

Department of Climate Change, Energy, the Environment and Water National Electricity Market Review initial consultation

submission

February 2025





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The Carbon Market Institute (**CMI**) is an independent, member-based institute that promotes the use of market-based solutions and supports best practice in decarbonisation to limit warming to 1.5°C.

CMI's membership includes 150+ primary producers, carbon service providers, First Nations organisations, legal and financial institutions, technology firms and emissions-intensive companies in Australia and the Asia Pacific. The CMI Board updates CMI's Policy Positions annually, which draw on practical insights from—but are ultimately independent of—members.¹ CMI also administers the Australian Carbon Industry Code of Conduct (**ACI Code**), which was established in 2018 to steward consumer protection and market integrity.²

Strategic outlook

CMI welcomes this opportunity to provide feedback on the National Electricity Market Review (**NEM Review**) initial consultation, led by an independent panel (**NEM Review Panel**) supported by the Department of Climate Change, Energy, the Environment and Water (**DCCEEW**).

Our recommendations build on our 2024 response to DCCEEW's Electricity and Energy Plan discussion paper,³ and broadly respond to the 'Investment incentives' section of the NEM Review Panel's Terms of Reference Release Package, including the focus on interactions with governments' renewable energy targets and policies in promoting investment and the importance of decarbonising Australia's electricity system.

Consistent with the findings of the Climate Change Authority in its recent Sector Pathways Review,⁴ CMI sees an important role for sector-specific and market-based policy frameworks to guide business action and scale investment to achieve and exceed Australia's national climate and renewable energy targets.

Government should seek to harmonise signalling across the economy on the cost of carbon by progressively implementing and scaling complementary market-based mechanisms for sectors adjacent to the industrial sector, particularly in the electricity sector.

https://www.climatechangeauthority.gov.au/sites/default/files/documents/2024-09/2024SectorPathwaysReview.pdf



¹ CMI 2024, 'CMI Policy Advocacy Positions', <u>https://carbonmarketinstitute.org/app/uploads/2024/10/CMI-Policy-Advocacy-Positions-October-2024.pdf</u>.

² More information on the ACI Code webpage: CMI 2024, 'Australian Carbon Industry Code of Conduct', <u>https://carbonmarketinstitute.org/code/</u>.

³ CMI 2024, 'DCCEEW Electricity and Energy Sector Plan discussion paper submission',

https://carbonmarketinstitute.org/app/uploads/2024/04/2024.04_CMI-Submission_Electricity-and-Energy-Sector-Plan_FINAL.pdf. 4 See further Climate Change Authority, Sector Pathways Review (2024),



Ideally, this should include careful consideration of opportunities to strengthen the reformed Safeguard Mechanism to support Australia's 2035 national targets, including by extending its application to other sectors of the economy and tightening rules on credit eligibility and use to drive sectoral decarbonisation.

CMI recognises the importance of recent electricity market reforms and supporting policies in facilitating finance towards the decarbonisation of Australia's electricity sector through to 2030, notably:

- the expansion of the Capacity Investment Scheme (**CIS**) to accelerate grid-connected renewable electricity generation and storage towards meeting the 82 percent renewable energy target; and
- the incorporation of emissions reductions objectives into Australia's national electricity objectives in 2023— that subsequently led to the Australian Energy Regulator (**AER**)'s guidance on valuing emissions reduction (**VER Guidance**) in 2024.

In developing options to enhance investment outcomes in pursuit of Australia's national renewable energy and emissions targets, consideration should be given to:

- establishing mandatory targets for firmed renewable capacity;
- incorporating carbon pricing signals into the electricity sector; and
- provisioning public funding towards priority firmed renewable electricity assets in the right locations.

CMI Recommendations

CMI recommends the NEM Review Panel explore the following policy options to improve investment incentives in Australia's electricity sector:

1. Introduce a mandatory target under the Renewable Energy Guarantee of Origin (REGO) scheme to drive investment in firmed renewables capacity in the grid

A mandatory target under the Renewable Energy Guarantee of Origin (REGO) scheme could be phased in to align with the conclusion of the RET and provide an ongoing driver for continued investment in increasing the share of renewables in the grid's electricity mix beyond the 82 percent 2030 target and support the future replacement of renewable generating assets as they begin aging.

Incorporating a time-matching requirement as part of the REGO target, leveraging REGO certificates' timestamp attribute, could further drive investment into project types that support variable renewable generation in the grid, including firmed renewables paired with long-duration storage to provide clean electricity at all times of the day.

Introducing a REGO target that incorporates time-matching could help balance the grid by driving further renewable electricity capacity without incentivising investment in new solar that could contribute to negative pricing events.

We note that any move to mandate time-matching as part of a REGO target should be carefully consulted on; stringent time-matching requirements (i.e., to the minute) may impact market liquidity and erode the ability of a REGO target to deliver targeted outcomes at the required scale. Conversely, if time-matching is implemented too loosely, it may not drive these outcomes at all.





CMI has previously suggested⁵ that the time-matching dimension of the REGO target could be phased in to allow investments in firmed renewables to come online and provide a source of time-varied REGO certificates.

In considering a REGO target with time-matching requirements, the NEM Review Panel and/or Australian Government should closely consult with industry and consider learnings from other jurisdictions' approaches, for example the EU where hourly time-matching will begin on a voluntary basis for renewable hydrogen production.⁶

2. Bring high-emitting electricity generators into the reformed Safeguard Mechanism as a backstop to lock in the retirement of legacy fossil fuel generating assets

Grid-connected generators are exempt from Safeguard Mechanism declining baselines and instead covered by a fixed electricity sectoral baseline. CMI considers these exemptions to be appropriate while the RET provides a driver for investments in renewable energy and electricity sector decarbonisation, and while fossil-fired generators remain important for grid capacity.

After the RET concludes and the CIS has scaled greater firmed renewables capacity in the grid, extending declining emissions baselines to grid-connected, fossil-fired generators would lock in their retirement and reinforce long-term electricity decarbonisation signals.

Applying the Safeguard Mechanism to the electricity sector could also incentivise the use of biomethane to reduce emissions from gas peaking plants that may be required intermittently and in limited circumstances to firm renewables and support grid stability and capacity. However, the use case for biomethane in gas peaking plants should be balanced against other uses for biomethane, for example in hard-to-abate industrial processes that would see more benefit from a renewable gaseous fuel; for example, biomethane can be used for green hydrogen production to reduce fertiliser emissions.⁷

Alongside extending Safeguard liability to electricity generators, it may be appropriate to introduce targeted, complementary investment incentives or public funding programs (see Recommendation 3, below) to support increased firmed renewables capacity as fossil fuels continue to exit the grid.

Finally, CMI notes that any decision to bring the electricity sector into the reformed Safeguard Mechanism should be carefully coordinated with the states and territories to avoid mixed investment signals and ensure a harmonised, holistic approach to energy policy at all levels of government.

3. Provision public funding towards priority firmed renewable electricity assets in the right locations

Targeted public funding programs have a continued complementary role to play alongside mandatory targets and pricing signals, particularly in circumstances where regional politics and questions of social licence, First Nations and environmental considerations, and the availability of regional workers may impact the ability of the market to support grid decarbonisation, capacity and reliability.

⁷ Some use cases for biomethane, including in electricity generation as well as in hard-to-abate industrial processes, are explored in: International Energy Agency Bioenergy (IEA Bioenergy) 2022, 'The role of biogas and biomethane in pathway to net zero', <u>https://www.ieabioenergy.com/wp-content/uploads/2022/12/2022_12_12-IEA_Bioenergy_position-paper_Final2.pdf</u>.



⁵ See: CMI 2024, 'DCCEEW Electricity and Energy Sector Plan discussion paper submission',

https://carbonmarketinstitute.org/app/uploads/2024/04/2024.04_CMI-Submission_Electricity-and-Energy-Sector-Plan_FINAL.pdf. ⁶ See: European Commission, 'Questions and Answers on the EU Delegated Acts on Renewable Hydrogen', <u>https://ec.europa.eu/commission/presscorner/detail/en/ganda_23_595</u>.



Beyond the 2027 conclusion of CIS tenders, CMI suggests the value of new public investment programs and schemes for targeting new renewable energy projects that support priority outcomes—for example, specific project types, capacities, and locations.

To support the location of assets in priority areas, the capacity threshold to qualify for funding could be lowered and/or funding programs could allow various projects of smaller sizes in priority locations to be grouped together to meet particular MW sizes.

Alongside direct public funding programs, the government could provide guidance to market that identifies locations for projects where approvals will be faster due to favourable conditions.

Should you wish to discuss CMI's submission on the NEM Review, please contact Gabriella Warden (gabriella.warden@carbonmarketinstitute.org).

Yours sincerely

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The Carbon Market Institute is at the centre of climate change policy and business in Australia. Independent and non-partisan, we bring business, policy makers and thought leaders together to drive the evolution of carbon markets towards a significant and positive impact on climate change.

Engaging leaders, shaping policy and driving action, we're helping business to seize opportunities in the transition to a negative emission, nature positive economy.

