

22 August 2021

Lord Hollick
Chair
House of Lords
The Industry and Regulators Committee

SUBMISSION REGARDING INQUIRY: THE OFGEM AND NET ZERO

Dear Lord Hollick,

Energy Consumers Australia (ECA) welcomes the opportunity to provide written evidence on Ofgem's role in the transition to net zero. We appreciated taking part in the oral evidence session on Tuesday 13 July 2021, along with Dhara Vyas, Head of Future Energy Services at Citizens Advice, and Matt Copeland, Head of Policy and Public Affairs at National Energy Action.

1. ECA is the independent, national voice for residential and small business energy consumers. Established by the Council of Australian Governments (COAG) Energy Council in 2015, our objective is to promote the long-term interests of energy consumers with respect to price, quality, reliability, safety, and security of supply. We advocate for a future Australian energy system that works for, and benefits, the households and small businesses who use it. ECA has an important role in the Australian energy context, given that we represent all residential and small business consumers across Australia.
2. Our submission will present learnings from the Australian perspective, discussing how we have considered the priorities of consumers, the costs associated with the transition to net zero, and changes in how consumers engage with the energy system in our work. We are mindful that ECA is constantly learning from other nations' experiences as well, including our colleagues in the UK at Citizens Advice and National Energy Action. These organisations have a holistic and rigorous focus supporting outcomes for consumers, and their engagement with Ofgem and others makes their insights and perspectives extremely valuable to us.

The Australian regulatory context

3. Comparative to Ofgem, there are three market bodies responsible for energy in Australia, the Australian Energy Market Commission (AEMC), the Australian Energy Regulator (AER), and the Australian Energy Market Operator (AEMO).
 - The AEMC is the rule maker, making and amending rules for the National Electricity Market (NEM), elements of the natural gas market and related retail markets.
 - The AER is the market regulator, regulating the wholesale and retail energy markets, and energy networks, and is part of the Australian Competition and Consumer Commission (ACCC).



- The AEMO is the market operator and planner, managing the NEM, the West Australian Wholesale Electricity Market (WEM), wholesale and retail gas markets and supply hubs, and gas systems.
4. The three market bodies report to the Energy National Cabinet Reform Committee through the Energy Ministers' Meeting. Their creation replaced several jurisdictional and Commonwealth regulators in Australia to provide consistency and stability in regulating the interconnected energy markets. The result is that each of the market bodies is an independent decision-maker with clear accountabilities for a particular function, with Governments being responsible for high-level policy and broader social value judgements. This enabled the three market bodies to focus their efforts on the efficient operation of the market in the long-term interests of consumers.
 5. Under the National Energy Laws, all three market bodies must follow the legislated national energy objectives: national electricity objective (NEO), national gas objective (NGO), and national energy retail objective (NERO). These objectives can collectively be summarised as: to promote efficient investment in, and efficient operation and use of, energy services for the long-term interests of consumers of energy with respect to price, quality, safety, reliability and security of supply of energy. As can be seen, they do not include any requirement to consider the long-term interests of consumers with respect to climate change or the environment though these have material impacts on the electricity and gas sectors. Instead, their approach is to consider if achievement of the energy objective would be impacted by mitigation or adaption risk that manifests due to the issue of climate change. For example, AEMO recently announced it aims to engineer grids capable of running at 100 percent instantaneous penetration of renewable energy by 2025.¹
 6. Alongside the three market bodies is the Energy Security Board (ESB). The (ESB), chaired by Dr Kerry Schott AO, was established by Energy Ministers in August 2027. The Board's role is to coordinate the implementation of the reform blueprint produced by Australia's Chief Scientist, Dr Alan Finkel AO.²
 7. The ESB also provides whole of system oversight for energy security and reliability to drive better outcomes for consumers. The ESB comprises an Independent Chair, Independent Deputy Chair and the heads of the Australian Energy Market Commission, Australian Energy Regulator and Australian Energy Market Operator.
 8. The Finkel Review identified that Australia's electricity system was at a critical point.
"Managed well, Australia will benefit from a secure and reliable energy future. Managed poorly, our energy future will be less secure, more unreliable and potentially
 9. The ESB was tasked by Energy Ministers in 2019 to develop a fit-for-purpose market design for the NEM. The ESB is currently in the process of developing changes to the existing market design or alternative market design to enable the provision of the full range of services to customers necessary to deliver a secure, reliable and lower

¹ <https://aemo.com.au/en/newsroom/news-updates/the-view-from-the-control-room>

² <https://www.energy.gov.au/government-priorities/energy-markets/independent-review-future-security-national-electricity-market>



emissions electricity system at least-cost. The ESB was tasked with this Post 2025 Market Design project as they have a broader remit to integrate such reform.³

10. In this way, Australia is addressing the question of how to incorporate net zero objectives into the energy regulatory structure in a similar way to that described by Professor Catherine Mitchell and Jeff Hardy in their evidence session held on 22 June 2021. That is, the regulator's limited remit may require a separate entity to act as a parallel and coordinating body to specifically address the implications for the design of energy markets of net zero targets, which are now commitments of all state and territory jurisdictions in Australia.

The two energy system transitions

11. In our view there are two transitions underway in Australia's national electricity market (NEM). The first is the necessary transition from fossil fuel technology to renewable energy generation. This 'big picture' transformation comes with a suite of issues about how we continue to provide a reliable and secure supply of electricity when the primary generation fleet is based on utility scale wind and significant amounts of rooftop solar, with its variable supply.
12. The largest generator in Australia's interconnected National Electricity Market is now owned collectively by customers – and sits on their rooftops. The rapid uptake of residential homes with rooftop solar PV is now close to 3 million homes across the NEM continues to outstrip all forecasts. Whereas formally the grid capacity was challenged at times of maximum demand, often when air-conditioner loads were highest on the hottest days, it is now periods of maximum generation in the middle of the day that are challenging the capacity of the grid and the operation of the system (see Figure 1). A mix of export limits, smart controls and in the future potentially pricing regimes are all targeting this issue.
13. The emergence of digital and battery technologies is likely to drive further growth in batteries and electric vehicles (EVs) over the coming years, supporting new choices and potential value streams for customers as they offer new forms of flexibility in their load to the grid. Excess power can be stored in batteries and sold back to the grid from the household or vehicle batteries.
14. The second transition is the changing ways consumers are using and engaging with energy, in their homes and small businesses. We see this in the growth of distributed energy resources (DER) – such as rooftop solar PV, home battery storage, electric vehicles and smart appliances. This transformation is fundamentally changing the way we use energy, resulting in greater customer control.
15. Understanding the nature of these transitions (and how they are inextricably linked) is critical to the successful management of both. Making sure the voices of consumers are heard and listened to will be a key driver of success across these two complex transitions.

³ <https://esb-post2025-market-design.aemc.gov.au/>

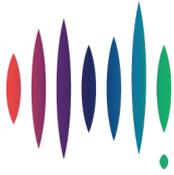
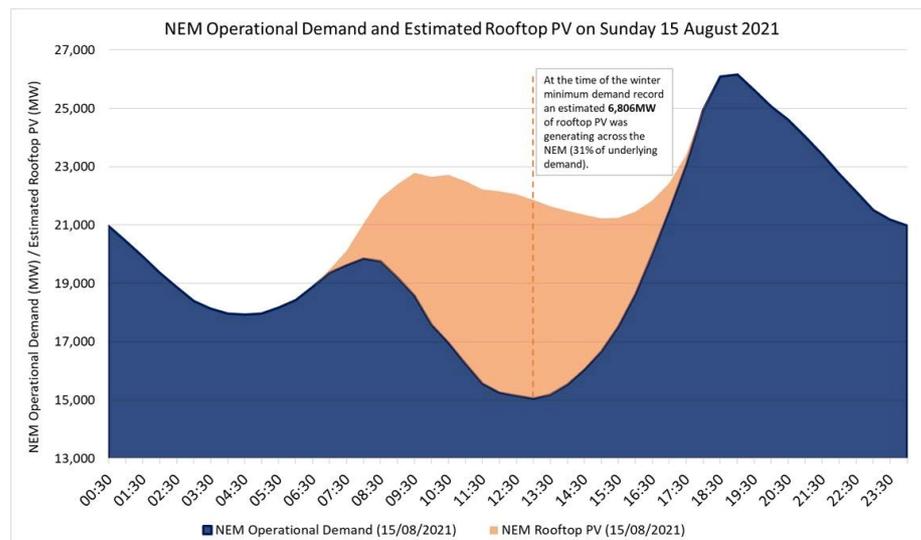


Figure 1 Rooftop solar generation



16. A positive policy example is the 2019 Distributed Energy Resources Roadmap for Western Australia, which clearly outlines the challenges of DER integration as well as a plan for how the increased uptake of DER can be integrated into energy system operation and management.⁴ It includes measures to ensure customers are protected and able to access information needed to build a future where DER is an active participant in the power system. The ESB is expected to publicly release its final report on Post 2025 Market Design in the near future and it is anticipated that it will also include a plan for the integration of the energy system with distributed energy resources.

The transition away from natural gas

17. Within Australia, the state of Victoria is where natural gas is relied on for space and water heating, to the greatest extent (other jurisdictions include the Australian Capital Territory and to a lesser extent New South Wales and South Australia).
18. Victoria faces a significant challenge in transitioning away from natural gas to meet the jurisdiction's net-zero emissions targets by 2050. In our recent submissions to the Victorian Government⁵ and to Infrastructure Victoria⁶ we focused on the interests of consumers in the transition.

⁴ <https://www.wa.gov.au/government/publications/der-roadmap>

⁵ <https://energyconsumersaustralia.com.au/publications/submission-to-the-victorian-government-gas-substitution-roadmap-consultation-paper>

⁶ <https://energyconsumersaustralia.com.au/publications/submission-to-infrastructure-victorias-interim-report>



19. Consumers want to actively participate in the energy transition. In February 2020, our research on Consumer Expectations⁷ found that Australian energy consumers wanted a say in the evolution of the energy market but feel that they lack the information and platform to be heard. Consumers are looking to governments for a long-term plan, seeing them as the key to making tangible change, as concluded in the same research piece. More recent focus group conversations with consumers have revealed that they believed reducing energy usage is a shared responsibility and they would welcome further education on energy issues. The Energy Consumer Sentiment Survey (ECSS) June 2021 found that 40% of consumers believed that transitioning to renewable energy sources to help prevent climate change was either the most or second most important challenge to the Australian energy system.

The costs of the transition

20. While the two energy system transitions will bring opportunities for increased consumer participation, there is a real risk that substantial benefits will accrue only to homeowners living in detached housing, unless policy measures address the energy divide. Surveying community attitudes to rooftop solar this year, we found key barriers for market entry included being a renter, the upfront expense, lack of knowledge, and the length of payback periods to cover initial purchase.⁸
21. Affordability needs to be a key constraint on the timing and costs of investment decisions, and the package of reform measures for this transition to net zero. In the context of a great deal of uncertainty, risks need to be allocated to the parties that can best mitigate those risks, and reform proposals should not pass those risks and costs onto consumers through their electricity bills.
22. The opportunities and challenges of smart technology uptake will likely be disproportionately spread across Australian consumers. Without access to energy efficient housing and appliances, rooftop solar PV or home battery storage, a significant proportion of households and small businesses could face the burden of disproportionately higher energy bills. Given the rise in the proportion of households in rental accommodation, and the decline in detached housing, it is not only the financially vulnerable that are at risk, with as many as one third of energy consumers potentially being left behind through the transition. It is crucial for policy to have this broader understanding of vulnerability to ensure the transition is equitable for all consumers.

Consumer trust

23. Securing consumer and community support and ensuring trust in government and industry will be crucial for a changing energy landscape. Our 2021 Consumer Sentiment Survey showed that while trust in energy companies has improved in recent times, coinciding with a fall in electricity prices, only 46 percent of Australian

⁷ <https://energyconsumersaustralia.com.au/publications/a-future-energy-vision-consumer-expectations-research>

⁸ <https://energyconsumersaustralia.com.au/wp-content/uploads/Report-on-Community-Attitudes-to-Rooftop-Solar-and-the-AEMC-Proposed-Reforms..pdf>



household consumers are confident that the overall market is working in their long-term interest.⁹ 69 percent of household consumers say they are concerned that the energy system will fail to keep up with the changing ways in which we use energy in Australia, and over 60 percent are concerned that electricity and gas will become unaffordable for them over the next 10-20 years.

24. Households are looking to Government to drive tangible change, namely a long-term energy plan with action starting immediately. In our 2020 Consumer Expectations Research, we found that consumers want Government and industry working in their interests, towards a better energy future that is affordable, simple, easy to manage, clean, and inclusive.¹⁰ Similar sentiments were expressed by small-medium businesses, who were comfortable with Government playing a leadership role if it was in line with their interests, such as enforcing lower energy costs and increasing rebates to make energy technology more accessible.

Thank you again for the opportunity to provide evidence before your Inquiry. If you have any further questions please don't hesitate to contact me at lynne.gallagher@energyconsumersaustralia.com.au.

Yours sincerely,

Lynne Gallagher
Chief Executive Officer

⁹ <https://ecss.energyconsumersaustralia.com.au/sentiment-survey-june-2021/>

¹⁰ <https://energyconsumersaustralia.com.au/projects/consumer-values-expectations-and-needs>