quarterly-march-2023.pdf>

⁴⁴ <https://www.abs.gov.au/statistics/economy/international-trade/international-trade-supplementary-information-financial-year/2021-22#key-statistics>

⁴⁵ https://taxpolicy.crawford.anu.edu.au/sites/default/files/publication/taxstudies_crawford_anu_edu_au/2022-12/complete_wp_p_burke_dec_2022.pdf

⁴⁶ <https://ministers.treasury.gov.au/ministers/jim-chalmers-2022/media-releases/changes-petroleum-resource-rent-tax>

⁴⁷ <https://statements.qld.gov.au/statements/95467>

⁴⁸ Ibid.

⁴⁹ https://budget.gov.au/content/bp1/download/bp1_2023-24.pdf

⁵⁰ <https://www.industry.gov.au/sites/default/files/2023-04/resources-and-energy-quarterly-march-2023.pdf>

⁵¹ https://bze.org.au/research_release/export-powerhouse/

⁵² https://iqcc.org.au/wp-content/uploads/2021/07/IQCC-Investors-role-in-an-Equitable-Transition-to-net-zero-emissions_FINAL-150720211-copy.pdf

⁵³ <https://www.pmc.gov.au/news/new-national-net-zero-authority>

Sectoral targets that add granularity to national emissions reduction goals are critical additional signals for investment and are again strengthened when they are embedded in an overarching net zero strategy and sector-specific pathways. Some policy areas may also be well serviced by explicit investment goals, especially where catalysing additional private capital is critical to outcomes such as in adaptation.

The legislation of Australia's 2030 and 2050 emissions goals was a positive step in this context.⁵⁴ Similarly, Australia has previously legislated a 2020 renewable energy target that was backed by a market mechanism mandating a response by large energy users to help achieve it. The Australian Government now favours a goal to reach 82 percent renewable energy penetration of the National Energy Market by 2030, which has been expressed as an ambition and/or a modelled outcome of a plausible scenario. As noted, investors will derive more confidence in this type of sector target if it is legislated, and existing and new programs, incentives and mechanisms are explicitly linked to its achievement.

⁵⁴ <https://www.pm.gov.au/media/australia-legislates-emissions-reduction-targets>