

Climate Change Authority

Submitted via email: consultation@climatechangeauthority.gov.au

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2025 Issues Paper

The Australian Energy Council ('AEC') welcomes the opportunity to make a submission to the Climate Change Authority's ('CCA') consultation on the *2025 Annual Progress Report Issues Paper* ('Issues 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.

By the time the 2025 Annual Progress Report is published, Australia will know its 2035 emissions reduction target. It is expected the announcement of this target will be accompanied by the Net Zero Plan and sector decarbonisation plans. If the Federal Government follows through with the CCA's draft 2035 target range of between 65 and 75 percent, this will presumably be backed on the electricity grid approaching net-zero.

It is unfortunate there have not been more opportunities afforded to stakeholders to inform these processes, especially given the almost nine months of extra time provided for consideration of targets. It will be difficult to have robust discussions about the economic efficiency or technical feasibility of the sector plans once published and the CCA's Annual Progress reports are likely to become built around their realisation.

To date, the CCA's Annual Progress reports have provided frank advice about the progress towards the 2030 emissions reduction target but are also constrained by providing advice on how to ensure the 82 per cent renewable electricity target is met without contemplation of its overall efficiency. If the barriers to meeting that target start to prove irresolvable before 2030, the CCA should give weight to what alternatives there are for pursuing emissions reduction.

One way of analysing this has come through the Productivity Commission's [interim report](#) which recommends developing "national carbon values" to assist policymakers in making efficient, least-cost decisions. The Commission suggests the CCA as one agency with the relevant expertise to do this, and the AEC would welcome the CCA providing advice in this report on how that could be done.

With respect to accelerating renewables deployment, the barriers mostly exist on the supply-side and include:

- Supply-chain limitations on the complex equipment required to build and connect large-scale renewables.
- Skill shortages, particularly with respect to electrical networks.
- Land-use resistance to the buildout of renewable generation and network infrastructure. While governments and project developers are taking steps to improve community engagement, this also slows the progress to deployment.

- Long and delayed approval and permit processes, complicated by tension between climate and environmental/biodiversity objectives. Upcoming reforms designed to streamline environmental assessment processes are welcome, but all decisions will still be subject to [judicial review](#), which may become a bigger issue if community engagement processes are not as successful as hoped.
- Even after receiving approval, longer than expected build times for connection assets, stabilisation equipment (e.g. synchronous condensers), long-distance transmission (e.g. only recently, the VNI West transmission project has been pushed back two years from 2028 to 2030), and pumped-hydro storage.
- Slow progress in developing the necessary tools to understand the complex phenomena resulting from deep penetration of inverter-based resources on a large electrical grid.
- Ongoing regulatory and policy uncertainty relating to the rollout of renewable generation, transmission and firming infrastructure. Queensland, for example, is currently reviewing its interim renewable energy targets.

The CCA has commented on these barriers in previous reports and should reassess whether there are further policy options that can be taken to assist with their resolution.

It is also important to keep in mind the end goal of net-zero by 2050. The AEC is currently undertaking a [project](#) that looks at the key enablers of the energy transition that will need to be unlocked to meet this target. Getting more renewable electricity online is obviously key, but it is only one enabler of the energy transition. The CCA should provide recommendations addressing other critical energy infrastructure that is needed:

- Support for dispatchable capacity, especially gas-powered generation – despite AEMO’s [2024 Integrated System Plan](#) making it clear that gas firming is needed to enable a high renewables grid, there is currently no federal mechanism to support gas firming investment and the states only have a patchwork framework. Any new gas firming capacity is likely to take years to build due to equipment waitlists, environmental assessments, and other supply-chain constraints,¹ which means unless action is taken now, there is a real risk it will not be ready in time to enable meeting the high renewable penetration scenarios that sit behind Australia’s 2030 and likely 2035 emissions targets.
- National framework for renewable gases – the [August ECMC Communique](#) noted that jurisdictions have committed to exploring “options for a National Renewable Gas policy”. This is a welcome development, especially given the barriers experienced in New South Wales with respect to its Renewable Fuels Scheme. The CCA should provide advice on what a National Renewable Gas policy could look like, where renewable gases represent an efficient decarbonisation option, and how it can be integrated with other decarbonisation policies (for example, situations where renewable gases are more efficient to complement or substitute electrification).
- Assessing affordability of network build options – AEMO’s [Electricity Network Options](#) report highlighted cost blowouts for major transmission projects, which will flow into customer bills. TNSPs are also increasingly being given responsibility for Essential System Security services, which in practice will involve procuring expensive synchronous condensers. Separately, DNSPs are pushing for greater expenditure for network resilience, and are increasingly seeking to provide competitive services (such

¹ As some guide, the two most recently built gas-powered generation facilities, Tallawarra B power station and the Hunter Power Project, each took about four years to come online.

as community batteries and EV charging) via growing their regulatory asset base. The Productivity Commission's recent interim report did not consider the productivity of networks. The AEC believes there is an opportunity for a comprehensive review into network-based incentives and regulations to support a least-cost energy transition.

Whatever recommendations the CCA puts forward, it should be mindful of avoiding regulatory duplication or creating inconsistency with existing processes (for example, there is currently a National Electricity Market Wholesale Market Settings Review underway, while a statutory review of the Safeguard Mechanism is scheduled for next year). Companies are already preparing forward-looking plans to prepare for the energy transition (e.g. through Climate Transition Action Plans, and climate-related financial risks disclosure) so recommendations about further reporting requirements (as recommended last year) do not necessarily fill a gap.

Finally, the CSIRO's [Modelling Sectoral Pathways to Net Zero Emissions](#) used a 75 per cent by 2035 scenario, which serves as a helpful reference point for what is needed if Australia adopts that target. That scenario modelling showed a strong reliance on carbon credits to offset slow emissions reductions in transport, industry, and agriculture sectors.

Rather than restricting carbon credit use, it would be better for the CCA to re-prosecute its previous recommendation for the Federal Government to: *develop a National Carbon Market Strategy that includes setting out how carbon offsetting will be used to channel finance towards deployment of removals technologies without substituting or delaying direct emissions reductions*. This strategy, which should be made in consultation with industry and other stakeholders, would then be the basis for any future reforms to the use of carbon credits.

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Yours sincerely,

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