



Australian
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Submission: Net Zero Interim Report to the Productivity Commission

ANU Institute for Climate, Energy & Disaster
Solutions

This submission is the collated perspective of independent researchers that work at The Australian National University. The views and opinions expressed in this submission reflect those of the authors and contributors.

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15 September 2025

The Hon. Jim Chalmers MP
Treasurer of Australia
Member for Rankin
PO Box 349
Canberra ACT 2600

**Re: Submission invitation – Net Zero Interim Report to the Productivity
Commission**

Dear Treasurer,

Please find enclosed a submission by the ANU Institute for Climate, Energy and Disaster Solutions (ICEDS) for the Productivity Commission's Interim Report on *Investing in cheaper, cleaner energy and the net zero transformation*.

Based in the ACT, ICEDS connects industry, governments and communities with climate, energy and disaster-risk research from the Australian National University. Our goal is to advance innovative solutions to address climate change, energy system transitions and disasters. We facilitate integrated research, teaching and policy engagement across disciplines.

Our network of ANU researchers will gladly offer further consultation.

Sincerely,



Llewelyn Hughes
Interim Director, ANU Institute for Climate, Energy and Disaster Solutions

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Executive Summary

The Productivity Commission's aims are to identify priority reforms under each of the five pillars of the Government's productivity growth agenda and formulate actionable recommendations to assist governments to make meaningful and measurable productivity-enhancing reforms.

This submission responds to item (e) *Investing in cheaper, cleaner energy and the net zero transformation* on the scope of inquiries undertaken by the Productivity Commission, as follows:

1. Strategic Policy Reform for Decarbonisation
 - a. Rethinking Technology Neutrality
 - b. Carbon Pricing as a Foundational Reform
 - i. Safeguarding mechanism policy
2. Aligning Fiscal Policy with Climate Goals
 - a. Removing Fossil Fuel Subsidies
 - b. Rebalancing Vehicle Incentives

The submission makes the following recommendations:

Recommendation 1: The Commission should revise its stance on technology neutrality and advocate for strategic, targeted support for emerging clean technologies where market failures are evident.

Recommendation 2: The Commission should explicitly recommend a national carbon price, consistent with its own past reports and the consensus amongst economists and policymakers.

Recommendation 2.1: Cap the use of offsets in product-level emissions accounting to ensure genuine on-site abatement and industrial emissions reduction innovation is incentivised.

Recommendation 3: The Commission should recommend gradually eliminating subsidies such as the Fuel Tax Credits Scheme, diesel rebates, and PRRT concessions, which costs taxpayers over \$14.5 billion AUD annually, and reinvest savings into clean energy production, infrastructure, and workforce transition programs.

Strategic Policy Reform for Efficient Decarbonisation

Recommendation 1: The Commission should revise its stance on technology neutrality and instead advocate for strategic, targeted support for emerging clean technologies where market failures are evident.

Recommendation 2: The Commission should explicitly recommend a national carbon price, consistent with its own past reports and the consensus amongst economists and policymakers.

Rethinking Technology Neutrality

The report should reduce its emphasis on technology neutral policy. The draft report places an emphasis on technology neutrality in policy supports. For example, the Executive Summary says:

“Governments should ensure incentives are neutral towards which technologies can achieve reductions... Priorities for action include new, technology neutral policy settings to incentivise reductions in emissions from heavy vehicles.”

The emphasis on technology neutrality is at odds with the state of knowledge on best-practice green industrial policy which finds that technology neutral policies :

1. Are not neutral in practice and tend to favour incumbent industries and technologies (Aisbett, Cheng and Beck, 2021).
2. Are driven by the view that Green Industrial Policy is a second-best response to environmental externalities. In fact, Green Industrial Policy can, and should, address a range of market failures that limit the development and deployment-at-scale of new, clean technologies (Allan, Lewis and Oatley, 2021; Jakob and Overland, 2024).

Many of these market failures are technology-specific, meaning the optimal policy response will also be specific (Allan, Lewis and Oatley, 2021). Market failures can include information externalities, network externalities, knowledge spillovers, and coordination failures (OECD, 2013; Pack and Saggi, 2006; Rodrik, 2014; Colvin, Hughes and Jotzo, 2024). A case in point is the network externalities associated with establishing EV charging networks (for either battery or hydrogen fuel cell EVs) (Aisbett, Cheng and Beck, 2021).

3. Do not account for the fact that technology specific policies can complement and reinforce carbon pricing within an overall policy mix (Rissman *et al.*, 2020; Jakob and Overland, 2024).

Carbon Pricing as a Foundational Reform

Whilst many of the report's recommendations move in the right direction, they lack consistency and ambition in key areas, particularly regarding carbon pricing. **The report should address the plans to implement a national carbon price** given the widespread support for carbon pricing amongst economists, businesses, and the Commission itself in its previous reports.

Instead of advocating for a clear carbon price, the report proposes a framework of mechanisms that emulates its function – such as Targeted Clean Energy Investment Values (TCCVs), government imposed “carbon values”. It also argues for the extension of other incomplete measures such as the Safeguard Mechanism which has limited coverage. For example, Australia's plans to expand the Capacity Investment Scheme have been criticised due to the decrease in solar and wind power, and the value of large generation certificates (Janda, 2025).

These decreases mean that government subsidies such as the CIS have less efficiency to incentivise renewable energy investments (Geroe, 2022). An introduction of a national carbon price would alleviate budget constraints from the existing government schemes and “add about 1 percent of the GDP or about \$25 billion to government revenues”, whilst having better capacity to compensate households for power prices (Janda, 2025). Therefore, a national carbon price remains the most efficient and equitable tool for driving low-emissions investment, correcting market distortions, and reducing the cost of meeting Australia’s climate targets (Geroe, 2022). Australia needs to adopt tax principles such as a carbon price first, and utilise the “technology” principles as a complementary approach (Geroe, 2022). Without it, the market will continue to favour emissions-intensive activities – particularly in transport – where fuel prices do not reflect their environmental impact (Janda, 2025).

Recommendation 2.1: Cap the use of offsets in product-level emissions accounting to ensure genuine on-site abatement and industrial emissions reduction innovation is incentivised.

Since the 2023 reform of Australia’s Safeguard Mechanism policy, an annual decline rate of 4.9% has been applied to emissions baselines for Australia’s largest industrial facilities over 100,000 tCO₂-e (DCCEEW, 2023). While this has resulted in a modest reduction of approximately 2% in emissions in the 2023-2024 year (CER, 2025), headline figures improve to 7% when offsets are included (Morton, 2025). This heavy reliance on offsets highlights a weakness in the scheme’s design, as it enables facilities to continue increasing their direct emissions levels while meeting their compliance targets under the scheme. The recently released mechanism compliance data (CER, 2025) also indicates that almost 70% of coal and gas facilities covered by the scheme increased their direct emissions under the reformed system, raising concerns about the mechanism’s capacity to drive meaningful decarbonisation in the industrial sector (Morton, 2025), as well as the integrity of initial baselines proposed in 2023. This structural reliance on Australian Carbon Credit Units (ACCUs) not only undermines the integrity of the emissions reductions achieved via the Safeguard Mechanism, but risks embedding a culture of delay in innovation of on-site industrial decarbonisation. For the mechanism to achieve its intended function, it must more effectively incentivise and, where necessary, compel facilities undertake substantive on-site emissions reductions.

Aligning Fiscal Policy with Climate Goals

Recommendation 3: Gradually eliminate subsidies such as the Fuel Tax Credits Scheme, diesel rebates, and PRRT concessions, which costs taxpayers over \$14.5 billion AUD annually. Reinvest savings into clean energy production, infrastructure, and workforce transition programs.

Removing Fossil Fuel Subsidies

The report should address the possibilities of removing fossil fuel subsidies and consider the reallocation of public funds towards the clean energy transition. This section draws only on a paper from The Australia Institute (Campbell et al. 2024), which estimated that subsidies paid by Australian Federal and the Northern Territory governments to fossil fuel producers, exporters and users was \$14.5 billion in 2023-24 (Campbell, Morison and Ryan, 2024). The Federal Government paid out \$9.6 billion to users under the Fuel Tax Credits Scheme, \$1billion of this to the coal industry (Campbell, Morison and Ryan, 2024). The Federal Government’s concessions on the Petroleum Resource Rent Tax cost around \$165 million, and it is also spending \$1.9 billion to subsidise the Middle Arm petrochemical processing facility in Darwin, plus \$100 million to build roads for the gas industry (Australian Taxation Office, 2023).

Some subsidies paid to the fossil fuel industry are tabulated here:

Jurisdiction	2023-24, \$	Future commitments, \$
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Queensland	1.6 bn	5.5 bn*
Western Australia	419 m	1.1 bn
Northern Territory	531m	3.7 bn
Victoria	21m	84 m
South Australia	35 m	186 m
New South Wales	60 m	102m

Source: (Campbell, Morison and Ryan, 2024)

Note: *Queensland committed \$520 million to reducing emissions mainly from metallurgical coal mines.

A logical way to reduce the cost of meeting emissions reduction targets is to stop using public funds to subsidise emissions and divert the budgetary savings into the production and distribution of clean energy.

Rebalancing Vehicle Incentives

The report should recommend removal of perverse subsidies that encourage emissions-intensive activities rather than focusing on removal of EV subsidies. EV subsidies are a second-best approach to addressing climate externalities and other market failures limiting the adoption of EVs. In contrast, diesel rebates and subsidies for vehicles over one tonne are perverse subsidies that exacerbate climate externalities. These subsidies are worth over \$10bn per year (Campbell, Morison and Ryan, 2024). The fringe benefits tax exemptions for vehicles over one tonne are the same category of subsidy as the one the draft report recommends removing for EVs (Australian Taxation Office, 2023). A good argument can be made that these subsidies are directly responsible for the growth in popularity of heavy, high-emissions vehicles in the Australian market since 2016 (Crabb, 2025). If the Commission wants to encourage productivity and efficiency, it should be targeting the removal of these perverse subsidies for fossil fuel use rather than second-best subsidies for EVs.

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