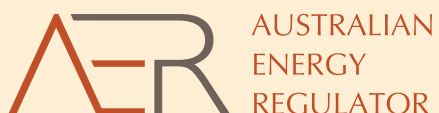




State of the energy market

2024



Australian Government

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Chair's preface

For more than 15 years the Australian Energy Regulator's (AER) flagship *State of the energy market* report has provided a comprehensive view of Australia's electricity and gas markets and the experiences of consumers. This year's edition continues this tradition with a detailed description of the year that was across all our energy markets and for energy consumers.

Alongside the *State of the energy market* we will continue to publish a range of in-depth reports into specific parts of the energy system. These reports will provide a deep dive into some of the critical issues facing the energy sector.

- Our November 2024 Annual retail markets report looks at how energy consumers are faring as prices increase and how retailers are addressing this challenge.
- In December 2024 we will release our biennial competition and efficiency review that examines the structure, conduct and performance of our wholesale electricity market as it goes through a profound transition.
- We will publish our second annual export services network performance report, looking at the increasingly important role of energy exports from rooftop solar systems and other technologies, as well as our analysis of regulated gas transmission pipeline performance and a focus report on the gas supply hubs.

The *State of the energy market* provides a rich background to these reports, documenting the end-to-end operation of our energy markets. It is a resource for both those new to the sector and those looking to understand the breadth of changes in the past 12 months.

Over the past year we have observed that wholesale prices have eased from the extreme levels of 2022–23, but that they are increasingly volatile. The market also saw record low minimum demand in New South Wales, Victoria, South Australia and Tasmania and record high maximum demand in Queensland. Weather and outages at both generator and network levels were key contributors to this. Rooftop solar photovoltaic (PV) is now the fuel source with the highest registered capacity across the National Electricity Market (NEM). Residential solar PV installed in the NEM now exceeds 20 gigawatts – equivalent to 25% of total registered generation capacity. Through their investment in rooftop solar, batteries and electric vehicles, consumers have become an integral part of the energy transition.

An important policy development over the past 12 months has been legislative reform to include emissions reduction in the national energy objectives. These objectives promote efficient investment in, and use and operation of, energy services in the long-term interests of consumers. In promoting these objectives, market bodies must now consider emissions reduction alongside factors such as price, reliability, quality, safety and security.

The change in relation to emissions will contribute to energy system planning and can now be factored into network investment proposals. It also reinforces that promoting efficiency is critical as we develop the energy system. This will help us ensure the energy system is least cost and that assets are well utilised.

The importance of efficiency has long been the clarion call of the AER. We are again urging industry to be disciplined about how existing assets are used before they build more. Now is the time to get creative about how to do this. With the sector changing so fast, it is unclear which mix of technology, economic and regulatory solutions will meet consumer and system needs most efficiently. The Energy Innovation Toolkit, which is a regulatory sandbox operated in partnership with the Australian Energy Market Commission, Australian Energy Market Operator, the Australian Renewable Energy Agency and the Essential Services Commission, allows innovative approaches to be trialled. Now is the time to experiment with an eye always to lowering future costs for consumers.

Significant shifts are not confined to our electricity markets. In gas markets we are seeing supply risks in the short to medium term. Gas will remain a critical fuel for electricity reliability and large industry for some time. However, we are also seeing moves towards electrification of domestic uses of gas, with accompanying uncertainty about the future of some of the infrastructure currently meeting those needs.

For energy consumers, the past 12 months has been a challenging time. Across the NEM, while the proportion of customers in debt has remained stable, the average amount of debt per customer increased in 2023–24. While price increases were offset by rebate assistance from governments, broader economic conditions meant that affordability and energy debt remained challenging.

Through our *Towards energy equity* strategy, released in 2022, we are continuing to highlight the importance of identifying consumers in need of support early and providing effective assistance. In November 2023, we submitted our ‘game changer’ reforms to Energy Ministers, setting out a suite of proposals to break the cycle of energy debt and fundamentally shift the way the energy sector supports consumers. We are pleased progress has been made on some of these reforms in the package of consumer-focused rule change requests endorsed by Energy Ministers in July 2024. We recognise that more must be done to drive systemic change for energy consumers who struggle to pay their energy bills. In addition to advocating for the remaining game changer reforms, we are reviewing the payment difficulty protections that currently exist and considering how these protections could be strengthened.

The energy transition means that consumers have access to an increasing array of new energy services such as electric vehicles, aggregation services (such as virtual power plants) and home energy management services. We expect these services to continue to grow as technology evolves and the sector innovates. However, we are concerned that protections for consumers using these new services are inadequate. Put simply, our current protections framework is designed for the one-way supply of electricity directly to a home or business and not a world in which a customer can use multiple energy services to consume, trade and produce energy. We have presented detailed analysis on this issue to Energy Ministers and look forward to seeing this progressed as part of the National Consumer Energy Resources Roadmap. The Roadmap will help address the risk of harm to consumers while creating the right environment for the continued development of services that can support the grid and reduce costs through the energy transition.

I recommend the *State of the energy market 2024* report to all stakeholders as a source of key data and clear insights on the industry, but also as a compelling reminder of our shared responsibility to help make energy consumers better off, now and in the future.

Clare Savage
AER Chair
November 2024





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