

# Submission to the Productivity Commission

## Pillar 5: Investing in cheaper, cleaner energy and the net zero transformation

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Contact: Bethany Richards, Policy Manager bethany.richards@igcc.org.au

## About IGCC

IGCC is a collaboration of Australian and New Zealand institutional investors focused on the impact of climate change on investments. IGCC represents investors with total funds under management of over $3 trillion in Australia and New Zealand and $35 trillion around the world. IGCC’s members are the custodians of the retirement savings of around 15 million Australians.

IGCC thanks the Clean Energy Investor Group and the Property Council for their advice.

## Summary of response

The Productivity Commission (PC) accepted responses via a questionnaire. This summary provides an overview of the key points from the questions.

* Meeting carbon targets will incur a cost, but this must be compared against the cost of inaction – both on missed opportunities from undergoing a smooth transition to net-zero, and as climate damages compound due to a lack of adaptation activity.
* Industrial precincts need access to low-cost renewable sources of energy. Increasingly, this demand will be met by renewable energy.
* Government must be able to take on more risk at early stages of investment.
* Timeframes for decisions on planning permits for renewable energy are unacceptably long and have material impact on investment decisions.
* Building community understanding of the transition is a critical element of the net zero transition, with real benefit sharing needing to be a priority.
* Specific supports for household-level resilience must not be done in isolation of community and infrastructure-level resilience planning.

## Extended responses

### Reduce the cost of meeting carbon targets

**Overview:**

IGCC understands the Government is in the process of determining its 2035 Australian emissions reduction target, or ‘Nationally Determined Contribution’ (NDC), pursuant to the terms of the Paris Agreement, in addition to finalising its Net Zero Plan and sector decarbonisation plans.

It is materially important for investors to have an ambitious, Paris-aligned and scientifically backed Australian 2035 NDC, with supporting policy frameworks. NDCs, together with supporting policy frameworks, play an important role in portfolio construction and investment decision-making. IGCC members also support the Future Made in Australia reform package, which aims to provide funding and other supports to sectors undertaking transition activities.

IGCC members would like to emphasise that there will be a cost to meeting carbon targets, but that this will be significantly lower than the cost of inaction. Data released by the Network for Greening the Financial System (NGFS) – a group of 141 central banks and financial supervisors including Bank of England, Bank of Japan, European Central Bank, People’s Bank of China, Reserve Bank of Australia, Reserve Bank of India and US Federal Reserve – shows Australia could see GDP cut by roughly one seventh due to the broad effects of climate change, from costs associated with extreme weather and second order effects on labour, capital, land and natural productivity.[[1]](#footnote-1)

The economic damage will likely be significant for our trading partners as well, with our neighbours across Asia likely to see a 16% hit to GDP by 2050 under current policies.

A least-cost decarbonisation pathway for the Australian economy must be driven by efficient market mechanisms, as the PC states:

*“Enduring, broad-based market mechanisms are the best way for governments to reduce carbon emissions and governments have made progress on adjusting policy settings towards this goal.”*

This will allow the market to decide how to most efficiently allocate capital towards the transition, provided that the mechanisms unlock private finance to remediate unfavourable risk-return profiles of net-zero-aligned projects.

However, IGCC members would also like to emphasise that least-cost does not guarantee most-benefit, for social and environmental outcomes. It is critical that economic efficiency does not come at the expense of governments prioritising good resilience and mitigation outcomes, for communities and nature.

As climate damages begin to mount, it is important that the government’s policy approach remains consistent but responsive to changes in the real economy and society. Enduring, whole-of-government support for climate policy should be a priority, with the PC providing expert advice to better inform policymakers.

## Questions:

### What could be done to improve the cost-effectiveness and alignment of policies to reduce emissions across the industrial, electricity and transport sectors?

Fundamentally, industrials need access to ultra-low-cost renewable energy as an input to their processes. Ensuring that industrial precincts have access to renewable sources of energy, be it electricity for lower-heat processes or fuel for higher-heat processes, is critical to their ability to transition. Many industrials are grid connected and take up a significant amount of load in their states.

Grid firming and renewable capacity are critical elements of a secure electricity system, which all users require. Industrials are exposed to more risk, in that there can be significant damages done to machinery should black- and brown-outs occur. As the grids transition to a higher penetration of renewable energy, managing system security will become more complex.

Encouraging more utility-scale capacity and storage to enter the market is important, and so is better integrating Consumer Energy Resources (CER). As more consumers are bidding their resources into the market, it is becoming a two-sided system. The NEM Review, ongoing, has noted that a significant amount of CER is bidding into the market, with no visibility to the Australian Energy Market Operator (AEMO). This creates system stability risks and inefficient pricing, as AEMO must quickly make requests for discharge or charge, to correct for unexpected variations in supply and demand. As long-term power purchase agreements are becoming less common, it is important that electricity spot-prices are as efficient as possible for industrials (and consumers more broadly).

Often, machinery will need to be replaced or significantly retrofitted for fuel switching, and the high upfront capital costs of this are often a barrier. The federal government has introduced Safeguard Mechanism Credits to reward facilities for on-site emissions reductions activities. The Australian Energy Regulator is now facilitating SMC trade. As it is very new, it remains to be seen how effective SMCs are in reducing barriers to on-site emissions reductions.

Some very large industrials will bring renewable energy on-site and may require assistance with underwriting. In general, underwriting is considered an inefficient way to bring new capacity and storage online, as it disconnects the true value of electricity from the service provided by putting a floor price on revenue. This is less of a concern for non-grid connected generation and storage.

Companies who made early investments in green hydrogen which did not come to fruition have been left unable to transition; significant government support is needed to establish sources of green hydrogen for facilities that have limited other transition alternatives.

### Are there gaps in the emissions-reduction policies in the industrial, electricity and transport sectors which should be addressed?

To some extent, government will need to focus on particular clusters of activities to support decarbonised alternatives becoming available to industry. The Climate Change Authority has outlined technology pathways to achieve low-carbon processes, and the Sustainable Finance Taxonomy is working to develop detailed Technology Readiness Levels for different methods of abatement across the economy. There is a balance that must be struck between government “picking winners” and the free market being left to decide which are most economic per unit of abatement. Targeted government support in the form of financial and non-financial mechanisms for industrials will be required and should be a function of the government’s sector decarbonisation plans.

Government must be able to take on some risk, noting that some public investment will be lost, but that others will bring new abatement options to market. This process can lead to the emergence of new Australian technologies and businesses, supporting Australia’s ambition to become a renewable energy superpower. All investment will result in innovation ecosystem development, as information is shared on what works and what does not. This is even more critical for activities that do not yet have scaled alternatives to fossil fuels, such as refrigerants, fertilisers and long-haul freight.

### Are there any duplicative emissions-reduction policies in the industrial, electricity and transport sectors which could be streamlined?

No comment.

## Speed up approvals for new energy infrastructure

**Overview:**

The Clean Energy Investor Group, which has some overlapping membership with IGCC, has done significant work on planning processes, environmental approvals and their relationship with renewable energy developments. CEIG found that there were “...financial impost and procedural impediments to the delivery of renewable energy projects result from interfaces with the EPBC Act.”[[2]](#footnote-2)

IGCC recommends reviewing CEIG’s resources to inform its approach to this section of the consultation. Specific resources are outlined against each question.

### Are planning and approvals processes for large energy infrastructure taking too long? If so, what causes the most delay?

CEIG research has found that “...for the last five years, average approval timeframes in NSW for major clean energy development applications (DAs) include:

* 746 days for State Significant Development Infrastructure projects – 3488 days for wind – 705 days for solar – 530 days for battery
* 492 days for Critical State Significant Infrastructure projects (including hydro and transmission).”[[3]](#footnote-3)

In Victoria, planning applications for renewables took an average of 376 days in 2023, with one wind farm application lodged in 2018 reaching 2,045 days without a decision. In Queensland, seven wind farms took an average of 190 days for planning approval between 2019 and 2021.[[4]](#footnote-4)

CEIG found that “delays can often arise in relation to the time between lodging an application and formal acceptance, requests for further information, uncertainty in technical assessment requirements, and the time between the public inquiry or panel (where applicable) submitting its report to the Minister and the Minister’s decision on the permit application.”[[5]](#footnote-5) More detailed rationale for why delays are occurring is outlined in their reports.

### How can planning and approvals processes be sped up without unduly compromising regulatory standards?

CEIG poses a suite of recommendations that aim to streamline planning processes to reduce the amount of time taken to reach a decision. They centre on improved data sharing for proponents and regulators, clarifying and coordinating public consultation processes, improving interactions between state and federal jurisdictions, and improving policy clarity around engagement with First Nations Peoples.[[6]](#footnote-6)

### Should clean energy projects be treated differently to other projects for the purpose of environmental and other approvals? If so, how?

No comment.

### What can be done to build local community support for new energy infrastructure projects?

Government has a role in coordinating community engagement with project proponents, not just for renewable energy projects and transmission, but also for renewable energy industrial precincts. Project proponents have varying capacities to engage communities, and need connections that governments have in order to make these engagements as productive as possible. Many IGCC members invest in renewable energy (63%)[[7]](#footnote-7), but most of them invest in foreign jurisdictions, with uncertainty around project timeframes being a key factor in where capital is allocated.

The role of the Net Zero Economy Authority (NZEA) is to transition Australia’s vital industrial regions, and over the last 12 months has embedded itself within communities across Australia. It should assist companies in undertaking community consultation engagements, and have oversight over the quality and standardisation of these engagements.

Building community understanding of the transition is a critical element of the net zero transition, with real benefit sharing needing to be a priority. The NZEA can support communities that are impacted by the transition away from heavy emitting industries and take advantage of new employment opportunities in clean industries. The work can also help crowd in private sector investors like superannuation funds, which can generate further economic activity and new opportunities in impacted communities.

### Please outline any evidence showing the productivity benefits of faster approvals for energy projects.

No comment.

## Encourage adaptation by addressing barriers to private investment

**Overview:**

To keep the economy as vibrant and productive as possible, Australia will need many billions of dollars invested in climate adaptation, including in resilient housing. Federal and state budgets cannot cover the entire cost without significantly cutting other critical public services, increasing borrowing or raising taxes. Therefore, removing barriers to private investment in climate adaptation is essential.

In addition, without large-scale adaptation, climate change may make it financially rational for private capital to become less available in regions and industries with more exposure to climate damage and disruption, which will have significant adverse effects on communities.[[8]](#footnote-8) Banks have already indicated they may withdraw from exposed areas,[[9]](#footnote-9) and insurers are already raising prices, above affordability in some cases.[[10]](#footnote-10)

Specific interventions to improve the resilience of housing stock are critical, to ensure that people are protected against climate harms, however, this aim must be situated within community and infrastructure-level resilience planning. Unless the micro and macro scale are addressed in tandem, people will be left vulnerable.

IGCC emphasises the need for the PC to consider four key barriers to adaptation finance being scaled:

* challenges in quantifying the financial implications of physical risks and adaptation
* lack of market recognition for resilience in valuations
* difficulties in cost-sharing when adaptation benefits are spread across stakeholders
* asset-level resilience is normally insufficient to protect value if whole-of-system resilience is lacking.

Housing-specific recommendations follow below, to unlock adaptation investments.

### What are the barriers and enablers impacting decisions by owner-occupiers, landlords and developers about how housing is built and updated over time so that it is resilient to the effects of climate change?

Upfront capital costs of undertaking adaptations are a significant barrier, with most government schemes focused on electrification, rather than resilience. IGCC members caution that mitigation and adaptation policies need to be considered together, to maximise the benefits of doing each type of activity. Household electrification means more resources that, once better integrated into the grids, will help reduce reliance on fossil fuels. However, if these homes are not appropriately adapted to climate, those assets are at risk.

### What information do people need to make decisions about where to live, how to build and how to upgrade their homes to appropriately factor in climate change?

IGCC members emphasise that the issue of decision-making around where people decide to live is much more complicated than based on its climate risk profile alone. Communities have the right to a just transition, and that includes adaptation and resilience initiatives being co-designed with them. Managed retreat should be done with support from communities.

All market stakeholders need consistent, accessible data on climate risks. There have been some steps in the right direction, but we do not have consistent, granular climate risk data available across the country to inform policy decisions on land use planning frameworks.

Flood maps and bushfire risk ratings (which are accurate and accessible) are critical tools to identify climate risks in particular areas. They are necessary for governments to determine what interventions are required to improve the resilience of building stock, and to prioritise these interventions. High quality data can be used to develop tools that empower households, businesses and investors alike to explore adaptation initiatives.

The Resilient Building Council has developed the Bushfire Resilience Rating home self-assessment app[[11]](#footnote-11), which empowers households to identify what their level of risk is based on location and building composition. It is the first scientific system to measure the bushfire resilience of homes, and has the potential to give insurers, banks and investors a framework for financing and rewarding bushfire resilience adaptations.

###  What are the most cost-effective retrofitting options for improving the resilience of Australia’s existing housing stock? What are their costs and benefits?

No comment.

### What role might minimum standards play in ensuring the resilience of Australia’s housing stock?

Valuation methodologies and standards should recognise the socioeconomic benefits of investments in adaptation. Governments and investors will need to work together and with other entities (e.g., valuers and rating agencies) to develop robust methodologies. For valuations, both the negative impacts of physical risk (i.e., costs) and the positive impacts of adaptation (i.e., benefits) should be considered.

**IGCC recommends that governments:**

* expand the Australian Sustainable Finance Taxonomy to incorporate resilience criteria for eligible investments in systemic adaptation and resilience – this will enable better capital flow to resilient developments, or adaptation measures in existing developments
* support and endorse the inclusion of physical risk and resilience in valuation standards
* include relevant standards in legislation and regulation where appropriate.

### The impacts of climate change are being factored into the regulation of where and how houses are built in different ways around Australia. What does leading practice look like? Where is there room for improvement? Are there lessons we can learn from other countries?

Best-practice necessarily involves a top-down and bottom-up approach to resilience planning. Community level resilience needs to be situated within National Adaptation Plans, to ensure that adaptations are happening at all levels of society and the economy. These plans need a sectoral and inter-sectoral approach that embeds resilience within planning processes, to avoid creating future risks. Ensuring that the mandates of all specialist investment vehicles (SIVs) (including Housing Australia) expressly include adaptation and resilience should also be a priority.

**Ensuring that resilience is considered in planning will help avoid creating future risks, reduce the cost of insurance and the cost of capital. IGCC recommends that:**

* Planning guidance needs to be developed for buildings, to ensure that the physical impacts of climate change are considered in their design and placement – which can help reduce insurance costs.[[12]](#footnote-12)
* Alongside insurable impacts, non-insurable (e.g. increased temperatures and sea level rise) must also be considered.
* Governments may choose to set development targets for housing stock, and resilience should be included as a key criterion.
* All new developments should meet a standard level of resilience for the lifetime of the asset, including the likely impacts of climate change.

IGCC notes the Productivity Commission’s recent research paper on housing construction productivity[[13]](#footnote-13), which emphasises reducing regulatory barriers in the sector. While more houses need to be built, and quickly, this aim should not come at the cost of future-proofing Australia’s housing stock.

## For more information

IGCC looks forward to continued engagement with the Productivity Commission.

For any questions on content in this submission, please contact Policy Manager Bethany Richards at bethany.richards@igcc.org.au.

1. IGCC 2024, $6.8 trillion GDP hit if renewable energy transition is delayed [[link](https://igcc.org.au/6-8-trillion-gdp-hit-if-renewable-energy-transition-is-delayed/)]. [↑](#footnote-ref-1)
2. CEIG 2024, Delivering major clean energy projects [[link](https://www.ceig.org.au/wp-content/uploads/2024/12/HSF-x-CEIG-EPBC-Act-Report.pdf)]. [↑](#footnote-ref-2)
3. CEIG 2022, Delivering major clean energy projects in NSW [[link](https://www.ceig.org.au/wp-content/uploads/2022/07/HSF-CEIG-Report-Delivering-major-clean-energy-projects-in-NSW-14-December-202380.pdf)]. [↑](#footnote-ref-3)
4. CEIG 2024, Delivering major clean energy projects in QLD and VIC [[link](https://www.ceig.org.au/wp-content/uploads/2024/04/HSF-_-CEIG-Report-Delivering-major-clean-energy-projects-in-QLD-and-VIC.pdf)]. [↑](#footnote-ref-4)
5. ibid. [↑](#footnote-ref-5)
6. CEIG 2024, Delivering major clean energy projects in QLD and VIC [[link](https://www.ceig.org.au/wp-content/uploads/2024/04/HSF-_-CEIG-Report-Delivering-major-clean-energy-projects-in-QLD-and-VIC.pdf)]. [↑](#footnote-ref-6)
7. IGCC 2025, The state of net zero investment [[link](https://igcc.org.au/wp-content/uploads/2025/04/IGCC-2025-State-of-Net-Zero_Full-Report.pdf)]. [↑](#footnote-ref-7)
8. IGCC 2024, Activating private investment in adaptation [[link](https://igcc.org.au/wp-content/uploads/2024/10/Activating-Private-Investment-in-Adaptation.pdf)]. [↑](#footnote-ref-8)
9. Australian Prudential Regulation Authority (APRA) 2022, Climate Vulnerability Assessment Results [[link](https://www.apra.gov.au/sites/default/files/2022-11/Information%20Paper%20-%20Climate%20Vulnerability%20Assessment%20Results.pdf)]. [↑](#footnote-ref-9)
10. Actuaries Institute 2024, Home Insurance Affordability and Home Loans at Risk [[link](https://actuaries.asn.au/docs/thought-leadership-reports/home-insurance-affordability-and-home-loans-at-risk.pdf)]. [↑](#footnote-ref-10)
11. Resilient Building Council 2025, Resilience Ratings [[link](https://rbcouncil.org/resilience-ratings/)]. [↑](#footnote-ref-11)
12. Insurance Council of Australia 2024, Climate Change Roadmap Towards a Net-Zero and Resilient Future: 2024 Update [link]. [↑](#footnote-ref-12)
13. Productivity Commission 2025, Housing construction productivity: Can we fix it? [[link](https://www.pc.gov.au/research/completed/housing-construction/housing-construction.pdf)]. [↑](#footnote-ref-13)