

Australian Government
Productivity Commission

Submitted via email: 5pillars@pc.gov.au

6 June 2025

5 Pillars Consultation

The Australian Energy Council ('AEC') welcomes the opportunity to make a submission to the Productivity Commission's consultation on *Pillar 5: Investing in Cheaper, Cleaner Energy and the Net Zero Transformation* ('Consultation Paper').

The Australian Energy Council is the peak industry body for electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. AEC members generate and sell energy to over 10 million homes and businesses and are major investors in renewable energy generation. The AEC supports reaching net-zero by 2050 as well as a 55 per cent emissions reduction target by 2035 and is committed to delivering the energy transition for the benefit of consumers.

The past few years have seen federal and state jurisdictions introduce a range of policies designed to accelerate economy-wide decarbonisation. These policies, while well-intentioned, are often based on governments meeting near-term emissions or technology targets which may not necessarily represent the most economically efficient abatement pathway to net-zero.

In the absence of a carbon price,¹ there is limited visibility of the abatement cost of federal and state emissions reduction policies and, more broadly, the sectoral decarbonisation pathways they are designed to support.

The AEC considers this is one area where the Productivity Commission can provide ongoing value. The Commission could, for example, prepare some modelling and projections that show what an efficient economy-wide carbon price is, how the existing suite of policies compares in terms of abatement cost, and potentially map out an abatement cost curve across the major economic sectors from now to a net-zero 2050.

Such work would be informative in understanding whether the current emissions projections for each sector are reasonable, identifying where it would be most efficient to push for more emissions reductions, and how existing policy design could be improved (e.g. merits of having a federal renewable gas target rather than separate state jurisdictional renewable gas targets).

This level of visibility would be helpful to policymakers when contemplating things like the legislated Safeguard Mechanism Review next year, and likely demand for offsets. Of course, for it to materially improve the quality of public policy, this carbon value would need to be consistently applied by industry, regulators, and governments.

With respect to the electricity sector, it is currently the only sector with a technological pathway to net-zero. However, the commercial availability of clean and enabling technologies is only one piece of the puzzle – there are substantial supply-side barriers slowing the accelerated rollout of energy projects while an economically efficient market must be maintained, both in the short and long term, to attract private investment and minimise costs to customers.

¹ The AEC notes that the Australian Energy Regulator has published [guidance](#) on an interim value of emissions reduction.

There are also questions about how to ensure revenue adequacy and essential system security, as well as uncertainty with respect to the least cost mix of generation, network and storage investments to support the electricity transition.

How to set up a functioning National Electricity Market (NEM) for now and the future is currently under review by an [Independent Expert Panel](#). While it is important the Commission does not duplicate this process, the AEC considers there are some specific areas where the Commission could leverage its expertise and resources to support an efficient market design:

- Mechanisms to support and derisk investment in flexible gas-powered generation. AEMO's 2024 [Integrated System Plan](#) forecasts a need for 15 GW of flexible gas by 2050 in the NEM to provide firm schedulable capacity for a high variable renewable generation grid. However, the optimal market settings to support firming gas-powered generation are not entirely clear and it has also been explicitly carved out of government underwriting policies like the Capacity Investment Scheme.
- Mechanisms to support long storage (i.e. 8 hours to multiple days). Long duration storage is not currently part of the federal policy landscape presumably because it is a) not within the 2030 time window and b) not a form of renewable generation even though storage capacity is integral to a workable high variable renewable grid. The absence of policy support is problematic because deep storage is not something that can be built straight away. Long-duration storage has very long build times, high capital expenditure, and prospects of delay, which combined make it a difficult proposition for private capital to invest in alone. These factors mean that policy signals for investment must be put in place now or in the very near future, for such projects to be up and running in the next decade when there is higher renewables penetration.

As for improving the speed of environmental assessment processes:

- Businesses need clearer and more consistent guidance on what is expected of them in the planning process. It is currently difficult and confusing for businesses to provide necessary information to agencies due to outdated guidance documentation, handballing of decision-making by departments (which makes it hard to know which agency to engage with), and constantly moving standards across federal and state jurisdictions with respect to the acceptability of impacts, mitigations, and offset standards. These "moving goalposts" add costs and inefficiencies, and ultimately slow the ability of proponents to provide timely, relevant information to decisionmakers and ensure approval timeframes are met.
- The AEC is cautious about giving priority status to clean energy projects – firstly, this is unlikely to lead to faster approvals unless there is an equivalent resourcing commitment, and secondly, there would need to be clear and fair boundaries about what a "clean energy" project is (for example, does it include batteries and transmission projects?).
- The [ACCC March 2025 Gas Inquiry Report](#) cites delays to regulatory approvals as one reason for reduced projected gas supply – noting the role of gas to firm clean energy, it is important this is given contemplation in the Commission's directions.

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Yours sincerely,

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