Watt Benefits?

Ensuring social equity in Australian electricity markets

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CENTRE FOR POLICY DEVELOPMENT

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Executive summary

The transition to an energy system powered by renewable generation and storage will result in a spectrum of possible outcomes. On one end, governments can ensure that consumers have access to fair, predictable, and transparent energy prices. On the other, only energy consumers that can and are willing to actively participate in energy arbitrage – the process of buying electricity when prices are low and selling them when prices are high to generate a profit – will be able to get good outcomes. The former can be delivered through careful setting and adjustments of the incentives, rules and regulations that guide the energy market, and is the only viable option if governments want to ensure enduring confidence and support for the transition.

This brief outlines three key themes, and underlying recommendations, for ensuring fairness and social license in the energy transition:

- Creating the policy conditions necessary to ensure that energy prices are no higher than they need to be to support investment;
- Ensuring regulatory and fiscal policy settings are designed to support households without rooftop solar and batteries; and
- Structuring government support for the energy industry to deliver broad social and economic benefits for Australian society.

Theme	Recommendation
Creating the policy conditions necessary to ensure that energy prices are no higher than they need to be to support investment	Increase the abilities for regulators, including the Australian Energy Regulator (AER), to address market manipulation in the spot market.
	Reduce the cost of network services by providing more options for consumer energy resources (CER) to substitute distribution network service providers and calculating total allowed revenues of providers based on total expenditure (capex and opex combined).
	Reform regulatory settings for the Default Market Offer and market price cap to prevent excessively high energy bills.
Ensuring that regulatory settings are designed to support households facing disadvantage	Increase funding and incentives for Australians who face barriers – e.g. because they are on low incomes, rent, or live in apartment buildings – to accessing energy efficiency and demand management.
	Household payments towards upgrading the energy system (e.g. for network infrastructure and to incentivise investment in generation and storage) should be progressively distributed based on income and wealth.
	Introduce a consumer duty for all households in the National Electricity Market to mandate retailers to act in the best interests of consumers.
Structuring government support for the energy industry to deliver broad social and economic benefits for Australian society	Require businesses to provide broad social and economic benefits, aligned with the Community Benefit Principles in the Future Made in Australia legislation, if they receive federal government support to build new energy generation and storage.
	Develop policy frameworks to incentivise higher ownership shares of generators and networks by Australian governments and local communities – especially government ownership of networks as they are natural monopolies.

The various current consultations, including the Department of Climate Change, Energy, the Environment and Water's (DCCEEW) National Electricity Market wholesale market settings review, the Australian Energy Market Commission's (AEMC) Pricing review, and DCCEEW's Better energy customer experiences process offer strong opportunities to ensure that households are properly supported through the energy transition, and their outcomes must reflect an understanding that strong consumer protections are essential to trust in the transformation.

The National Electricity Market (NEM) review has made welcome observations for how the energy market could be reformed to ensure consumers benefit in the interim report, and these should be both strengthened in the final report and furthered through other consultation processes.

NEM review observation	**CPD recommendation**
Consider supporting the development of simple, multi-year fixed price retail contracts.	Propose that the multi-year fixed price contract model is implemented as a flat-rate tariff to avoid harming households who face disadvantage and are less able to shift their energy demand.
	Encourage that the energy system should be designed in such a way that consumers who are not interested in shopping around for the best deal should receive energy prices that are set based on strict policy and regulatory principles, which allow for no headroom provisions, and should have a limited set of tariffs to choose from.
Consider reforming network tariff structures to ensure they are more equitable and better aligned with wholesale market dynamics.	Suggest that the AEMC oversees a detailed analysis of the costs and benefits of possible solutions for sharing the cost of network upgrades, rather than simply proposing a shift of costs to the fixed components of energy bills.
	Call for regulators to amend frameworks to increase the ability of consumer energy resources (CER) to contest network service provision.
Consider extending the National Energy Customer Framework to cover new energy services, including CER aggregation, and explore the introduction of an overarching consumer duty to protect consumers engaging with more complex service offerings.	The NEM review panel should focus on all households, not only CER owners, when encouraging the introduction of an overarching consumer duty.

A just transition for energy-consuming households

A fair and equitable market – where households can access energy as a transparent, predictable and fair-priced service – is critical to ensure long-term support and social licence for the energy transition. The energy market therefore needs to work for consumers – that is the ultimate pathway to a system that is technically, financially, and politically sustainable. If households must engage in energy arbitrage to get good outcomes, or if the costs of new infrastructure are distributed unfairly, then the energy transition will lose confidence and community support.

As a result, the incentives, rules, and ownership of assets in the energy market must be designed to deliver equitable consumer outcomes. Current reviews such as the National Electricity Market (NEM) review and the Australian Energy Market Commission's (AEMC) Pricing Review play an important role in guiding the approach of federal and state governments to accelerating the energy transition. In designing policy conditions to support investment in renewable energy, they inevitably butt up against challenging questions that demonstrate a trade-off between supporting investors and ensuring consumers get a good deal. How high do prices need to be to incentivise new investment in renewables? How much risk should the supply-side of the market (from generators to retailers) assume, in order to reduce risks that reach those least able to manage them? What does energy equity look like and how can energy markets be designed to deliver it?

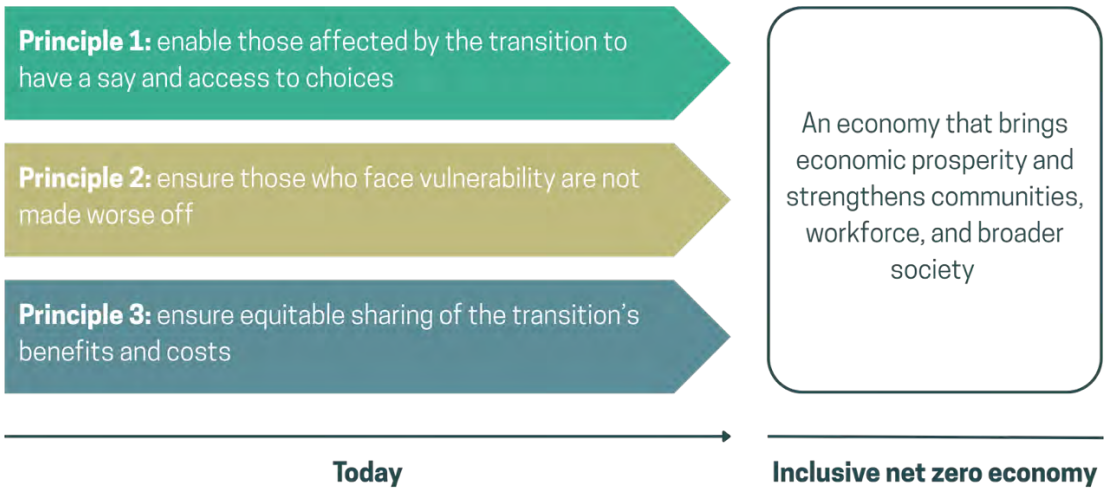
CPD has designed a framework to guide a just transition, which is helpful for starting to answer these questions and for understanding what social equity should look like in the context of energy markets.[1] A just transition for energy markets, including the National Electricity Market, would entail:

Principle 1: Consumers should be able to make decisions about the extent of their interactions with the energy market based on their varying motivations, abilities and possibilities to participate. Markets should be structured and regulated to ensure consumers do not enter into contracts that are not appropriate for their circumstances.

Principle 2: Policy measures should be introduced to prevent (or compensate) any increases in the proportion of income that households facing socioeconomic disadvantage are spending on energy that arise from the transition. There should be no cross-subsidy from these households to the well-off.

Principle 3: Government policies should be designed to ensure the cost of the energy transition is spread equitably across households, and does not fall primarily on households without consumer energy resources (CER) – customer-owned devices like rooftop solar, batteries and electric vehicles that generate, store or manage electricity. Over 80% of Australian households face one or more barriers to having reliable and affordable energy, such as renting and living in an apartment or in a rural or remote area.[2]

Figure 1: CPD's just transition framework



To achieve these principles, reforms are needed throughout Australian energy markets, from the way that generators set their dispatch prices to how retailers recoup costs from their customers. This brief sets out key recommendations under three main themes that would go a long way in delivering an equitable energy system for Australian households. Our main focus is on the NEM, and we also apply the themes to assessing the interim report of the National Electricity Market wholesale market settings review.

The main themes are:

- Creating the policy conditions necessary to ensure that energy prices are no higher than they need to be to support investment;
- Ensuring regulatory and fiscal policy settings are designed to support households without rooftop solar and batteries; and
- Structuring government support for the energy industry to deliver broad social and economic benefits for Australian society.

Recommendations for an equitable energy system for Australian households

Creating the policy conditions necessary to ensure that energy prices are no higher than they need to be to support investment

In recent years, energy prices have risen rapidly due to global trade disruptions, Australia's continued reliance on fossil fuels that are traded as international commodities, ageing coal-fired generators, and an insufficient amount of renewable energy generation to put downward pressure on prices. Issues with market concentration, evident across generation, networks, and the retail sector, have also contributed to higher energy prices. In June 2024, the big three retailers (AGL, Origin Energy and EnergyAustralia) had a combined market share of 62% in the NEM.[3]

As more renewable generation enters energy markets, competition remains a concern of the Australian Consumer and Competition Commission (ACCC), Australian Energy Regulator (AER) and consumer groups as existing dominant energy companies seek to control large wind and solar farms and batteries.[4] Policymakers therefore need to focus on limiting energy bill increases and promoting competition at all stages of the supply chain to ensure that public support for the energy transition does not erode as a result of higher living costs. This would require policymakers to address market concentration and limit opportunities for profits that exceed what is necessary to do business, including by introducing a consumer duty for energy customers.

Australia's energy regulators have highlighted ways in which insufficient competition and the potential for market manipulation in the spot market have led to higher prices for energy consumers.[5] The NEM is intended to be competitive and efficient, with energy consumers paying no more than necessary for electricity. Yet, low levels of competition among dispatchable resources provide these resources with greater ability to set the wholesale price and mean that electricity prices are often higher than what would be expected from competitive markets.

These effects should be ameliorated through measures to make the spot market more efficient and competitive.[6] While policymakers have taken actions over the past 25 years to change the NEM's bidding and rebidding rules and performance monitoring, dominant generators continue to exercise market power in the spot market. Future policy measures should include increasing the abilities for regulators (e.g. the AER) to address market manipulation, further distinguish market manipulation from legitimate rebidding practices and enforce penalties. The bidding and rebidding rules should be amended to eliminate the possibility for generators to exercise market power. Ideally, the increased abilities of regulators should also extend to addressing market manipulation of generators in forward contract markets. Another option is to introduce a capacity market, which would mean that generators are paid for the electricity and capacity they provide to the market, hence eliminating the incentive for generators to bid high prices on the spot market.

The potential for high energy prices brought on by the current spot market throws into question the finding by the NEM review that the spot market is "efficient". In reality, this means little for affordability. The spot market is only efficient in the sense of delivering

sufficient energy supply to match energy demand. The prices that are bid on the spot market are considerably higher than what would be needed to satisfy supply and demand as well as what reflects the long-run marginal cost of bringing extra generation online.

Action to address market manipulation and boost competitiveness in the spot market will be increasingly important as more grid-scale batteries and distributed network service provider (DNSP)-managed or gentailer-managed virtual power plants (VPP) come online – there will be regular moments when a handful of battery owners set the market price, and setting high prices will enable many of them to support portfolios of coal and gas assets. Battery capacity has rapidly grown in the NEM and is already setting the wholesale price in around half of high-price intervals on some days.[7]

Recommendation 1: Increase the abilities for regulators, including the AER, to address market manipulation in the spot market

While the AER sets total allowed rates of return for network service providers, insufficient government regulation means that networks have been accused of profit gouging. Profits of network providers were around three times that implied by the AER's regulated return rate in 2023,[8] which ultimately represents money transferred from consumers to network owners that could have instead been spent on infrastructure upgrades. There is an emerging risk of future over-investment in networks, as network providers request higher capital allowances to replace ageing assets and for augmentation. While per-customer network utilisation is falling, the per-customer value of the distribution network regulatory asset base is increasing, which provides evidence of excessive market power for distribution network service providers.[9]

As network operators are effectively granted a monopoly by the government, there needs to be improved economic regulation of this market. Avoiding over-investment in network infrastructure would include offering more options for consumer energy resources (CER) to provide relevant services. If policymakers amend regulatory settings such that CER can provide network services including congestion management and voltage control, this would substitute for distribution network investment and potentially limit energy bill increases. Policy reforms are needed to better integrate CER into the NEM, including lowering barriers to participation, setting targets around the integration of CER in NEM planning documents, and instituting a CER coordinating body.[10] The UK, as well as some other countries in Europe and parts of the USA, all allow CER to provide network services.

Alongside enabling contestability of network services through CER, the AER should make changes to how they set total allowed revenues for network service providers to address the current capital expenditure (capex) bias. The AER sets the total allowed revenues that can be collected from a network service provider's customers through a building blocks method that treats capex and operating expenditure (opex) separately. Capex is added to the network's regulatory asset base, and the provider can earn a rate of return on this base plus a depreciation allowance. Contrastingly, opex is treated as a cost pass-through to consumers and therefore does not earn a return for the provider's shareholders. This building blocks approach is typically viewed as the main reason why network service providers are biased towards capex, rather than choosing solutions that would reduce the provider's total cost of production and could therefore save consumers money. To address this issue, the UK as well as some European countries are now calculating allowed revenues on the basis of the expected total expenditure (capex and opex combined) required by an efficient network service provider. This approach should be similarly

adopted in Australia to help ensure that providers choose an opex solution (e.g. maintenance work on existing assets to extend their technical life) if it is less expensive than a capex solution (e.g. building new networks).

Recommendation 2: Reduce the cost of network services by providing more options for consumer energy resources to substitute distribution network service providers and calculating total allowed revenues of providers based on total expenditure (capex and opex combined).

The NEM places caps on how much retailers and generators are allowed to charge, which are intended to protect consumers from extreme prices. However, in reality, these caps have been largely ineffective. The Default Market Offer (DMO) was introduced as a maximum price for electricity customers on standing offer contracts to address findings that many energy consumers were paying prices far above the best deals available. However, six years on, the DMO has done little to protect consumers from excessively high energy bills. The December 2024 ACCC Electricity Inquiry Report found that many consumers were paying prices above the DMO: around 44% of consumers on demand tariffs, 22% on flat-rate tariffs, and 19% on time of use tariffs.[11]

To ensure the DMO benefits consumers, the Australian Government is consulting on potential reforms. At a minimum, the AER should permanently remove the retailer competition allowance from the DMO cost stack, pending an examination into the impacts on competition from temporarily excluding this allowance from both the 2024-25 and 2025-26 DMOs.[12] Allowing retailers to charge a higher price so that the price can be competed down seems counterintuitive to ensuring affordable energy for consumers. It appears that the energy system, at the moment, is better at promoting competition in methods that extract value from consumers (for example, headroom in the DMO cost stack, opaque contracts, and "loyalty taxes" for retailers) rather than true competition on the basis of the quality and price of energy services. To ensure households are not overpaying for energy, the AER should also take steps to reduce the customer loyalty penalty and ensure households on market contracts are not charged more than the DMO when their contracts expire.[13]

Similarly, any new policies to incentivise investment in renewables should avoid creating major windfalls for existing baseload fossil fuel generators. Rulemakers have long asserted that raising the market price cap (MPC) – the maximum price that can be charged on the spot market – is needed to incentivise new investment. However, evidence shows that in reality it has increased prices while doing little to assist the roll-out of new energy infrastructure. Increasingly, new utility-scale generation is being built with significant support from Commonwealth and state/territory governments, rather than relying on market signals alone.[14] The NEM's market price cap is also considerably higher than similar price caps set for example in Texas and Singapore. Analysis found that the higher MPC from 2019 to 2024 increased costs for consumers by $4.7 billion.[15]

Recommendation 3: Reform regulatory settings for the Default Market Offer and market price cap to prevent excessively high energy bills.

Ensuring regulatory and fiscal policy settings are designed to support households without rooftop solar and batteries

The energy market is becoming increasingly complex for both households who can access the benefits of CER and those who cannot.

Requiring consumers to choose between contracts they may not understand sufficiently exposes them to potential financial outcomes they do not expect and/or are unable to manage. Reports from the ACCC show that around 80% of Australian households in the NEM could save by being on a more suitable electricity plan.[16]

A just transition for the energy sector would mean that consumers are able to buy a utility service that is fairly priced, predictable, and stable, rather than being increasingly pushed into needing to isolate themselves from the grid through rooftop solar and home batteries to have good outcomes. Many households want stable and predictable bills, a basic and hands-off relationship with their energy retailer, and are not equipped to make sense of complex contracts, meaning they often end up on contracts that are sub-optimal for their circumstances. Energy market regulators should intervene – by making it easier for people to identify the energy contract that works best for them and providing options for more Australians to electrify their homes.

Much of the government funding by both federal and state and territory governments has flowed to those who face lower barriers to making changes to their homes, for example because they have their own fully detached houses, live in houses rather than apartments, and are on reasonably high incomes so can afford the upfront costs. Increasing government funding so that households facing barriers can more readily access rooftop solar and batteries could lower energy bills for these households, however the underlying inequity would remain: some households would inevitably be left out, for example because their homes are less suitable for these technologies, and the inequality for them would be *even worse* than it was before.

Alternatively, increasing access to energy efficiency and demand management would also help lower energy bills and increase comfort at home, and these improvements are more broadly accessible. Some households may increase their use of energy services, such as heating and lighting, following an energy efficiency improvement that makes them cheaper. However, evidence shows that this "rebound effect" may be smaller for households facing vulnerability than for those that do not.[17] Other states and territories should follow in the steps of the ACT Government, which has provided funding and information to ensure more households can have energy-efficient homes. The ACT has introduced:

- An energy efficiency program to install energy-efficient appliances in homes, with a specific proportion focused on those households facing higher levels of vulnerability;
- A minimum energy efficiency standard for ceiling insulation in rental properties; and
- Free home energy assessments and advice, tailored to different circumstances including those of renters and low-income households.

Recommendation 4: Increase funding and incentives for Australians who face barriers – e.g. because they are on low incomes, rent, or live in apartment buildings – to accessing energy efficiency and demand management.

Household contributions towards the decarbonisation of our energy systems should be progressively distributed – ideally depending on economic resources and gross energy consumption rather than factors such as access to rooftop solar and home batteries. The challenge is that many of these transition-related costs are recovered based on per-kWh consumption from the grid, which is much lower for CER-owning households. This means CER-owning households contribute less for policies to incentivise energy system decarbonisation, for example for contracts for difference and the Capacity Investment Scheme, as well as for network augmentation and replacement. Moreover,

because revenues are typically recovered through a combination of volumetric and fixed charges, and prices for networks usually change once every five years, declining grid consumption from households with CER means that non-CER households must pay more to recover network revenues.

Analysis of the energy market in Victoria, however, shows that rooftop solar made consumers better off by around $217 million, due to the small increases in the cost of network services being offset by larger reductions in wholesale market prices.[18] This is a "pareto improvement": CER-owning households capture most of the benefits, but every household is still better off than if there were no CER. At the same time, CER-owning households are generally better off than other households (more likely to own their own home, more likely to have a fully detached house, and more likely to have a higher level of financial resources). This means there is a tension between two of our principles for a just transition. Under the current settings, lower-resource households are still better off (principle 2: ensure the least vulnerable are not worse off), but the costs and benefits of transition are regressively distributed towards favouring households with CER (principle 3: ensure equitable distribution of costs and benefits).

A range of policies could even the playing field by reducing the costs borne by households without CER. Paying for infrastructure upgrades through the tax system could be more equitable but public balance sheets are overstretched and policies can change with the government of the day. Switching from financing through consumption charges to fixed charges could shift costs to consumers who reduce their energy use as they are unable to afford it. Applying costs for green schemes to energy consumption above a set threshold would reduce the burden for those with limited financial means, but does not increase the share borne by households with CER. A strong alternative contender would be using income-based fixed charges. In California, a recent change to utility rates has seen retailers charge customers a new monthly income-dependent fixed rate charge while lowering prices for per-kWh use of electricity.[19] The new flat fee is US$24 for regular consumers, while lower-income households pay either US$6 or US$12 depending on their incomes. In Australia, a similar system could be set-up, with people self-identifying to retailers with a concession card, or everyone could pay the same fixed charge, and the charge could be offset through the welfare and pension system for households facing socioeconomic disadvantage.

Recommendation 5: Household payments towards upgrading the energy system (e.g. for network infrastructure and to incentivise investment in generation and storage) should be progressively distributed based on income and wealth.

In recent years, households have needed to take increasingly more variables into account when selecting their energy contract, meaning they are at higher risk of choosing contracts that are not suitable for their circumstances. When retail energy markets were first established, the only thing households needed to decide upon was the price of a contract. Now, the energy transition means that consumers have access to new energy technologies, such as rooftop solar and smart appliances, requiring them to consider many more variables and different types of tariffs. Even for consumers without these new energy technologies, retailers have introduced new pricing models, such as time of use and demand tariffs, which many consumers have difficulty understanding and responding to. These difficulties are compounded by the fact that energy literacy is quite low across Australian households, with around 40% of households being unaware of the type of retail electricity tariff they use.[20] Complex tariff structures are also associated with increased energy bills for households facing socioeconomic

disadvantage (who often have the least capacity to shift their energy use patterns).[21]

Recent discourse – such as through the AER's Review of consumer protections for future energy services and DCCEEW's Better energy customer experiences process – has assessed the benefits of introducing an overarching consumer duty that sets expectations for retailers to act in the best interests of consumers and actively minimise harm. A consumer duty would shift the responsibility from expecting consumers to successfully navigate an increasingly complex energy market to providers who become responsible for ensuring consumers understand their energy plans, have access to fair and timely dispute resolution and are not disconnected during hardship.

A consumer duty in the energy market should be supported by principles to protect both consumers who have new energy technologies and those without and by a regulator (likely the AER) that has the role of taking retailers to court if they fail the duty. Consumer duties have been implemented in several other areas, for example Australian financial advisers have a duty to act in the best interests of their clients,[22] and UK Government officials are exploring an energy-specific consumer duty for their energy regulator, Ofgem.[23] In switching from a prescriptive rule-based system to an outcomes-based approach to regulation, regulators need to answer questions around the design, roll-out and level of regulation of a consumer duty to ensure that it is effective and does not become a tool that retailers can use to lessen their responsibilities. When done well, these reforms can improve service standards, and rebuild trust in sectors with low levels of confidence from consumers.[24]

Moving energy offers to subscription type pricing provides another avenue to ensure consumers have higher levels of certainty over their energy bills. More of the risk would be shifted to retailers if households could pay a fixed price for access to as much electricity as they need over a set period of time such as a year. A subscription-style offering could work like payments for mobile phone pre-payment plans and private health insurance, in that households pay upfront and know how much they will be charged. Retailers could set limits on how much energy can be consumed for different price bands, and households could reevaluate whether their contract is suitable for them at the end of each payment period.

Recommendation 6: Introduce a consumer duty for all households in the NEM to mandate retailers to act in the best interests of consumers.

Structuring government support for the energy industry to deliver broad social and economic benefits for Australian society

Government funding has become increasingly critical in supporting the private sector to invest in new energy generation over the past decade. Requiring businesses who receive this funding to provide broad social and economic benefits can build support for the transition and develop the necessary workforces and supply chains. State and federal governments taking equity stakes in new generators would also increase levels of support by providing a return on investment for taxpayers.

If the government is taking on risk or providing funding for new generation and storage projects, businesses that participate in these schemes should be required to deliver broad social and economic benefits, as is done today, for example, through the Commonwealth Government's Capacity Investment Scheme's (CIS) merit criteria. The CIS merit criteria include matters such as benefits for the system, how quickly the project will reach commercial operation, but also benefit sharing with both First Nations groups and local communities. Projects are attributed higher merit (and are therefore more likely to be chosen) if they meet the

relevant requirements of the merit criteria. The Community Benefit Principles introduced in the Future Made in Australia legislation take a broader approach to benefiting the national community by also considering matters like workforce development, building supply chains, and tax transparency. By ensuring benefits flow to workers, communities, and the broader economy, governments can show commitment to protecting the rights of communities and First Nations, and build social licence for the transition.

In the context of the NEM review, the government should require businesses that benefit from the proposed Electricity Services Entry Mechanism (ESEM) to provide broad social and economic benefits aligned with the Future Made in Australia's Community Benefit Principles. Currently, the interim report states that non-financial considerations regarding community engagement, workforce development and benefit sharing with local communities should not be dealt with as merit criteria for the ESEM. Given that the ESEM is essentially a type of forward contract, it makes sense that it would be challenging to clear the ESEM on anything other than price. This contrasts with the CIS, which awards project proponents long-term revenue underwriting contracts with the Commonwealth Government.

Nevertheless, to ensure social license and the buy-in of communities for the development of renewable energy infrastructure, it is essential that non-financial considerations including broad benefits are treated as eligibility criteria that are consistent across the NEM. These eligibility criteria should be clear, binary, and easily quantifiable (rather than being weighted in an assessment rubric). For example, rather than weighting projects more favourably that deliver a Stakeholder and Community Engagement Plan, as is currently the case for the CIS, project proponents could be required to have such a plan and ensure they are engaging communities to at least the "involve" level of the IAP2 Spectrum,[25] as is the case for the Victorian Renewable Energy Target auction (VRET2). The eligibility criteria should also ensure that local communities have the ability to shape the benefits they receive. It should not be left to separate jurisdictions to decide these matters, as is currently suggested in the interim report. Generators that do not benefit from government support should continue to be able to participate in the energy market without additional requirements being imposed.

Recommendation 7: Require businesses to provide broad social and economic benefits, aligned with the Community Benefit Principles in the Future Made in Australia legislation, if they receive federal government support to build new energy generation and storage.

Governments and local communities taking an ownership share of generators and networks can help smooth the transition to renewable energy by ensuring that the broader community benefits, and that owners prioritise social (rather than private) benefits. Privatisation can lead to efficiency but only with sufficient competition among service providers and effective regulatory oversight. In the absence of these conditions, it is not obvious that private ownership creates better outcomes than public or community ownership. Increased public ownership of the energy system would enable states to ensure that the necessary infrastructure can be built in a timely manner, well before fossil fuel power generators close, avoiding any shortfalls in energy supply. Public ownership would also help reduce tensions between the roll-out of behind-the-meter batteries and microgrids as private network service providers seek to counteract a potential decline in profitability. Community (co-) ownership of projects can deliver profits for community projects to increase resilience, and increase acceptance of the transition.

State governments are increasingly investing in their own energy infrastructure projects, which provides them with greater control over supply and prices. In Queensland, the Energy (Renewable Transformation and Jobs) Act 2024 legislates public ownership targets of at least 54% of generation assets, and 100% of networks and deep storage assets including pumped hydro by 2035.[26] While the Victorian Government recently resurrected the State Electricity Commission as a government-owned energy company invested in renewable energy generation and storage, energy infrastructure in states like New South Wales and South Australia remains privatised.

Community co-ownership models for renewable energy projects are also beginning to emerge, both within First Nations communities and across rural Australia.[27] However, many of these projects rely on individuals purchasing shares, meaning that the benefits are delivered to local shareholders rather than the whole community. In contrast, in countries such as the UK, many community energy projects are run to serve the wider local population.[28]

Recommendation 8: Develop policy frameworks to incentivise higher ownership shares of generators and networks by Australian governments and local communities – especially government ownership of networks as they are natural monopolies.

Application: NEM review

The NEM review, alongside other ongoing consultations including DCCEEW's Better energy customer experiences process and AEMC's Pricing review, offer invaluable opportunities for the federal government to ensure consumers benefit from the energy transition and, as a result, will be more likely to support it. The recommendations above are relevant for these reviews, and, collectively, would strengthen the role of consumers in the energy market.

In this section, we apply the recommendations to the NEM review. We welcome the decision of the NEM review panel to include a chapter on "Ensuring consumers benefit" in their interim report, marking a notable distinction from previous reviews of the NEM that have focused on the supply side. The chapter "Ensuring consumers benefit" offers valuable insights into how entities like the Australian Energy Regulator can better support consumers in a decarbonising energy system.

Observation 1: Consider supporting the development of simple, multi-year fixed price retail contracts

We strongly agree with the proposal to promote the provision of long-term fixed price retail contracts, and that information to assess these contracts should be offered in as simple a form as possible (see above section on "Ensuring regulatory and fiscal policy settings are designed to support households without rooftop solar and batteries" for more information). Providing choice to consumers to decide whether or not to use a fixed multi-year contract is in principle a good idea, assuming that the relevant information is offered in a transparent way, that it is not easy for retailers to manipulate or mislead consumers, and that consumers can easily compare different contract options. While the structure of the proposed multi-year fixed contracts is not clear, for ultimate simplicity, they should not just be fixed over time but also be a flat rate.

Nevertheless, it is not certain that households who enter into multi-year fixed price contracts will be protected against miscontracting, even if cost benchmarks are published in a transparent way. Based on the past history of the energy market, the difficulty of correctly deciding between a short-term variable or multi-year fixed term contract will likely not be fixed simply by making the total expected cost of providing the service more available and transparent.

Additional measures are clearly needed to protect consumers against miscontracting. We value the reference in this sub-section to the work of Ron Ben-David on an inner and outer market for energy consumers, to distinguish between those who want a simple service for energy (inner market) and those who want to trade energy as a commodity (outer market). We also suggest further consideration around how this model can be applied to more comprehensively protect consumers. Currently, the interim report suggests that the obligation for retailers to offer multi-year fixed price contracts aligns with Ron Ben-David's idea of an inner market. However, truly supporting consumers who are not interested in being active energy traders and shopping around for the best deal, implies the need for additional reforms. For these consumers, strict policy and regulatory principles should govern prices, prices should include no headroom provisions such as competition allowances, and there should be a limited set of tariffs that consumers can choose from.[29] Rather than selling contracts to retailers in later years – as is currently

proposed for the ESEM – the central ESEM administrator could sell energy directly to consumers in the inner market, with the rest of the contracted energy being sold into the outer market, to reduce overall costs.[30]

Recommendation NEM1: Propose that the multi-year fixed price contract model is implemented as a flat-rate tariff to avoid harming households who face disadvantage and are less able to shift their energy demand.

Recommendation NEM2: Encourage that the energy system should be designed in such a way that consumers who are not interested in shopping around for the best deal should receive energy prices that are set based on strict policy and regulatory principles, which allow for no headroom provisions, and should have a limited set of tariffs to choose from.

Observation 2: Consider reforming network tariff structures to ensure they are more equitable and better aligned with wholesale market dynamics

We strongly agree that household contributions towards the cost of energy network upgrades should be progressively distributed and that households with low levels of income and wealth should pay less. Households with rooftop solar and batteries should not be able to avoid paying for the costs associated with upgrading the network to accommodate more renewable energy, including from their own devices. There is a need to redesign network tariffs, including moving away from volumetric tariffs, to ensure greater fairness in the distribution of these costs. However, rather than transitioning to network tariffs with a higher fixed component, as is currently suggested in the NEM review interim report, we recommend encouraging the use of policies like income-based fixed charges (see recommendation 5 above). Alongside the reform of network tariffs, we agree that measures should also be taken to increase the visibility of exports from rooftop solar, batteries, and EVs in the NEM (recommendation 2 of the interim report) to increase the efficiency of AEMO's dispatch processes.

While the interim report discusses the need for network tariffs to drive efficient utilisation of electricity networks – which we agree with – it does not consider alternatives to network infrastructure. We see a need for regulators to amend frameworks to increase the contestability of network service provision by CER (see recommendation 2 above).

Recommendation NEM3: Suggest that the AEMC oversees a detailed analysis of the costs and benefits of possible solutions for sharing the cost of network upgrades, rather than simply proposing a shift of costs to the fixed components of energy bills.

Recommendation NEM4: Call for regulators to amend frameworks to increase the ability of CER to contest network service provision.

Observation 3: Consider updating the methodology for regulated retail price benchmarks (such as the DMO) to reflect the evolving nature of the derivatives market in the context of new contract structures and market making obligations

We agree that the AER should incorporate any improvements in the transparency of wholesale prices when deciding upon relevant regulated retail price benchmarks each year. The review's recommendations to increase investment in renewables, particularly with regards to contract markets, should increase the transparency of prices and make them more predictable further in advance. Annually-updated retail price benchmarks should reflect these changes. This brief also makes other suggestions for reforming how the DMO is set (see recommendation 3 above), however these are more relevant for the AEMC's Pricing review.

Observation 4: Consider extending the National Energy Customer Framework to cover new energy services, including CER aggregation, and explore the introduction of an overarching consumer duty to protect consumers engaging with more complex service offerings

While the NEM review proposes protections for consumers who access new technologies, CPD believes the consumer duty should cover all households, as discussed above in recommendation 6. DCCEEW's Better energy customer experiences process asserts that strong consumer protections are "fundamental to the community's trust towards energy transformation",[31] and we see this sentiment applying across all households. The NEM review's interim report discusses the challenge for consumers to understand the risks of proposed multi-year fixed price retail contracts. Here is a clear example of where a consumer duty makes sense for all households.

Recommendation NEM5: The NEM review panel should focus on all households, not only CER owners, when encouraging the introduction of an overarching consumer duty.

Conclusion

The energy market is an administrative invention based on rules and regulations that can and should be designed to benefit energy consumers including households. While investment in energy infrastructure is vital to support Australia's ambitions to decarbonise its economy, policy reforms to energy markets should place people at the centre to ensure enduring support for the transition.

This brief has examined what a reformed energy system should deliver for Australian households, both at a general level and as applied to the NEM review. Our recommendations centre on three main themes:

- Creating the policy conditions necessary to ensure that energy prices are no higher than they need to be to support investment;
- Ensuring regulatory and fiscal policy settings are designed to support households without rooftop solar and batteries; and
- Structuring government support for the energy industry to deliver broad social and economic benefits for Australian society.

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