

Investing in cheaper, cleaner energy and the net zero transformation – Interim report

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About the Justice and Equity Centre

The Justice and Equity Centre is a leading, independent law and policy centre. Established in 1982 as the Public Interest Advocacy Centre (PIAC), we work with people and communities who are marginalised and facing disadvantage.

The Centre tackles injustice and inequality through:

- legal advice and representation, specialising in test cases and strategic casework;
- research, analysis and policy development; and
- advocacy for systems change to deliver social justice.

Energy and Water Justice

Our Energy and Water Justice work improves regulation and policy so all people can access the sustainable, dependable and affordable energy and water they need. We ensure consumer protections improve equity and limit disadvantage and support communities to play a meaningful role in decision-making. We help to accelerate a transition away from fossil fuels that also improves outcomes for people. We work collaboratively with community and consumer groups across the country, and our work receives input from a community-based reference group whose members include:

- Affiliated Residential Park Residents Association NSW;
- Anglicare;
- Combined Pensioners and Superannuants Association of NSW;
- Energy and Water Ombudsman NSW;
- Ethnic Communities Council NSW;
- Financial Counsellors Association of NSW;
- NSW Council of Social Service;
- Physical Disability Council of NSW;
- St Vincent de Paul Society of NSW;
- Salvation Army;
- Tenants Union NSW; and
- The Sydney Alliance.

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The Justice and Equity Centre office is located on the land of the Gadigal of the Eora Nation.

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1. Introduction

The Justice and Equity Centre (JEC) welcomes the opportunity to respond to the Productivity Commission's interim report, *Investing in cheaper, cleaner energy and the net zero transformation* (the interim report).

The JEC supports the intent to ensure our emissions reduction targets are met as efficiently as possible. We note that it is likely the optimal means of achieving this is an economy-wide carbon pricing mechanism.

In any case, significant expansion and reform of the scope and impact of existing emissions reduction measures is urgently required. In this context we support the Productivity Commission's (PC) recommendations to increase the breadth and effectiveness of the Safeguard Mechanism and to empower the Climate Change Authority (CCA) to both produce national carbon values and cost effectiveness benchmarks. As part of these measures the CCA should also be charged with monitoring and reporting on Australian governments' progress against emissions reduction targets.

With finite emissions limits associated with our committed targets, action to improve the effectiveness of emissions reduction measures cannot be delayed. We urge the Productivity Commission to recommend any reform measures take effect as soon as possible. Many existing mechanisms are winding down or have ceased to be effective and must be refreshed or replaced well before 2030 to ensure continued emissions reduction progress.

Recognition of resilient housing as a productivity issue is welcome, but insufficient. Household energy performance (efficiency) is not only a measure to support future resilience, but a critical foundation for a productive economy in its own right. We again highlight the recommendations in our *Roadmap for efficient and electric homes* and note the need for a focus on equity in recommendations to address housing resilience and energy efficiency.

We urge the PC to appropriately recognise and consider the Australian Energy Regulator's (AER) concerns regarding inefficient energy pricing.¹ They have noted market concentration and a range of potential issues with the existing rules around rebidding as a serious issue impacting productivity. An energy market which does not produce the lowest pricing is a powerful drag on economy-wide productivity, due to energy's role as a critical input to every other good and service.

The PC should support the Nelson Review's recommendation for market bodies to work with the Australian Competition and Consumer Commission (ACCC) and collectively develop regulatory responses, including rule changes if needed, to address risks created by excessive rebidding and algorithmic bidding. This emerging issue has the scope to structurally distort pricing in the energy market, materially impacting long-term productivity. We urge the PC to further recommend this work considers the extent and implications of continued market concentration in the NEM in coming years.

¹ <https://consult.dcceew.gov.au/nem-review-initial-consultation/take-the-survey/view/92>

2. Emissions reductions

The JEC supports further consideration of proposals for an economy-wide carbon pricing mechanism.² An economy-wide measure is likely to be both more effective and efficient than the existing suite of narrower measures. Importantly, the funds raised through an economy-wide approach could be used to lower the cost of energy for consumers, helping to address equity concerns and maintaining social license for the transition.

Flaws and inefficiencies the existing arrangements

In lieu of more efficient and comprehensive measures to price emissions, we currently rely on a limited and uncoordinated collection of mechanisms in the energy and transport sectors to reduce emissions. This is totally inadequate, deeply inefficient and contributes to ongoing inequities.

Inefficiency and inequity considerations

The existing arrangements do not consistently drive emission reductions investments in all sectors. Absent clear and consistent signals across the economy, opportunities for efficient investments in emissions reduction are currently being missed, with implications for climate action and the reliance on potentially more expensive action in the energy sector.

As the PC itself has noted, some policies aimed at reducing emissions in the energy and transport sectors - such as the Fringe Benefit Tax and Luxury Vehicles import tax for electric vehicles on novated leases - have extremely high cost per unit of emission reduction. More efficient and cheaper emissions reduction investments are likely to exist in other sectors. An economy wide carbon price would optimise opportunities to pursue the most impactful and least expensive/most efficient opportunities to reduce emissions.

Arguably, the partial coverage of the existing emissions mechanisms also creates inefficient incentives for investments and economic activity to move from areas where emissions have a financial consequence, to areas where they do not. This is not efficient from an economy-wide perspective, and has the effect of reducing Australian productivity potential.

Emissions reduction which is overly reliant on energy emissions reduction (as is arguably the case now) is regressive and exacerbates inequities in energy outcomes. The bulk of measures to reduce energy emissions are funded through energy bills, often through pricing mechanisms which place a disproportionate cost burden on household consumers. Further, as a cost imposed on the basis of consumption rather than income, this mode of funding is inherently regressive.

Inadequacies of existing mechanisms

On an individual basis, the existing emissions reduction mechanisms are flawed and ineffective.

As the interim paper notes, the Safeguard Mechanism is inadequate in the scope of its coverage, missing a fifth of heavy industry emissions. The mechanism is also exposed to carbon leakage both internationally and to smaller scale production units. It is insufficiently robust in the

² Sims, R. 'Now is the time for a price on carbon', speech delivered to the NSW Treasury and Economic Society on 27 August 2025. <https://www.superpowerinstitute.com.au/news/now-is-the-time-for-a-price-on-carbon>

emissions reduction it requires of the involved companies and allows too much leeway for large emitters to buy carbon credits rather than reduce emissions of their own operations.

The Capacity Investment Scheme is valuable, but not a mechanism underpinning all the renewable and storage investment needed. tilts at. In any case, it is set to expire early in the energy transition.

The Renewable Energy Targets (RET), both large and small scale have proved their effectiveness, being the key driver of renewables development. But they are now being wound down without a robust replacement.

Significant reform measures are required.

Reform alternatives

Economy-wide carbon pricing

An economy-wide carbon price would resolve many of the deficiencies observed in existing mechanisms, as well as addressing the inefficiencies outlined above. An economy-wide approach could also create a pool of funds which could be used to strategically invest in the transition to:

- support developments in areas that the market is unable or unwilling to, and
- support equity and affordability outcomes through subsidies and rebates. This would be particularly valuable in relation to energy and improvements to housing efficiency and electrification.

Such an approach could offer critical support for the social license of the transition as a whole as well as the contributions it could make to improved Australian productivity by lowering the input costs of goods and services in Australia.

Reforms to existing structures

In lieu of progressing an economy-wide carbon pricing mechanism, the following reforms should be prioritised among other measures to expand the coverage of emission reduction mechanisms and improve their effectiveness.

- The large-scale RET should be extended in time and increased in ambition. This mechanism is proven in design and application and the market has experience and understanding of it.
- The Safeguard Mechanism should be expanded in scope and extended to a wider number of industrial facilities. As per the proposals in the interim report this should be done by reducing the thresholds from 100,000 tonnes to 25,000 tonnes.
- Any reforms of emission-reducing policies should be introduced as soon as possible. The existing arrangements are not adequate, and it is not appropriate to delay substantial reforms which may be critical in meeting our commitments.

- The CCA should be empowered to both produce national carbon values and cost effectiveness benchmarks. The CCA should also be charged with monitoring and reporting on Australian governments' progress against emissions reduction targets and commitments.

3. Home efficiency

The interim report's reference to resilience must be expanded to address both resilience and household energy efficiency/performance.

Improvement in the energy 'productivity' (efficiency/productivity) of Australia's housing stock will help reduce the impact of extreme and changing weather, improve living and working conditions of Australians, and substantially reduce the cost of meeting Australia's household energy needs. As the International Energy Agency's 'Net Zero by 2050' roadmap asserts, improved energy performance and renewable electrification are key pillars of decarbonisation and the global pathway to net zero.³

As part of this, much greater focus is needed on the financial impediments to improved housing energy efficiency. Inequitable outcomes in housing and housing efficiency undermine productivity and the Productivity Commission's recommendations should be updated with a view to prioritising improved equity in housing energy efficiency outcomes.

As noted in our prior submission the JEC has brought together a collaboration of community, sector and industry organisations to produce the *Roadmap for efficient and electrical homes*.⁴ This work is focused on developing policy interventions to improve household energy efficiency through measures which also address existing inequities in household outcomes.

Among the benefits of the *Roadmap for efficient and electrical homes*, we identify the following relevant to the consideration of improved productivity:

- Significant, permanent household energy savings.
- Government and household savings on health budgets.
- Emissions reductions in homes and the energy system.
- Increased household and community resilience to extreme weather, including heatwaves.
- A more flexible, efficient and resilient energy system, achieved through distributed demand response.
- Growth in more sustainable and resilient local manufacturing.
- Thousands of new, secure jobs distributed throughout the country.

The recommendations of the Roadmap align well with the aims identified in the interim report, but provide more robust and detailed measures aimed at optimising the equity of housing efficiency improvements and the benefits they enable in improved productivity, health, wellbeing and resilience.

³ <https://www.iea.org/reports/net-zero-by-2050#overview>

⁴ <https://jec.org.au/resources/roadmap-for-efficient-and-electric-homes-making-all-australian-homes-healthy-and-affordable/>

Key recommendations drawn from the *Roadmap* that we highlight here are:

1.5	Adopt principles, timeline and target dates for residential electrification and improved household energy efficiency detailed in this Roadmap. Require the targets to be reviewed at least every five years and communicated in Australia's Nationally Determined Contributions and associated architecture at jurisdictional level.
1.10	Develop an economy wide electrification plan as part of the National Energy Transformation Partnership (NETP) or similar mechanism in consultation with sector peak bodies and stakeholders.
1.22	Establish a national energy performance agency. The agency would link policy areas responsible for energy, buildings, housing, industry, and transport; and ensure energy demand is as integral to energy system policy and market settings as energy supply.
1.24	Create a coordinated delivery architecture to streamline impact focused home thermal upgrades, energy efficiency and electrification. While details and prioritisation of refits must be based on climate zones, coordination and consistency of principles, participants, standards, information and supports should be implemented through a National Retrofit Scheme (NRS) to overcome the fragmented market of home energy services.
2.2	Commission a comprehensive baseline study of residential energy performance (by building type, location and key characteristics) to build a critical mass of energy performance ratings and create a high-quality data set on residential energy performance. This should not delay ongoing work on implementation of electrification. This should be integrated with jurisdictional maps of gas connections and other key energy performance indicators and shared openly between jurisdictions.
2.3	Commission comprehensive modelling to measure the benefits of achieving zero energy carbon-ready existing homes and costs of delaying action. This should be regarded as a key foundation of public messaging and building support for the transition. Modelling should account for all material benefits of upgrading homes, including emission reduction, peak energy demand, health and resilience. This should not delay ongoing work on implementation of efficient electrification and should be drawn on in all reform processes (such as the update of the NCC) related electrification and household energy efficiency.
3.1	Provide a national definition of a zero-carbon ready home which is all-electric and low energy in line with NatHERs and an updated NCC. For example, the International Energy Agency defines zero-carbon-ready buildings as 'highly energy-efficient and resilient building that either use renewable energy directly or rely on a source of energy supply that can be fully decarbonised, such as electricity or district

	energy. ³¹ This definition should form the basis of the standard adopted by the NCC and implemented by all jurisdictions as soon as possible.
3.3	Commit to the implementation of mandatory disclosure of energy performance (by a nominated date) for all residences when they are sold and leased. Implementation commitments should commence disclosure at the earliest possible juncture, with transition measures where appropriate.
4.10	Reform and expand the Wholesale Demand Response Mechanism to encourage more efficient commercial and industrial demand response, while extending the and extend the mechanism to households.
5.1	Set a date and create a long-term strategy to achieve zero carbon ready existing buildings in line with Roadmap targets. This strategy should incorporate measures outlined in this Roadmap, and prioritise actions and set interim target dates according to Roadmap principles and targets.
10.1	Deploy some HEUF loans via pilots of innovative funding models including on-bill financing and income contingent loans and use this to design options for a large-scale finance package to significantly accelerate electrification over 10 years, particularly among low- and medium-income households.
10.2	Establish a Special Purpose Funding Vehicle, the Australian Efficiency and Resilience Retrofit Fund (AERRF), to provide rolling funds to invest in energy performance and climate-resilience upgrade programs across all low-income housing tenure types (public housing, community housing, low-income homeowners and private rental). This could later be expanded to support other housing. Separate special purpose finance vehicles could be set up if necessary to implement each program.
12.1	Utilising funding mechanisms outlined above, to provide targeted support to help low-income homeowners access home energy upgrades. Support could include subsidies, access to no-interest loans and tailored and culturally appropriate services (see recommendation 11.1 for further information on services).

Please see the full report for further details and the full list of recommendations.

4. The energy spot market

We again highlight the issues raised by the Australian Energy Regulator (AER) in their recent submission to the Nelson Review:

[I]ssues of market concentration and competition need to be considered across the range of services and capabilities the market needs, not just in aggregate.... [O]wnership of dispatchable generation remains concentrated and a few large participants are often needed to meet demand outside of solar hours. This increases the scope of those participants to exercise market power. The top 4 participants

control 69% of the dispatchable generation in Queensland, 87% in NSW, 88% in Victoria and 86% in South Australia.

While the relevant issues were not considered in detail, the interim report of the Nelson Review does make the following recommendation:

4A. Market bodies and the Australian Competition and Consumer Commission (ACCC) should work together to develop regulatory responses, including rule changes if needed, that address risks created by excessive rebidding and algorithmic bidding.

While we do not disagree with this, we contend it does not sufficiently resolve the causative issues.

Accordingly, the JEC urges the PC to recommend examination – potentially part of the work recommended by the Nelson Review - of market concentration and manipulation in the NEM, both today and into the future. This is important as while existing market concentration exists in control of dispatchable generation, this is likely to evolve as part of the energy system transition. We consider it unlikely that, absent any specific measures to address market concentration, dominant market players will cede such a lucrative position voluntarily.

Given the investment behaviour of larger market participants in the last two years, it seems likely that market concentration will take the form of a high degree of concentration in battery storage ownership by the middle of the 2030s. This is potentially dangerous for consumers and the wider economy, as it is likely that battery storage providers will increasingly play the role of price setter in the market.

Higher than necessary energy prices must be considered a productivity issue. Unaddressed market concentration and manipulation will leave consumers vulnerable to higher than necessary or efficient electricity prices, with flow-on consequences for the cost of goods and services across the Australian economy.

5. Continued engagement

We welcome the opportunity to meet with the Productivity Commission and other stakeholders to discuss these issues in more depth. Please contact Michael Lynch at [REDACTED] regarding any further follow up.