IPART Independent Pricing and Regulatory Tribunal | NSW

Monitoring the NSW Retail Electricity Market – 2024-25

Final Report

November 2025

Energy »

Acknowledgment of Country

IPART acknowledges the Traditional Owners of the lands where we live and work. Our office is located on Gadigal land and our work touches on Aboriginal lands and waterways across NSW.

We pay respect to their Elders both past and present, and recognise Aboriginal people's unique and continuing cultural connections, rights and relationships to land, water and Country.

Image taken on Worimi Country (Myall Lakes)

The Independent Pricing and Regulatory Tribunal

IPART's independence is underpinned by an Act of Parliament. Further information on IPART can be obtained from IPART's website.

Tribunal Members

The Tribunal members for this review are:

Carmel Donnelly PSM, Chair
Dr Darryl Biggar
Jonathan Coppel
Sharon Henrick

Enquiries regarding this document should be directed to a staff member:

Jonathan Gawthorne Jonathan.gawthorne@ipart.nsw.gov.au

Adrian Thomas Adrian.thomas@ipart.nsw.gov.au

ISBN 978-1-76049-874-0

Contents

Glossary

Term	Definition
Acquisition offer	A retail electricity plan with attractively low prices designed to attract new customers, often followed by price increases for existing customers.
ACCC (Australian Competition and Consumer Commission)	The national regulator responsible for promoting competition and fair trading, including monitoring electricity markets and retail pricing.
AEMC (Australian Energy Market Commission)	The rule maker for Australia's electricity and gas markets, responsible for market development and rule changes.
AEMO (Australian Energy Market Operator)	The organisation that operates the National Electricity Market (NEM) and gas markets across Australia.
AER (Australian Energy Regulator)	The regulator responsible for monitoring and enforcing compliance in the NEM, setting network prices, and overseeing retail energy markets.
Aggregator	An entity that coordinates and manages distributed energy resources (such as batteries and solar) from multiple customers to participate in energy markets or provide grid services.
ASX (Australian Securities Exchange)	The main securities exchange in Australia, where electricity futures and hedging contracts are traded.
Better Bills Guideline	A set of AER requirements for retailers to provide clearer, more informative billing to help customers understand and compare offers.
BYOD option	A virtual power plant offer which allows you to bring your own battery and solar system rather than purchasing a system from the operator.
Cap futures	Financial contracts that provide protection against high wholesale electricity prices above a certain threshold.
CER (Consumer Energy Resources)	Small-scale energy generation or storage owned by consumers, such as rooftop solar, batteries, and electric vehicles.
CDR (Consumer Data Right)	A regulatory framework that allows consumers to authorise accredited third parties to access their energy usage and billing data for comparison and switching services.
Controlled load	A tariff for specific appliances (e.g., hot water systems) that operate at off-peak times for lower rates.
Cost stack	The breakdown of all cost components that make up the final retail electricity price (e.g. wholesale, network, environmental, retail margin).
DCCEEW (Department of Climate Change, Energy, the Environment and Water)	The government department responsible for energy, climate, environment, and water policy. There is a Commonwealth DCCEEW and a NSW DCCEEW.
DMO (Default Market Offer)	A regulated electricity price cap set by the AER to protect customers on standing offers from unjustifiably high prices.
DNSP (Distribution Network Service Provider)	Companies that own and operate the electricity distribution networks (Ausgrid, Endeavour Energy, Essential Energy in NSW).
Demand charge	A component of some electricity tariffs based on the highest level of power drawn from the grid during a billing period.
Demand response	Programs that incentivise customers to reduce or shift electricity use during peak demand periods.
Demand tariff	A tariff that includes a charge based on the customer's maximum demand (kW) during peak periods, in addition to usage and supply charges.
DER (Distributed Energy Resources)	Small-scale generation or storage connected to the grid at the distribution level (e.g., rooftop solar, batteries).
ECA (Energy Consumers Australia)	An organisation representing residential and small business energy consumers, conducting research and advocacy.
EWON (Energy & Water Ombudsman NSW)	The independent dispute resolution service for energy and water customers in NSW.
Explicit informed consent	A regulatory requirement that retailers must obtain clear, affirmative agreement from customers before making certain changes to their energy plans or tariffs.

Term	Definition
Feed-in tariff (FiT)	The rate paid to customers for electricity exported to the grid from their solar PV or other generation.
Flat-rate tariff	A tariff with a single usage rate for electricity, regardless of time of day.
Hedging contract	A financial agreement used by retailers to manage the risk of fluctuating wholesale electricity prices.
HHI (Herfindahl-Hirschman Index)	A measure of market concentration, calculated by summing the squares of market shares of all firms in the market.
kW (Kilowatt)	A unit of power equal to 1,000 watts.
kWh (Kilowatt-hour)	A unit of energy representing one kilowatt of power used for one hour.
LGA (Local Government Area)	A geographical area governed by a local council, used for reporting regional data.
Loyalty tax	The extra amount paid by customers who remain on older electricity plans compared to those who switch regularly.
Market offer	An electricity contract with terms and prices set by the retailer, usually requiring the customer to actively sign up.
Median market offer	The middle value of all available market offers for electricity, used as a benchmark for price comparisons.
Minimum system load event	A period when grid demand is so low (often due to high rooftop solar output) that it challenges grid stability.
MSP (Metering Service Provider)	Companies responsible for installing and maintaining electricity meters, including smart meters.
National Energy Retail Law (NSW) (NERL)	The legislation that governs the sale and supply of energy to retail customers in NSW, including consumer protections and market rules.
NEM (National Electricity Market)	The wholesale electricity market covering NSW, QLD, VIC, SA, TAS, and the ACT
Network price list	The published schedule of network tariffs and charges set by a DNSP.
Network tariff	The charge for using the electricity distribution network, set by DNSPs and regulated by the AER.
NSW PDRS rebate	A rebate from the NSW Government for signing up to a virtual power plant, offered through the Peak Demand Reduction Scheme.
Off-peak period	Periods when electricity demand is low and prices are lower.
On-supply customer	A customer who receives electricity through an embedded network (e.g. in an apartment block), rather than directly from a retailer.
OTC (Over-the-Counter) contract	A privately negotiated financial contract for electricity, as opposed to standardised contracts traded on an exchange.
Peak demand event	A period of high electricity usage when demand response programmes may be activated.
Peak period	Times of high electricity demand, usually attracting higher prices.
PV (Photovoltaic)	Technology that converts sunlight into electricity, commonly used in solar panels.
Retailer	A company that sells electricity to end customers, purchasing from the wholesale market and setting retail tariffs.
Retail margin	The profit margin earned by retailers after covering all costs.
RoLR (Retailer of Last Resort)	A mechanism to transfer customers to another retailer if their current retailer fails.
Shoulder period	The time between peak and off-peak periods in a time-of-use tariff, with intermediate pricing.
Sign-up credit	A financial reward or bill reduction for signing up to a virtual power plant offer.
Smart meter	An electronic meter that records electricity usage in short intervals and communicates data to the retailer for billing and monitoring.
Solar soaker plan	An electricity plan that offers very low or zero rates for electricity used during periods of high solar generation (usually midday).

Term	Definition
Standing offer	A basic electricity contract with regulated terms and a price cap (DMO), available to all customers.
Supply charge	The fixed daily charge for being connected to the electricity network, regardless of usage (measured in c/day).
Swaption	A type of financial derivative (swap option) used by retailers to hedge against future wholesale price risk.
Tariff	The pricing structure for electricity, including usage, supply, and (where applicable) demand charges.
Time-of-use (ToU) tariff	A tariff with different rates depending on the time of day (e.g. peak, shoulder, off-peak).
Transitional demand tariff	A demand tariff with reduced rates for a limited period, typically offered to customers newly assigned to network demand tariffs.
Usage charge	The variable component of an electricity bill, based on the amount of electricity consumed (measured in c/kWh).
VPP (virtual power plant)	A network of distributed energy resources (e.g. solar, batteries) coordinated to act as a single power plant, providing services to the grid or market.
Wholesale price	The price retailers pay for electricity in the NEM before selling to customers.

Chapter 1

Executive summary

01

IPART is required to report each year to the Minister for Energy on the performance and competitiveness of the NSW retail electricity market for small customers and advise the Minister on whether a detailed review of retail prices and profit margins is required. Since 2024, our role has been expanded to include ongoing monitoring of new energy services, including demand response programs and virtual power plants (VPPs), and how these products affect customer outcomes.

A well-functioning and competitive retail electricity market helps to ensure that electricity prices are set at a reasonable level (that reflects the cost of supply plus a reasonable margin), that customers receive high quality service, and offers meet changing customer needs and preferences. A competitive retail electricity market is also essential to ensure that the long-term benefits of the energy transition are passed onto customers.

Over 2024-25, the NSW retail electricity market delivered uneven outcomes. Households and small businesses that regularly review their plan and switch have lower bills. However, those that remain on older plans pay higher prices, often above the Default Market Offer. This loyalty tax grows over time – the older an offer, the more a customer is likely to pay.

Households also continued to worry about energy bills in 2025. A 2025 consumer survey found energy costs were the third largest area of concern after the cost of living and the economy. Further, we found some households, particularly those on certain government support payments, are paying a high proportion of their income on energy bills, even after government rebates.

The retail electricity market is also continuing to evolve. The rollout of smart meters and move to cost-reflective network tariffs has resulted in new pricing structures that signal when and how to use electricity. Further, the strong uptake of solar, and more recently batteries, has supported the growth of new energy services, including VPPs. To date there have been signs of healthy competition in the supply of VPPs, with a diverse range of offerings. Customers on VPPs also have lower bills.

However, cost-reflective network tariffs, consumer energy resources (CER) and new energy services are making the market more complex. Stakeholders raised concerns around the growing complexity of offers, limitations with online comparison tools, the pricing practices of retailers, and challenges with bundled energy services. As electricity is an essential service, transparent pricing is essential, and regulation must ensure there are strong consumer protections for all customers, and access to redress when things go wrong.

Most of these issues and concerns have persisted for several years and were detailed in our *2023-24 Retail Electricity Market Monitoring Report*. However, several rule changes and reviews are underway that aim to address or will consider these issues.

IPART will continue to monitor whether these reforms and reviews deliver better outcomes and more consistent value for retail customers in NSW. As many of these reforms will not be fully implemented or completed until 2026, we have not made new recommendations in this report. Rather, our key findings highlight current market outcomes and issues in the context of these reforms and provide a basis for monitoring their impact once they take effect.

1.1 The NSW retail electricity market remains concentrated

While smaller retailers are competing to acquire and retain customers, the market remains concentrated. In March 2025, the 3 largest retailers (Origin, AGL, and EnergyAustralia) supplied 74% of residential and small business customers.

Nine new retailers have been authorised since 2023-24 but only one has started offering contracts to small customers.[a] Most new retailers have focused on specific market segments, such as embedded networks, large users, virtual power plant customers or other regions in the National Electricity Market (NEM). The number of active retailers seeking new customers has been steady since last year but remains below 2020-21 peaks.

In 2024-25, only 65% of retailers in NSW were seeking new customers, down from 77% before 2021-22. Fewer retailers competing for new customers may reduce pressure on incumbents to lower prices, innovate and improve service quality.

Smaller retailers continue to face barriers to growth, including difficulty accessing hedging products and higher costs to serve and retain customers.

1.2 Higher network costs and retail margins have reduced the benefit of cheaper wholesale costs

Wholesale electricity costs have eased compared to last year but remain high. After the sharp price rises in 2022–23, average wholesale costs for retailers in NSW fell by 7-11% in 2024-25. However, forward contracts suggest prices will remain above pre-2022 levels through 2026.

Higher network and retail costs are offsetting much of the benefit from cheaper wholesale electricity prices. Network charges rose 6–16% across NSW between 2023–24 and 2024–25. Retail operating costs rose 18–27% in the 2024-25 DMO, driven by bad debts, the smart meter rollout, and spending to attract and retain customers.

Retailer margins have also rebounded. Across the NEM, the average gross margin per residential customer rose from $34 in 2022–23 to $110 in 2023–24, the highest since 2017–18.

1.3 Customers that switch regularly pay lower prices

In 2024, NSW households on flat-rate offers between 1-2 years old paid $127 (6%) more than those on offers less than a year old. Households that stayed on the same offer for 2 years or longer paid an extra $297 (15%).

More than a third of customers on flat-rate plans paid prices at or above the DMO, even though its purpose is to protect customers from unjustifiably high prices. In general, the older the offer, the more likely a customer is to pay a price above the DMO.

[a] The term 'small customer' is defined in the National Energy Retail Law (NERL) as a residential customer or a business customer who consumes less than 100 megawatt hours (MWh) per annum of electricity. Throughout this report, we refer to these customers as residential customers and small business customers.

Switching rates were slightly lower in 2024–25 than a year earlier but remain higher than the levels from 2019-20 to 2022-23. About two-thirds of households in NSW reported they reviewed their electricity at least once a year, however many households do so far less often. Further, only around one in 6 households in NSW were on their retailer's best offer, which still may not be the lowest cost offer available.

Stakeholders also submitted that complex tariffs, limitations with comparison tools and retailer pricing practices continue to make it difficult for customers to compare and switch.
This complexity is having a particularly large effect on disadvantaged households that have limited time and capacity to navigate the energy market, or who face language, literacy or technology barriers.

1.4 Estimated bills are typically higher under demand tariff plans

Distribution networks and retailers are continuing to transfer customers onto time-of-use and demand tariffs. The share of households on flat-rate network tariffs fell from 71% in 2022–23 to 52% in 2024–25. Around 29% of households in NSW are on time-of-use network tariffs and 18% are on demand network tariffs, while small businesses show a similar pattern. However, we found that not all households who are assigned to a cost-reflective network tariff are also on a cost-reflective retail tariff.

Stakeholders continued to raise concerns that demand tariffs are complex and difficult to understand. Further, many comparison tools, including Energy Made Easy, cannot calculate the demand charge component of a bill, making it hard for customers to compare and find an affordable offer.

We found that customers with similar usage levels on flat-rate and time-of-use plans have similar bills. However, offers with a demand charge are typically the most expensive, especially for households without solar. For these customers, demand charges can add around $100 to $300 a year to their bills.

For households with solar, the difference in annual bills between demand tariff plans and flat-rate or time-of-use plans is smaller. This is because demand tariff plans often come with higher solar feed-in tariff payments, which help offset some of the extra costs of demand charges. However, demand tariff plans are still typically the most expensive option overall.

We also found that bills under demand tariff plans can be much less predictable than other tariff types. Two households importing the same amount of electricity from the grid can receive very different bills, depending on when and how they use power during peak times.

As more customers are moved onto demand tariffs, customers need better information and tools to help them make informed choices.

1.5 Households are feeling the strain of high electricity bills

Electricity bills are continuing to put pressure on NSW households. In 2025, households ranked the cost of electricity as their third largest concern after the cost of living and the economy.

Based on new indicators developed by Energy Consumers Australia, around one in 5 households in NSW are vulnerable to or experiencing energy hardship. The likelihood of being vulnerable to or experiencing hardship is higher in the Endeavour Energy network, where around one in 4 households were showing one or more indicators of energy hardship.

Some households on government income support spend more than 10% of their income on electricity, even after rebates. Further, around 470,000 households did not receive rebates they were eligible for in 2023–24. These payments, including NSW Government rebates and the National Energy Bill Relief rebate, could have covered just over 40% of the average electricity bill for a rebate customer. In addition, most energy rebates have not increased since 2017–18, and National Energy Bill Relief rebates end in 2025.

Complaints to retailers and the Energy & Water Ombudsman NSW remain high. They were steady this year but have grown sharply over time. Retailer complaints are up two-thirds since 2020–21, and EWON complaints have almost doubled.

1.6 CER uptake continues to be strong

NSW continues to have a strong uptake of CER. By 30 September 2025, there were over 1.1 million rooftop solar installations with a cumulative capacity of almost 7.7 GW.

Battery installations have also accelerated over the past 2 years. In 2024, there were close to 4,600 batteries installed by small customers in NSW. Over the period of 1 January to 31 October 2025, there were just under 8,000 batteries installed.

Strong growth in battery installations is expected to continue. Recent research has found the amount of time to pay back a battery has fallen sharply, and it is generally shorter than the warranty period for batteries. With the Cheaper Home Battery Program rebate, NSW households could, on average, pay back the cost of a battery in 7.3 years. For households who join a VPP, this could be as few as 4 years.

1.7 VPP customers are benefiting from competition

The NSW Government has asked IPART to continue to report on new energy services, including demand response programs and VPPs.

We identified 5 behavioural demand response programs in NSW. These were run by the 3 largest retailers (Origin, AGL and EnergyAustralia), Engie and Amber Electric. The 3 largest retailers account for most demand response customers (over 95% in NSW, Southeast QLD, VIC and SA).

Behavioural demand response programs are structured as an add-on service (to an existing retail electricity contract) that customers can choose to participate in. However, the savings or rewards for successful participation may not be sufficient to encourage future growth.

In NSW, there were just under 13,000 VPP customers in January 2025. The 3 largest retailers held a market share of 22% of VPP customers in January 2025. Other VPP operators held a market share of 78%.

The strong presence of smaller retailers and other energy service providers are a positive outcome for competition and consumer choice in the supply of VPPs. Competition is currently focused on product differentiation and innovation to cater for different customer needs and preferences.

VPP customers in NSW have significantly lower bills than other customer types, including those with solar and a battery (who are not part of a VPP). For example, over Q3 2023 to Q3 2024, the median quarterly bill for VPP customers was between 34% and 72% lower (depending on the quarter) than the median quarterly bill for customers with a battery and solar.

1.8 New rules are coming into effect and reviews are underway to improve consumer outcomes

In 2025, the AEMC made 7 rule determinations to improve consumer confidence in retail energy plans, strengthen hardship protections, and make it easier for customers to find better plans and switch. These new rules are coming into effect in 2026 and aim to address several concerns raised in submissions.

While these reforms are expected to make it easier for customers to find better deals, many price comparison tools still do not include demand charges or new energy services such as VPPs. Further, we found there is a segment of the market that is unlikely to engage and switch even with additional disclosure. These customers will continue to pay higher prices.

However, there are several other major reviews underway. The AEMC's Review of Electricity Pricing for a Consumer-Driven Future is considering the role of network and retail electricity pricing, products and services in supporting the diverse needs of customers, and pricing to support the update of CER necessary for the energy transition.

In addition, the Commonwealth Department of Climate Change, Energy, the Environment and Water has recommended stronger price protections for standing offer and embedded network customers. Further, the Better Energy Customer Experiences review is also considering whether the National Customer Energy Framework remains fit for purpose given the uptake of CER and changing market dynamics.

IPART will continue to monitor the impact of these reforms and reviews on the NSW retail electricity market and customer outcomes.

Findings

1. Market concentration has fallen over the last decade, but was flat between 2023-24 and 2024-25. In 2024-25, only 65% of retailers in NSW were seeking new customers, down from 77% before 2021-22. 38

2. Over the last 2 years, new retailers entering the market have targeted specific market segments, including embedded networks, large industrial customers, and virtual power plant customers. 38

3. Access to suitable hedging products remains challenging for many small retailers. New exchange-traded morning and evening peak contracts are intended to better match changing wholesale price patterns; however stakeholders have reported that the 1 MW minimum contract size may still limit access for smaller retailers. 43

4. 2025 survey data shows that 66% of households in NSW reported they review their energy plan and investigate better options at least once a year. However, the remaining households do this far less often – 20% reported they only review their energy plan once every few years, and 13% reported they do this less than every 5 years or never. 51

5. Customers who do not shop around regularly for energy plans pay more. In 2024, residential customers on flat-rate offers 1 to 2 years old paid, on average, $127 more and those on flat-rate offers 2+ years old paid, on average, $297 more than residential customers who switched in the last year. Small business customers on flat-rate offers 1 to 2 years old paid, on average, $598 more, while those on flat-rate offers 2+ years old paid, on average, $700 more. 53

6. The estimated annual bill ranges for flat-rate and time-of-use offers were similar in 2024-25, whether calculated using the DMO usage profiles or a sample of individual usage profiles (although individual customers could be better off on flat-rate or time-of-use tariffs depending on their usage profile). 92

7. Demand tariff customers typically cannot move back to a flat-rate offer, but they can move to a time-of-use offer. Many demand tariff customers could pay less by moving to a time-of-use offer. 92

8. Estimated annual bills are typically higher for demand tariff plans than flat-rate or time-of-use plans, in particular for households without solar. Stakeholders continue to report demand tariffs are difficult to understand and some comparison tools, including Energy Made Easy, cannot calculate the demand charge component of a bill. 106

9. A detailed review of retail prices and profit margins in the NSW retail electricity market is not warranted at this time. The ACCC continues to inquire into prices, profits and margins in the National Electricity Market and retailers are required to ensure that any substantial and sustained cost reductions are passed on to small customers. 118

10. There are 5 behavioural demand response programs running in NSW. These offer customers an easy way to participate in a new energy service. However, the savings from participating may not be enough to encourage greater participation. 136

11. Virtual power plant customers in NSW are benefiting from competition through product differentiation and lower bills. We identified 21 virtual power plant offers from several suppliers with different eligibility criteria, participation payments, and control over the customer's battery. 150

12. Stakeholders continue to report consumers find virtual power plants difficult to understand, with limited information and tools available to compare and assess offers. Contracts may not clearly specify how virtual power plant operators control batteries and other large appliances, or what settings the customer can adjust. 150

13. There is often no dispute resolution process for bundled energy services which can involve a retail contract, third-party consumer energy resources, financing, and a virtual power plant. 151

14. Based on indicators of energy hardship developed by Energy Consumers Australia, rural and regional households are more likely to be vulnerable to or experience energy hardship, compared to households in metropolitan areas. 157

15. Across several categories of income support payment recipients, we found households in the Endeavour Energy and Essential Energy distribution networks would spend a higher proportion of income on the median electricity bill, compared to the Ausgrid distribution network. This was due to both higher estimated usage levels and to a lesser extent higher median electricity prices in the Endeavour Energy and Essential Energy distribution networks. 159

16. NSW Government energy rebates have not kept pace with electricity price increases over time and may not be sufficient to protect vulnerable customers from falling into energy hardship. A rebate based on a percentage of the total bill, could result in a more equitable outcome across eligible customers. 174

Chapter 2

What stakeholders told us

02

In July 2025 we published our Energy Market Monitoring Consultation Paper (the Consultation Paper). We asked for feedback on:

- our approach to market monitoring and the metrics we report on
- customer experiences with new energy products and services, including virtual power plants (VPPs) and demand response programs, and whether customers have sufficient information to make informed decisions
- any emerging issues we should explore.

We received 23 submissions, including one confidential submission. Submissions argued a diverse range of views and considerations. We have grouped these into 6 key themes.

This chapter summarises these themes and explains how we have considered them in this report.

Table 2.1 Number of submissions

Stakeholder group	Number of submissions	Name of stakeholder(s) that provided a submission
Individual	17	A. Sumit, B. Ratten, B. Watson-Will, R. Webb, G. Sage, S. Cromie, G. Olsen, R. Irwin, B. Allen, 7 name suppressed, 1 confidential submission
Consumer advocacy group	2	Justice and Equity Centre (JEC), National Seniors Australia (NSA)
Businesses	2	Origin (retailer), Freewatts Pty Ltd (accredited certificate provider)
Industry associations	1	Master Electricians Australia (MEA)
Ombudsman	1	Energy and Water Ombudsman NSW (EWON)

2.1 Theme 1 – barriers to engagement and switching

We heard many customers find it difficult when they try to engage with, compare, or switch electricity offers or retailers. The key challenges were:

- the increasing complexity of retail tariffs and retailer pricing practices
- limitations of online comparison tools, including Energy Made Easy[a]
- current market design requires frequent switching for affordability.

We explain each of these below.

[a] Energy Made Easy is an Australian Government website maintained by the Australian Energy Regulator. Under the National Energy Retail Law which came into effect on 1 July 2012, the AER must operate a price comparison website.

2.1.1 The increasing complexity of retail tariffs and retailer pricing practices

Eight submissions raised concerns around the increasing complexity of retail tariffs and considered this is impacting customer engagement and the ability to switch.

Three individual submissions noted retail tariffs now include several price components - such as a daily supply charge, peak, off-peak and shoulder usage charges (which may vary by season), demand charges and feed-in tariffs. Submitters considered this complexity makes it difficult to compare offers, and discourages customers from engaging and switching.[1]

The JEC submitted that market complexity and retailers' pricing practices[b] have made identifying, comparing and switching offers time consuming, confusing, and with a low likelihood of savings.[2] The submission explained that customers' previous experience - where they switch to a cheaper offer, and a retailer subsequently increases the price - can leave customers knowing they are worse off on their current offer, but concluding that the effort of switching will likely be wasted.[3]

2.1.2 Limitations of online comparison tools

Several submissions detailed that online price comparison tools, including Energy Made Easy, have limitations and have not kept pace with new tariff structures.

Several individuals submitted that Energy Made Easy can't estimate the total cost of an offer with a demand charge component.[c, 4] Another noted that Energy Made Easy does not allow users to input if they have an electric vehicle (EV) or home battery and does not include new offers such as EV charging plans or VPPs. This means a customer could choose a plan that is more expensive or not suited for their circumstances.[5]

The JEC submission said that even if a customer identifies and selects a better offer on a comparison site, that offer may be different to the offer that a customer actually signs up to, which undermines customer choice. The JEC submission noted this issue is more pertinent for customers with lower digital or English language proficiency.[d, 6]

---

b The JEC submission detailed that several pricing practices or strategies of retailers inhibit engagement and switching. These pricing practices are detailed in Section 2.1.3 below.

c In our 2023-24 Retail Electricity Market Monitoring report, we highlighted that Energy Made Easy is unable to calculate the demand charge component of an offer, despite customers being moved onto these offers. We recommended that the AER urgently update Energy Made Easy to include demand charges in bill estimates.

d Similar issues were raised last year by the JEC and EWON. In our 2023-24 Report, we found that retailers often have the same name for plans with different tariff structures. When a customer signs up, they are typically placed on a plan with a tariff structure that is aligned with the underlying network tariff. This could be different to the plan the customer found online.
Source: IPART, *Monitoring the NSW retail electricity market*, 2023-24, pp 56-58.

2.1.3 The current market design requires frequent switching

The submission from the JEC and 2 individual submissions raised concerns that the current market design requires frequent switching to stay on the best value offer.

The JEC submitted that customers cannot opt out of the retail energy market. While Minister Bowen recently explained that most customers consider choosing an energy contract is a 'set and forget' task, the retail market relies on constant engagement and makes affordability dependent on it.[7] The JEC said customers must review their plan every 3-12 months to stay on an affordable offer, which is a poor outcome for an essential service.[8]

Individual submitters also raised concerns about needing to frequently switch.[9] This sentiment was captured in R. Webb's submission:

> 'there are fairly big savings for people who change their electricity plans. But this is becoming more and more difficult … I still get electricity to my house, but the pricing keeps becoming more complicated and the only way to save money is to keep switching. If it becomes too difficult and time-consuming people simply won't switch anymore.'[10]

The JEC said the retail energy market is based on the fundamental assumption that customers can 'shop around' for affordable offers, and this choice disciplines the market toward more efficient practices. However, the JEC considers this assumption is not reasonable, and recent reform processes and the designated complaint from CHOICE[e] demonstrate this.[11]

The JEC said many households, particularly disadvantaged households, face material barriers to switching with the frequency required for an affordable outcome. This includes limited time and capacity to navigate the market, language, literacy and numeracy barriers, limited technology access, or constraints from mental or physical health issues.[12]

How we considered these views

Several submissions to our 2023-24 Energy Market Monitoring Consultation Paper raised similar challenges consumers face when searching and switching.[13]

In Chapter 4, we report on barriers to engagement and switching using consumer survey data and the financial impact of not switching. Although these barriers have persisted over several years, the AEMC has recently made several rule determinations to improve consumer confidence and make switching easier in retail energy markets.[14] We outline these rule determinations in Chapter 4.

Chapter 5 reports on the estimated bills for customers on different offers including flat-rate, time-of-use and demand tariffs. This examines whether customers are on the lowest cost tariff for their usage profile.

[e] On 21 May 2025, CHOICE submitted a designated complaint to the ACCC around potentially misleading pricing and sales practices for retail energy plans. We detail the CHOICE designated complaint in Chapter 4.

2.2 Theme 2 – falling feed-in tariffs (FiTs) and limited innovative solar offers

The second most common concern in submissions was the falling value of solar FiTs and the lack of innovative solar offers.

2.2.1 Solar FiTs have fallen

Six individuals and MEA raised concerns around the falling value of FiTs.[15] Submissions detailed that FiTs have fallen sharply over the past decade, while retail prices have risen.[16] One submission noted that off-peak charges have not fallen alongside FiTs, despite solar exports helping to lower wholesale prices during daylight hours.[17]

The JEC submitted that some customers are installing larger solar systems without batteries or enough load, and may not understand the impact of lower FiTs, export charges or that solar (without storage) has limited use at peak times.[18] The JEC warned that limited awareness of these changing dynamics and predatory sales have left some customers worse off.[19]

2.2.2 Few offers are responding to wholesale market signals

Several submissions considered there are opportunities for retailers to provide more offers with innovative pricing, such as solar soaker periods or dynamic FiTs, in response to wholesale price signals.[20]

The JEC detailed the growing number of households with smart meters provides the potential for retailers to offer more dynamic 'solar soaker' products that reward daytime electricity use and share the benefits of solar more broadly. The JEC also suggested retailers could dynamically compensate households with excess solar for not exporting at certain times. This would avoid the need for AEMC to use more expensive interventions during minimum system load events.[21]

The JEC proposed IPART should examine the range of solar offers, including the balance of supply charges, usage charges and FiTs, and the value and availability of flexible solar products.[22]

The JEC also noted few retailers in NSW offer dynamic or time-dependent FiTs that reward exports during peak times.[23] Several individuals also considered higher feed-in tariffs should be available to all customers who export at peak times; not only those in VPPs.[24]

How we considered these views

Chapter 7 reports on CER and new energy services. In this chapter we detail the Governments new solar sharer standing offer proposal and the FiTs available for customers on a VPP.

Concerns about the long-term decline in FiTs and rising electricity prices are consistent with those in submissions to our 2025-26 Solar Feed-in Tariff Benchmark Review. As we addressed these in our 2025-26 Solar Feed-in Tariff Final Report, they have not been reconsidered here.

2.3 Theme 3 – customer experiences and challenges with VPPs

In the Consultation Paper we sought stakeholder views on customer experiences with VPPs and demand response programs, and whether they have sufficient information to make informed decisions.[25]

Nine submissions (EWON, NSA, Origin and 5 individuals) discussed customer experiences or challenges with VPPs, including:

- limited information to understand and compare VPP offers
- unclear and potentially uneven distribution of VPP benefits
- increasing complexity of bundled energy products and services.

We discuss these issues below. Feedback on demand response programs was limited. Only Origin provided information on their demand response programs and customers numbers.[26]

2.3.1 Information on VPPs is complex and not easy to access

Four submissions raised concerns about a lack of easily accessible information on VPPs.

The JEC submitted customers face material barriers when making informed decisions about participating in VPPs. VPPs vary widely in design and value proposition but are not consistently listed on comparison sites such as Energy Made Easy. This makes it difficult for customers to assess costs, benefits, contract terms and suitability of VPPs.[27]

Several individuals raised similar concerns. G. Olsen noted that Energy Made Easy does not include information on VPPs, which may lead customers to choose plans that are not appropriate for their circumstances.[28] One anonymous submitter said while they had purchased a battery, they had not joined a VPP, as information is difficult to find and often buried in VPP contracts.[29]

EWON submitted that customers need simple and clear information about how a VPP works at each stage of the customer journey; before investing in CER, before signing a new contract and while participating.[30] EWON considers this should include (but not be limited to):

- **the benefits of participating in a VPP** – clearly defined financial benefits, such as rebates or lower energy rates, and how to check if they are being received.[f] For indirect benefits, such as a more secure electricity supply, these should be clearly explained in marketing material.
- **how the VPP operates** – which large electrical appliances such as hot water systems, home batteries or EV charging infrastructure will be impacted by the VPP. For example, for a home battery, customers must know the time periods when the battery will be charged and discharged, and what to monitor.
- **how appliances will be remotely controlled** – which aspects of electrical appliances will be controlled by the VPP, and which aspects the customer can still control. For example, customers must know what settings they can adjust on the inverter once they join a VPP.[g, 31]

[f] For example, EWON submitted retailers could provide a clear indicator on the bill what customers would pay with and without participation in the VPP.

[g] EWON noted customers make a significant investment in CER, and these technologies allow owners to adjust the settings to suit the household's needs. Complaints to EWON indicate customers often do not understand that

EWON also submitted that retailers often reserve the right to place customers on a VPP through the terms and conditions in a retail market contract, but this is not explicitly shared with customers, or in a way customers understand.[h, 32]

2.3.2 The benefits of VPPs are unclear and may not be distributed fairly

Five submissions said it is difficult for customers to understand how the benefits (revenue) from VPPs are distributed between retailers, aggregators and customers.

The JEC submitted a common issue in the energy sector is a lack of trust in retailers and aggregators, founded in the pricing of retail offers. The JEC considers there is a perception that gen-tailers and VPP operators retain a disproportionate share of the benefits, compounded by the lack of robust regulation for VPPs.[33] Similarly, NSA warned that if industry keeps VPP profits while customers bear the cost of CER, the reputation of VPPs will suffer and growth may slow.[34]

Several individual submissions asked IPART to investigate how much retailers earn from VPPs and how much of this value is shared with customers.[35]

2.3.3 Complexity and challenges with bundled energy services

EWON submitted that complaints about batteries and VPPs are often complex as they involve the sale and installation of CER, which may be bundled with VPP contracts, and may include finance.[36] However, the external dispute resolution (EDR) model is based on service providers being members of EWON's scheme. As a result, EWON cannot resolve complaints about third party sales and CER installations.[37]

Retailers may also structure their business so that energy, CER services, and financing are offered through separate legal entities. This prevents EWON from addressing parts of a complaint about behind-the-meter devices and services.[38]

EWON explained it is working with the NSW Government to implement Action 25 of the NSW Consumer Energy Strategy to begin public consultation to expand EWON's jurisdiction to new energy services providers, such as VPP and demand response services. EWON is also engaging with the Federal Government and peer ombudsman through the Better Energy Customer Energy review.[39]

How we considered these views

In May 2025, the NSW Minister for Energy asked IPART to continue to report on new energy offerings, including VPPs and demand response programs, and how they have impacted the competitiveness of the NSW retail energy market.[40]

---

when they join a VPP, they give up some or all of their ability to adjust the functionality of devices (inverters, batteries or thermostats). Further, customers may face challenges regaining control of their devices once they switch VPPs.

h EWON's submission emphasised this is not a new issue – energy Ombudsman from QLD, SA and VIC have raised concerns about this in a 2024 joint submission to the AEMC. EWON's submission also provided several case studies where customers were placed onto VPPs without their knowledge.

Chapter 7 provides information on:

- VPPs and demand response programs in NSW
- challenges consumers face in understanding and engaging with these offerings
- how VPPs benefits are being shared
- how these new offerings affect competition
- trends in complaints related to CER.

2.4 Theme 4 – concerns about smart meters and changing tariff structures

We received 6 submissions raising concerns about smart meters or the accelerated smart meter rollout. These were from the JEC, EWON, MEA, NSA and 2 individuals. The main concerns were:

- rising bills, added complexity and higher complaints linked to the smart meter rollout
- potential gaps in the AEMC's consumer safeguards for the Accelerated Smart Meter rollout.

2.4.1 The benefits of smart meters are not being realised

Several submissions from individuals questioned the value of smart meters. One individual considered smart meters lead to higher bills,[41] and another highlighted their retailer moved them onto peak and off-peak rates following a smart meter installation and won't allow them to move back to a flat rate tariff.[42]

MEA's submission cautioned that many households are unfamiliar with time-of-use or demand tariffs. The submission explained that the accelerated smart meter rollout shows the need for better consumer awareness and education, and without it, households may be moved onto new tariffs after a smart meter installation without knowing how to adjust their usage to minimise costs.[43]

EWON submitted many customers are not seeing the expected benefits from smart meters but instead are facing a range of problems. These include estimated bills, billing delays, back-bills, difficulty accessing usage data, and delays in disputed bill reviews.[44]

EWON attributed many issues to a disconnect between retailers, customers and Meter Service Providers (MSPs). EWON has facilitated workshops with a range of stakeholders to address smart meter issues and prevent future complaints.[45]

EWON encouraged IPART to:

- consider complaints that show the expected benefits of smart meters are not being realised
- review how competition is working in metering services
- consider whether changes should occur so MSPs are brought into the National Energy Customer Framework (NECF) to address these systemic issues.[46]

2.4.2 Gaps remain in smart meter protections

Submissions from the JEC and NSA raised concerns that consumer safeguards in the AEMC's Accelerating Smart Meter Deployment rule change do not take effect until 1 December 2025.[47] They submitted this delay has created a gap in consumer protections. Until that date, customers who have smart meters installed can still be moved onto time-of-use or demand tariffs without their explicit informed consent.[48]

The JEC and NSA also submitted while the rule requires a customer's existing retail tariff to be maintained for 2 years after smart meter installation, this protection ceases if the customer switches retailer.[49]

In addition, both submissions highlighted that the NSW Government has not yet opted into the AEMC's recommendation that designated retailers must offer customers the choice of a flat-rate tariff after a smart meter is installed. They said this limits customer choice and that people should have the option to switch to a flat rate offer if they prefer.[50]

How we considered these views

In Chapter 4, we report on customer understanding and engagement with new tariff structures using consumer survey data. We also report on whether households in NSW want to switch back to flat rate tariffs after a smart meter is installed.

In Chapter 5, we report on prices and estimated annual bills for customers on different tariff structures - flat rate, time of use, and demand. We consider whether customers are on the lowest cost tariff structures given their consumption profile.

In Chapter 7, we report on smart meter uptake in NSW and the rise in related complaints. We also consider issues raised by EWON about MSPs.

2.5 Theme 5 – energy affordability remains a concern

Five submissions raised concerns about energy affordability and the pressure of rising energy bills on households in NSW. These came from Origin, the JEC and 3 individuals.

Origin submitted there are several major reviews into customer protections underway, and the AEMC is introducing new rules that will embed a higher level of protection against high prices. Origin said these reforms will improve customer experiences and better protect vulnerable customers.[51]

The JEC submitted IPART should have a renewed focus on affordability, including for disadvantaged and vulnerable customers. The JEC considered that while IPART's standard affordability indicators provide some insight into payment difficulty and hardship, they do not capture the full picture of customer experiences, nor the diverse impact of energy poverty.[52]

The JEC suggested that IPART:

- use both quantitative and qualitative data to report on energy hardship, including measures in the JEC's Powerless research and ECA's research on energy hardship. Over time, IPART should develop a comprehensive measure of energy hardship for market monitoring[53]
- report more fully on disconnections, drawing on the JEC's Powerless research to understand the causes and impacts[54]
- investigate which eligible households are missing out on rebates and assess if the value of rebates remains sufficient.[55]

Several submissions from individuals raised concerns around the persistent rising cost of electricity in NSW, which is exacerbating cost-of-living challenges.[56]

How we considered these views

Chapter 8 reports on the number of customers accessing hardship and/or payment plans, eligibility and use of rebates, and complaints to retailers and EWON.

This year, we have also:

- expanded our analysis on energy affordability by reporting estimated bill to income ratios across LGAs and reporting on the ECA's indicators of energy hardship regions in NSW
- included insights from the JEC Powerless research, which provides deeper insights about customers experiencing hardship, and the risks and impacts of disconnection.

The AEMC has also introduced new rules to protect hardship customers and improve access to rebates. These rules take effect in 2026. Further detail is provided in Chapter 8.

2.6 Theme 6 – views on IPART's approach to market monitoring

Origin and the JEC provided feedback on our approach to market monitoring and the metrics we report on. The JEC's and EWON's submissions also made recommendations for this report.

Origin submitted that the AEMC is implementing a range of reforms to strengthen consumer protections against high prices. Origin considered drawing on these existing reviews would reduce the compliance burden for retailers and that there is a limited case for an additional review into retailer prices and margins.[57]

The JEC submitted effective monitoring is critical through the energy transition and amid rising energy bills and cost-of-living pressures.[58]

The JEC feedback on our metrics included:

- reporting on new metrics – such as changes in the cost to serve, acquire and retain customers, and more granular reporting on outcomes for specific groups (for example, renters, households without CER, non-switchers, and rebate recipients)[i, 59]
- reassessing how we interpret certain metrics – including the number of retailers, number of offers, switching rates, complaints data, and product diversity, noting the material limitations of these metrics given market concentration and current market design.[60]

2.6.1 Recommendations in submissions

Both the JEC and EWON made recommendations for IPART to consider as part of our Market Monitoring. These recommendations and our responses are in Table 2.2 below.

Table 2.2 Recommendations in submissions and our response

Recommendations in submissions	IPART response
JEC recommendation 1 - IPART seek independent, robust qualitative data on customer experiences and perceptions of competition and pricing. This data should not be wholly sourced from retailer customer satisfaction data.	We agree with the JEC that robust qualitative data on consumer experiences and perceptions is important for our market monitor role. Throughout this report, we have used data from ECA's Consumer Energy Report Card data to understand customer perceptions and engagement, and views on pricing and competition. We have also used this data to report on a broader range of energy hardship (or stress) indicators.
JEC recommendation 2 - IPART expand analysis of the energy transition for households to include a broader range of indicators that will provide a better, more holistic understanding of household experiences and outcomes from the energy transition.[j]	Section 234(A)(8) of the National Energy Retail Law (NSW) limits the information we can consider in our role as the Market Monitor. We can only consider information from the AER or AEMC, publicly available information and select information on pricing and customer numbers from retailers. The additional metrics suggested by the JEC would require information requests to retailers or survey data. Given the information restrictions, we have not expanded our analysis for additional indicators in this report.
JEC recommendation 3 - IPART review the Justice and Equity Centre's Roadmap for Efficient and Electric Homes and utilise it as a critical resource for understanding regulatory and legislative gaps that are impacting household energy performance.	We have reviewed the JEC's Roadmap for Efficient and Electric Homes. Given the scope of this Market Monitoring Report, we have not included findings from the Roadmap. However, we will consider this in future Market Monitoring reports and other relevant work programs, such as those related to embedded networks.

[i] The JEC submission also detailed that they support IPART continuing to report on several metrics that were new in the 2023-24 report. This included longer-term price trends, the frequency of price increases, the number and spread of offers by retailer, the number of customers on flat-rate, time-of-use and demand tariffs, price differences across retailers and by tariff type, level of fees and charges and changes in cost stack components (with focus on the costs of the NSW Electricity Roadmap). We have continued to report on these metrics in this report.

Recommendations in submissions	IPART response
EWON recommendation 1 – EWON has received 5 key complaint topics involving VPPs. These are a lack of explicit customer consent and information disclosure, a lack of understanding of the benefits from VPPs, a lack of understanding of how or when devices will be remotely controlled, difficulty managing multiple sources of energy data, and risks related to bundled energy services. EWON has recommended that IPART monitor these issues.[k]	Action 24 of the NSW Consumer Energy Strategy requires IPART to report on demand response and VPP services of retailers in the annual energy retail market monitor report. We appreciate EWON's submission on the issues and challenges related to VPPs from complaints. We will monitor these on an ongoing basis as part of our Market Monitoring reports. In this report, these issues are considered in Chapter 7.

Source: JEC, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 3; EWON, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper,* August 2025, p 2

How we considered these views

Several retailers raised concerns about regulatory burden created by multiple energy-related reviews in submissions to our Consultation Paper last year.[61]

We are mindful of the regulatory burden of information requests and of differing jurisdictional requirements across the NEM. In recent years, this has been a key consideration when deciding not to issue information requests and when shaping our recommendations.

We have included reporting on the changes in the cost to serve, acquire and retain customers in Chapter 3. In Chapter 5 and Chapter 8, we also report on annual bills for customers with and without CER, and for different groups of rebate customers.

We acknowledge the concerns raised by the JEC around the specific metrics we report on. In the chapters where these metrics are analysed, we outline their limitations. Where possible, we have added consumer survey results or other qualitative data sources to address some of the inherent limitations.[l]

2.7 Other topics raised in submissions

In addition to key themes outlined above, submissions raised discrete or out-of-scope topics. These topics and our response are summarised in Table 2.3 below.

[k] EWON's submission also explained they recommended the NSW Government consider these issues when implemented in the NSW Consumer Energy Strategy.

[l] For example, the JEC submission noted complaints only provide insights into the experiences of a small segment of consumers who have the awareness and capacity to make a complaint. We have supplemented complaints data with consumer survey data from Energy Consumers Australia to gain a broader understanding of customer perceptions.

Table 2.3 Other topics or issues raised in submissions

Other topics or issues raised in submissions	IPART response
Embedded networks The JEC submitted that while embedded networks (and CER in embedded networks) can provide benefits to customers, current regulations and protections do not support this, and several reviews have failed to generate meaningful reform. The JEC submitted that IPART should investigate the growth of embedded networks, CER in embedded networks and assess whether the benefits are being received by residents. IPART should also consider regulation to ensure consistent good outcomes for residents.	In 2024, IPART released the Final Report on the Future of Embedded Networks in NSW. This review contained 38 recommendations to improve consumer outcomes and protect consumers in embedded networks. On 11 October 2025, the NSW Government responded to IPART's recommendations, and is actioning 36 of IPART's recommendations. This includes authorising IPART to determine maximum prices for electricity, gas, hot water and air conditioning in embedded networks. The NSW Government has introduced legislation to enact these reforms in 2025. As these reforms are underway we have not assessed prices or outcomes for embedded network customers further in this report.
Reforms to improve grid stability and balance incentives to invest in solar Submissions from the JEC and MEA discussed mechanisms for balancing grid stability with incentives to invest in solar. MEA submitted that the frequent activation of the Emergency Backstop Mechanism (EBM) risks undermining customer confidence in clean energy investment, without addressing the underlying issue of grid capacity. MEA suggested the Emergency Backstop Mechanism (EBM) should curtail exports to zero as a last resort, rather than shutting down solar systems entirely. The JEC submitted that Flexible Export Levels (FELs) have the potential to enable greater rooftop solar penetration and more efficient integration of renewable generation. However, the benefits are contingent on fair and equitable access, including that all customers required to enrol in the EBM are also provided access to FELs, and that capacity allocation principles are transparent and support equitable sharing of export capacity. The JEC suggested IPART monitor the rollout of FELs in NSW as well as the operation of the EBM.	In early 2025, NSW DCCEEW consulted on its proposed approach to implement an EBM and CER installer portal.[62] NSW DCCEEW is now developing licence conditions to establish the EBM and a CER installer portal. Mandatory use of the CER installer portal and EBM is set to commence in June 2026. Given this timing, we will consider these issues further in future Market Monitoring reports.
Addressing market failures through overarching reform The JEC submission noted there are reform processes considering an overarching consumer duty and the explicit informed consent (EIC) framework. The JEC submission noted they support a consumer duty to augment existing regulations and protections, and in their submission to the BECE review, recommended strengthening the EIC framework.	As these reforms are being considered through the BECE review, we have not addressed them further in this report.
Pool pump installations and upgrades The submission from FreeWatts detailed that high-efficiency pool pump upgrades and efficient pool pump installations can benefit customers, reduce bills and contribute to peak demand reduction. However, the current design and incentives in the PDRS have not led to widespread market adoption.	The issues raised by FreeWatts are outside the scope of Energy Market Monitoring, however this submission has been provided to NSW DCCEEW for consideration.

Source: Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, pp 9, 18–19, 28–29, Master Electricians Australia, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, pp 2–3; FreeWatts, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025.

Chapter 3

Market structure and barriers to entry and expansion

03

Chapter summary

- The NSW retail electricity market remains concentrated. The 3 largest retailers (Origin, AGL, and EnergyAustralia) supplied 74% of household and small business customers as of 31 March 2025.
- There were fewer entrants in the NSW electricity market in 2024–25 than in 2023-24. Nine retailers have been authorised since 2023–24, but only one (Flipped Energy) has commenced offering retail contracts to small customers in NSW. Other new authorisations indicated the retailers will serve embedded network customers, large industrial users, or operate in other regions.
- The number of active retailers in NSW (those with 50 or more customers) and the number of retailers seeking new customers (those with published offers) have remained stable over the past 12 months but are well below their peaks in 2020–21.
- In 2024-25, only 65% of active retailers were competing for new customers. This is down from 77% in 2020–21.
- Smaller retailers continue to experience barriers to expansion, including difficulty accessing hedging products and higher per-customer costs to serve and retain customers.

3.1 Why we assess market structure and barriers to entry and expansion

New entrants can improve competitive outcomes by challenging existing suppliers on price, product offerings and customer service. The threat of new entrants can also incentivise existing suppliers to compete more aggressively or innovate their product offerings. This highlights the importance of ensuring that barriers to entry are sufficiently low.[63]

Business exits may also be a part of a well-functioning market. These can occur for a range of reasons such as changing consumer preferences, evolving market dynamics or economic shocks. However, if several businesses leave the market at the same time, or stop competing for new customers, this can be detrimental to competition.

In this chapter, we report on:

- the entry and exit of retailers
- the number of active retailers and retailers with offers available to new customers
- measures of market concentration
- barriers to entry and expansion.

3.2 Fewer retailers entered the market in 2024–25 than in 2023-24

To supply customers in the NSW electricity market, an entity must obtain a retailer authorisation from the AER.[64] In most cases, this authorisation allows the holder to supply customers in New South Wales, the Australian Capital Territory, Queensland, South Australia and Tasmania.

A retailer may exit the market in 2 ways:

- the AER revokes an authorisation if the retailer fails to meet their obligations or if a Retailer-of-Last-Resort (RoLR)[a] event is triggered
- a retailer can surrender or transfer their authorisation if they no longer wish to provide retailing services, for example after a merger or internal restructure.

From 2013-14 to early 2021-22, the number of authorised retailers in NSW rose steadily, with more retailers entering than exiting (Figure 3.1). However, the market saw considerable disruption following the wholesale price shocks in 2022. Over 2021-22 and 2022-23, 9 retailer authorisations were revoked, and an additional 4 authorisations were surrendered.

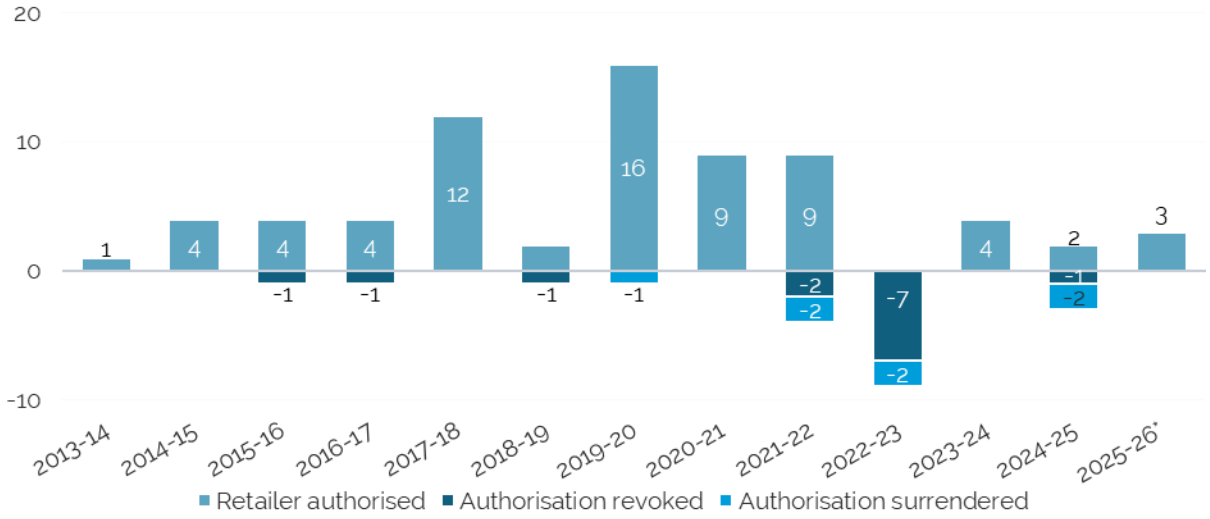
The ACCC has attributed this uptick in retailer exits to sharp rises and volatility in wholesale electricity spot prices. Many of the retailers that exited the market were vulnerable to price and volume risk, which contributed to their exit.[65]

There were no new entrants in 2022-23. Retailer authorisations recommenced in 2023-24 as the wholesale market stabilised. Four retailers were authorised in 2023-24, followed by 2 retailers in 2024-25, and 3 retailers in 2025-26 (until October 2025).

While 9 retailers have been authorised since 2023-24, only one retailer (Flipped Energy) has commenced supplying electricity to small customers in NSW.[66] The other new authorisations indicated the retailers will focus on servicing embedded network customers, large industrial users, or other regions in the NEM.[67]

[a] Retailer-of-Last-Resort events are triggered when a retailer becomes insolvent, enters external administration, or when AEMO suspends the retailer from trading in the NEM. Following a RoLR notice from the AER, a retailer's customers are transferred to a designated retailer.

Figure 3.1 Number of retailer authorisations, revoked authorisations and surrendered authorisations in NSW



Note: Data for 2025-26 is year-to-date to 1 October 2025.
Source: IPART analysis of AER authorisations data.

3.2.1 Reasons for retailer exits

RoLR events have been responsible for 10 out of 15 retailer exits from the NSW retail electricity market since 2021–22. This was primarily the result of wholesale market volatility in 2021–22, which placed significant financial strain on retailers. In most cases, retailers were unable to settle with AEMO or faced insolvency.[68] As noted by AEMO in each of its post-implementation reports, these RoLR events typically impacted a small number of customers (Table 3.1).

Some exits were strategic decisions, such as consolidating brands after acquisitions. In each case, the rationale for surrendering the retailer authorisation was simplification or integration, rather than an inability to continue servicing customers. These exits reflect parent company decisions (e.g. portfolio tidy-ups or internal consolidations), with customers transferred to another authorisation within the same group.

Table 3.1 below outlines when and why retailers left the market since 2022, either as a result of RoLR events or following voluntary surrender.

Table 3.1 Retailer of Last Resort events since 2022

Category	Retailer	Effective date	NEM customers impacted	Reason of failure or surrender
RoLR event	Pooled Energy	May 2022	824	• External administration/insolvency: failed to settle accounts with AEMO.[69]
RoLR event	Enova Energy	June 2022	13,270	• External administration/insolvency.[70]
RoLR event	Power Club	July 2022	1,940	• Default in obligations. Exact reasons undisclosed.[71]
RoLR event	Mojo Power East	July 2022	456	• Default in obligations. Exact reasons undisclosed.[72]

Category	Retailer	Effective date	NEM customers impacted	Reason of failure or surrender
RoLR event	Social Energy	August 2022	274	• External administration/insolvency.[73]
RoLR event	Elysian Energy	September 2022	7,123	• External administration/insolvency.[74]
RoLR event	QEnergy Limited	June 2023	10,304	• Default in obligations. Exact reasons undisclosed.[75]
RoLR event	Mojo Power	June 2023	5,785	• Winding-up order by Supreme Court of Queensland.[76]
RoLR event	Sanctuary Energy	June 2023	2	• Default in obligations. Exact reasons undisclosed.[77]
RoLR event	Circular Energy *(Maximum Energy)*	August 2024	804	• Failed to comply with wholesale settlement requirements.[78]
Surrender - financial	Rush Energy	July 2022	0	• Voluntary surrender.[79]
Surrender - financial	ReAmped Energy	September 2024	*Unstated, close to 0.*[80]	• Voluntary surrender.[81] • ReAmped previously advised its customers in June 2022 to switch retailer, reflecting it was experiencing similar wholesale cost pressures to other retailers that failed.[82]
Surrender	Powerdirect	March 2023	82,000	• Powerdirect surrendered its authorisation so AGL could streamline its retail operations and simplify its offerings.[83, b]
Surrender	Iberdrola Australia Holdings	August 2024	0	• Iberdrola Australia Holdings surrendered one of its authorisations while another of its group authorisations remained active.[84]
Surrender	Ampol Energy	(Proposed) April 2026	*Estimated 41,000 as of Q3 2024-25*[85]	• AGL has applied to surrender the Ampol Energy (Retail) authorisation and transfer all customers from Ampol Energy (Retail) to AGL, citing similar reasons to Powerdirect.[86]

3.3 Fewer retailers are seeking new customers

We report on the number of suppliers in the NSW retail electricity market across 3 levels:

- **Authorised retailers:** retailers that hold an active AER authorisation to sell electricity to small customers in the NEM (reported above).
- **Active retailers:** with 50 or more small customers in NSW. These retailers are operating in the market but may not be seeking new customers.[c]
- **Retailers with published offers:** retailers that have generally available electricity plans published on the Energy Made Easy website. These retailers are actively competing for new customers in NSW.

[b] AGL also applied to surrender the OVO Energy retailer authorisation after acquiring it in April 2021, however the application was withdrawn in January 2025, meaning OVO would continue operating under its own brand rather than the AGL brand. See: AER, *OVO Energy authorised electricity retailer*.

[c] Our definition of active retailers is consistent with that used by the ACCC in NEM Inquiry. Source: ACCC, *Inquiry into the National Electricity Market,* December 2024, p 63.

We report on the number of retailers at these different levels as they demonstrate different aspects of supply-side competition and the degree of contestability in the market.

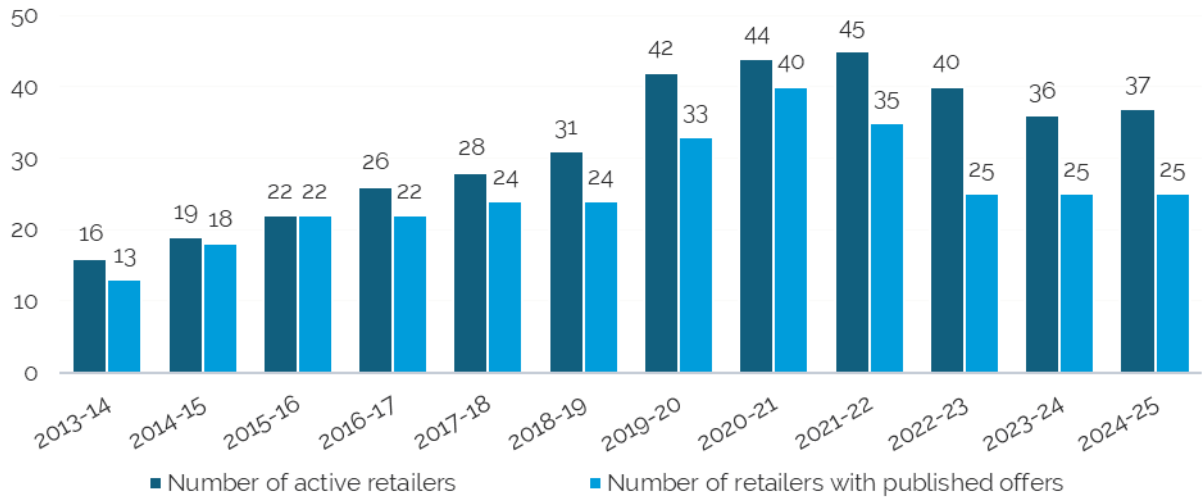
As shown in Figure 3.2, the number of authorised retailers in the NSW retail electricity market expanded materially between 2013–14 and 2021–22. Over this period, the number of active retailers in NSW rose from 16 to 45 retailers. The number of retailers with publicly available offers on Energy Made Easy also increased, peaking at 40 retailers in 2020–21 (Figure 3.2).

Both measures fell after the wholesale market volatility in 2022, in line with the fall in retailer authorisations (Section 3.2). The number of:

- active retailers has fallen from 45 to 37 (an 18% fall) since 2021–22
- retailers with publicly available offers fell from 40 to 25 (a 38% fall) from 2020–21 to 2022–23 and has remained stable since.

The share of active retailers with publicly available offers has fallen from 77% in 2020–21 to around 65% in 2024–25. This shows that fewer retailers with an existing customer base are competing for new customers.

Figure 3.2 Number of active retailers and retailers with published offers in NSW



Source: IPART analysis of Energy Made Easy data.

While the number of retailers is one indicator of supply-side competition, it has limitations. As noted in the JEC submission a large number of suppliers does not necessarily indicate a dynamic, competitive, or effective retail market, particularly if the market structure allows poor practices.[87]

The JEC submission also suggested that IPART expand our analysis of supply-side competition to include changes in the cost to serve, acquire and retain customers, and to incorporate qualitative analysis on customer experiences and whether competition is delivering good outcomes.[88]

We recognise the limits of analysing retailer entry and exit rates. When assessing competition, we do not consider this metric in isolation, but in conjunction with concentration measures, barriers to entry and expansion, indicators of demand side competition, and desktop research on costs and profitability.

We have expanded our analysis of supply-side indicators and report on the cost to serve, acquire and retain customers in Chapter 6. We also explore customer perceptions of pricing and competition in Chapter 4.

3.4 Retail electricity market concentration is still high but has eased in 2024-25

Market concentration provides a snapshot of market structure and the relative size of market suppliers. Tracking changes in market concentration helps show how easily new entrants and smaller competitors can attract and retain customers.

High and stable rates of concentration can lower competitive tension, weaken incentives to innovate or improve product offerings, and over time, may lead to higher prices.

The NSW retail electricity market is concentrated. The 3 largest retailers (Origin, AGL and Energy Australia) together supply 74% of households and small business customers as of 31 March 2025 (Figure 3.3 and Figure 3.4).

However, the market share of the 3 largest retailers has declined gradually since 2014, when they held 93% of residential customers (Figure 3.3) and 95% of small business customers in NSW (Figure 3.4). This ongoing decline has been driven mainly by strong growth from Red Energy.

Over the past decade, Red Energy's market share of residential customers has increased from around 2% in 2013-14 to 13% in March 2025.[89] Its market share of small business customers has increased from less than 1% to over 8%.[90] As of March 2025, the remaining retailers together hold 13% market share of residential customers (Figure 3.3) and 18% of small business customers (Figure 3.4).

The Herfindahl-Hirschman Index (HHI) is another measure of market concentration. It is typically used in horizontal merger analysis (Box 3.1).

Box 3.1 The Herfindahl-Hirschman Index

The HHI is a measure of market concentration used by competition regulators in horizontal merger analysis and market studies.

The Herfindahl-Hirschman Index (HHI) measures market concentration. It is calculated by adding together the squared market shares of each supplier in a market at a point in time.

The HHI Index ranges from close to zero for a highly competitive market – where many suppliers each hold a small market share – to 10,000, which represents a monopoly (a market with a single supplier).

Box 3.1 The Herfindahl-Hirschman Index

Under the ACCC's new merger assessment framework:

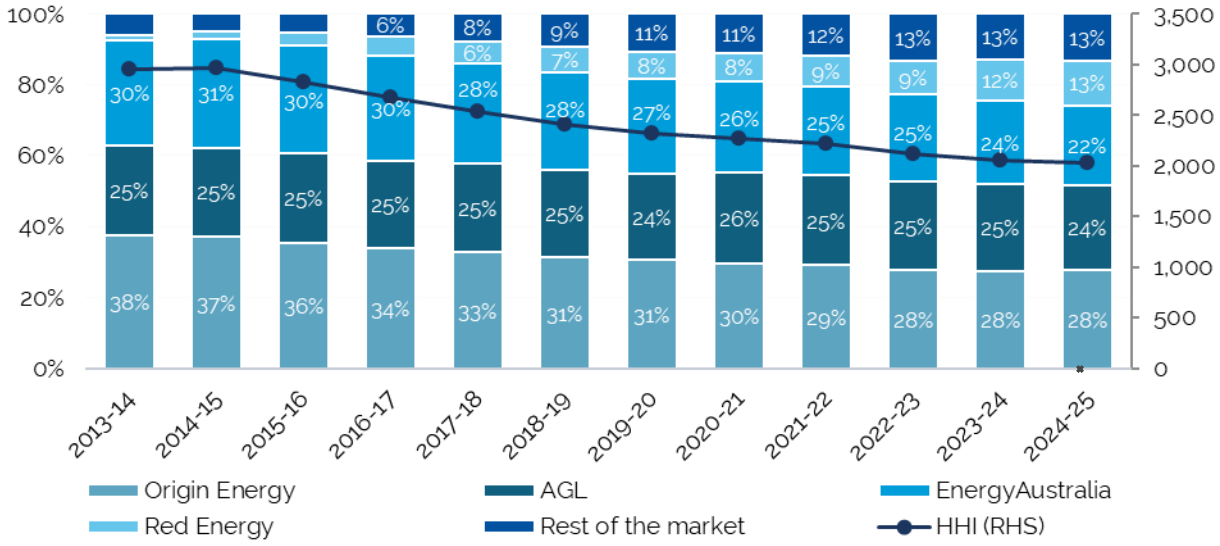
- an HHI **above 2,000** is a highly concentrated market
- a rise in HHI exceeding **100 points** is a significant increase in concentration.

While concentration alone does not determine outcomes, it can provide an indication of whether a market (and any merger within it) may allow suppliers to exercise market power through unilateral or coordinated behaviour.

Source: ACCC, *Merger assessment guidelines*, June 2025, pp 13, 58.

The HHI for residential customers was 2,027 as of 31 March 2025. On average, the HHI fell by around 4% (or 100 points) each year from its peak of 2,963 in 2014-15 to 2023-24. However, the HHI remained broadly stable from 2023-24 to 2024-25 (Figure 3.3).

Figure 3.3 Market shares and the Herfindahl-Hirschman Index for the NSW retail electricity market, residential customers

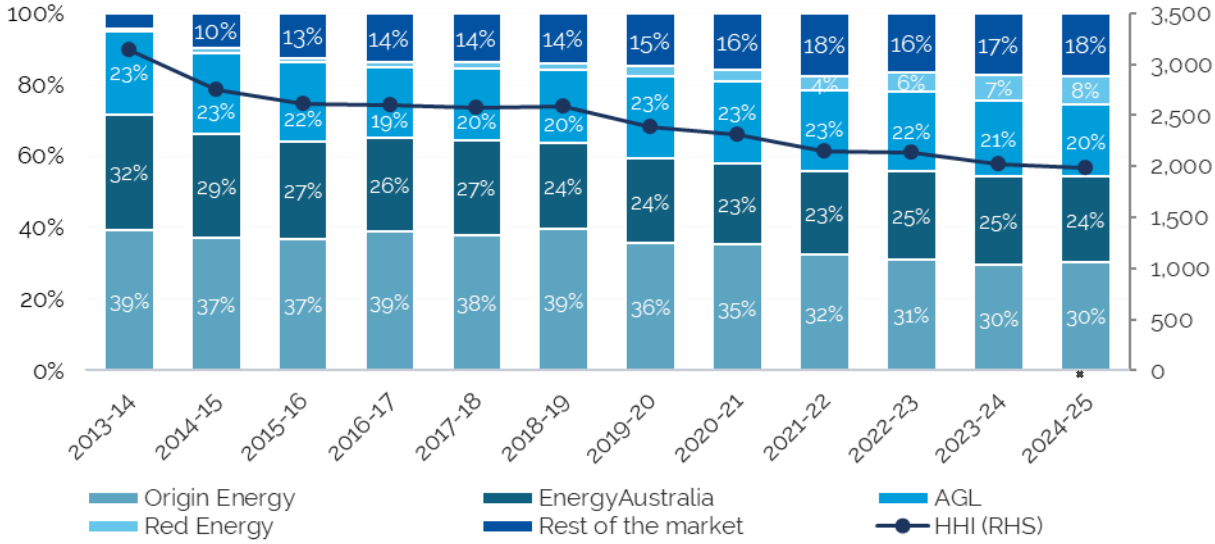


Notes: *Data for 2024-25 is to March 2025.
Market shares and the Herfindahl-Hirschman Index are based on the number of residential customers with each retailer as of 30 June of the relevant financial year. Data for 2024-25 is based on customer numbers as of 31 March 2025, which was the latest available data point.

Source: IPART calculations of AER, *Schedule 2 – Quarter 3 2024-25 Retailer Performance Data*, 27 June 2025.

The HHI for small business customers was 1,985 as of March 2025, which is around 37% less than its peak in 2013-14. While the HHI was flat between 2015-16 and 2018-19, it has fallen year-on-year since this time (Figure 3.4).

Figure 3.4 Market shares and the Herfindahl-Hirschman Index for the NSW retail electricity market, small business customers



Notes: Data for 2024-25 is to March 2025.
Market shares and the Herfindahl-Hirschman Index are based on the number of small business customers with each retailer as of 30 June of the relevant financial year. Data for 2024-25 is based on customer numbers as of 31 March 2025, which was the latest available data point.
Source: IPART calculations of AER, *Schedule 2 – Quarter 3 2024-25 Retailer Performance Data*, 27 June 2025.

Finding

1. Market concentration has fallen over the last decade, but was flat between 2023-24 and 2024-25. In 2024-25, only 65% of retailers in NSW were seeking new customers, down from 77% before 2021-22.

2. Over the last 2 years, new retailers entering the market have targeted specific market segments, including embedded networks, large industrial customers, and virtual power plant customers.

3.5 Barriers to entry and expansion

Earlier sections showed that while many retailers are authorised in NSW, most small customers are still supplied by a few large incumbents (AGL, Origin Energy, EnergyAustralia and Red Energy).

New retailers continue to enter the market, but it remains concentrated, with a long tail of very small retailers. The section below explores the barriers that limit new entrants and smaller retailers from expanding.

3.5.1 Heightened volatility from renewable sources

Wholesale price volatility that retailers must manage rose again in 2024-25. In its Quarterly Energy Dynamics Q2 2025 Report, AEMO noted that wind output increased 31% year-on-year and grid-scale solar was up 17% in Q2 2025, lifting the NEM-wide renewable share of electricity supply to 37.9%, up from 32.2% in Q2 2024.[91]

This stronger renewable output has coincided with record-low daytime demand and sharp evening peaks across the NEM. On 3 days in June 2025, price volatility alone contributed $32/MWh of the quarter's $37/MWh volatility component. On 12 June 2025, the NEM recorded its highest daily price since the market began. These renewable-driven dynamics also set new Q2 records for distributed solar and battery activity.[92]

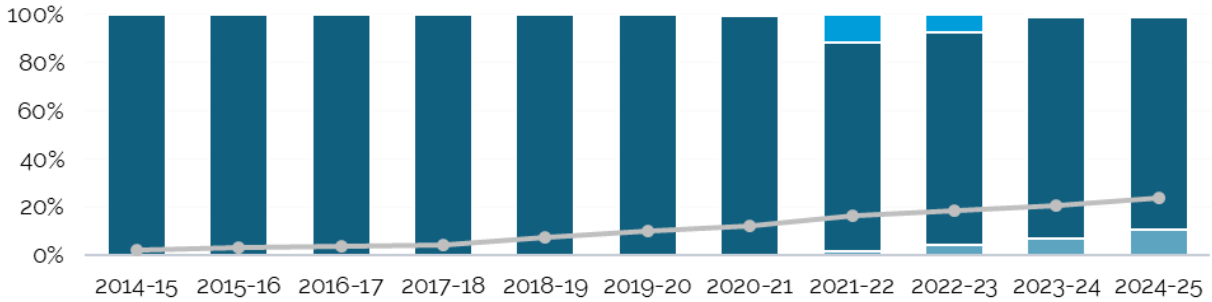
In NSW specifically, these conditions produced frequent negative prices during high-solar hours and high prices during evening peak periods. The AER's Wholesale Electricity Market Performance Report 2024 noted that intermittent renewables are increasingly setting daytime prices across the NEM, including in NSW, with negative prices becoming more common. However, outside solar hours, dispatchable generation still set prices more than 90% of the time.[93]

This shows the degree of spot-price volatility retailers must manage (see Box 3.2). Figure 3.5 shows the relationship between the higher share of very high and negative wholesale prices each year in NSW and South Australia and the rising share of generation of grid-scale wind and solar.

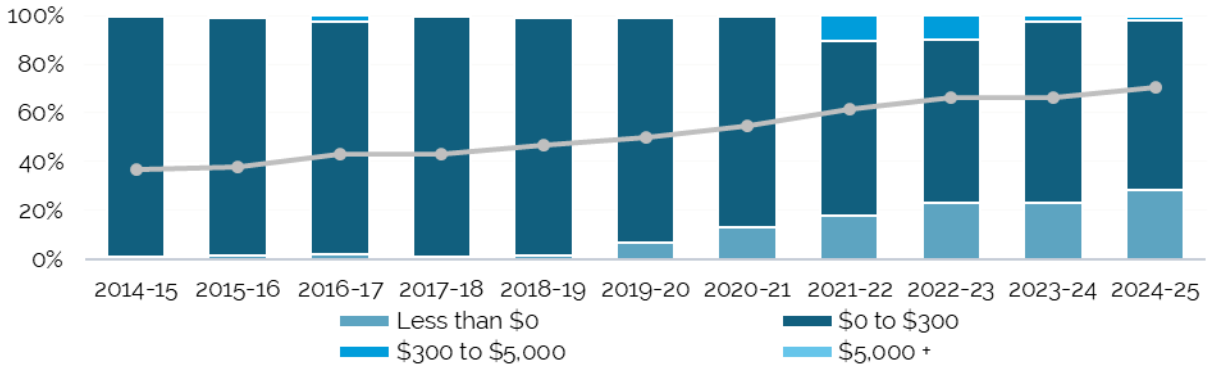
The 2025-26 DMO (DMO 7) included higher contract cost allowances than the previous year's determination (DMO 6), reflecting elevated costs for base and cap futures.[94] This reinforces that volatile winter peaks and tighter contract markets in 2024-25 pushed up the wholesale cost component that retailers must provision for in NSW.[95]

Figure 3.5 Distribution of spot prices by financial year (stacked columns) and share of generation from wind and grid-scale solar (line), 2014-15 to 2024-25

New South Wales



South Australia



Notes: Spot prices were settled in 30-minute intervals until September 2021, after which they settled in 5-minute intervals.

Source: IPART analysis of AEMO, *Aggregated price and demand data*; AER, *Wind output as a percentage of total output*; AER, *Grid-scale solar output as a percentage of total output*, accessed August 2025.

Box 3.2 The role of hedging contracts in the retail electricity market

A hedging contract sets out the terms under which a generator sells electricity to a retailer. This includes the volume of electricity, the price per unit and the period when the electricity is required to be delivered.

When the contract period arrives, the generator sells the contracted amount of electricity on the spot market at the spot price, and the retailer buys the same volume at that price.

The hedging contract is then settled by one party paying the other party so the net amount paid reflects the contract terms.

For retailers, hedging contracts provide certainty about the cost of wholesale electricity over a set period. This helps them manage the risk associated with offering customers fixed prices when the wholesale spot price varies.

For generators, the contract market provides certainty for the prices they will receive for the electricity they generate. This supports day-to-day operations and helps secure funding for new generation assets or upgrades.

Hedging contracts can either be listed on an exchange, such as the Australian Securities Exchange (ASX) or traded in the Over-the-Counter (OTC) market. Most hedging contracts for the NSW region in the National Electricity Market are traded on the Australian Securities Exchange (ASX).

OTC hedging contracts are settled bi-laterally and confidentially between the 2 contracting parties (and as a result there is limited data on these contracts).

ASX-traded contracts have standardised terms and have greater liquidity, while OTC contracts generally allow for more flexibility in negotiating bespoke contract terms. OTC contracts often impose a higher transaction cost as the retailer must invest additional time into finding and negotiating with suitable counterparties.

Box 3.2 The role of hedging contracts in the retail electricity market

Notes: A very small number of hedging contracts for the National Electricity Market are also traded on the Financial and Energy Exchange Global (FEX).

Source: AEMC, *Spot and contract markets*, accessed 19 July 2024; ACCC, *Inquiry into the National Electricity Market*, December 2023, pp 78, 84, 96.

3.5.2 Traditional hedging products don't match new risk patterns

The deepening 'duck-curve'[d] across the NEM has increased retailers' exposure to intra-day price swings, with cheap (sometimes negative) prices when solar is abundant, and steep evening peaks when it is not.

Historically, the main electricity hedging contracts available to retailers through the ASX were peak-load futures (covering between 7 am and 10 pm Monday to Friday) as well as baseload futures (covering all hours).

However, changes to the standard energy profile have reduced the usefulness of flat ('base') hedging contracts. In a 2023 survey by the ACCC, small retailers agreed the energy transition would make managing wholesale price risk harder with existing baseload and cap products.[96]

New exchange-traded products are a step toward matching risk to retailer needs. In July 2025, ASX Energy listed 2 new quarterly peak futures contracts to provide wholesale market participants more granular hedging options:

- **Morning Peak Contract** for electricity sold between 6 am and 9 am
- **Evening Peak Contract** for electricity sold between 4 pm and 9 pm.[97]

For smaller retailers, these new contracts pose the same limitations as existing ones. This is because they are standardised at 1 MW per contract and centrally cleared via ASX Clear (Futures), consistent with other electricity futures. The AER explained in 2024 that the use of standardised products with a minimum trade size of 1 MW is prohibitively high for many smaller retailers.[98]

In practice, this means the new ASX Energy products are accessible to mainly larger retailers that are already active in the hedging market. On their own, they are unlikely to materially change how small and mid-tier retailers manage risk.

3.5.3 Access to hedging contracts remains limited for many small retailers

For many small retailers, exchange-traded products remain difficult and costly to access.

As we reported last year, around 90% of small retailers reported they could not access ASX-traded electricity hedges in 2023,[99] based on ACCC survey data.[100]

[d] The duck curve, coined by the California Independent System Operator, describes an energy profile with imbalance between low daytime demand and high evening demand. The duck curve signifies the grid-balancing challenge presented by high daytime solar output and the subsequent rapid rise of power needed in the evening. This creates a steep increase in demand and the need for fast-starting, dispatchable generation to meet it as the sun sets.

The AER's 2024 market performance report noted that while overall liquidity in contract markets has reached record highs after 2023, smaller retailers still may struggle to find counterparties, particularly as generators are insulated from price risk through government contract-for-difference schemes.[101]

In 2023-24, there were 6 ASX 24 clearing participants active for Australian electricity derivates after Marex entered during the year following earlier withdrawals by Bell Potter and Macquarie.[102]

The AER reported that retailers have consistently raised access to clearing services as a key issue. Exchange trades also require initial and daily variation margins in cash, set against contract price levels and volatility.[103] These margin requirements can materially raise working-capital needs for smaller retailers during volatile periods when effective risk management is most needed.

These cash requirements sit alongside AEMO prudential obligations to participate in the NEM. Small retailers face a higher Maximum Credit Limit (MCL) than large vertically integrated incumbents as they lack generator offsets.[104] Call notices can also require additional capital within hours, and prudential and exchange margining do not net against each other.[105]

Standard product sizes don't accommodate small loads. Even as new ASX peak-period products emerge (see Section 3.5.2), standardised electricity futures remain 1 MW per contract. Submissions to the NEM review noted that this minimum parcel size forces small retailers to be meaningfully over- or under-covered, adding risk or cost.[106]

In addition to forward contracts, retailers have increasingly used 'swaptions'[e] to hedge their spot market positions in recent years, which provides an alternative to standard forward contracts.[107]

The AER's 2024 market performance report found that swaptions, like forward contracts, remain inaccessible to small retailers as 95% of transactions in 2023-24 were traded with a minimum lot size of 25 MW.[108] As noted above, even a minimum trade size of 1 MW can be prohibitively high.[109]

When retailers cannot secure exchange-traded contracts, they can hedge through the OTC market. However, OTC deals typically involve higher search and negotiation costs and may have higher credit assessments and margining requirements.

In 2023, a third of small retailers reported they either could not secure all the OTC contracts they required or faced difficulty doing so.[110]

During periods of high wholesale prices over 2022-23, the supply of contracts becomes tighter as generators are less willing to sell forward contracts due to margining requirements.[f] Clearing services were also reported as restricted during these periods, further straining small retailers' ability to hedge.[111] The net result is that OTC dependence places practical limits on when and how much a small retailer can trade, creating a barrier to growing beyond a certain size.[112]

[e] Swap options (or swaptions) allow buyers to hedge further in the future without the cash flow risks of margining, in exchange for a fixed up-front cost.

[f] Margining refers to the requirement for generators and retailers to post cash or collateral against their forward contract positions as market prices move. When wholesale prices rise sharply, these margin calls can become very large, tying up liquidity and increasing financial risk. As a result, generators may reduce the number of forward contracts they offer to avoid the risk of further margin calls. See: AER, *Wholesale Electricity Market Performance Report 2024*, December 2024, p 45.

There are some signs of progress in OTC markets that could improve access to hedging for small retailers over time. For example, the NEM Wholesale Market Settings Review Draft Report explained most product innovation is now occurring in OTC markets rather than on the ASX. These innovations include super-peak swaps, solar and inverse-solar-shaped products, storage hedges such as 'virtual tolls', and weather and temperature-index contracts.[113]

The NEM Panel has proposed a co-design process to standardise priority contract types, including for potential exchange listing. This process includes exploring small parcel sizes where these are a barrier for small retailers.[114]

The NEM Panel also intends to examine prudential and margining settings to improve derivatives-market access.[115] At the same time, the ACCC has suggested measures to support listing new ASX products (for example, market-making incentives or underwriting to reduce margin obligations until liquidity develops).[116]

Finding

3. Access to suitable hedging products remains challenging for many small retailers. New exchange-traded morning and evening peak contracts are intended to better match changing wholesale price patterns; however stakeholders have reported that the 1 MW minimum contract size may still limit access for smaller retailers.

3.5.4 Smaller retailers face higher costs to serve, acquire and keep customers

In NSW, the cost of acquiring and servicing customers tends to be higher for smaller retailers than for large incumbents such as AGL, Origin Energy and EnergyAustralia due to economies of scale.[117]

Cost-to-serve includes billing and payments, customer service platforms and call centres, compliance, and hardship management.[118] Because smaller retailers spread these largely fixed functions over fewer customers, their per-customer cost-to-serve is higher than that of the large incumbents.

The ACCC's December 2024 NEM Inquiry Report found that the 3 largest retailers' cost-to-serve for residential customers was 36% lower than other retailers (or $41 per customer).[119] Average cost-to-serve also rose from 2022–23 to 2023–24 by $33 per residential customer and $28 per small business customers (in real terms). This reflected broader increases in servicing and IT costs.[120]

The AER's DMO methodology also recognises variation in retailers' cost-to-serve. It uses customer-weighted averages to reflect the different costs of retailers serving most customers, noting there are economies of scale across retail functions.[121]

Cost-to-acquire-and-retain is also higher for smaller retailers on a per-customer basis. These are the costs to attract and keep customers, such as advertising and marketing, third-party sales, loyalty programs, and retention or win-back activities.[122]

The ACCC's December 2024 inquiry found that after several years of relatively flat acquisition and retention costs, smaller retailers lifted acquisition spending in 2023-24. Advertising and marketing by retailers other than AGL, Origin Energy and EnergyAustralia rose by $11 per residential customer (59%) from the previous year.[123] This likely reflected greater effort to grow market share.[124]

These scale disadvantages in cost-to-serve and cost-to-acquire-and-retain raise breakeven prices for smaller retailers and compress margins relative to AGL, Origin Energy and EnergyAustralia. This limits their ability to undercut incumbents or expand.

The JEC submission noted that if retail competition was delivering efficiency gains, customer acquisition and service costs would be falling and passed through to customers. The continued rise in these costs signals weak competitive pressure.[125]

In practice, when competition for customers intensifies, retailers' cost-to-acquire-and-retain rises.[126] This is because competition and contested or delayed switching can push up industry-wide spending through duplicated acquisition and retention spending.[127]

Reforms since 2019 have aimed to reduce retention expenditure and make switching easier. The AEMC's December 2019 rule change shortened transfer times and addressed processes that enabled retailers to conduct win-back activity.[128] The Consumer Data Right (CDR) for energy, introduced in November 2022, also allows customers to authorise accredited services to access their usage and billing data for faster and more accurate comparisons and sign-ups.[129]

However, the net effect of these reforms on lowering acquisition and retention costs on a per-customer basis remains unclear. While the ACCC reported that non-big 3 retailers lifted acquisition spending by 59% in 2023-24,[130] the cost-to-acquire-and-retain allowance in the 2025-26 DMO was unchanged in real terms, as it was based on 2023-24 data adjusted for inflation.[131]

Chapter 4

Customer engagement and switching

04

Chapter summary

- Just over 3 in 5 households in NSW review their electricity plan at least once a year. A further 20% do so every few years and 13% rarely or never. In 2024-25, around 21% of small customers in NSW switched retailer.
- There is a significant cost for not engaging and switching frequently. In 2024, NSW households on flat-rate offers that were between 1 to 2 years old paid about $127 more than those on newer offers less than a year old. Staying on the same offer for 2 years or longer costs about $297 more.
- Only around 1 in 6 households in NSW were on their retailer's best offer from January to August 2024. However, a retailer's best offer may not be the cheapest in the market. For example, in May 2025, flat-rate offers in the Ausgrid distribution network differed across retailers by more than $500.
- Stakeholders raised concerns again this year about the complexity of tariffs (time-of-use and demand tariffs), limitations with online comparison tools, and retailer pricing practices that make comparing and switching harder.
- New rules coming into effect in 2026 will help consumers compare and switch offers and limit price increases to once a year. More online comparison tools have improved functionality and can calculate demand charges, but most do not incorporate newer tariffs, such as EV tariffs, or new energy services such as VPPs.

4.1 How we assess engagement and switching in an essential service

A well-functioning market where the benefits of competition flow to customers includes both:

- firms seeking to win customers by developing and offering products that meet customer needs and preferences, and competing on price to gain new customers and retain existing customers
- engaged customers that have the knowledge, information and tools necessary to assess, compare, and choose the best product for their circumstances and the ability to switch with minimal friction.[132]

When a market has both these characteristics, there is a virtuous cycle of competition; profit seeking firms compete to win well-informed customers who frequently engage and switch. Over time, this will lead to lower-cost offerings, innovations to meet changing consumer needs and preferences, and greater consumer confidence in the market.[133]

However, the topic most frequently raised in submissions was barriers or impediments that consumers face when they try to find a cheaper offer or switch retailer. Submissions highlighted that retail tariffs are becoming more complex and difficult to compare[134], online tools to help consumers find offers have limitations[135], and retailer pricing practices can disincentivise switching.[136] Further, as we detail in this chapter, the data for 2024-25 indicates that a key benefit of competition, lower prices that approach marginal costs, is only accruing to a small cohort of customers; those who navigate and frequently switch in an increasingly complex market.[137]

While the concerns in this chapter are based on 2024-25 data, the AEMC has recently finalised several rule changes that will take effect in 2026. These are designed to make it easier for customers to switch and to limit price increases to once per year.

The remainder of this chapter presents our analysis and findings on engagement and switching in the NSW retail electricity market. This includes:

- how frequently households review their energy offer and switch
- the proportion of customers on market offers versus standing offers
- how households are responding to new tariff structures
- the savings available from switching, and from shifting usage from peak to off-peak periods.

4.2 How often households in NSW review their electricity plan

Several stakeholders submitted that households and small businesses need to regularly review, and switch electricity plans to stay on an affordable offer.[138] The JEC considered that consumers should assess their plan every 3 to 12 months.[139]

The ACCC has also reported it is not uncommon for there to be increases in prices soon after a customer signs up for a new plan, and retailers typically recoup their costs over a customer's lifetime. This is done by retailers setting attractively low acquisition offers, then making subsequent unilateral price increases for their existing customer base.[140]

To understand how frequently consumers engage with and review their energy plans, we have analysed data from the ECA 2025 Consumer Energy Report Card (CERC) survey.[a] This survey found that for households in NSW:

- 20% review their energy plan and look for better offer several times a year
- 46% do this around once a year
- 34% do this much less frequently (Figure 4.1).

While 66% of households said they review their energy plan and consider other options at least once per year, this does not mean they switch to a different offer.

[a] ECA run a biannual survey, the Consumer Energy Report Card Survey, which explores household attitudes, behaviours and perspectives on the energy sector and transition.

Among households that do not review their energy plan regularly, the main reason was they were 'satisfied with their current plan' (reported by 36% of households in NSW, Figure 4.3). Other reasons included:

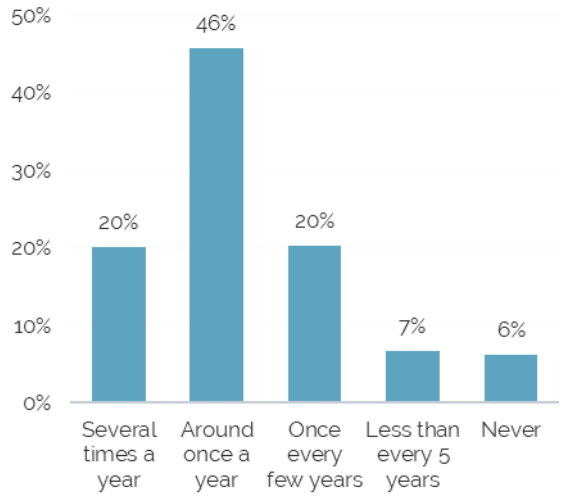
- 'the savings would probably be small' or it is 'too hard to compare plans' (29% reported each)
- 'they wouldn't know where to start' (26%), 'switching isn't worth the effort' (26%), it would 'take too much time' (22%) or 'another reason' (6%).[b, 141]

The CERC survey also asked households how confident they were that their electricity plan was competitively priced. Of households in NSW:

- 17% responded they were 'very' confident their offer was competitively priced
- 52% 'somewhat confident'
- 31% were not confident ('not very', 'not at all' or 'don't know') (Figure 4.2).

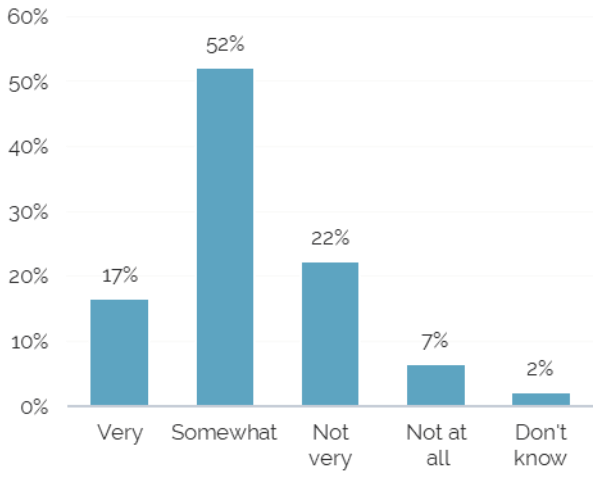
Lower-income households were typically more confident that their electricity plans were competitively priced. For example, 23% of households with income of $100,000 or less were 'very confident', compared with 10% of households earning more than $100,000.[142]

Figure 4.1 How frequently households review their energy plans



Question: Approximately how often do you review your current household energy plan and investigate whether there are better options for you?

Figure 4.2 How confident households are that their energy plan is competitively priced

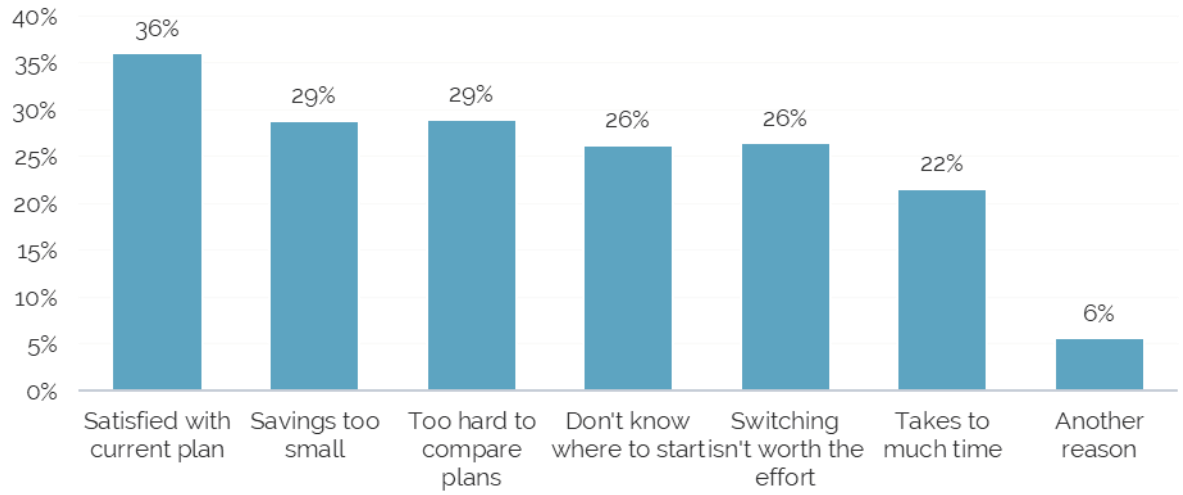


Question: How confident are you that you''re on a home energy plan that is competitively priced?

n= 660. These results in these charts differ slightly to those reported in the Topline Data tables. This is because we have filtered out respondents that had missing data in key variables including bill amounts and incomes.
Source: Energy Consumers Australia, *Consumer Energy Report Card Survey raw data*, June 2025

[b] Respondents could choose more than one answer in response to this question. As a result, the totals add to more than 100%.

Figure 4.3 What are the reasons you don't regularly review your energy plan



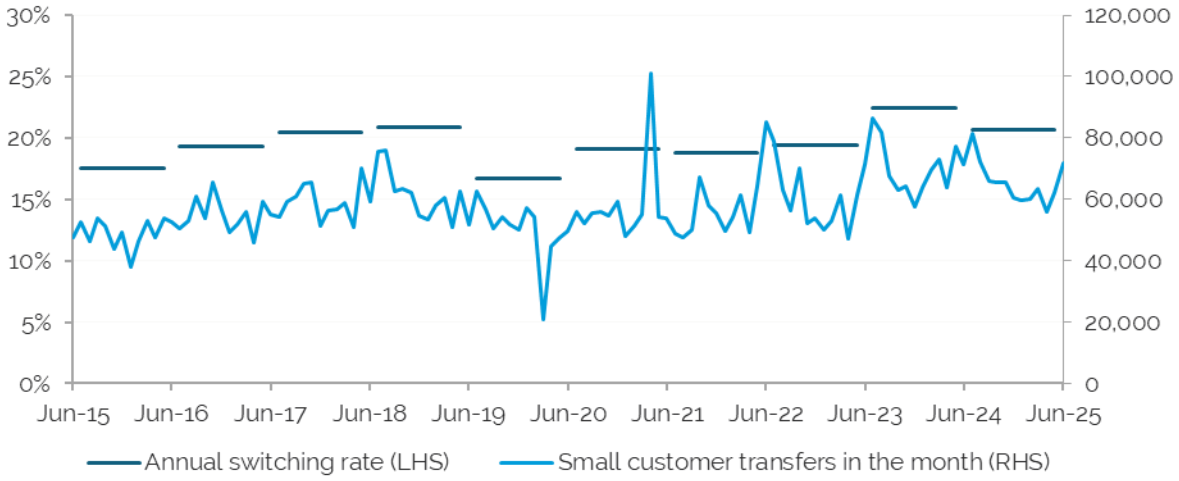
Question: Which of the following, if any, are reasons why you don't regularly review your energy plan.
Respondents could choose more than 1 answer in response to this question. As a result, the percentages add to more than 100%.
n: 194
The results in this chart differ slightly to those reported in the Topline Data tables. This is because we have filtered out respondents that had missing data in key variables including bill amounts and incomes.
Source: Energy Consumers Australia, *Consumer Energy Report Card Survey raw data*, June 2025

4.3 Small customer switching rates

Over the 2024–25 financial year, an estimated 20.6% of small customers in NSW switched retailer (Figure 4.4).[c] This was down from 22.4% in 2023-24 but remained above the annual switching rates from 2019-20 to 2022-23.

[c] Broadly in line with this, consumer data from the latest Consumer Energy Report Card survey found that 22% of NSW households reported switching energy provider over the 12 months to April 2025.
Source: IPART calculations based on ECA, *Household raw survey data*, June 2025

Figure 4.4 Number of small customer transfers per month and annualised switching rate



Notes: To calculate the annualised switching rate, we divide the number of small customers (this includes both residential and small business customers) transfers during a month, by the number of small customers in NSW at the end of each quarter.
Data was not available on the number of small customers at the end of Q4 2024–25. As a result, we used the number of customers as of the end of Q3 2024–25 when calculating the annualised switching rate for 2024–25.

Source: IPART calculations based on AEMO, *retail transfer statistics data*, September 2025; AER, *Schedule 2 – Retail Energy Market Performance Updates*, Various dates

The number of customers switching in NSW has trended higher in recent years. This may reflect several factors including:

- rising retail prices prompting customers to engage with the market and look for cheaper offers
- additional disclosure requirements introduced in 2022 through the Better Bills Guideline. This requires retailers to inform customers if a better offer is available and link to the Energy Made Easy website. This may have encouraged more consumers to review their plans and engage with the market.

While the switching rate is one indicator of customer engagement, it has limitations.[d] For example, it includes:

- customers who move house but stay with the same retailer
- cases where the same customer switches more than once during the year
- customers transferred as part of a Retailer of Last Resort event.

The JEC submitted that switching rates are not a robust indicator of consumer outcomes or of how effectively the market is operating. They noted switching data does not track outcomes, and several studies have found that consumers face challenges identifying and switching to better offers.[143]

[d] We have noted these limitations in previous years' reports. These were also detailed in the JEC submission.

We agree that switching rates have limitations, but we do not consider them in isolation. We look at them alongside other measures of consumer engagement, and in the context of pricing outcomes for customer who do and do not switch.[e]

Findings

4. 2025 survey data shows that 66% of households in NSW reported they review their energy plan and investigate better options at least once a year. However, the remaining households do this far less often – 20% reported they only review their energy plan once every few years, and 13% reported they do this less than every 5 years or never.

4.3.1 Customers who don't switch pay more

In past market monitoring reports, we have emphasised the importance of households and small business customers regularly engaging with and switching offers or retailers. This helps ensure customers are on an:

- affordable electricity plan
- offer suited to their circumstances.

In December 2024, the ACCC published data on the size of the loyalty tax. The ACCC found that most retailers' price-setting policies intentionally differentiate between acquisition and existing customer prices. This price strategy means customers pay more when they stay on the same plan.[144]

To estimate the loyalty tax, the ACCC compared the prices customers pay on older offers to newer ones. Offers were grouped as:

- **newer offers (less than 12 months old)**: offers which only existed in the data collected from retailers as of 1 August 2024
- **older offers (1 to 2 years old)**: offers which existed as of 1 August 2023 and in 2024
- **older offers (2 or more years old)**: offers which have existed from 1 August 2022 onwards.[f, 145]

[e] Data on the outcomes for customers who switch and those who do not has been limited in past years. However, in 2024 the ACCC has published additional data as part of its Inquiry into the National Electricity Market showing the annual bill outcomes for those who do and do not switch.

[f] The ACCC noted that the age of an offer does not always match how long a customer has been on it. Across NSW, Southeast Queensland, South Australia and Victoria) the ACCC found that among customers on flat-rate contracts:

- 2.1 million were on offers 2 years or older
- 1.6 million were on offers 1 to 2 years old
- 1.2 million were on offers less than 1 year old.

Source: ACCC, *Inquiry into the National Electricity Market*, December 2024, p. 52

The ACCC then calculated the weighted-average annual price for newer and older offers.[g] The results for residential customers on flat-rate offers in NSW and across the NEM are shown in Figure 4.5 below.[h]

NSW residential customers on older flat-rate offers (1 to 2 years old) paid, on average, $127 (6%) more than those on newer flat-rate offers, while customers on flat-rate offers 2 or more years old paid, on average, $297 (15%) more.[146]

While the size of the loyalty tax rose with the age of the offers, the ACCC also found that customers still paid a loyalty tax for newer offers (those less than 12 months old). In some cases, prices rose within the first 12 months of the offer being made publicly available.[147]

Figure 4.5 Residential customers' weighted average annual prices for newer vs older flat-rate offers (no demand charge, incl. GST)

Note: the weighted average annual prices assume 100% of conditional discounts are achieved.

Source: ACCC, *Inquiry into the National Electricity Market Appendix C - Supplementary spreadsheet with retail pricing data, cost stack data and charts*, December 2024, Tab: Residential (Conditional).

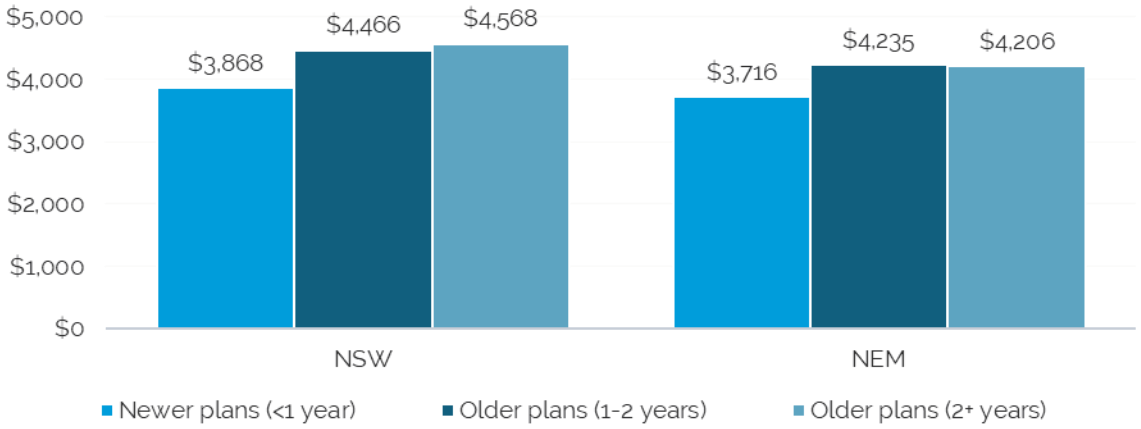
This pricing behaviour was observed for both residential and small business customers. For small NSW business customers, the impact of the loyalty tax was larger, both in dollar value and percentage terms.

NSW small businesses on offers 1 to 2 years old paid an average of $598, or 15% more than small businesses on newer offers. Those on offers more than 2 years old paid an average of $700, or 18% more than customers on newer offers.

g To calculate the weighted average annual price, the price components for each offer were calculated based on the Default Market Offer usage assumptions. The weighting was then based on the number of customers on each offer. This allows a consistent comparison across offers (including those of different ages) and a comparison with the DMO. The weighted average prices assume 100% of conditional discounts are achieved.

h The loyalty tax was not limited to flat-rate offers. The ACCC found that customers on older time-of-use and demand tariff offers also paid more than customers on newer offers. However, data was only available to calculate the difference between newer offers and offers that were more than 1 year old. Further, data was not available for these other tariff types for only NSW.

Figure 4.6 Small business customers' weighted average annual prices for newer vs older flat-rate offers (without demand charge, incl. GST)



Note: the weighted average annual prices assume 100% of conditional discounts are achieved.

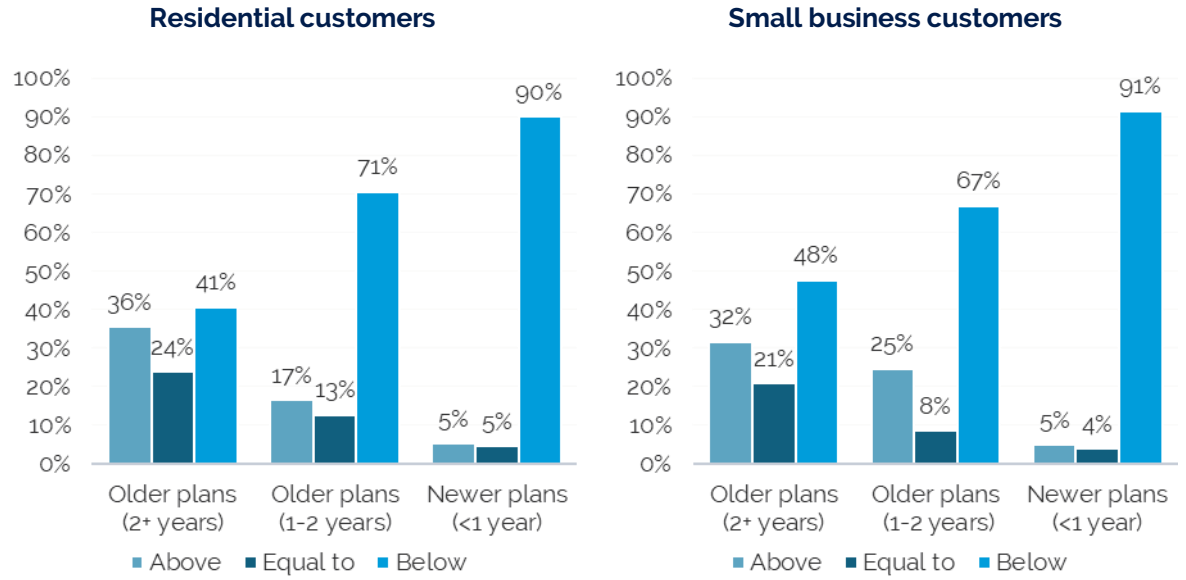
Source: ACCC, *Inquiry into the National Electricity Market Appendix C - Supplementary spreadsheet with retail pricing data, cost stack data and charts*, December 2024, Tab: 1. Residential (Conditional)

Findings

5. Customers who do not shop around regularly for energy plans pay more. In 2024, residential customers on flat-rate offers 1 to 2 years old paid, on average, $127 more and those on flat-rate offers 2+ years old paid, on average, $297 more than residential customers who switched in the last year. Small business customers on flat-rate offers 1 to 2 years old paid, on average, $598 more, while those on flat-rate offers 2+ years old paid, on average, $700 more.

While data is only available at an aggregated level – covering New South Wales, Southeast Queensland, South Australia and Victoria – a larger share of residential and small business customers on older plans were paying prices at or above the DMO or Victorian Default Offer (VDO) (Figure 4.7).

Figure 4.7 Proportion of residential and small business customers paying prices above, equal to, or below the DMO, flat-rate offers, August 2024



Notes: Above, equal to, or below refer to the proportion of customers with average annual prices that are greater than, equal to, or less than, than the DMO (for customers in NSW, South-East Queensland and South Australia), or the VDO for customers in Victoria.

Source: ACCC, *Inquiry into the National Electricity Market Appendix C - Supplementary spreadsheet with retail pricing data, cost stack data and charts*, December 2024

Customers who pay prices above the DMO or VDO would be better off on a flat-rate standing offer, where the maximum price is capped by the DMO or VDO.

In our *Retail Electricity Market Monitoring Report 2023-24*[i] and in this report, we highlight that many residential and small business customers on market offers are paying prices above the DMO. A key driver is that customers sign up to a market offer and then do not switch for several years, during which prices rise. This is concerning because the DMO is intended to protect standing-offer customers from unjustifiably high prices, yet many market-offer customers continue to pay above it.

4.3.2 The largest retailers increased prices more often in 2024

Given the findings on the loyalty tax and concerns about frequent price increases,[148] we analysed how frequently retailers raised prices of publicly available market offers.[j]

To analyse how frequently retailers raised prices, we calculated the number of times they increased either the supply charge or usage charge for new flat-rate offers listed on Energy Made Easy within 12 months of publication.[k]

[i] See: IPART, *Monitoring the NSW retail electricity market 2023-24*, 30 November 2024, p 72-77

[j] We reported on this metric for the first time in the *Retail Electricity Market Monitoring Report 2023-24*. The JEC submitted that IPART should continue reporting on this metric going forward.

[k] For example, if a plan was published on Energy Made Easy in January 2024, we counted how many times either the supply charge and/or usage charge increased over the following 12 months.

We conducted this analysis for all new flat-rate offers in NSW listed on Energy Made Easy between January 2021 and October 2024 from the 4 largest retailers – Origin, AGL, EnergyAustralia, and Red Energy.[l]

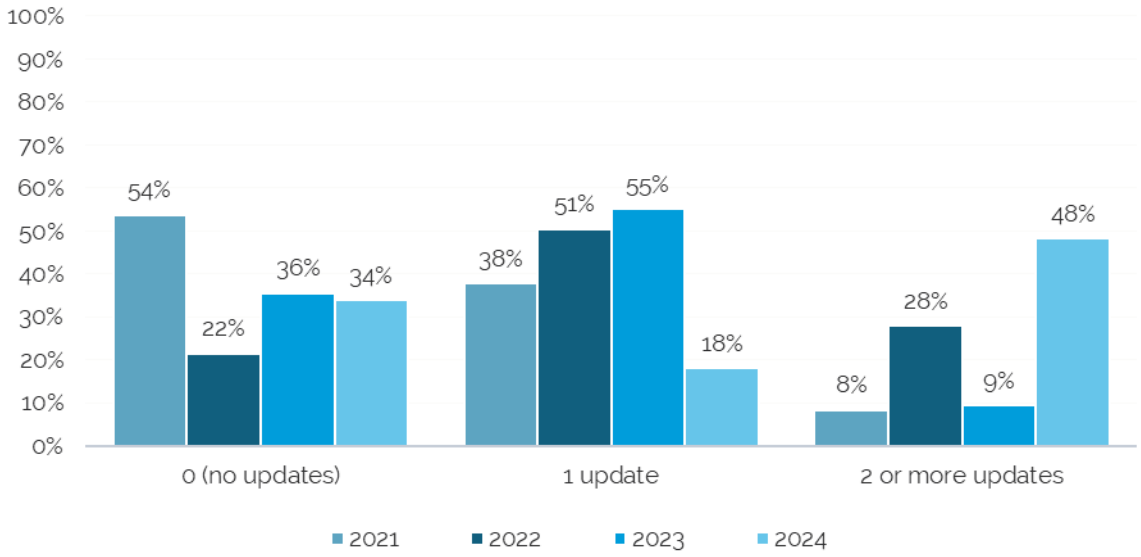
We found that over 2024:[m]

- 34% of offers published on Energy Made Easy had no increases in the supply and/or usage charge in the following 12 months
- 18% had 1 increase in the supply and/or usage charge
- 48% had 2 or more price increases.

During 2024, a larger share of plans had 2 or more price rises within 12 months of being listed, compared to previous years. The results of this analysis are shown in Figure 4.8.

This analysis does not capture all price increases. Retailers are only required to submit information to be published on Energy Made Easy if the offer is generally available. It is possible for a retailer to change prices for a group of customers without this price change being captured on Energy Made Easy. This can occur if those customers are on legacy offers[n] (and the new prices are not being offered to new customers).

Figure 4.8 Number of times that the 4 largest retailers increased at least one price component on flat-rate offers in the 12 months after it was published



Notes: 0 (no updates) means the supply and usage charges did not increase within 12 months of the offer being listed on Energy Made Easy. 1 update means that either the supply or usage charge increased once within 12 months of the offer being listed on Energy Made Easy. 2 or more updates means that the supply charge or usage charge was increased 2 or more times within 12 months of the offer being listed on Energy Made Easy.
This analysis includes all cases where at least one price component of a flat-rate offer increased. In some cases, a retailer raised one price component (e.g. the usage charge), while lowering the other (e.g. the supply charge). These cases were still counted as an increase (update) in the analysis above.
Source: IPART analysis of Energy Made Easy data

[l] In aggregate these retailers held 86% of residential customer market as of 31 March 2025. Source: AER, *Schedule 2 - Quarter 3 2024 – 25 retail performance data*, 27 June 2025

[m] The data for 2024 covers the 10 months from January to October 2024 and does not include the full 2024 calendar year.

While the largest retailers raised prices on flat-rate offers more often in 2024 than in previous years, the AEMC has recently made a rule determination to limit the frequency of price increases and improve consumer confidence in retail energy plans (Box 4.1).

Box 4.1 AEMC rule determination – improving consumer confidence in retail energy plans

On 19 June the AEMC made a rule determination to improve consumer confidence in retail energy plans. This rule change aims to address systemic issues in retail energy contracts, including the loyalty tax.

Under this new rule, retailers will only be able to increase prices for retail market contracts once every 12 months. They will also only be limited to reducing energy payments such as feed-in tariffs once every 12 months.

Price increases may occur in either:

- once in July each year (for most customers), or
- no earlier than the anniversary of the contract and no sooner than 12 months after the previous price increase, if the contract has a fixed-price period.

Retailers will also be required to inform customers before they enter a contract and when prices can change under the contract.

This rule determination also includes several other measures to improve consumer outcomes, including:

- protecting customers on standing offers with benefits that change or expire from paying more than the standing-offer price once the benefits end
- extending protections for customers on existing contracts with unreasonable conditional discounts, by requiring retailers to remove the conditions and apply the discounts in full
- prohibiting retail fees and charges for vulnerable customers and limiting fees to reasonable costs for all others
- protecting carry-over customers on deemed retail arrangements from disconnection if they are paying their bills.

The new rules take effect from 1 July 2026.

Source: AEMC, *Rule determination - Improving consumer confidence in retail energy plans*, 19 June 2025

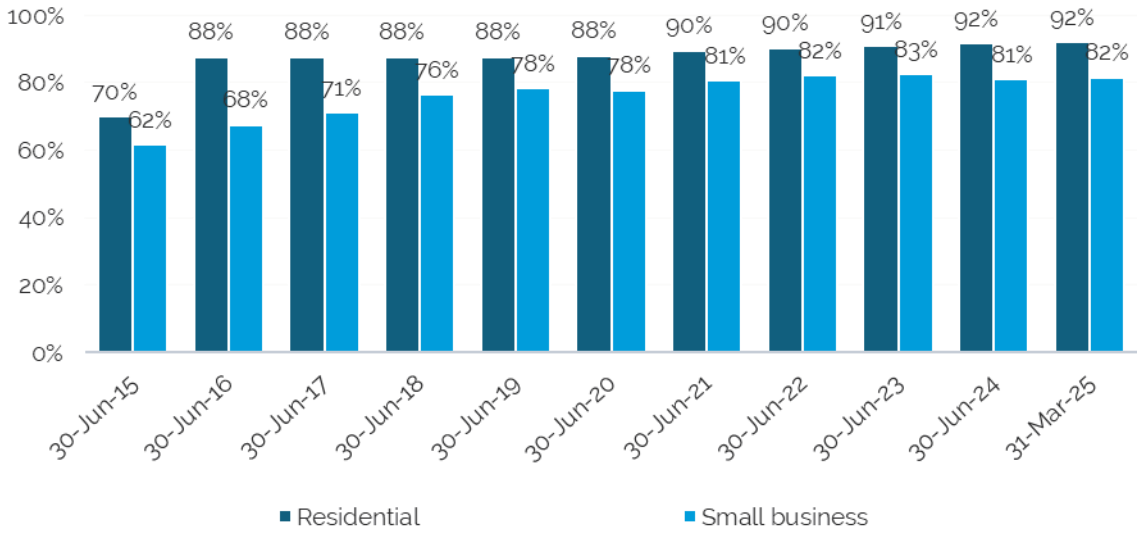
4.4 Savings for customers that switch from standing offers

Under the National Energy Customer Framework, a retailer can supply electricity to households and small businesses under a market offer contract or standard offer contract.[149]

A customer must actively sign up to a market offer, while a standard offer contract applies by default. As a result, another way to measure customer engagement in the NSW retail electricity market is to compare how many customers are on market offers versus standing offers.[o]

As of 31 March 2025, 92% of NSW residential customers were on market offers, unchanged from 30 June 2024. For small business customers, 82% were on market offers, up 1% over the same period (Figure 4.9).

Figure 4.9 Percentage of NSW residential and small business customers on market offers



Source: AER, *Schedule 2 – Retail Energy Market Performance Updates*, Various dates

For residential and small business customers on standing offers, there are significant savings to be made from switching to a competitively priced market offer – such as the median market offer or one of the lowest offers available.

[o] Stakeholders have highlighted the limitations with this indicator in past years. For example, in their 2023-24 submission, the JEC considered comparing the number of customers on standing offers and market offers is not meaningful as many customers are on market offers with prices higher than the DMO. We agree with the JEC that comparing the number of customers on market offers compared to standing offers has limitations, including that prices for customer on market offers may not be better than standing offers. However, we continue to report on this metric as it provides one indicator of the number of customers that have engaged with the market.

Box 4.2 How we estimate annual savings from switching

Each month we download data on prices, fees, conditions and discounts for all residential and small business offers on Energy Made Easy. To estimate the saving from switching we:

- exclude all offers not available to most customers, such as those requiring membership of a specific organisation or residence in a defined area. We also exclude offers that include controlled load or solar feed-in tariffs
- estimate the total annual bills for remaining offers based on annual usage of 4,215 kWh for residential customers and 10,000 kWh for small business customers
- group the resulting annual bills by the distribution network and rank them by total annual cost to determine the 10th, 25th, 50th (median), 75th and 90th percentiles.

Using these annual bills, we calculate the savings from switching by subtracting the total annual bill for one offer from another. We report the savings for customers moving from:

- the median standing offer to the median market offer
- the median market offer to the 10th percentile market offer.

Notes: We estimate total annual bills for both flat-rate and time-of-use offers. Savings from switching were similar across both offer types. For time-of-use offers, we use the DMO load profile for each distribution network.
This approach of comparing the median market offer to the 10th percentile market offer reflects feedback from past submissions that the lowest-priced offer may not be available to all customers or may be difficult for some customers to find.

The estimated savings for a residential or small business customer depend on when the estimate is made and the distribution network they are in.

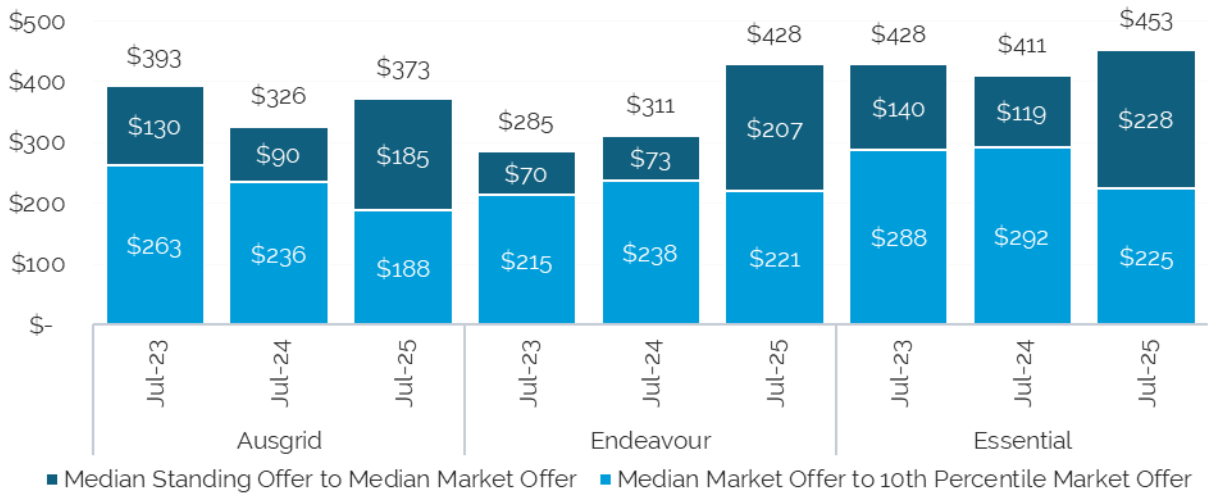
In July 2025, we estimate that an NSW residential customer on a time-of-use offer could save between:

- $185 to $228 by switching from the median standing offer to the median market offer, depending on the distribution network
- $188 to $225 by switching from the median market offer to the 10th percentile market offer, one of the lowest offers available, depending on the distribution network.

The total savings for a residential customer switching from a standing offer to one of the lowest offers in the market ranges from $373 to $453, depending on the distribution network.

These findings show that meaningful savings are available for customers that engage and switch. However, as stakeholders noted in submissions, ongoing review of offers is needed to ensure these savings are maintained.[150]

Figure 4.10 Estimated savings from switching for residential customers on standing offers, time-of-use offers (incl GST, nominal)



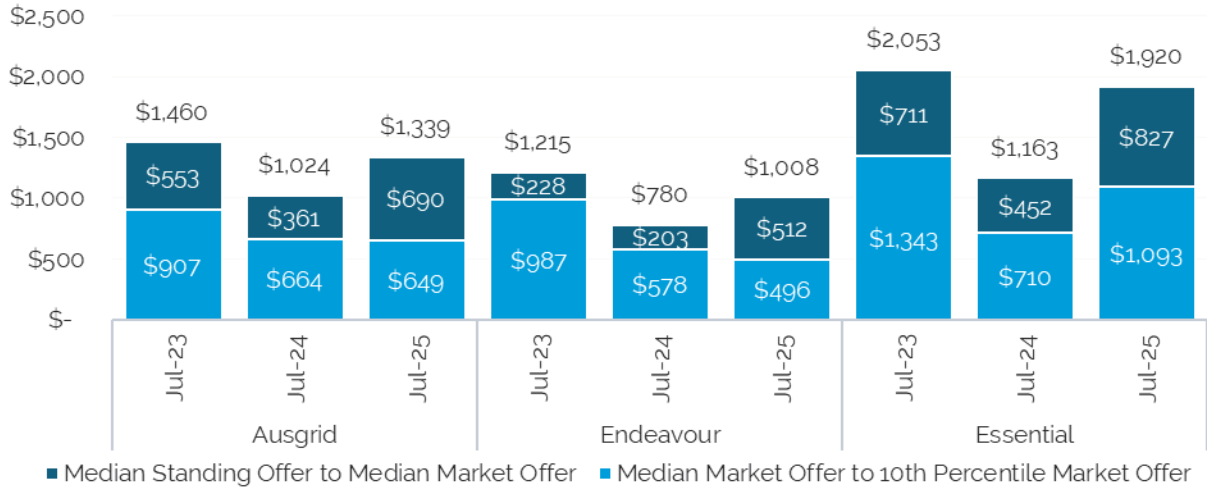
Notes: Residential customer savings are calculated assuming a usage of 4,215 kWh per year.
Numbers in the bars show the savings from switching from one specific offer to another.
Numbers above the bar charts show the total savings from switching from the median standing offer to the 10th percentile market offer.
Source: IPART analysis of Energy Made Easy data

In July 2025, we estimate that a NSW small business customer on a time-of-use offer could save:

- $512 to $827 by switching from the median standing offer to the median market offer, depending on the distribution network
- $496 to $1,093 by switching from the median market offer to the 10th percentile market offer, one of the lowest offers in the market.

The total savings available for a small business customer switching from a standing offer to one of the lowest offers in the market ranges from $1,008 to $1,920, depending on the distribution network.

Figure 4.11 Estimated savings from switching for small business standing offer customers, time-of-use offers (incl GST, nominal)



Notes: Small business customer savings are calculated assuming a usage of 10,000 kWh per year.
Numbers in the bars show the savings from switching from one specific offer to another.
Numbers above the bar charts show the total savings from switching from the median standing offer to the 10th percentile market offer.
Source: IPART analysis of Energy Made Easy data.

4.4.1 Only 1 in 6 NSW residential customers are on their retailer's best offer

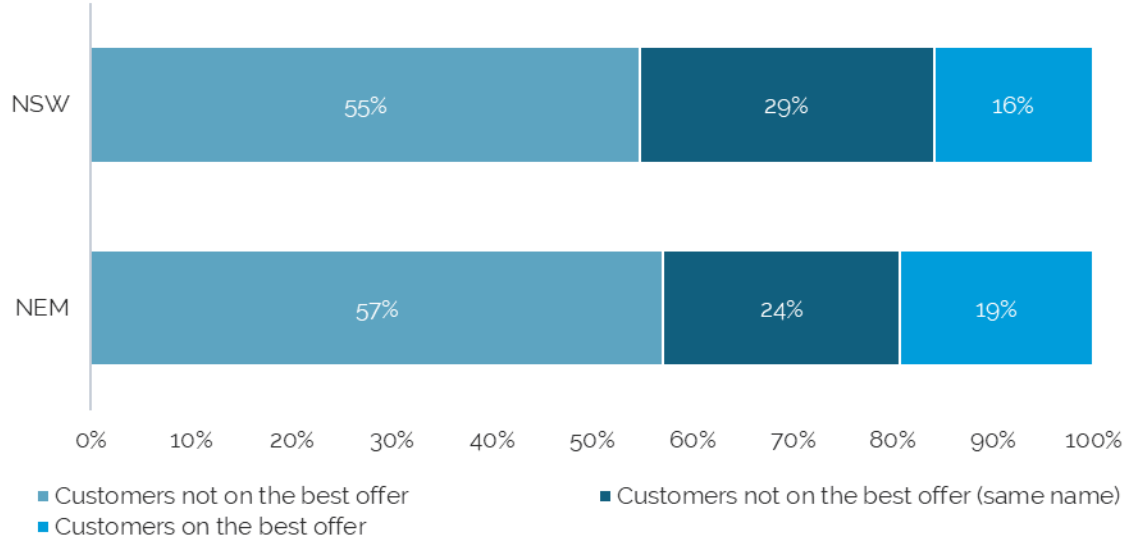
Under the AER's Better Bills Guideline, retailers must tell customers whether a better offer is available through messages on their bills.[151] These better offer messages are designed to empower customers with the information they need to switch offers with their current retailer. Customers only need to contact their retailer (e.g. by email or phone) to request to be moved to the quoted better offer. This limits the need for customers to spend time searching for lower offers with their existing retailer.

As part of the Inquiry into the National Electricity Market, the ACCC collected information, spanning from January to August 2024, on the number of residential customers receiving different better-offer messages.[152]

Over this period, only 16% of NSW residential customers were on their retailer's best offer. This means 84% of customers were not on their retailer's best offer. Across regions in the NEM, NSW had the lowest proportion of customers on their retailer's best offer.[153]

However, being moved to a retailer's better offer does not guarantee that customers are on the lowest offer available in the market. As shown in Chapter 5, the lowest offers vary materially across retailers. For flat-rate offers, we found differences of more than $500.

Figure 4.12 Proportion of residential customers receiving better-offer messages by region



Notes: The data for the Better Offer messages was collected by the ACCC over 1 January 2024 to 10 August 2024.

'Customers not on the best offer (same name)' refers to a customer receiving a message that a cheaper offer is available, but the cheaper offer has the same name to the customer's current offer.
Source: ACCC, *Inquiry into the National Electricity Market Appendix C - Supplementary spreadsheet with retail pricing data, cost stack data and charts*, December 2024, Tab: 2. Residential (unconditional)

Box 4.3 AEMC rule determination – improving the ability to switch to a better offer

On 11 September 2025, the AEMC made a rule change to increase customers' awareness of the savings that can be made through switching plans with their retailer.

The AER's Better Bills Guideline requires retailers to include a better-offer message on customers' bills to:

- alert customers to savings available by switching to a deemed better offer
- explain how to switch
- prompt them to visit the Energy Made Easy website.

The AEMC noted that, despite these messages, many consumers do not switch to their retailer's best offer or onto a cheaper offer from another retailer.

A significant number of customers continue to pay higher prices because they have remained on the same plan for several years. Newer plans are generally cheaper than older ones.

The AEMC's rule determination also highlighted that while comparing varied and complex plans can be difficult and time consuming, the process of switching is straightforward once a customer decides to make the change.

Box 4.3 AEMC rule determination – improving the ability to switch to a better offer

The AEMC found the primary way to increase the rates at which customers switch to their retailer's better offer is to increase awareness of the deemed better-offer message and the savings customers could access. The AEMC also noted that a contributing factor to not switching is low engagement with energy bills.

The rule determination requires retailers to include similar information in communications that relate to and accompany a bill. For example, this information is required in the email summary a retailer provides when issuing a new bill.

The AER will be required to update its billing guideline by 30 September 2026, and retailers will need to comply with this guideline by 30 December 2026.

Source: AEMC, *Information Sheet: Improving the ability to switch to a better offer*, 11 September 2025

In our *Retail Electricity Market Monitoring 2023-24* report, we highlighted that retailers often have plans with the same name but different prices for new and existing customers. We considered this could confuse customers when interacting with the better-offer disclosure requirement in the Better Bills Guideline and limit its effectiveness.[154]

As shown in Figure 4.12, over January to August 2024, 29% of better-offer messages in NSW informed customers of a better offer with the same name, but different prices for different customer groups.[p]

In April 2025, CHOICE submitted a designated complaint to the ACCC. It noted 3 widespread practices that may mislead customers. This included using identical plan names to represent plans with different prices and prompts to switch (known as better-offer messages) that refer to plans that do not appear to be available or that the customer is not eligible for.[155]

In May 2025, the AER made a decision to require retailers that re-use plan names to add additional information following the better-offer message. This message is:

> If this plan has the same name as your current plan, you are on an older version of the plan which has different rates. You can still save money by switching to a newer version.[156]

While additional disclosure and transparency are important, recent research by ECA has found that simpler pricing and disclosure may not result in higher engagement or switching across all customers (Box 4.4).

[p] In the ACCC's December 2024 Inquiry into the National Electricity Market they also explained that the presence of offers with the same name but different prices adds complexity for customers seeking to switch offers and may undermine the impact of this policy measure.

Box 4.4 ECA consumer research – simplicity doesn't equal higher engagement

ECA has recently published research on how frequently households engage with and review whether there are better offers for different utility services, including electricity, gas, internet, mobile phones and health insurance.

The ECA consumer survey research found that across the different utility services:

- around 45% to 50% of households review their plan and search for better offer at least once a year, depending on the utility service
- around 17% to 22% of households review their plan once every few years
- the remaining one-third review their plan less often than every few years or never.

The ECA found the level of engagement was broadly stable across utilities, despite households considering some offers and plans (such as mobile phone and internet plans) to be less complex and easier to understand and compare.

The ECA concluded that even if simpler or better information was provided for electricity or gas offers, a material segment of the market may still infrequently engage or not engage at all.

Note: The ECA findings presented above were based on an Australia-wide survey undertaken in September 2025. These results differ from those presented in Figure 4.1, which show the results for NSW households only.
Source: Energy Consumers Australia, *Simplicity doesn't equal higher engagement*, 29 October 2025

While the AEMC has made rule determinations to limit the frequency of price increases (Box 4.1) and improve the ability of customers to find better offers and switch (Box 4.3), there remains a material cohort of customers who have not switched offers in recent years, and who are paying prices above the DMO.

Given the ECA's recent findings that simpler or better information may not lead to higher engagement, it's likely there will be a cohort of these customers who will not engage and will continue to pay high prices.

4.5 Customer understanding and responsiveness to electricity pricing structures

The National Electricity Rules require DNSPs to gradually make their network tariffs more reflective of the costs involved in serving customers.[157] To date this has generally involved transferring a customer from a flat-rate network tariff to a time-of-use or demand network tariff when a smart meter is installed.

When a customer's network tariff changes, retailers may change the customer's retail plan to align with the underlying network tariff.[q] Once a customer has a smart meter installed and is transferred onto a time-of-use network tariff or demand network tariff, they are typically not able to switch back to a flat-rate network tariff.[r]

Several submissions to our Consultation Paper raised concerns around the complexity of cost-reflective tariffs and about consumer safeguards as part of the AEMC's rule change for accelerating smart meter deployment (Box 4.5 below).

Individual submissions considered that cost-reflective tariffs have resulted in pricing that is too complex. One submission said prices are 'nearly impossible to understand',[158] while another said that to find a better offer, consumers need to compare 'supply charges, peak, shoulder and off-peak charges, demand charges, feed-in tariffs and controlled loads.'[159]

The NSA and JEC both raised concerns about gaps in the consumer safeguards for the AEMC's Accelerated Smart Meter Rollout. These submissions highlighted the NSW Government has not opted in to the AEMC's recommendation that designated retailers must offer customers a choice of a flat-rate tariff after a smart meter is installed.[160] Several submissions also noted that time-of-use and demand tariffs could lead to higher bills for consumers who have limited ability to or are unaware of the need to shift their usage away from peak periods.[161]

To explore concerns raised in submissions, the section below reports on:

- how households are responding to new tariff structures (time-of-use and demand)
- the impact of changes in usage and varying levels of peak demand.

Box 4.5 AEMC rule determination – accelerating smart meter deployment

In late 2024, the AEMC made a final rule determination for accelerating smart meter deployment. Under this determination, all NSW households (and other states) will have smart meters installed by 2030.

The determination incorporated several consumer safeguards that come into effect from 1 December 2025. These include:

- Retailers being required to obtain a customer's explicit informed consent ahead of any retail tariff change. This aims to minimise the risk of a negative consumer experience following a smart meter installation, such as bill shock.

[q] When a retailer changes a customer's retail tariff after a change in the underlying network tariff, they must inform the customer of the change as soon as practicable, and in any event no later than the customer's next bill.

[r] Customers in NSW can request a change to their network tariff every 12 months. Customers do this by contacting their retailer and requesting a change to the network tariff (and the retailer contacts the distribution network on the customer's behalf).

Box 4.5 AEMC rule determination – accelerating smart meter deployment

- The explicit informed consent period lasts for 2 years after the customer's smart meter is installed. After two years, the retailer may move the customer to a new retail tariff without explicit informed consent. In these circumstances, the retailer is required to give:
  - 30 business days' notice
  - an estimate of what the customer's historical bill would have been for the preceding 12 months under the new varied retail tariff, compared to the bill they received under their existing tariff
- The determination notes that the safeguards do not apply to certain customers. These include customers who move into a premises that already has a smart meter and those who change retailer after they receive a smart meter.
- The determination introduces a requirement for designated retailers to offer a flat-rate standing offer to customers with smart meters. This measure must be implemented by jurisdictions to come into effect.

Note: there are additional disclosure requirements as part of the Consumer Safeguards. There are also additional classes of consumer that the safeguards do not apply to. We have listed the relevant parts of the Determination that stakeholder submissions commented on. Further information is provided in the Determination in the link below.
Source: AEMC, *Rule Determination – Accelerating Smart Meter Deployment*, 28 November 2024, p 25

4.5.1 Household understanding and engagement with different tariff structures

The 2025 CERC survey includes questions on the type of tariffs households are on, their understanding of electricity pricing, and how they are responding to and adjusting behaviour in response to new tariff structures.

Below, we explore this survey data to analyse the concerns raised in submissions regarding the increasing complexity of retailer tariffs and how households are engaging with new tariff structures.

The CERC survey asked respondents which type of tariff they are on. Of households in NSW:

- 39% were on a flat-rate tariff
- 35% were on a time-of-use tariff
- 5% were on a demand tariff
- 21% didn't know what type of tariff they were on (Figure 4.13).[s]

Of households on cost-reflective tariffs (time-of-use or demand), over half were moved onto the tariff by their retailer (47%) or by someone else, such as strata (8%). A little over 1 in 3 (38%) reported they choose to be on a cost reflective tariff.

[s] In Chapter 5, we report that data from 2023-24 shows that 21% of NSW residential customers were on retail time-of-use tariffs and 5% were on demand tariffs.

However, of households in NSW that were moved onto a cost reflective tariff by their retailer only 14% reported they wanted to move back to a flat-rate tariff. The remaining 86% reported they either did not care (26%) or prefer to stay on their current tariff (61%) (Figure 4.15).

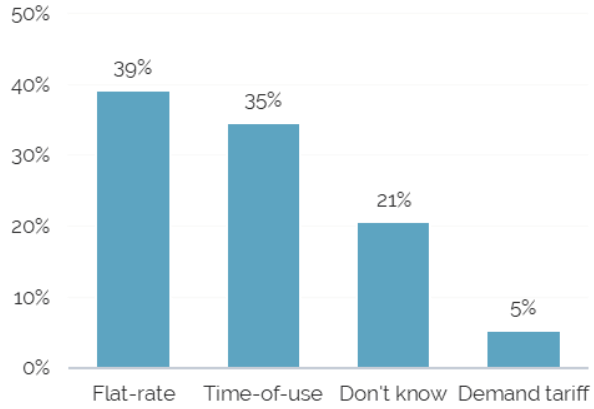
While submissions raised concerns that the NSW Government has not opted into a requirement for a flat-rate standing offer to be provided by designated retailers, the CERC survey data suggests there is only a small proportion of households in NSW on cost-reflective tariffs who would like to switch back to a flat-rate tariff.

In addition, across all tariff types:

- 32% of NSW households reported they knew how their electricity bill was calculated
- 58% had some idea but were not sure
- 11% of households reported they 'don't know'.

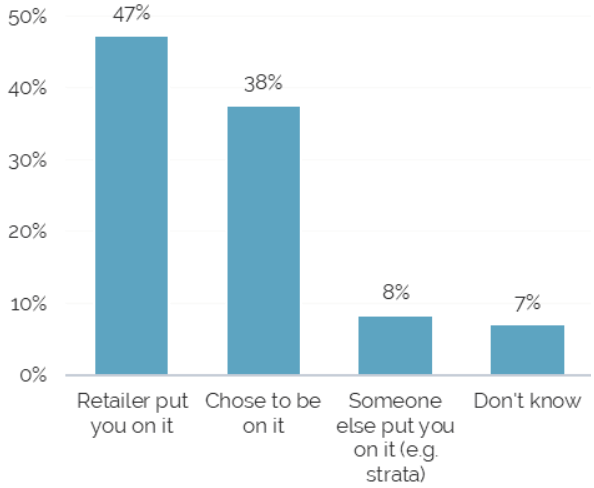
The proportion of household that responded they knew how their electricity bill was calculated was similar for households on flat-rate and time-of-use tariffs.[t] This suggests while time-of-use tariffs are more complex, NSW households have a similar understanding (compared to flat-rate tariffs) of how they are priced and how to respond to their price signals.

Figure 4.13 What type of electricity plan do you currently have?



Question: What type of electricity tariff or plan do your currently have for your household electricity plan?
n: 660

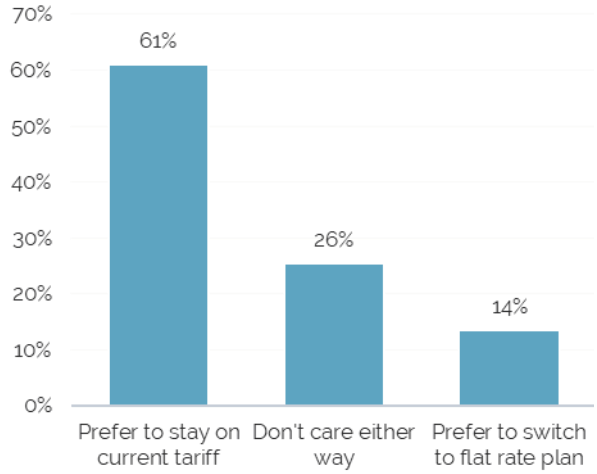
Figure 4.14 Did you choose to be on a time-of-use or demand tariff plan?



Question: Did you choose to be on a time-of-use or demand tariff?
n: 274

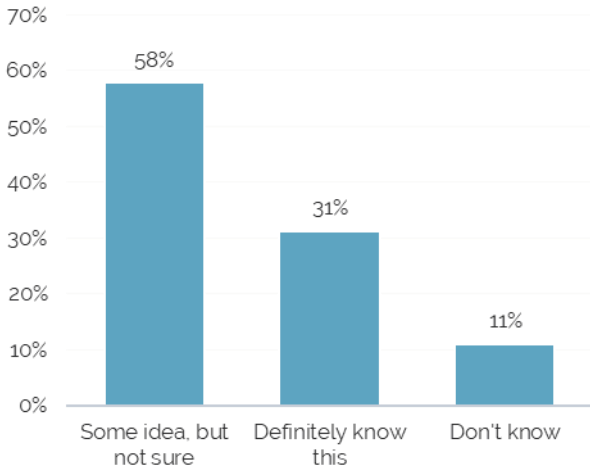
[t] The sample was too small to split this by households in NSW on demand tariffs.

Figure 4.15 Would you prefer to move back to a flat-rate tariff?



Question: Would you prefer to switch back to a flat-rate electricity plan or stay on your current time-of-use or demand tariff plan?
n: 274

Figure 4.16 Do you know how your electricity bill is calculated?



Question: How much do you know about the following things: how your electricity bill is calculated?
n: 660

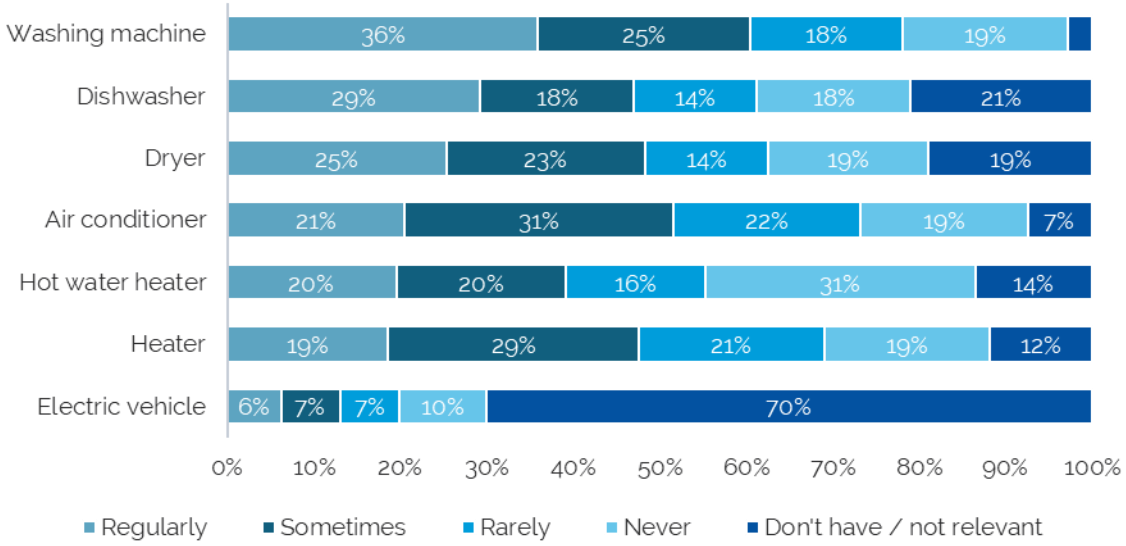
The results in the charts differ slightly to those reported in the Topline Data tables. This is because we have filtered out respondents that had missing data in key variables including bill amounts and incomes.
Source: Energy Consumers Australia, *Consumer Energy Report Card Survey raw data*, June 2025

Further, some NSW households on time-of-use and demand tariffs are shifting the use of appliances and equipment to reduce bills. For example, 36% responded they 'regularly' shifted the usage of the washing machine, while 29% 'regularly' shifted the use of a dishwasher. Around 1 in 4 households regularly shifted the use of a dryer and 1 in 5 shifted the use of an air conditioner, hot-water system or heater.

ECA explained that a relatively low proportion of households on time-of-use or demand tariffs were shifting heating, cooling and hot water heating to save money. These are typically the largest energy loads for households and can make up between 35% to 75% of a household's energy use.[162]

ECA found that households most frequently shift the use of lower-energy appliances, such as washing machines and dishwashers, and these appliances would likely account for less than 10% of a household's energy use. Given this, ECA considered the financial benefits of time-of-use tariffs are likely to be modest for many households.[163]

Figure 4.17 How frequently NSW households are shifting usage of appliances to reduce bills



Question: How often does your household deliberately shift the time of day that it uses appliances or other electrical equipment to reduce your electricity bill?
n: 374
The results in the charts differ slightly to those reported in the Topline Data tables. This is because we have filtered out respondents that had missing data in key variables including bill amounts and incomes.
Results are ordered by the proportion of NSW households that reported they 'regularly' shift usage.
Source: Energy Consumers Australia, *Consumer Energy Report Card Survey raw data*, June 2025

4.6 Savings from shifting usage and changing peak demand

Customers on time-or-use tariffs or demand plans are encouraged to shift their usage from peak period to off-peak or shoulder periods.

To keep electricity costs as low as possible customers on these offers need to:

- be on a plan that suits their needs
- understand how their plan is priced and their own usage patterns
- be able to adjust their usage patterns.[164]

In the section below, we explore the annual bill impacts of shifting electricity usage. We focus on customers on time-of-use and demand plans.

4.6.1 Savings from shifting usage

As discussed in Section 4.3, if a customer on the median market offer switched to one of the lowest offers in the market, they could save between $188 and $225, depending on the distribution network.

Customers on time-of-use plans can also reduce their annual bill by shifting their electricity usage from peak periods to shoulder or off-peak periods. The greater the price difference between peak and other periods, the more customers can save on their bill, and the stronger the incentive to shift usage.

Figure 4.18 shows how much customers on the median market offer in each distribution network could save by shifting their electricity use from peak to off-peak periods.[u]

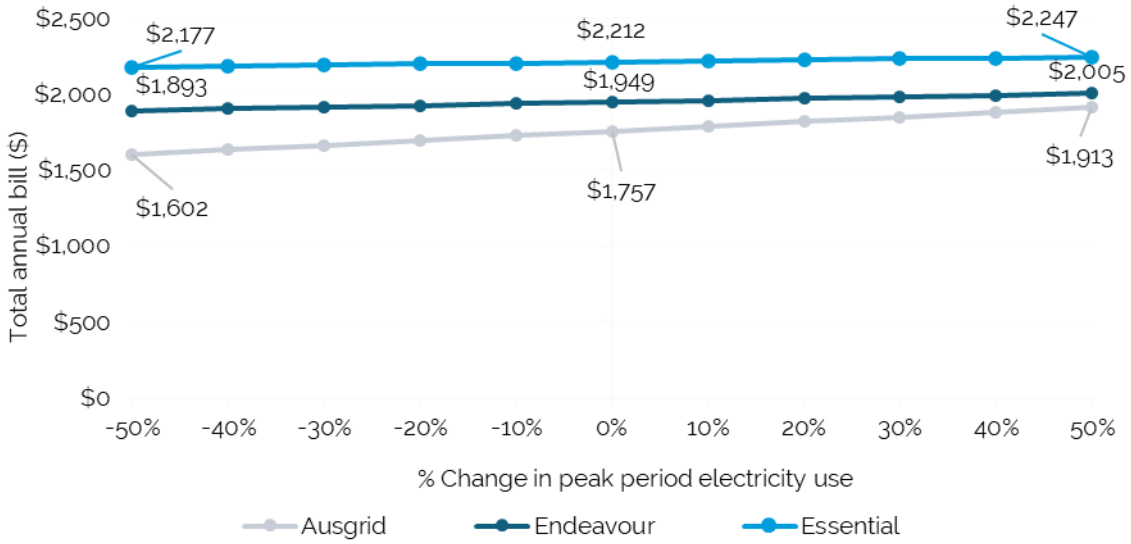
In each scenario, total electricity use stays the same (4,215 kWh), but the times the electricity is used are different. We modelled the annual bill by shifting usage between peak to off-peak periods (or vice versa) in 10% increments.

We find that savings from shifting usage are typically small, but they vary across distribution networks. This saving size depends on the difference between the peak and off-peak prices.

Savings are highest in the Ausgrid distribution network, where the difference between the peak and off-peak prices in June 2025 was 33 cents per kWh. A time-of-use Ausgrid customer could save around 2% of their annual bill by shifting 10% of their peak usage to off-peak periods. If they shifted 30%, they could save around 5%.

Savings are smaller in the Endeavour and Essential Energy networks because the difference between the peak and off-peak prices is lower, 13 cents per kWh and 10 cents per kWh respectively. If a customer in either of these networks shifted 10% of their usage to off-peak, they would save less than 1% of their annual bill.

Figure 4.18 Savings off the median annual bill from higher and lower-peak usage (incl. GST), June 2025



Note: the horizontal axis shows the % change in peak usage that is shifted to off-peak periods. For example, a movement from 0% to 10%, shows the bill impact from increasing peak usage by 10% and decreasing off-peak by the same amount (in kWh). Similarly, a movement from 0% to -10% shows the bill impact from decreasing peak usage by 10% and shifting this to the off-peak period.
Source: Energy Made Easy data, June 2025

These findings are consistent with those in the ACCC's Inquiry into the National Electricity Market. The ACCC found that there are only moderate savings available to customers who shift their usage from peak to off-peak periods[165] and that shifting usage alone is not enough to substantially lower annual bills.[166]

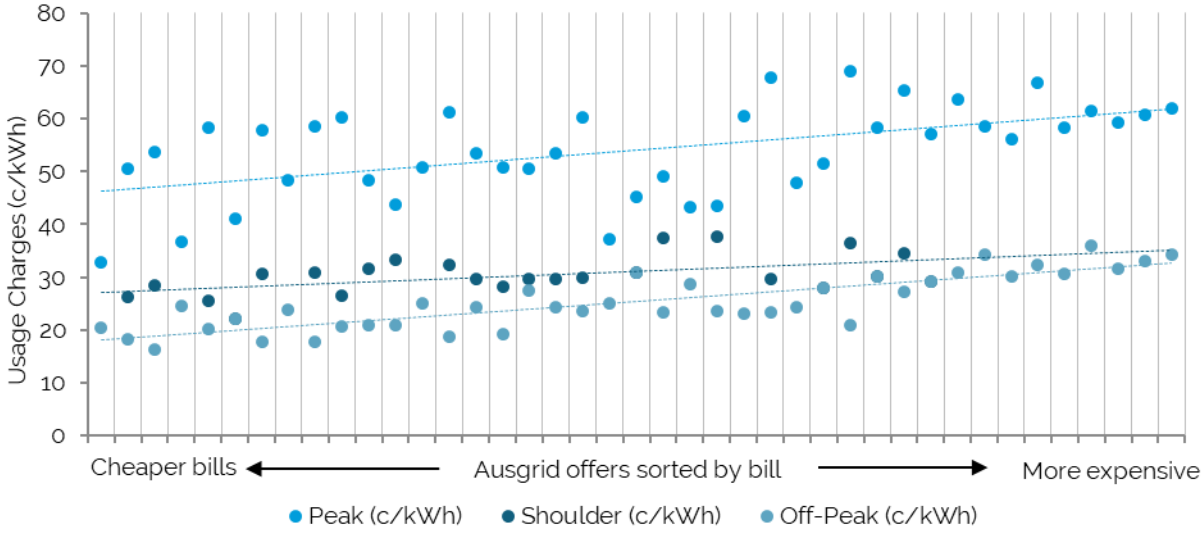
[u] We assumed that usage occurred in line with the DMO consumption profile for 2024-25 for the specified distribution network.

Across all regions in the NEM, the ACCC found that the weighted average residential price for time-of-use customers with different load profiles (high evening peak, medium evening peak, low evening peak and midday peak) only varied by about 2%.[v, 167]

The savings available to a customer depend on the specific time-of-use plan they are on and their usage profile. As Figure 4.19 shows, some plans in the Ausgrid distribution network have larger gaps between peak, shoulder and off-peak charges. Depending on the plan, the difference between peak and off-peak rates ranges from 12 c/kWh (the smallest) to 50 c/kWh (the largest gap).

However, even plans with the largest difference between peak and off-peak rates may not deliver large savings if households shift appliances that use only a small share of total energy use.

Figure 4.19 Peak, shoulder and off-peak charges for time-of-use offers, Ausgrid, June 2025 (c/kWh)



Notes: This figure includes year-round and seasonal offers. Where seasonal offers are included, we have calculated an average peak, average shoulder and average off-peak usage charge. Only a few seasonal offers include usage charges that vary by period, and it is more common for offers to have the same price for a usage charge but vary the times it is active in each season. The usage charges in the figure above do not include GST.

Source: IPART analysis of Energy Made Easy data

[v] The customer-weighted prices were most expensive for households with a high evening peak and cheapest for those with a noon-peak. However, the differences were small.

4.6.2 Savings from shifting instantaneous peak usage for customers with demand charges

As detailed in Chapter 5, demand tariffs are electricity plans that include a demand charge in addition to other charges, such as a fixed daily supply charge and usage charges (which may be fixed or variable).

A demand charge is typically calculated using the highest amount of power drawn from the grid during any 30-minute peak period in a month.[w] If households are on a plan with a demand charge, they can make larger savings if they can reduce their maximum electricity demand.

To estimate potential savings available from reducing maximum demand in peak periods, we calculated the highest level of demand for each month in 2024-25, for each customer in our sample.[x] We then averaged each customer's monthly maximum demand.[y]

To determine low, medium and high levels of maximum demand, we then calculated the 25th percentile of monthly maximum demand, the 50th percentile (median) and 75th percentile respectively. We then multiplied these levels of maximum demand by the median demand charge for the relevant distribution network, and the number of days in the year the demand charge applies.[z]

In the Ausgrid distribution network, if a household consistently reduces their monthly maximum demand from 6kW (high – 75th percentile) to 4kW (medium – 50th percentile), we estimate they could save just over $200 a year. Similarly, if a household in the Ausgrid distribution network reduces their monthly maximum demand from 4 kW (medium) to 3kW (low – 25th percentile) they could save just over $100.

The estimated savings from consistently reducing maximum demand in the Endeavour Energy network are smaller. This is because of a lower median demand charge and lower maximum demand. If a household consistently reduced their monthly maximum demand from 4kW (high) to 3 kW (medium), we estimate they could save around $65. Further, if a household reduced their maximum demand from 3kW (medium) to 2kW (low) they could save a further $65.

These findings highlight that for households on plans with demand charges, reducing their maximum demand tends to have a larger impact than shifting usage from peak to off-peak periods.

---

[w] While most retailers calculate demand charges this way (particularly in the Ausgrid Network), there is some variation. For example, some retailers have offers that apply demand charges based on:
- the highest demand during a quarter
- an average of peak demand over a specified period
- different rates for demand charges, depending on the season.

Source: ACCC, *Inquiry into the National Electricity Market*, 3 June 2024, p 55

[x] We did this analysis for customers on demand tariffs in the Ausgrid and Endeavour Energy distribution network. We did not conduct this analysis for the Essential Energy distribution network due to data quality issues.

[y] Using an average across months was a simplification we applied for the calculation. Most households had some variation in peak demand from month to month. However, given that most plans incorporate demand charges that are consistent throughout the year, averaging across months only resulted in a very minor difference in the total demand charge over the year.

[z] This analysis assumes that the overall level of usage and amount of usage in peak, shoulder and off-peak periods will remain the same.

Figure 4.20 Estimated residential annual demand charge, Ausgrid, by level of maximum demand (incl. GST)

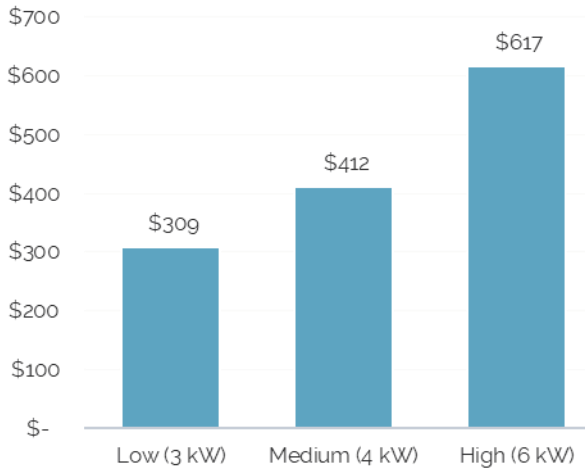
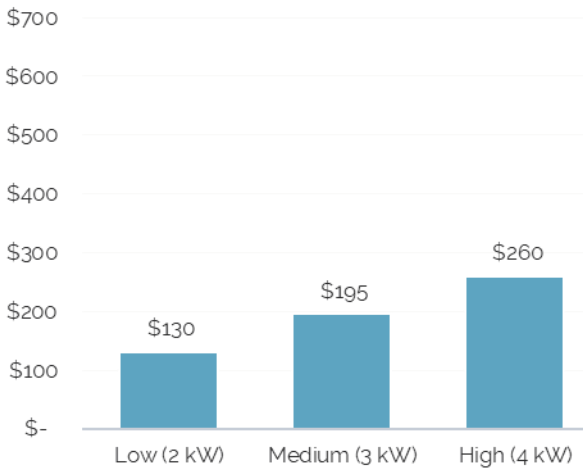


Figure 4.21 Estimated residential annual demand charge, Endeavour Energy, by level of maximum demand (Incl. GST)



Notes: Low refers to the 25th percentile of the average monthly maximum demand. Medium refers to the 50th percentile (median) and high refers to the 75th percentile. When calculating the percentiles, we filtered out households with very low annual usage (less than 1,000 kWh) and very high annual usage (greater than 12,000 kWh).
The median demand charge in the Ausgrid distribution network was 38.5 c/kW and the median demand charge in the Endeavour Energy distribution network was 16.2 c/kW.
Due to data quality issues, we were unable to estimate the annual demand charges for residential customers in the Essential Energy distribution network.
Source: IPART analysis of DNSP consumption profile data provided by the AEMC; Energy Made Easy data.

4.7 Tools to help consumers compare and switch

Several submissions to our Consultation Paper raised concerns around the complexity of time-of-use and demand tariff plans. These submissions explained if customers want to compare and switch offers, they need to consider:

- multiple price components, including supply charges, off-peak, peak and shoulder usage charges (which may vary by season), demand charges and solar feed-in tariffs
- the times when they use electricity.[168]

Price comparison tools are one way that customers can search for and compare offers. However, submissions also noted that these tools, including Energy Made Easy, have limitations.[169] This includes that price comparison tools may not incorporate demand charges or newer offerings, such as EV charging plans or VPPs.[170]

Last year, we analysed several price comparison websites that list plans in NSW to understand how many retailers they compared, the tariffs covered in bill estimates and functionality.[aa] Given the concerns raised in submissions again this year, we conducted this analysis again this year.

We have also considered whether these comparison sites include information on new offerings, including GreenPower plans, EV charging and VPPs. The results are shown in Figure 4.22.

[aa] Last year this analysis was undertaken during late October 2024.

Across the price comparison websites in our analysis, there was a clear difference in the number of retailers compared, the types of tariffs able to be compared and the additional functionality.

Energy Made Easy and Wattever compared all retailers in NSW (40 plus retailers). The remaining price comparison websites compared far fewer retailers, ranging between 6 and 14 retailers. On average, price comparison websites compared 15 retailers.

The types of tariffs that can be compared also varied. All price comparison websites in our analysis had the functionality to calculate and compare annual bills for flat-rate and time-of-use tariff plans. Further, the majority were able to include controlled loads in bill estimates.

A growing number of price comparison websites were able to calculate demand charges into bills. These websites required the user to manually input peak usage over the billing period, or in specified seasons. This was an improvement on the functionality of many price comparison websites last year when only 1 had the functionality to calculate a demand charge.

Only 3 price comparison websites had functionality to upload a bill (i.e. scrape the relevant usage data) to generate a bill estimate. In line with last year, only Energy Made Easy had the functionality to connect to the AEMO and obtain an individual customer's usage data. This data allows Energy Made Easy to provide a more granular estimate of the cost of alternative offers.

Only Wattever covered all new types of energy offers. This website included information on GreenPower, EV Plans (and the savings from switching to an electric vehicle) and VPPs.

Overall, these results show better functionality in price comparison websites compared to last year. As time-of-use and demand charges have become more common, many price comparison websites have been updated to provide estimates of these newer tariffs.

Figure 4.22 Summary of energy price comparison websites' functionality

Comparison website	Retailers covered	Tariffs covered						Functionality			Newer offers		
		FR	FR + CL	ToU	ToU + CL	Demand charge	FITs	Enter bill data (manual)	Upload bill (PDF)	NMI usage data	Green power	EV plans	VPPs
Wattever	40	●	●	●	●	●	●	●	●	●	●	●	●
Energy Made Easy	40	●	●	●	●	●	●	●	●	●	●	●	●
Canstar	14	●	●	●	●	●	●	●	●	●	●	●	●
EnergyWatch	14	●	●	●	●	●	●	●	●	●	●	●	●
Mozo	14	●	●	●	●	●	●	●	●	●	●	●	●
Compare and Connect	14	●	●	●	●	●	●	●	●	●	●	●	●
Econnex	11	●	●	●	●	●	●	●	●	●	●	●	●
Finder	11	●	●	●	●	●	●	●	●	●	●	●	●
Compare the market	8	●	●	●	●	●	●	●	●	●	●	●	●
GoSwitch	8	●	●	●	●	●	●	●	●	●	●	●	●
Select and switch	8	●	●	●	●	●	●	●	●	●	●	●	●
Electricity Wizard	6	●	●	●	●	●	●	●	●	●	●	●	●
iSelect	6	●	●	●	●	●	●	●	●	●	●	●	●

Notes: In addition to the price comparison websites listed above, we also considered other comparison services including Billy Explore, Zemble, Compare Club, Electricity Monster, Solar Choice, and Business Electricity Compare. However, these comparison websites did not provide a comparison of results online. Rather they collected customer information for a sales consultant to contact the customer. As a result, they have not been included in this analysis.
Results are ordered by number of retailers compared (descending), then functionality enabled (number of green circles), then alphabetically.
For retailers covered, if a price comparison website covered all retailers in the market, they were given a value of 40.
FR = flat rate, CL = controlled load, ToU = Time of Use, FiTs = feed-in tariff, NMI = National Metering Identifier, EV = electric vehicle, VPP = virtual power plant.
For tariffs covered, a green circle indicates the price comparison website incorporates the tariff or charge into the calculation of the total bill. A red circle indicates the tariff was not included in the total bill.
For functionality, a green circle indicates the specified functionality was available. A red circle indicates the functionality was not available.
For newer offer types, a green circle indicates the price comparison site has the ability to filter or select plans by that offer type, or it has information on those offers available on the website. A red circle indicates the price comparison website does **not** cover that tariff in the bill estimate, have price information, have that functionality available or cover the new offer plan type.
NMI usage data means the price comparison website has the ability to connect to AEMO and calculate bills based on granular usage data from a smart meter.

Source: wattever, Energymadeeasy, Canstar, CompareandConnect, EnergyWatch, Mozo, Econnex, Finder,,Comparethemarket, GoSwitch, SelectandSwitch, ElectricityWizard, Iselect, accessed 3 to 7 November 2025

4.7.1 Automated monitoring services that monitor bills and recommend switches

In addition to price comparison websites, there are also services available that monitor energy prices or bills on an ongoing basis. These services analyse usage data from bills or data made available through the Consumer Data Right (CDR) to periodically review if there are better offers available for customers. If there are, the service recommends a switch to the new offer or helps facilitate the switch, 2 examples of these services are detailed in Box 4.6.

Box 4.6 Examples of bill monitoring services

Bill Hero

Bill hero is a subscription service, with an annual fee of $49 for residential customers for electricity or gas, or $79 for both. This service monitors customers energy bills (monthly or quarterly) and using the consumption data in each energy bill, estimates and compares the cost of the current plan against all other plans available in the customer's area.

The subscriber is contacted by SMS or email if a cheaper offer is available, where the savings are above a specified personal threshold (bothered threshold).

If the customer would like to switch, they can either complete the switching process themselves, or Bill Hero can help them switch for a $25 service fee.

hipages energy

The service offered by hipages energy allows customers to share energy data through the CDR (by providing consent) or by uploading the last 12 months of energy bills.

After an online account is created, including providing identification, a customer's energy usage from either CDR or bills is analysed and compared against other retail offers. If there are savings available, the customer is switched to a lower cost plan.

The service guarantees a saving of 20% in the first year, based on the electricity bills for the previous 12 months. There is no cost for a customer to use the hipages services, however a commission may be paid by the new retailer when a customer switches.

Source: Bill Hero; Hipages energy, accessed 7 November 2025

These services provide a similar function to the Better Bills Guideline better-offer message, however they compare offers across retailers, rather than only offers within a retailer.

A recent report by the DSB and Treasury into the CDR framework found that it generally enables plan comparison and recommendation services, which can help customers find offers that suit their needs and identify more affordable options. Other services also provide tailored advice on areas such as appliance upgrades and how to change usage to reduce bills.[171]

However, the report found the CDR framework and current energy rules do not yet allow customers to use CDR-enabled services to switch plans from start to finish in one place. This reduces CDR's ability to make switching easier.[172]

Chapter 5

Pricing outcomes for customers in NSW

05

Chapter summary

- The number of households and small businesses on cost-reflective tariffs has continued to grow. The share of residential customers on flat-rate network tariffs has fallen from 71% in 2022-23 to 52% in 2024-25. The share of households on time-of-use and demand tariffs has increased to 29% and 18% respectively. Small business customers showed a similar transition.
- Between June 2024 and June 2025, the median market offer for residential customers increased by up to 6% for flat-rate plans and 4% for time-of-use plans. This was a smaller increase compared to June 2023 to June 2024. In contrast, the median market offer for small business customers fell over 2024 to 2025.
- Flat-rate and time-of-use plans had similar estimated bill ranges in 2024-25, based on the DMO load profile for residential customers. These 2 tariff types also had similar ranges when bills were calculated based on a sample of customer load profiles.
- Demand tariff plans typically result in the highest estimated bills for residential customers. For non-solar customers, demand tariff plans were consistently the most expensive type of plan in 2024-25, with average estimated bills between $100 and $300 higher than flat-rate or time-of-use plans. For solar customers, estimated annual bills were around $150 to $200 higher, even after accounting for typically higher solar feed-in tariffs offered on demand tariff plans.
- Stakeholders have continued to raise concerns that demand tariffs are complex and poorly understood, and some online comparison tools including Energy Made Easy cannot calculate a demand charge.

This chapter reports on estimated annual bills for residential and small business customers in NSW, for flat-rate, time-of-use (TOU), and demand tariff plans.

As the smart meter rollout continues, a growing number of customers are being assigned to time-of-use or demand network tariffs. Retailers typically align a customer's retail tariff with the underlying network tariff to reduce risk. However, as submissions highlighted, these are more complex than flat-rate plans, and may result in higher bills, particularly if customers do not adjust their usage.

In this chapter we:

- track price and annual bill changes over 2024-25
- compare average bills and the bill composition across tariff types, for solar and non-solar customers
- assess outcomes for demand tariff plans and information gaps for customers.

5.1 Retail tariffs are becoming more diverse and complex

The National Electricity Rules require DNSPs to gradually make their network tariffs more reflective of the costs involved in serving customers. To date this has generally involved transferring a customer from a flat-rate network tariff to a time-of-use or demand network tariff when a smart meter is installed.

As the rollout of smart meters continues, a rising number of small customers in NSW are being moved onto cost-reflective network tariffs. These tariffs allow for more efficient pricing and are intended to incentivise customers to consume electricity in off-peak periods when demand for electricity is lower.

When a customer's network tariff changes, retailers have generally also changed the customer's retail tariff to align with the underlying network tariff. This is because it reduces the retailer's risk by guaranteeing the customer pays enough to cover what the retailer is charged by the distribution network. As a result, a growing share of customers are now charged prices that vary by time of day or by their maximum demand.

Once a customer has a smart meter installed and they are transferred onto a time-of-use network tariff or demand network tariff, they are generally not able to switch back to a flat-rate network tariff.[a] However, customers on a demand network tariff can still typically sign up for a time-of-use retail plan. They can also elect to be reassigned to a time-of-use network tariff after one billing month, with reassignment generally limited to once per 12 months.[173]

The ACCC has explained there is currently little information available on the extent to which customers on time-of-use or demand tariff plans have sought to switch back to a flat-rate tariff plan, or how successfully these customers have been in finding a flat-rate plan with their existing or a new retailer.[174]

In Figure 5.1 and Figure 5.2 below, we report on the proportion of NSW customers on cost-reflective network tariffs (time-of-use and demand) and retail tariffs. As retailers often align a customer's retail tariff with the underlying network tariff, there is a similar trend in the distribution of residential customers on retail plans with flat-rate, time-of-use and demand tariffs.

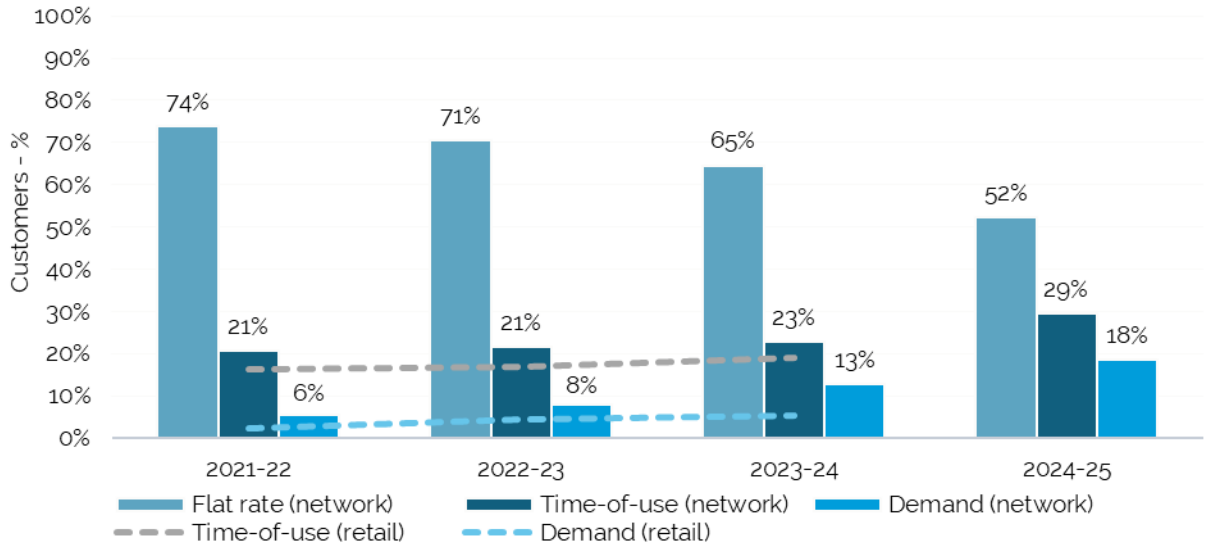
The mix of customers across network tariffs has shifted materially since 2022. For residential customers, the proportion of customers on flat-rate network tariffs has fallen from 71% in 2022-23 to 65% in 2023-24, to an estimated 52% in 2024-25. Over the same period, the proportion of customers on time-of-use and demand tariffs rose to 29% and 18% respectively (Figure 5.1).

The trend for retail tariffs is similar, but not identical. A slightly lower percentage of customers are on cost-reflective retail tariffs compared to cost-reflective network tariffs, and uptake of demand retail tariffs appears to have slowed in 2023-24 relative to uptake at the network level. This highlights that some customers have been able to switch retail tariffs or remain on their existing retail tariff following installation of a smart meter.

[a] Customers in NSW can request a change to their network tariff every 12 months. Customers do this by contacting their retailer and requesting the change. The retailer then contacts the distribution network on the customer's behalf.

This also highlights that the accumulation of poor customer outcomes relating to demand tariffs, and the default onus on retailers to explain demand tariffs, have since been reflected in the market's response. For instance, Origin's approach is to not change a customer's retail tariff after a smart meter installation,[175] and AGL no longer offers demand tariffs to new residential customers as of 2024,[176] explaining this was largely due to the complexity of demand tariffs.[177]

Figure 5.1 Proportion of residential customers on flat-rate, time-of-use and demand network and retail tariffs



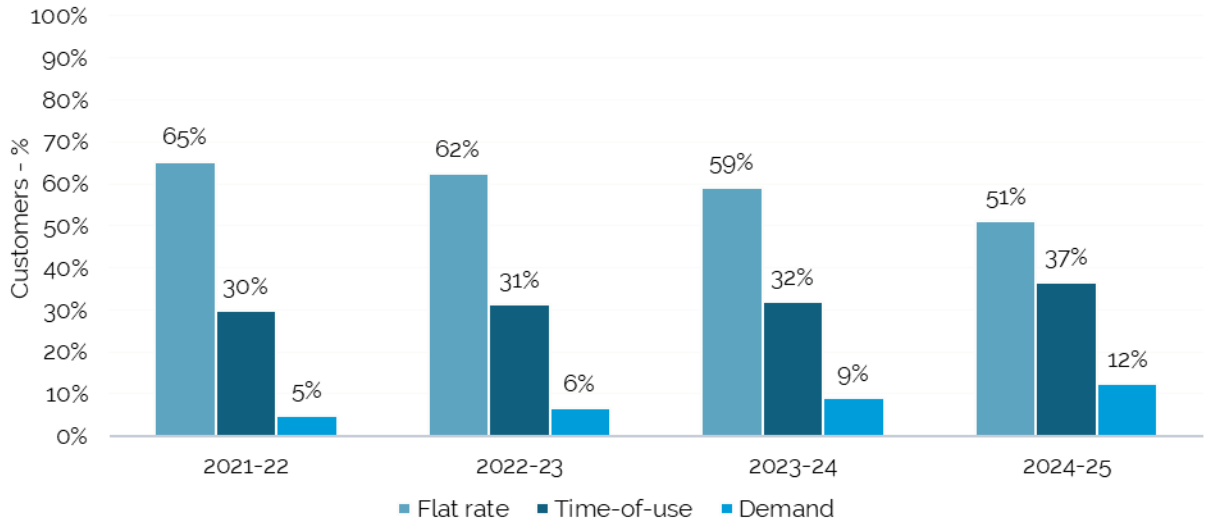
Note: Controlled load meters are excluded. Retail tariffs are reported to 2023-24, while network tariffs for 2024-25 are DNSP estimates.

Source: IPART calculations based on *Ausgrid SCS Pricing Model 2025-26*, *Endeavour Energy SCS Pricing Model 2025-26*; *Essential Energy SCS Pricing Model 2025-26*.

For small business customers, the proportion of customers on flat-rate network tariffs has declined from 62% in 2022-23 to 59% in 2023-24 and an estimated 51% in 2024-25. The proportion of small business customers on time-of-use and demand tariffs has increased to 37% and 12% respectively in 2024-25 (Figure 5.2).

This highlights that a growing number of residential and small business customers are exposed to time-varying or demand-based price structures.

Figure 5.2 Number and percentage of small business customers on flat-rate, time-of-use and demand network tariffs



Note: Controlled load meters are excluded. Proportions for 2024-25 are DNSP estimates. Retail tariff data is not available for small business customers.

Source: IPART calculations based on *Ausgrid SCS Pricing Model 2025-26*, *Endeavour Energy SCS Pricing Model 2025-26*; *Essential Energy SCS Pricing Model 2025-26*.

Flat-rate plans are the main tariff structure available for customers with basic meters.[b] These plans have the simplest pricing structure with a single usage charge and a fixed daily supply charge.

As noted above, once a customer has a smart meter installed and the network tariff is changed to a time-of-use or demand network tariff, retailers may restrict access to their flat-rate plans for these customers.

Stakeholders submitted that this limits the ability of those customers to choose a simpler tariff structure, if they would like to.[178] As the smart meter rollout progresses, the group of customers on flat-rate tariffs will continue to shrink, in line with the AEMC's final rule requiring universal smart meter deployment by 2030.[179]

Time-of-use plans have different usage charges that apply at different times of the day. These tariffs are designed to better reflect the cost of supplying electricity at different times and to signal customers to shift usage away from periods of high demand. Time-of-use network tariff structures are also evolving. For example, for 2024-25:

- Ausgrid simplified its time-of-use structure to apply peak rates from 3 pm to 9 pm every day during summer and winter, and off-peak rates at all other times. Ausgrid also removed the shoulder period from its network tariff.[180]
- Endeavour Energy introduced near-free network usage charges between its 10 am and 2 pm 'Solar Soak Period' to encourage midday consumption when solar generation is high.[181]
- Essential Energy's 'sun soaker' tariff applies peak rates from 7 am to 10 am and 3 pm to 10 pm, with off-peak rates from 10 am to 3 pm every day.[182]

[b] Basic meters – or type 5 meters – are accumulation meters that record total electricity consumption without tracking when that consumption occurs. Basic meters are not compatible with time-of-use or demand tariffs.

The National Consumer Energy Resources (CER) Roadmap has identified time-of-use pricing as a key enabler of efficient CER integration.[183]

Demand tariffs include a demand charge based on the customer's maximum kW draw within a defined period, in addition to supply and usage charges. The demand component is intended to better reflect the network capacity required to supply the customer at times of peak capacity.

Demand tariffs are expected to expand further as networks continue tariff reassignment following a smart meter installation and as retailers continue to develop retail offers aligned to them.[184] Several submissions to our consultation considered these tariffs are complex and customers often find them difficult to understand.[185]

Table 5.1 summarises the main tariff types available to customers in NSW, their price components, and how charges apply over time. The following sections examine how prices for these plan types changed in 2024-25 and what this means for customers' annual bills.

Table 5.1 Common retail tariff plans available to customers in NSW

Tariff	Description	Price components	Price periods
Flat-rate	Default tariff structure for customers with a basic meter. Flat-rate plans apply a single usage charge per unit of electricity at all times of the day.	• Supply charge (c/day) • Usage charge (c/kWh).	No price periods. Same usage charge applies at all times.
Time-of-use	Time-of-use tariff plans apply different rates to electricity used at different times of the day. Time-of-use plans are designed to price electricity more efficiently by accounting for the higher infrastructure cost of electricity used at peak times. This incentivises customers to use electricity during off-peak periods when prices are lowest.	• Supply charge (c/day) • Usage charges: – Peak (c/kWh) – Off-peak (c/kWh) – Shoulder (c/kWh).	Price periods are typically divided into: • Peak, when electricity costs the most, typically in the evenings. • Off-peak, when electricity costs the least, typically overnight and on weekends. • Shoulder, other times.
Demand tariff	Demand tariffs include a fixed daily supply charge, a usage charge (that may be flat or time-of-use) and a demand charge. The demand charge is calculated based on the maximum amount of power drawn from the grid at a specified point in time, measured in kW. This is distinct from the total amount of energy used over time, measured in kWh. Demand charges are designed to price electricity more efficiently by accounting for the cost of high demand periods on electricity infrastructure.	• Supply charge (c/day) • Usage charges: – flat (c/kWh), or – time-of-use (c/kWh) • Demand charge based on maximum demand (c/kW/day).	Most demand tariff plans have time-of-use price periods. Some demand tariff plans may have flat-rate usage charges (no pricing periods).
Solar feed-in tariff	Solar feed-in tariffs are available on some offers for customers with solar PV. These tariffs provide a payment to the customer for each kWh of electricity exported to the grid (or exported during certain hours)	• Rebate (c/kWh).	Most feed-in tariffs are flat-rate. Some retailers (like Amber) offer time-varying feed-in tariffs based on the wholesale price, while some time-varying feed-in tariffs may be offered as part of a virtual power plant.

Tariff	Description	Price components	Price periods
Controlled load tariff	Controlled-load tariffs are used for dedicated appliances such as hot water systems or underfloor heating. These often run overnight at off-peak times to take advantage of lower prices. Controlled load tariffs are generally added as a secondary tariff combined with either a flat-rate, time-of-use or demand tariff.	• Supply charge (c/kWh) • Usage charge for controlled load (c/kWh).	

Note: In addition to the retail tariff plans listed in this table, some retailers also offer solar soaker plans and EV charging plans. These are variants of time-of-use plans. Some retailers also offer innovative tariffs with different pricing structures. For example, Amber offers a plan with a usage charge that tracks the wholesale electricity price and users pay a subscription fee to sign up to this service.
Source: IPART analysis of offers on Energy Made Easy.

5.2 Residential prices increased in 2024-25, while small business prices decreased

Median market offer prices for residential customers in NSW were higher in June 2025 than in June 2024.

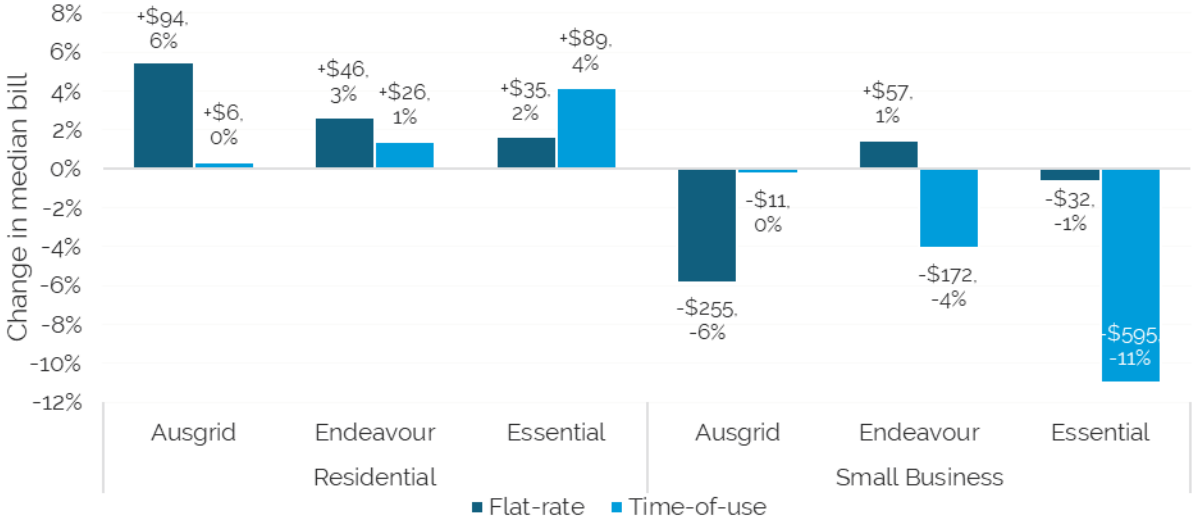
Median market offer prices increased by up to 6% for flat-rate plans and up to 4% for time-of-use plans, with outcomes varying by distribution network (Figure 5.3). For a typical residential customer in the Ausgrid network, this equated to an annual bill increase of around $94 on a flat-rate plan and around $6 on a time-of-use plan.

The median market offer price increase for residential customers was smaller from June 2024 to June 2025, compared to a year earlier.

From June 2023 to June 2024, the median market offer for residential flat-rate tariffs increased between $122 and $176 depending on the distribution network. From June 2024 to June 2025, the increases were between $35 and $94. Time-of-use prices increased by a similar amount over June 2024 to June 2025 (between $6 and $89, depending on the distribution network).

Conversely, median market offer prices for small business customers fell between June 2024 and June 2025 (except for the median flat-rate price in the Endeavour Energy distribution network, which increased by 1%). Median flat-rate prices decreased by 6% in Ausgrid and 1% in Essential Energy. Median time-of-use prices decreased between 0.1% (Ausgrid) and 11% (Essential Energy) (Figure 5.3).

Figure 5.3 Change in median market offer by plan type, customer type, and network, June 2024 to June 2025 (including GST, nominal)



Notes: This figure uses an annual residential usage of 4,215 kWh and a small business usage of 10,000 kWh. Time-of-use usage profiles are based on the 2024-25 DMO.
Source: IPART analysis of Energy Made Easy price data as of 11 June 2024 and 19 June 2025; AER, DMO 2024-25 usage profiles.

5.2.1 The range of residential customer prices trended higher from June 2024 to June 2025

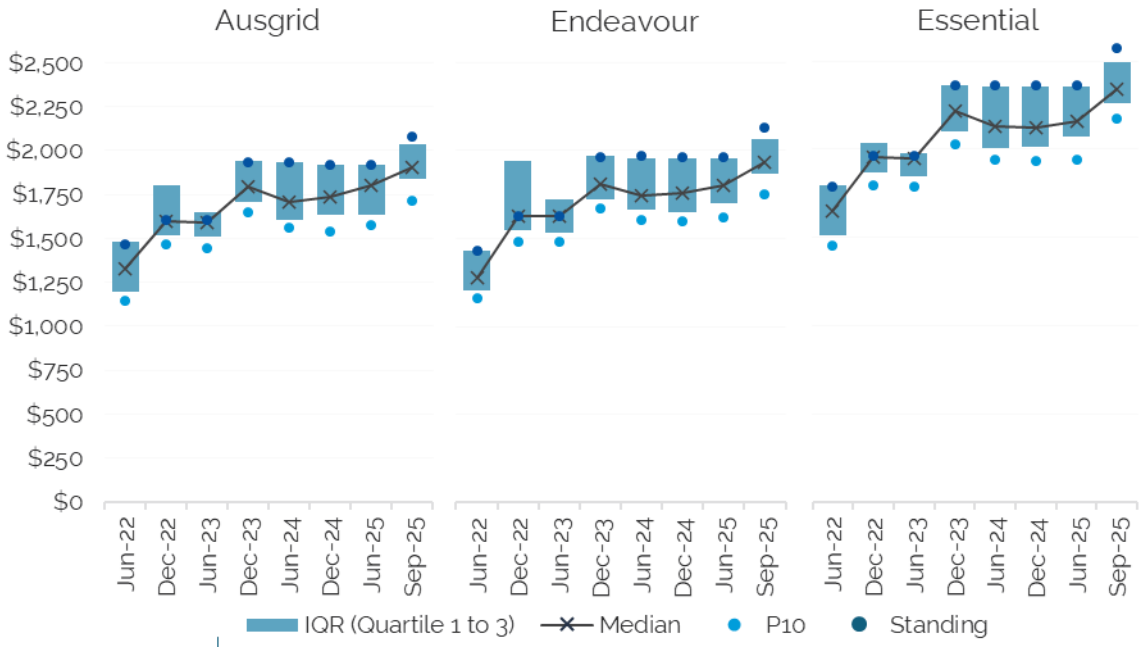
The range of residential market offer prices increased modestly from June 2024 to June 2025. The increase was driven by higher prices in the lower half of the market; retailers' cheaper offers became more expensive, pushing up the median (Figure 5.4). Over the same time period, prices in the upper half of the market were relatively unchanged, and the 75th percentile market offer price remained close to the median standing offer price across the 3 distribution networks.

Prices fell in the second half of 2023-24 and were relatively stable through most of 2024-25. As shown in Figure 5.4, there were almost no price movements in the 75th percentile market-offer price or the standing offer price between December 2023 and June 2025. However, prices increased again at the start of the 2025-26 financial year.

From the end of June 2025 to September 2025 (Q1 2025-26), median market offer prices for flat-rate plans rose between 5.5% and 8.2% (Figure 5.4) while time-of-use rose 4.1% to 8%, depending on the distribution network.

Prices at the 75th percentile also increased in Q1 2025-26 for the first time since December 2023 for both flat-rate and time-of-use plans. However, they increased by less than the DMO increase for 2025-26.

Figure 5.4 Distribution of flat-rate offers for residential customers by network (4,215 kWh per year, incl. GST, nominal)



Note: P10 is the 10th percentile market offer. The IQR (interquartile range) is the 25th percentile market offer to the 75th percentile market offer. Standing refers to the median standing offer.
Source: Energy Made Easy data 2022-25.

5.2.2 Small business price changes over time

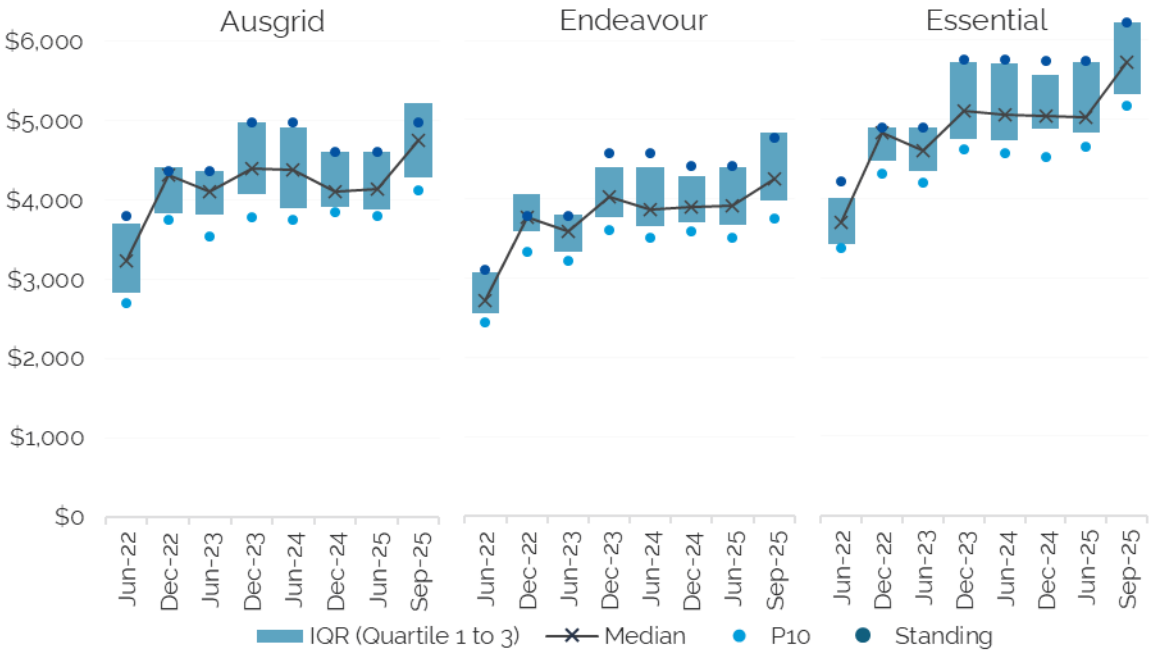
Between June 2024 and June 2025, price movements in small business flat-rate market offers were modest and varied by distribution network (Figure 5.5). In Ausgrid, the upper half of the market decreased along with the median standing offer price, lowering the median market offer. Prices in the lower half of the market were largely unchanged, so the interquartile range contracted downward.

In the Essential Energy distribution network, the median market offer price also decreased but by a smaller amount even though the market's lowest prices (10th and 25th percentile) increased.

Conversely, in the Endeavour Energy distribution network the median market offer increased marginally, while the 10th, 25th and 75th percentile prices were largely unchanged and the standing offer decreased slightly.

From the end of June 2025 to September 2025 (Q1 2025-26), flat-rate prices increased across all 3 networks by 8.5% to 14.9%. The 10th percentile, quartiles, median and standing offer prices each rose by similar amounts, indicating a broad repricing across the market at the start of 2025-26 rather than a change in distribution.

Figure 5.5 Distribution of flat-rate market offers for small business customers by network (10,000 kWh per year, incl. GST, nominal)



Note: P10 is the 10th percentile market offer. The IQR (interquartile range) is the 25th percentile market offer to the 75th percentile market offer. Standing refers to the median standing offer.
Source: Energy Made Easy data 2022-25.

5.3 Estimated annual bill ranges are similar between flat-rate and time-of-use plans

Retail electricity prices for residential customers show increasing variation between retailers as more tariff types become available. As of May 2025, most retailers in NSW offered both flat-rate and time-of-use plans (Figure 5.6).

Submissions explained that new tariff structures have resulted in more complexity when comparing plans, as customers must consider several price components and how they use electricity throughout the day.

Energy Made Easy data for May 2025 shows that, for most retailers, the range of estimated annual bills for flat-rate plans and for time-of-use plans[c] are very similar. Around 70% of retailers' lowest-priced offers for a typical household were time-of-use plans rather than flat-rate plans. However, on average, this difference is marginal; the lowest-priced time-of-use plan was only around $14 per year cheaper than the lowest-priced flat-rate plan (about 1%). As discussed in Chapter 4, a time-of-use customer could also receive a lower bill by shifting usage from peak to off-peak periods.

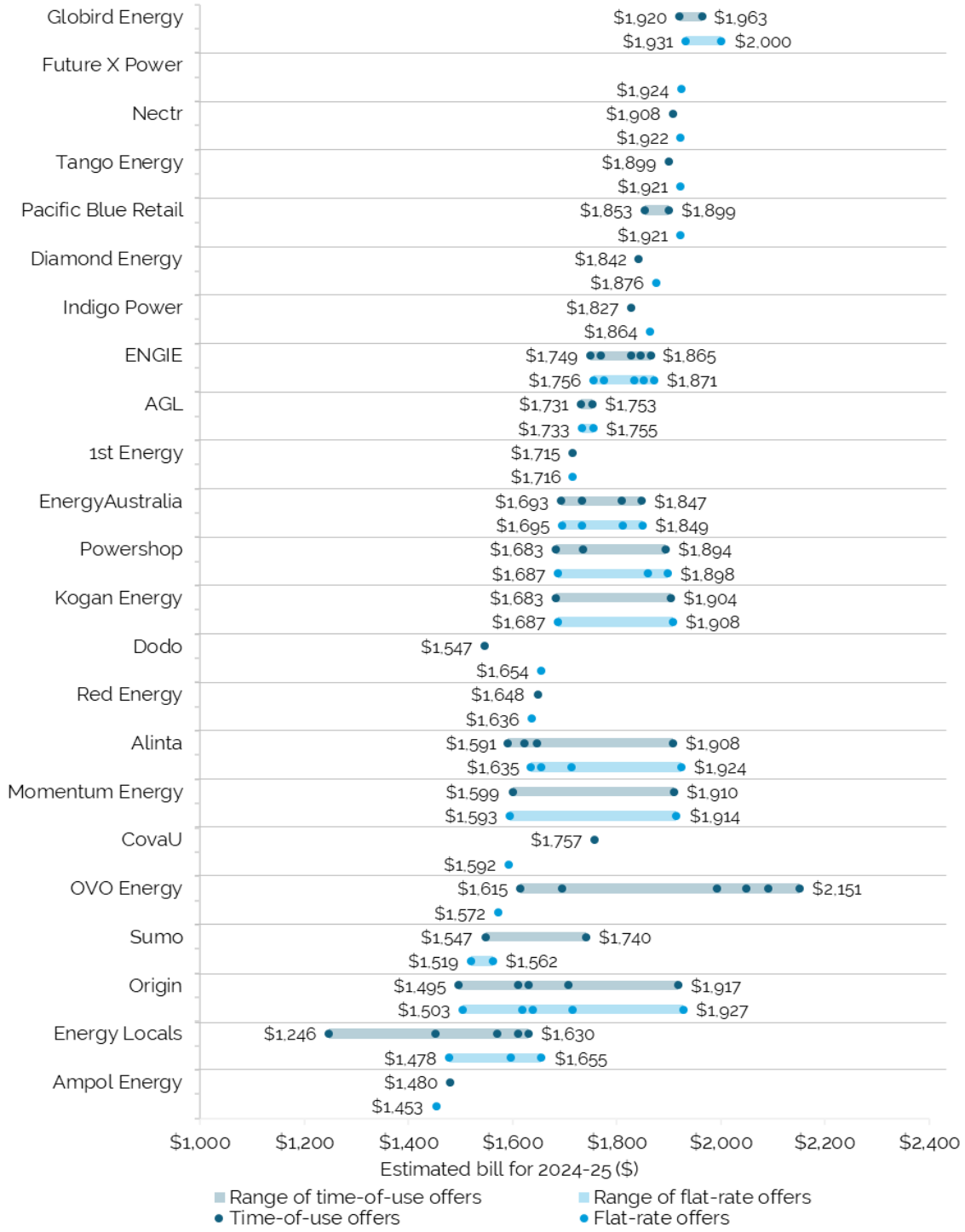
[c] We calculated the estimated annual cost for time-of-use plans using the DMO load profile for 2024-25.

While the range of estimated annual bills for flat-rate and time-of-use plans is narrow in each retailer's offerings, the estimated annual bills can vary notably. For example:

- across retailers, estimated annual bills differ by up to $750
- within a retailer's offerings, the estimated annual bills differ by up to $500 (Figure 5.6).

Overall, within each distribution network, the difference between the 10th percentile and median market offer is typically around $200, while the 75th percentile is a further $100-$200 higher than the median market offer. Chapter 4 discusses the savings customers can earn by switching.

Figure 5.6 Distribution of flat-rate and time-of-use market offers for **residential customers** by retailer, Ausgrid (4,215 kWh per year, incl. GST) May 2025



Notes: Based on the Default Market Offer residential Ausgrid load profile for 2024-25. Some retailers are not shown in this graph because their plans include eligibility requirements or missing information.
Source: Energy Made Easy plan data as of May 2025; DMO 2024-25.

For small business customers, the price ranges for flat-rate and time-of-use offers do not align as closely compared to residential customers. Figure 5.7 below shows each retailer's estimated annual prices for small business customers in 2024-25.

While there are some retailers that offer consistent price ranges for flat-rate and time-of-use plans (such as Origin and Powershop), most retailers' time-of-use price ranges extend higher than their flat-rate price ranges.

However, while the majority of retailers appear to have higher time-of-use prices than flat-rate prices, this does not mean the majority of small business customers are on these more expensive plans.

In practice, almost 82% of small business customers in NSW were serviced by the 3 largest retailers plus Red Energy in 2024-25.[186] Figure 5.7 shows the time-of-use plans from these larger retailers[d] generally resulted in similar or only slightly higher annual bills compared to flat-rate plans.

There is no Default Market Offer benchmark specific to time-of-use plans for small business customers. As a result, some time-of-use market offers may exceed the flat-rate standing offer benchmark for small businesses. This exposes small business customers who select higher-priced time-of-use plans to annual bills that exceed the Default Market Offer.

The estimated bills in Figure 5.7 are based on an average small business load profile from our sample of 2024-25 Ausgrid non-solar customers, equivalent to around 10,000 kWh per year. Small business usage varies widely across sizes and sectors (e.g. offices, restaurants, small warehouses, and light manufacturing). The average profile we use is therefore not representative of all small business customers.

To represent small business customers of all sizes, Section 5.7 estimates bills using each small business customer's individual load profile from our sample. The results are similar to Figure 5.7 overall, but show that many of the upper-end annual bill estimates in Figure 5.7 are outliers. Excluding outliers (as done in Section 5.7), time-of-use and flat-rate bill ranges are often similar.

[d] We did not analyse price estimates for EnergyAustralia due to eligibility filters we exclude.

Figure 5.7 Distribution of flat-rate and time-of-use market offers for **small business customers** by retailer, Ausgrid (incl. GST) May 2025

Notes: Based on sample load profiles for small business customers in Ausgrid who used around 10,000 kWh in 2024-25. As of May 2025, Amber and EnergyAustralia both offered time-of-use plans for small business customers. These are not shown – Amber's include eligibility requirements and EnergyAustralia's is a standing offer.
Source: Energy Made Easy plan data as of May 2025.

5.3.1 Some submissions considered a flat-rate standing offer should be available from retailers to all customers with a smart meter

Stakeholders raised concerns that some customers moved to cost-reflective tariffs after smart meter installation may prefer to return to flat-rate tariffs but are unable to do so.[187]

Evidence from Energy Consumers Australia indicates this group is relatively small; only about 14% of households in NSW who were moved from a flat-rate tariff to a time-of-use or demand-based tariff in 2024 said they would prefer to switch back (see Section 4.5).

The AEMC considered this issue in part in its *Final Rule Determination – Accelerating Smart Meter Deployment*.[188] On 28 November 2024, the AEMC published its final rule determination for universal smart meter deployment by 2030. In response to stakeholder submissions, the AEMC included 2 new consumer safeguards, including:

- a 2-year explicit informed consent period requiring retailers to obtain a customer's consent before changing their retail tariff after a smart meter is installed (commencing on 1 December 2025)
- **if jurisdictions opt in**, a requirement for designated retailers to make a flat tariff option available to all customers, regardless of their underlying network tariff. This would allow eligible customers to revert back to a flat-rate tariff following a smart meter installation, if the NSW Government decided to opt in.[189]

The AEMC found these protections were sufficient to ensure customers who are not yet ready to respond to time-of-use prices can remain on a flat-rate tariff.

As of November 2025, NSW has not implemented the flat-rate tariff requirement (only Southeast Queensland has required designated retailers to provide a standing offer with a flat rate).[190]

Our analysis above shows there were only minor differences between the distribution of residential flat-rate and time-of-use market offer prices in 2024-25. While these results are based on a standard DMO load profile, the analysis in Section 5.5 to Section 5.7 below shows that flat-rate and time-of-use market offers continue to have similar estimated bill ranges even when bills are calculated based on individual customer load profiles. Combined with Chapter 4 findings that reveal shifting usage from peak to off-peak times has a very small impact on total bill, these findings highlight that some residential customers may be just as well off on time-of-use plans or flat-rate plans, depending on their usage and the prices under their current and new plans.

These findings are consistent with analysis from the ACCC's December 2024 NEM Inquiry Report, which found that at the start of 2024-25 (August 2024), calculated annual prices for time-of-use plans were on average 3.3% lower than flat-rate plans.[191]

Given several retailers already offer both tariff types to customers who have smart meters (at least in the Ausgrid network), mandating an additional flat-rate option is unlikely to improve affordability or choice.

Table 5.2 summarises which NSW retailers currently provide flat-rate offers to customers with smart meters, based on Energy Made Easy data as of August 2025. While not all of these plans are openly advertised, they are publicly available, provide flat-rate tariffs under a time-of-use scheme (effectively offering the same price during peak, shoulder and off-peak times), and are listed on Energy Made Easy as eligible for customers on smart meters.

Table 5.2 Retailers that offer flat-rate plans to residential customers with smart meters

Distribution network	Retailers with standing offer flat tariffs for smart meter customers	Retailers with market offer flat tariffs for smart meter customers
Ausgrid	• ENGIE • Origin Energy • Red Energy	• ENGIE • Kogan Energy • Origin Energy • Powershop • Red Energy
Endeavour Energy	None	None
Essential Energy	None	None

Notes: This only includes plans that are reasonably available to all residential customers. We exclude plans with strict eligibility requirements. This does not include demand tariff plans with flat-rate usage charges. There were no flat-rate usage plans available in the Essential Energy network that are generally available (i.e. do not have strict eligibility).

Source: IPART analysis of Energy Made Easy data

The AEMC also found that requiring designated retailers to make a flat tariff offer available to smart meter customers would benefit customers who find cost-reflective tariffs complex.[192] As discussed below, we agree that time-of-use tariffs are more complex than flat-rate tariffs, and demand tariffs even more so.

We consider that the explicit-consent safeguard that commences December 2025 largely achieves the objective of protecting customers from complex tariffs by allowing customers to delay any tariff change. However, as this protection only lasts for 2 years after a smart meter installation, we will continue to monitor customer outcomes as cost-reflective tariffs become more widespread.

Further, customers on demand tariffs are not locked into this structure. They can request reassignment to a time-of-use network tariff after one billing month through their retailer.[193] At the retail level, NSW customers who have been placed on a demand tariff can also typically opt for a time-of-use retail plan either with their existing retailer or by switching retailers.[194]

Our analysis of 2024-25 retail offers shows that the distribution of estimated annual bills for flat-rate and time-of-use offers was very similar in 2024-25, both when calculated using the DMO reference usage profile and individual usage profiles. This indicates that customers who move from a demand tariff to a time-of-use network tariff and select a time-of-use retail offer can generally access a broad range of price points that are comparable with the range available for flat-rate offers.

Finding

6. The estimated annual bill ranges for flat-rate and time-of-use offers were similar in 2024-25, whether calculated using the DMO usage profiles or a sample of individual usage profiles (although individual customers could be better off on flat-rate or time-of-use tariffs depending on their usage profile).

7. Demand tariff customers typically cannot move back to a flat-rate offer, but they can move to a time-of-use offer. Many demand tariff customers could pay less by moving to a time-of-use offer.

5.4 Demand charge price ranges have widened since last year

Demand charge rates had a wider range in August 2025 compared to the previous year, for both residential and small-business customers. As of August 2025, demand charge rates on Energy Made Easy ranged from:

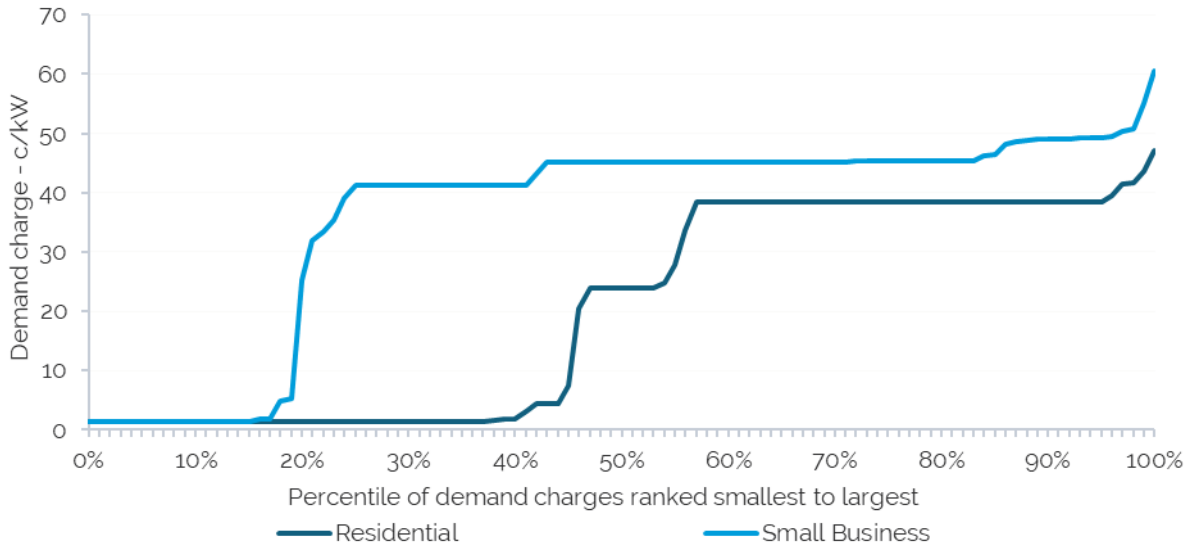
- 1 c/kW to 47 c/kW for **residential customers**. Around 45% of residential demand charges were above 30 c/kWh
- 1 c/kW to 60 c/kW for **small business customers**. Around 80% of small business demand charges were above 30 c/kWh.

The wide range of demand charge rates partly reflects "introductory" demand tariffs, which offer demand charge rates of around 1-2 c/kW for both residential and small business customers. These network tariffs (and subsequently retail offerings) are available to customers who have newly moved to a demand tariff and apply for 12 months before shifting to full demand tariffs, which have more expensive demand charge rates.[195]

While the distinction between introductory and standard demand tariffs is clear at the network level, retailers may offer the same demand charge rate for customers regardless of their underlying network demand tariff, adding to the complexity customers face when choosing between retail plans.

By comparison, the range of usage charges for flat-rate plans was 28 c/kWh to 39 c/kWh for residential customers (an 11-cent difference) in the Ausgrid distribution network and 25 c/kWh to 42 c/kWh for small business customers (a 16-cent difference). For time-of-use, peak period rates ranged from 25 c/kWh to 69 c/kWh (a 44-cent difference). This demonstrates the much larger spread in demand-charge rates than in flat-rate usage rates, but similar spread compared to time-of-use rates.

Figure 5.8 Distribution of retail demand charges (c/kW) in the Ausgrid network by customer type



Source: Energy Made Easy data, 25 August 2025.

5.4.1 Demand charge bills also vary with customers' peak usage

In addition to the demand charge rate (c/kW), the demand charge component of a bill is also determined by each household's maximum power draw (kW) during peak periods. This can make comparing retail demand plans more complex than comparing retail flat-rate or time-of-use plans.

Two customers with similar annual consumption (kWh) can therefore have very different bills depending on how their load is distributed across a month.[e]

To illustrate the impact of different levels of peak demand (kW) on the estimated annual bills for demand tariff plans, we analysed 16 residential customer profiles for 2024-25 (8 *solar* and 8 *non-solar* households on the Ausgrid network) with similar annual consumption levels over 2024-25. Individual usage ranged from 4,002 kWh to 4,105 kWh.

Each customer's bill was calculated for every eligible demand tariff plan on Energy Made Easy, broken down into supply, usage, and demand charge components. The result of this analysis is shown in Figure 5.9.

The analysis found that the average demand charge component differed between the highest- and lowest-demand households by $200 for non-solar customers and $325 for solar customers. This difference was driven solely by variations in each household's peak demand level (kW).

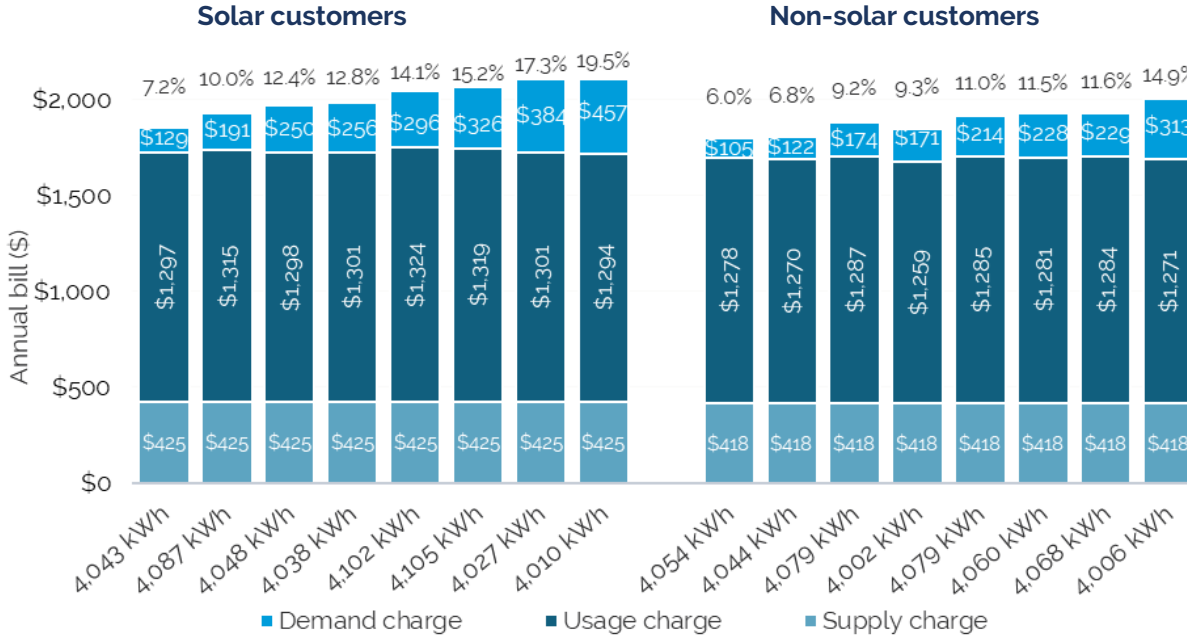
This means for customers with similar overall usage and on the same plans, the demand charge component represented on average 6% to 15% of total annual bills for non-solar households, and 7% to 19% of total annual bills for solar households. These shares are consistent with the ACCC's December 2024 NEM Inquiry Report, which found that demand charges accounted for about 13% of calculated annual prices as of August 2024.[196]

As shown in Figure 5.9, there was minimal variation in the average usage charge component between households (between $27 and $35) or in the fixed daily supply charge component. This reflects the small difference in total annual consumption and the fixed nature of supply charges. In contrast, the variation in potential electricity bills driven by demand charges was substantially higher.

Because households on the same demand plan with the same annual usage can still end up paying different bills due to their individual peak demand, customers may experience greater challenges and require more effort to accurately compare demand plans relative to flat-rate or time-of-use plans. This is discussed in Chapter 4, which explains that while a growing number of price comparison websites are now able to calculate demand charges in bills compared to previous years, these websites require users to manually input peak usage over the billing period or in specified seasons, in addition to their total usage.

[e] Most demand charges are calculated based on maximum monthly peak demand.

Figure 5.9 Average size of each estimated bill component for a sample of households in Ausgrid with similar annual usage (kWh), based on all market demand tariff plans on Energy Made Easy – solar vs non-solar customers*



Notes: *In this figure, solar customer bills exclude solar rebates. Bills for solar customers would be $100 to $300 lower on average than presented above and are typically lower than bills for non-solar customers.
Source: IPART analysis of Energy Made Easy plan data, August 2025, and sample consumption profile data from the AEMC.

5.5 We calculated annual bills based on a sample of customer consumption profiles

Despite a growing number of residential and small business customers in NSW on demand tariffs, barriers persist which prevent customers from easily comparing demand plans with flat-rate or time-of-use plans.

A key reason for this is when a customer is on a demand tariff plan, the estimated annual bill can only be calculated with granular usage data. Currently, most online price comparison tools, including Energy Made Easy, do not incorporate demand charges.

Our analysis of demand tariff plans is based on a sample of 1,000 residential and 1,000 small business customer usage profiles in the Ausgrid network. Our methodology for analysing this consumption data is outlined in Box 5.1.

Box 5.1 How we calculated the annual cost of demand tariffs using a sample of consumption profiles

We received a sample of consumption profiles for household and small business customers in NSW from the AEMC. This data was provided to the AEMC by the DNSPs in NSW. This consumption profile data included:

- electricity usage data in 30-minute intervals for each day in the 2024-25 financial year
- the type of customer (household or small business) and whether the customer does or does not have solar
- the network tariff the customer was on over the 2024-25 financial year.

We used the consumption profile data for both solar and non-solar customers and paired this with information on residential and small business electricity offers from Energy Made Easy to estimate the annual cost of demand tariff plans, flat-rate plans, time-of-use plans, and solar rebates.

Consistent with our previous Energy Market Monitoring reports, we excluded plans with strict eligibility requirements, such as those only available to specific customer groups (e.g. pool owners, certain organisation members, or residents in particular buildings or areas). However, this year we have included plans with solar feed-in tariffs.

We also excluded demand tariff plans that lacked complete information about the times, days and months in which the demand charges apply from our calculations.

In the sections below we show the key findings from the analysis of the sample of residential and small business consumption profiles. This includes:

- the composition of annual bills for different tariff types, and the contribution from each bill component (supply charge, usage charge, and demand charge)
- how estimated annual bills compare for flat-rate, time-of-use and demand tariff plans.

5.6 Residential prices are typically higher under demand tariff plans

We estimated annual bills for a sample of Ausgrid residential and small business customers, split between solar and non-solar customers. These customers were on network demand tariffs during 2024-25. For each load profile, we estimated the annual bill for eligible demand tariff plans, flat-rate plans and time-of-use plans published on Energy Made Easy as of 25 August 2025.

We did not have data on the actual retail tariffs these customers were on over this period. However, our understanding (supported by information in submissions to our 2023-24 Energy Market Monitoring Report) is that most customers on a network demand tariff are on a retail demand tariff plan.

The analysis in this section is separated into estimated bills for non-solar customers (5.6.1) and estimated bills for solar customers (5.6.2). Within each section, we conducted 2 stages of analysis:

1. The first part examines average estimated bills for customers who used between 4,000 and 4,500 kWh in 2024-25. This presents the average size of individual bill components (usage charge, supply charge, demand charge, and for solar customers solar rebate) by retail tariff type. We have reported average bill components and average bills excluding GST, discounts, or membership fees.
2. The second part of each section expands the analysis to include residential customers across all usage levels. This presents the distribution of bills within each usage 'band' (i.e. blocks of 1,500 kWh) through a box-and-whisker plot. Total estimated bills in this analysis include guaranteed discounts and membership fees.

5.6.1 Residential bills for non-solar customers

We found that for non-solar residential customers, estimated annual bills for flat-rate and time-of-use tariffs were similar on average. Transitional (or introductory) time-of-use plans were slightly cheaper, while standard time-of-use plans were marginally more expensive than flat-rate plans. This mirrors our findings from 2023-24.[197]

Individual bill components (average usage charges and supply charges) were relatively similar between flat-rate and time-of-use plans, except that supply charges appeared to be on average $40 more expensive for standard time-of-use plans than both flat-rate plans and transitional time-of-use plans.

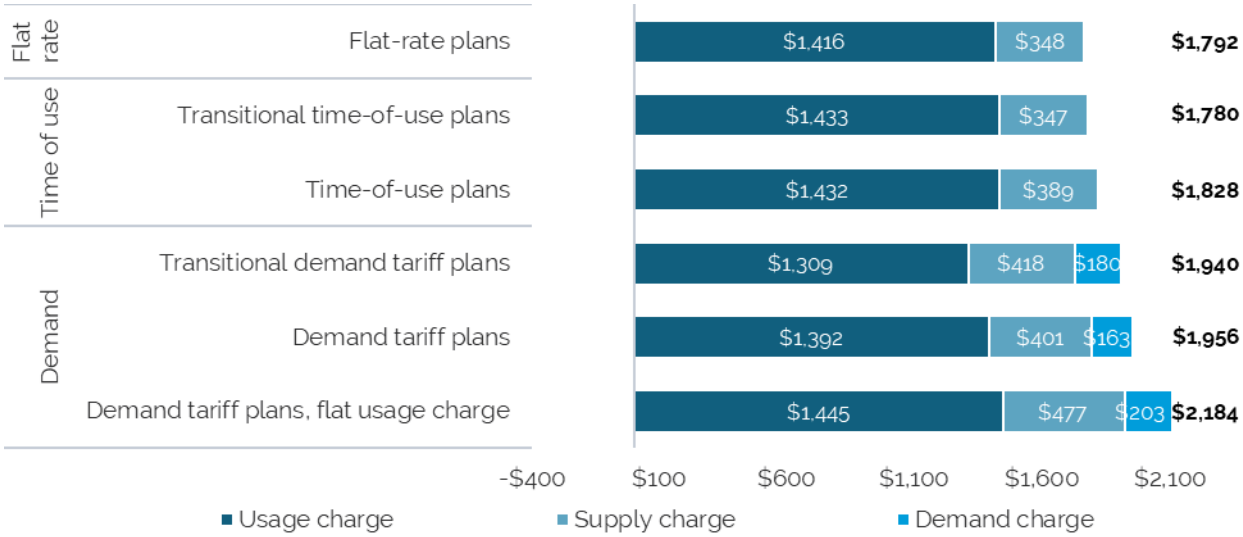
Demand tariff plans were the most expensive tariff type for non-solar customers, adding between $100 and $300 to an average estimated annual bill compared with flat-rate or time-of-use plans (Figure 5.10).

This difference in estimated bill is primarily due to the additional demand charge component, and to a lesser extent, higher supply charges for demand tariff plans. The average supply charge component for demand tariff plans was up to $130 more than flat-rate plans. These findings are consistent with the ACCC's December 2024 NEM Inquiry Report, which found that demand plans (with flat-rate usage) were around 13.7% higher than flat-rate plans on average, while demand plans (with time-of-use usage) were around 7.2% higher than time-of-use plans.[198]

Transitional (or introductory) demand tariff plans, which should apply reduced or introductory demand rates, remained slightly cheaper than standard demand tariff plans on average. By contrast, demand tariff plans that also included flat-rate usage charges were the most expensive plans overall.

This order of estimated annual bills by tariff type is consistent with our findings from September 2024.[199]

Figure 5.10 Average size of estimated bill components by retail tariff type, Ausgrid residential customers with 4,000 to 4,500 kWh annual imports – non-solar customers



Notes: Figure calculates the average size of individual bill components under different retail tariff types, based on offers downloaded from Energy made Easy in August 2025. This figure uses a sample of Ausgrid residential customers who used between 4,000 and 4,500 kWh in 2024–25, and whose network tariff classification was 'Demand'. Excludes GST, discounts and membership fees.
Source: Energy Made Easy offers as of 25 August 2025; Sample consumption data from the AEMC.

The above findings are based on average bills for residential customers using 4,000 to 4,500 kWh per year in the Ausgrid network.[f] In Figure 5.11 below, we expanded this comparison across all usage levels and included additional bill components such as membership fees and discounts.

Across the spectrum of market offers and non-solar residential customers at all usage levels, demand tariff plans were consistently more expensive than flat-rate or time-of-use plans regardless of usage level. However, this difference varies depending on the type of demand tariff plan.

Standard demand tariff plans (e.g. demand tariff plans with time-of-use pricing) had calculated bill distributions largely similar to flat-rate or time-of-use plans. The median and average estimated bills for demand tariff plans were only slightly higher than the corresponding flat-rate and time-of-use medians and averages across each usage level, and the overall price differences were much narrower than September 2024.

In comparison, transitional demand tariff plans and demand tariff plans with flat usage charges remained consistently more expensive than other tariff types, across all usage levels. Similar to our September 2024 analysis, the cheapest demand tariff plans with flat usage were higher than roughly 25% of flat-rate or time-of-use plans. This indicates that even the cheapest demand tariff plans with flat usage are not yet competitive with lower-priced flat-rate or time-of-use options.

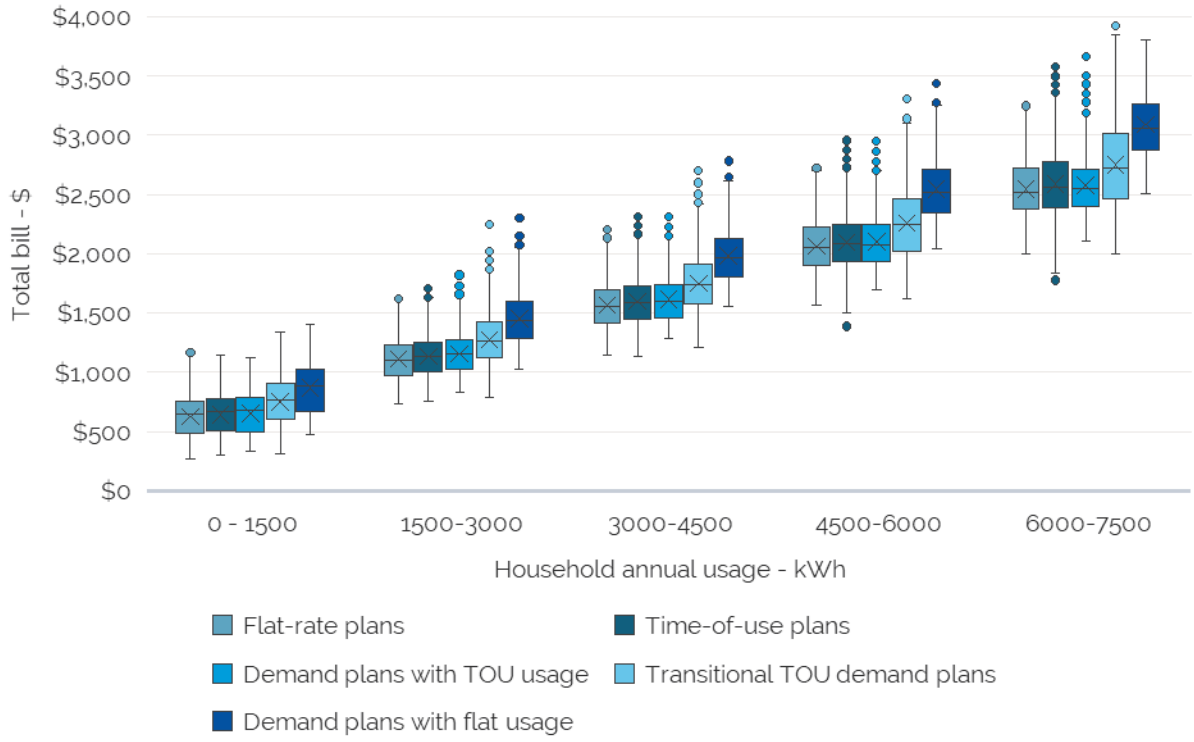
Despite some price differences and outliers, there was a high degree of overlap between the range of estimated bills for time-of-use plans and flat-rate plans. Figure 5.11 shows the distributions were broadly similar at each usage level, with the median bills tracking closely across different usage levels.

[f] We conducted this analysis for all sizes of customers; however we have presented the 4,000 to 4,500 kWh band as it aligns with the annual usage amount that we assume for bill estimates discussed in earlier sections of this chapter.

Their interquartile ranges (the difference between the 25th and 75th percentile bills) were also comparatively similar. This indicates there are flat-rate and time-of-use offers available at various price points that could result in similar or lower bills than a customer's current flat-rate or time-of-use plan. However, even though aggregate price ranges are similar, bill outcomes for individuals will depend on when they use electricity, their current plan, and the plan they switch to.

From December 2025, customers will need to provide explicit informed consent before being moved to a different retail tariff after a smart meter is installed. As a result, customers who do not want to be on a time-of-use or demand tariff plan can remain on a flat-rate tariff for up to 2 years after the installation of their smart meter.

Figure 5.11 Distribution of residential estimated bills in Ausgrid by plan type and annual usage (flat-rate vs time-of-use vs demand plans) – non-solar customers



Notes: In this figure:
- boxes represent the range of bills in the interquartile range (25th percentile of bills to the 75th percentile).
- dots represent outlier bills.
- 'X' represents the average bill.
- the horizontal '–' line inside boxes represents the median bill.

Source: Energy Made Easy offers as of 25 August 2025; Sample consumption data from the AEMC.

5.6.2 Residential bills for solar customers (including solar feed-in tariffs)

We have also calculated bills for a sample of residential customers with solar panels who export electricity to the grid. This analysis includes customers' annual usage as well as their net solar exports, enabling us to calculate annual bills that include solar feed-in tariffs.[g]

Based on the same usage band as the above analysis (4,000-4,500 kWh per year in the Ausgrid network), households with solar show a slightly different hierarchy of plan costs compared to non-solar customers.

Flat-rate and transitional time-of-use plans produced similar average annual bills for solar customers, followed by slightly higher standard time-of-use plans. The highest bills were for solar customers on demand tariff plans (Figure 5.12). However, the gap between flat-rate and time-of-use annual prices is wider for solar customers (around $100 per year) than for non-solar customers (around $30-$40 per year).

The reason for the difference in estimated bills between solar and non-solar households comes down to when each group typically imports electricity from the grid.

Solar households generate electricity during the day, which they can self-consume for free instead of buying electricity from the grid. Once the sun goes down and solar panels stop generating, they import electricity from the grid. This means a high proportion of the total electricity solar households import from the grid is during peak evening times, when electricity prices are most expensive.

In contrast, non-solar households generally have flatter usage profiles throughout the day, with a smaller proportion of their total imports occurring in the evening compared to solar households.

We included the impact of solar feed-in tariff rebates on customer bills. As expected, for the same level of annual imports from the grid (i.e. electricity purchased from a retailer), annual bills for solar customers were $200 to $300 cheaper than for non-solar customers. This impact was primarily due to the value of solar feed-in tariff rebates.

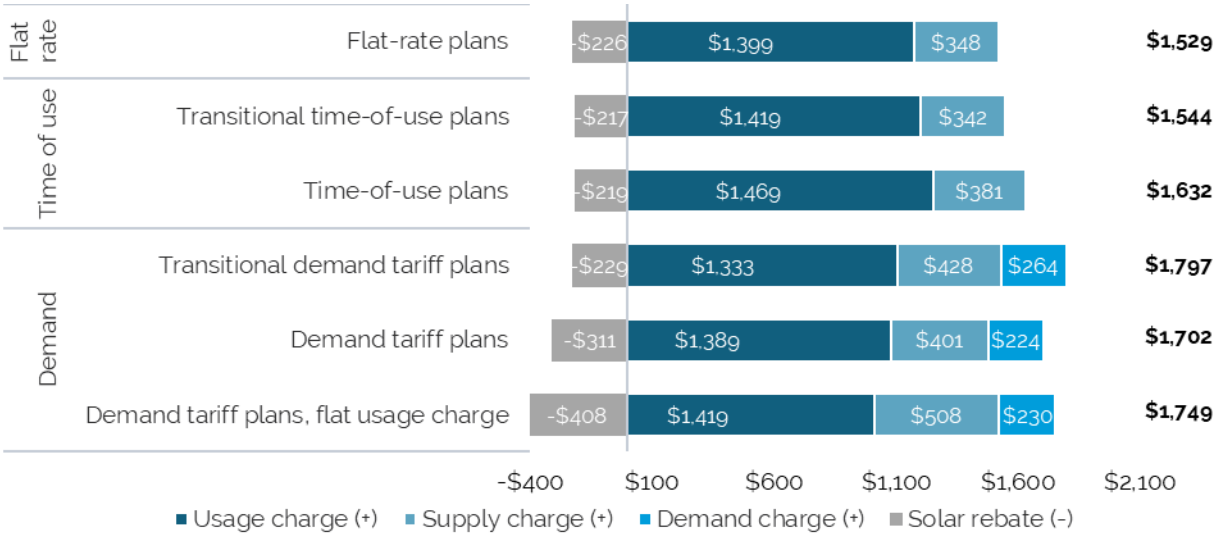
Solar households can also reduce their electricity bills through self-consumption. However, we only have data on what customers import from the grid and therefore cannot quantify these savings. Self-consumption can reduce electricity bills much more than solar feed-in tariffs. A household that uses the electricity generated by their solar panels could *use* 5,000 or 6,000 kWh per year but only need to *import* 3,000 or 4,000 kWh per year, depending on the size of their solar panels and whether they own a battery.

Further, the size of solar feed-in tariff rebates also differed by tariff type. Based on our sample of plans from August 2025, demand tariff plans on Energy Made Easy typically offered higher solar feed-in tariff rates than flat-rate or time-of-use plans (excluding transitional demand tariff plans). As a result, estimated solar rebates under demand tariff plans were $90 to $190 higher on average than flat-rate or time-of-use plans.

[g] Our analysis on solar customers only includes customers who exported electricity to the grid, and plans where the solar feed-in tariff was flat-rate and over 0 c/kW (i.e. the plan had a valid solar feed-in tariff).

However, we found that solar feed-in tariff rebates did not fully offset the additional cost from demand charges, leaving demand tariff plans as the most expensive tariff option overall, consistent with our findings for non-solar customers. Even after accounting for solar feed-in tariff rebates, average estimated annual bills for demand tariff plans were about $150 to $200 higher than the average estimated bills for flat-rate and time-of-use plans. However with the presence of solar feed-in tariff rebates, the net effect was that the gap between demand tariff plans and flat-rate or time-of-use plans was narrower for solar customers than for non-solar customers.

Figure 5.12 Average size of estimated bill components by retail tariff type, Ausgrid residential customers with 4,000 to 4,500 kWh imports – solar customers ($)



Notes: Figure calculates the average size of individual bill components under different retail tariff types, based on offers downloaded from Energy made Easy in August 2025. This figure uses a sample of Ausgrid residential customers who used between 4,000 and 4,500 kWh in 2024–25, and whose network tariff classification was 'Demand'. Excludes GST, discounts and membership fees.
The bolded figures on the right-hand side are the total average residential bill. This is comprised of the supply charge, plus usage charges plus demand charges (if applicable), less solar feed-in tariff rebates.
Source: Energy Made Easy offers as of 25 August 2025; Sample consumption data from the AEMC.

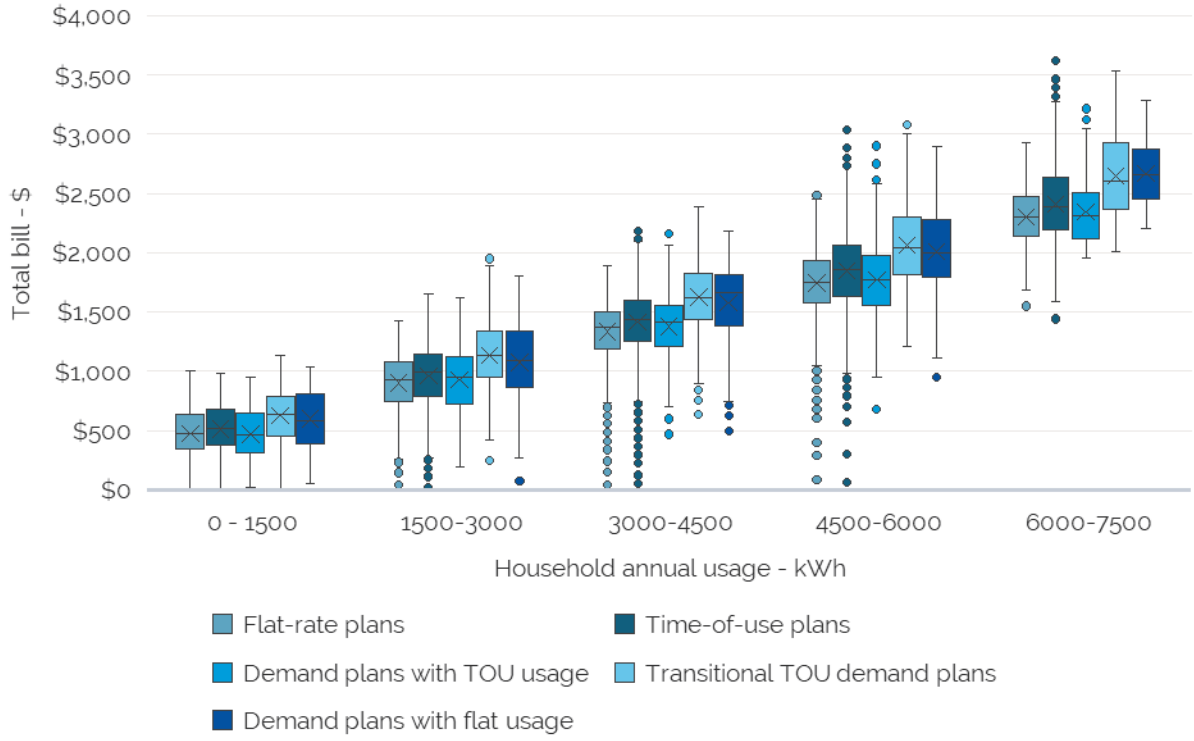
Similar to the analysis for non-solar customers, we also looked at estimated bills across all usage levels for solar customers and included membership fees and discounts in the total bill. This is shown in Figure 5.13 below. Expanded to include all usage bands, the distribution of solar customer bills shows a slightly different pattern from non-solar customers.

The distribution of flat-rate, time-of-use and regular demand tariff plans were similar for solar customers, particularly at lower usage levels. However, in some usage bands demand tariff plans had lower median and average estimated bills than flat-rate or time-of-use plans.

Consistent with non-solar customers, 'transitional'/'introductory' demand tariff plans and demand tariff plans with flat usage had consistently higher bills than other tariff types, particularly among higher-usage customers. Comparatively, at lower usage levels (e.g. up to 3,000 kWh) these estimated bills were only slightly higher while the overall distributions were fairly consistent between tariff types.

We also found that some solar customers had very low estimated annual bills, as shown by the lower outlier dots in Figure 5.13. This is because the usage profiles of these customers combine very high solar exports with low consumption.

Figure 5.13 Distribution of residential estimated bills in Ausgrid by plan type and annual usage (flat-rate vs time-of-use vs demand plans) - solar customers ($)



Notes: In this figure:
- boxes represent the range of bills in the interquartile range (25th percentile of bills to the 75th percentile).
- dots represent outlier bills.
- 'X' represents the average bill.
- the horizontal '–' line inside boxes represents the median bill.

Source: Energy Made Easy offers as of 25 August 2025; Sample consumption data from the AEMC.

5.7 Estimated bills for small businesses are similar across tariff types depending on if they have solar

Flat-rate and time-of-use plans generally had similar estimated bill ranges for non-solar small business customers. Figure 5.14 shows the estimated bill distributions of these 2 tariff types overlap relatively closely across all usage levels, particularly for customers with low annual consumption (below 10,000 kWh). As usage increases, the average and interquartile range (representing 50% of plans/users) for flat-rate plans rises more than the average and IQR estimated bills for time-of-use plans.

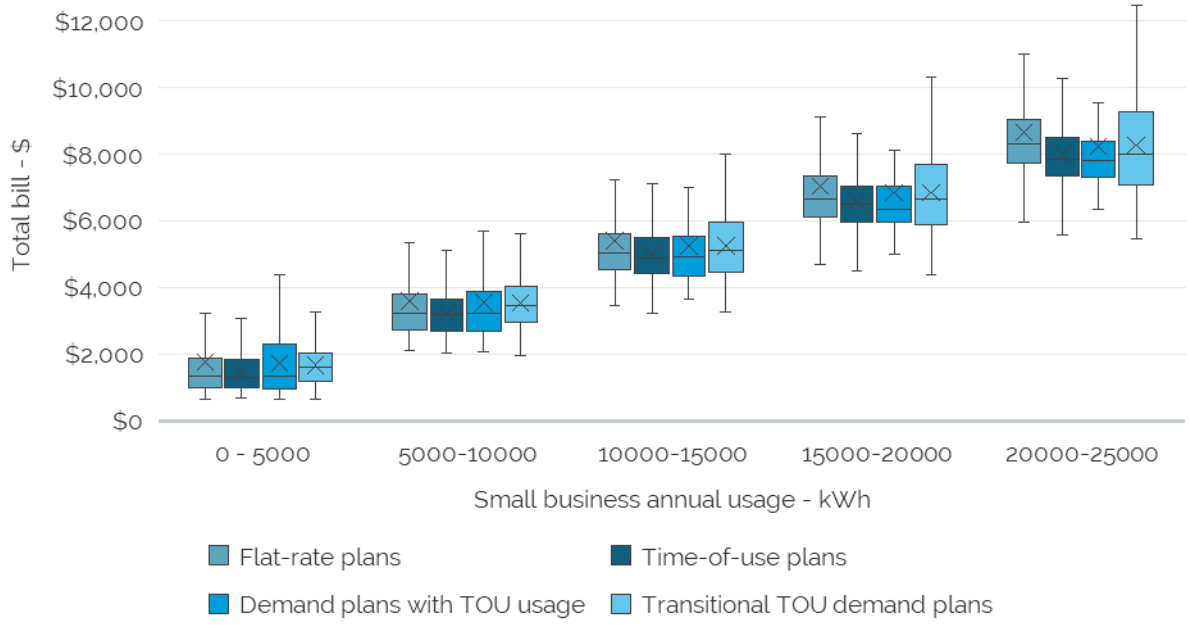
Compared to households, many small businesses have steady or predictable usage patterns. In many cases, this can allow them to adjust their usage in response to time-of-use prices, for example by shifting activity to daytime hours when electricity is cheaper. Time-of-use tariffs reward customers who can align consumption with lower-priced periods. By contrast, flat-rate plans charge a uniform rate per kWh. As total usage grows, the absolute bill on a flat-rate plan rises linearly, whereas the average unit cost under time-of-use pricing can stay lower if much of the consumption load occurs outside peak windows.

We found that similar to time-of-use plans, standard demand tariff plans (with time-of-use charges) also maintain relatively low estimated bills at higher usage levels compared to flat-rate plans. This results in estimated bills for flat-rate plans actually exceeding demand tariff plans at usage levels over 10,000 kWh. As usage increases, the interquartile ranges for standard demand tariff plans and time-of-use plans become more aligned.

The distribution of estimated bills for transitional demand tariff plans is similar to other tariff types at low usage levels but rises quickly as consumption increases. For instance, above 10,000 kWh per year, the upper whisker for transitional demand tariff plans (representing prices over the 75th percentile) extends higher than all other tariff types at each usage band, even though the lower half of prices remain in line with other tariff types. This may be because transitional demand tariff plans include a broad range of demand charge rates (c/kW): while many 'transitional' or 'introductory' plans set demand charge rates at 1-2 c/kW, some retail plans are classified as 'transitional' or 'introductory' but still charge demand charge ranges over 20 c/kW.

We also observed a right-skewed distribution in estimated bills across all tariff types, particularly for flat-rate plans and standard demand tariff plans. Within each usage band, average estimated bills were slightly higher than median estimated bills, indicating a small number of offer-usage combinations with much higher estimated bills than the bulk of the sample. This suggests that most small business customers with similar usage would face estimated bills around the median if they selected a plan at random, while a minority of plans are associated with materially higher estimated bills.

Figure 5.14 Distribution of small business estimated bills in Ausgrid by plan type and annual usage (flat-rate vs time-of-use vs demand plans) – non-solar customers ($)



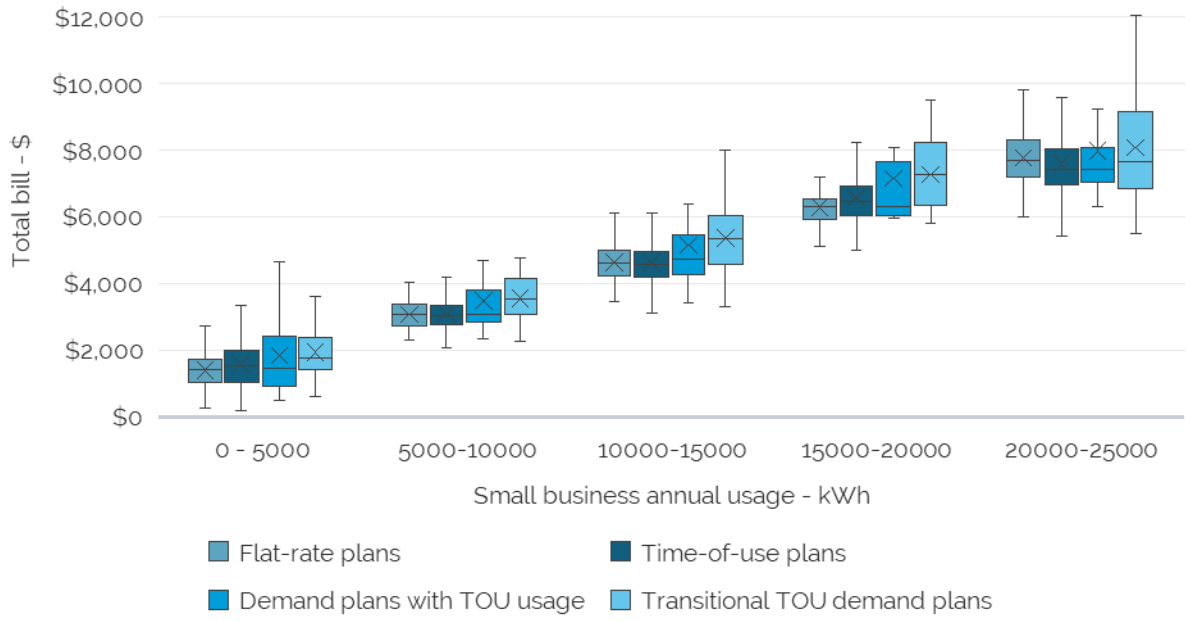
Notes: In this figure:
- boxes represent the range of bills in the interquartile range (25th percentile of bills to the 75th percentile).
- dots represent outlier bills.
- 'X' represents the average bill.
- the horizontal '–' line inside boxes represents the median bill.

Source: Energy Made Easy offers as of 25 August 2025; Sample consumption data from the AEMC.

For small business customers with solar systems, demand tariff plans (both standard and transitional/introductory) generally had higher estimated bills than flat-rate or time-of-use plans (Figure 5.15). Across almost all usage levels, average estimated bills for demand tariff plans were above the 75th percentile for flat-rate and time-of-use plans, meaning around 3 quarters of flat-rate and time-of-use plans remained cheaper.

This pattern was consistent across all usage levels. Even so, the cheapest offers within each tariff type (the lower whiskers in Figure 5.15), were broadly similar, indicating that customers on demand tariff plans could potentially find offers with comparable bills to other tariff types.

Figure 5.15 Distribution of small business estimated bills in Ausgrid by plan type and annual usage (flat-rate vs time-of-use vs demand plans) – solar customers ($)



Notes: In this figure:

- boxes represent the range of bills in the second and third quartile (25th percentile of bills to the 75th percentile).
- dots represent outlier bills.
- 'X' represents the average bill.
- the horizontal '–' line inside boxes represents the median bill.

Source: Energy Made Easy offers as of 25 August 2025; Sample consumption data from the AEMC.

5.8 Demand tariff prices compared to the DMO

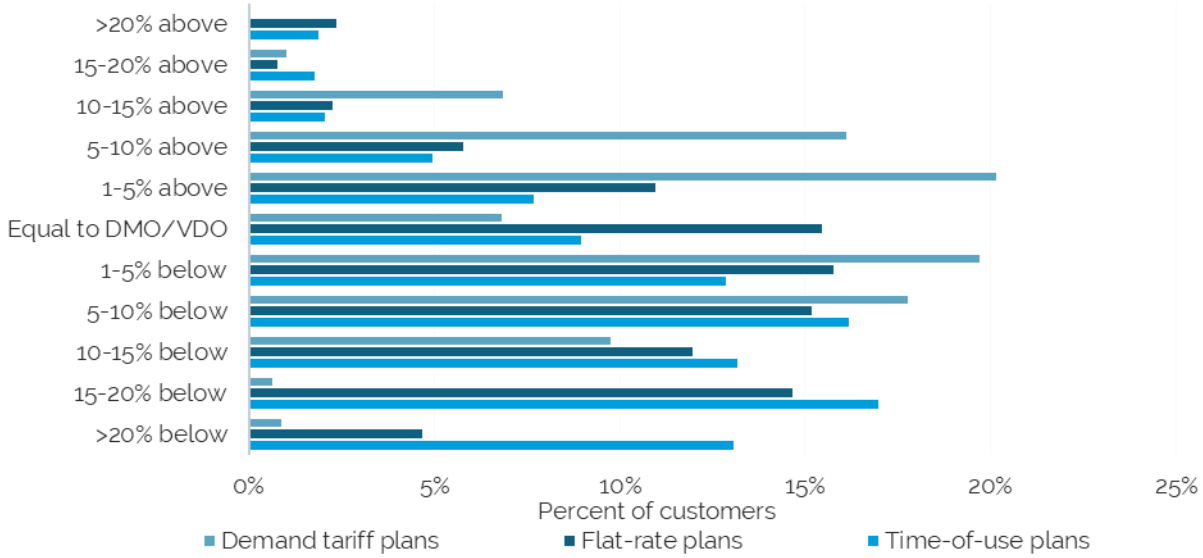
The ACCC found that the proportion of NSW customers paying estimated annual prices at or above the Default Market Offer price had fallen in August 2024 compared to August 2023.

More than 38% of flat-rate customers in NSW were still paying prices at or above the DMO in August 2024, down from 47% in 2023. Expected outcomes for time-of-use customers were better, with 27% at or above the DMO (down from 38% in 2023).[200]

For demand tariff plans, the ACCC found significantly higher rates of customers paying above cost-reflective benchmarks.[h] Around 51% of customers on demand-based plans paid prices equal to or greater than the flat-rate DMO, even though DMO protections do not apply to demand tariffs. When the demand charge component was excluded from the calculation, only 5% of these customers had base usage and supply charges above the DMO.[201] This indicates that the demand charge component was the primary driver of these higher bills.

[h] The ACCC calculated annual prices based on generally available offers on Energy Made Easy. The analysis uses the Default Market Offer usage profiles and assumes demand charges are calculated based on median peak demand.

Figure 5.16 Proportion of residential customers paying below, equal to, or above the DMO/VDO, by tariff type August 2024



Notes: The findings from the ACCC combine all residential customers in Ausgrid, Endeavour Energy and Energex which extends below NSW. The ACCC data assumes 100% achievement of conditional discounts.

Source: ACCC, *NEM Inquiry Report – supplementary cost stack data, Tab: 1. Residential (conditional)*, December 2024.

These findings are consistent with our analysis in Sections 5.6 and 5.7. Across both residential and small-business customers, flat-rate and time-of-use plans had similar estimated annual bills, while demand tariff plans (of varying sub-types) remained materially more expensive. In our sample of market offers, estimated demand tariff bills were typically $100-$300 higher than flat-rate or time-of-use plans for residential customers and $300-$500 higher for small business customers.

The ACCC highlighted that this pattern is not consistent with the intent of demand tariffs as a 'cost-reflective' pricing mechanism. If demand charges accurately reflected the underlying cost to supply electricity, average bills under these plans should be at or below the DMO benchmark.

Instead, more than half of demand tariff plans exceeded the standing-offer cap that the AER sets to represent a reasonable retail cost of supply. This suggests that demand tariffs, as implemented in 2024-25, do not yet deliver the cost reflectivity they are intended to achieve and may expose customers to higher-than-efficient prices.

Finding

8. Estimated annual bills are typically higher for demand tariff plans than flat-rate or time-of-use plans, in particular for households without solar. Stakeholders continue to report demand tariffs are difficult to understand and some comparison tools, including Energy Made Easy, cannot calculate the demand charge component of a bill.

5.9 Customers may be paying premiums for demand tariffs due to insufficient information and tools

While demand tariffs are designed to provide efficient price signals that reflect network costs, their effectiveness depends on customers being able to understand and respond to the price signals they create.

We consider residential customers (particularly non-solar customers) were continuing to pay premiums for demand tariffs in 2024-25, primarily because they did not have sufficient information to compare demand tariff plans or adjust their usage to reduce costs. In response to our Consultation Paper, stakeholders consistently raised concerns that demand tariffs are complex, poorly understood,[202] and often imposed without adequate consumer information or consent.

For instance, the AEMC has received anecdotal evidence that customers have not received sufficient information from their retailer about the impact of new complex tariffs or how they could change their energy usage.[203]

National Seniors Australia (NSA) expressed concern that customers are being "pushed onto more complicated electricity tariffs, especially demand tariffs," as smart meters roll out. NSA argued that these changes are creating a risk of bill shock for customers who do not understand or cannot manage their use at peak times.[204]

In addition, the Justice and Equity Centre (JEC) described "broad evidence of retail market failures," including that customers struggle to compare or access fair offers due to increasing tariff complexity and inconsistent information. The JEC highlighted that as more households are moved to demand structures, there is little transparency about who benefits or how informed consent is obtained.[205]

As for limited information, several individual submissions noted that comparing plans has become "impossible", even for educated consumers, because Energy Made Easy does not present demand tariff information clearly.[206] Stakeholders called for major improvements to government comparison tools like Energy Made Easy,[207] and clearer, standardised tariff definitions.[208] Master Electricians Australia emphasised a need for greater consumer education, including about how to adjust usage to maximise savings.[209]

We consider many of the information gaps faced by customers in 2023-24[210] persisted in 2024-25 and the start of 2025-26. For instance, as of November 2025 Energy Made Easy does not have the functionality to calculate total annual costs for demand plans (meaning the demand charge component is not part of the total estimate), even though last year we recommended the AER enable demand charges to be included in plan cost estimates.[211]

5.9.1 Information is required to help consumers who are not protected by the AEMC's explicit informed consent safeguard

As discussed in Section 5.3 above, the AEMC's November 2024 smart-meter reforms introduced a 2-year explicit informed consent safeguard that applies when a retailer proposes to change a customer's retail tariff structure following a smart meter installation. Retailers must notify customers, provide bill comparisons and usage guidance, and obtain explicit informed consent; customers can remain on their existing tariff during the explicit informed consent period (2 years from meter installation).[212]

However, the safeguard applies only to tariff changes associated with a smart meter installation from 1 December 2025, and there are defined exclusions to the safeguard (e.g. if customers move property or change their retailer after upgrading to a smart meter). Several stakeholders have raised concerns about these gaps.[213] This means customers already on demand tariffs are not covered. In NSW, around 18% of residential customers were on network demand tariffs in 2024-25 (Figure 5.1), so a material share will not benefit from the explicit informed consent rule.

For many customers dealing with demand tariffs, the ability to select an affordable demand plan or adjust peak demand depends on clear information and the ease of accessing relevant information, education, or tools. We consider current tools and information have not been adequate to prepare customers considering the significant impact demand tariffs can have on bills.

Last year we recommended that 'the AER should update the Energy Made Easy website as a matter of priority to enable demand charges to be included in the total cost of an electricity plan' (recommendation 9).

The AER is supportive of enabling demand charges to be included in estimated plan costs and is considering the feasibility of this.[214] We appreciate that it would take some time to update the functionality of Energy Made Easy to incorporate demand charges, as it requires ingesting granular usage data and clean plan data on demand charge.

While updating the functionality of the Energy Made Easy website may take some time to allow an accurate estimate of demand charges, we consider additional disclosure could be provided based on the typical annual bill impacts of demand charges. This could be based on findings from the ACCC's NEM Inquiry, which estimated demand charges for households with low, median and high peak demand.

Chapter 6

Retailer costs, margins and profits in NSW

06

Chapter summary

- Wholesale electricity prices in NSW have eased but remain above historical levels. After the wholesale electricity price spikes of 2022-23, average wholesale prices in NSW fell by 30% in 2023-24. These lower spot prices flowed through to wholesale contracts for the following year. As a result, average retail wholesale costs were 7-11% lower in 2024-25 than in 2023-24. Forward contract prices suggest wholesale costs will remain elevated through 2026.
- Network costs for residential customers rose by 6-16% across NSW distribution areas between 2023-24 and 2024-25, offsetting much of the benefit from lower wholesale costs.
- Retail operating costs increased by 18-27% in the 2024-25 Default Market Offer (DMO) determination. Retailers reported higher bad and doubtful debts, costs from the smart meter rollout, and increased spending to acquire and retain customers as key drivers of these rising costs.
- The ACCC reported retailer gross margins on electricity plans rebounded in 2023-24 after historic lows. Across the NEM, the average gross margin per residential customer rose from about $34 in 2022-23 to $110 in real terms in 2023-24, the highest since 2017-18.[215]
- We do not consider a detailed review of retail prices and profit margins in the NSW retail electricity market is warranted at this point in time. This is because the ACCC continues to inquire into prices, profits and margins in the National Electricity Market. The ACCC also holds powers to ensure that any substantial and sustained reductions in the cost of procuring electricity are passed onto small customers.

Retailers are the final link in the energy supply chain. They buy electricity through the wholesale market (and through hedging contracts), pay transmission and distribution network costs, and package these input costs (along with operating costs and a margin) into the retail tariffs that customers pay.

Wholesale electricity costs and network costs are the 2 largest cost components for retailers, making up over 75% of a typical retailer's cost stack. Changes in these cost components have a material impact on electricity prices and retailer margins.[216]

In this chapter we report on:

- changes in the wholesale cost of electricity over 2024-25
- changes in network costs over 2024-25
- trends in retailer costs and margins in recent years.

Box 6.1 What is included in a retailer's cost stack

A retailer's total cost stack comprises a number of components:

- **Network costs**: charges from network operators for transmitting and distributing electricity (use of the 'poles and wires' to transport electricity) and metering. This also includes contributions to the NSW Climate Change Fund and energy efficiency scheme costs.
- **Wholesale costs**: the costs of buying electricity from the wholesale spot market or the cost of generation for vertically integrated retailers and managing price exposure.
- **Environmental costs**: the costs of complying with state and national environmental (green) schemes.
- **Retail operating costs**: the cost of running a retail business, including billing, customer service, marketing and compliance.
- **Retailer margin**: the profit a retailer earns after covering the costs above, reflecting the return to the retailer's investors.

The retail margin is measured as earnings before interest, tax, depreciation, and amortisation (EBITDA). The EBITDA margin represents a level of return for the risks faced by retailers in the market. A retailer's EBITDA does not include the earnings from other parts of the supply chain, such as electricity generation.

Source: ACCC, *Inquiry into the National Electricity Market*, December 2023, p 29.

6.1 Wholesale electricity cost trends in 2024-25

Wholesale electricity costs are the most variable part of retail electricity bills for NSW households and small businesses. They typically make up 30-45% of the retail cost stack.[217]

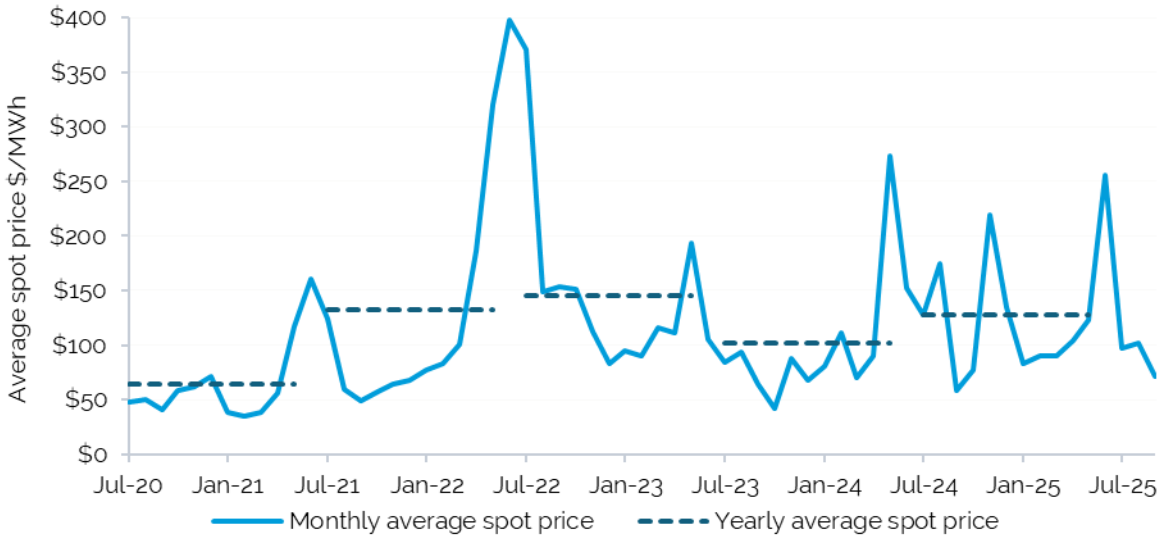
In 2024-25, wholesale electricity prices were lower than the peaks experienced in 2022-23, but remained above pre-crisis levels and the average price for 2023-24. Spot prices in the NEM averaged around $140/MWh in Q2 2025, compared with $133/MWh over the same period in 2024,[218] and almost $400/MWh in mid-2022.[219]

The AER noted that wholesale costs for NSW retailers fell by 7-11% between 2023-24 and 2024-25, continuing the downward trend that began after 2022.[220] This followed the exceptional volatility and record prices of 2022, when tight supply conditions, coal and gas supply disruptions, and generator outages drove wholesale prices to historic highs.[221]

Since then, a combination of easing global fuel prices, increased renewable generation, and the December 2022 government caps on domestic coal and gas prices have led to more stable wholesale electricity market conditions. However, the market has continued to experience periods of volatility.[222]

Forward contract prices also reflect this stabilisation. Base futures contract prices in NSW fell 39%-48% from 2022 highs, returning to levels closer to long-term averages.[223] These reductions indicate that market participants expected lower future wholesale costs and reduced volatility in 2024-25 compared with 2022-23.

Figure 6.1 Volume-weighted average spot price each month and financial year, July 2020 to June 2025 ($/MWh, nominal)



Notes: Average prices are weighted against the volume (total MWh) traded in NSW in each 30-minute interval.

Source: AEMO, *NEM Data Dashboard - Average Price*, accessed October 2025.

Overall, wholesale market conditions in 2024-25 were more stable than in previous years. Prices remained higher than pre-2021 levels, but the fall in both spot and contract prices suggests a better balance between supply and demand.

However, as the AER noted, volatility and high-price events still pose risks to retailers' wholesale costs, particularly during periods of high demand or low renewable output.[224]

Futures markets indicate that wholesale prices in NSW are expected to stay elevated in coming years. As of mid-2025, contract prices for the 2025-26 financial year remained high relative to historical averages, reflecting expectations of price volatility and delays in new generation projects.[225] NSW continues to trade at the highest price of any state in the NEM.[226]

In its 2025-26 DMO determination (DMO 7), the AER noted that while spot market conditions were relatively benign in early 2025, this 'had not had a significant impact' on forward price expectations for 2025-26, with contract prices remaining aligned with the higher spot price seen across 2024.[227]

Changes in wholesale costs take time to flow through to retail prices because retailers typically hedge their energy purchases up to several years in advance.[228]

The ACCC noted that while wholesale prices have fallen significantly from 2022 highs, retailers' hedging portfolios mean these declines would take time to reach customer bills.[229] As higher-priced hedges from 2022 expire and are replaced with cheaper forward contracts, the impact on customer bills is expected to be gradual. Early signs of these lower-cost contracts began to appear in 2024-25.

Looking ahead, the main uncertainty for retailer wholesale costs is whether wholesale prices will stabilise or rise again. This depends on the timely delivery and performance of new generation, storage, transmission, and consumer energy resources. If projects are delayed or under-perform, tight capacity could put upward pressure on spot and contract prices.[230] The AEMC's 2024 Price Trends Report similarly found that delays in renewable and transmission projects could result in higher wholesale costs.[231]

6.2 Network costs increased in 2024-25

Network charges make up just under half of retail electricity costs in NSW.[232] Retailers pay network fees to Distribution Network Service Providers (DNSPs) based on how many customers they serve and how much electricity those customers use.

Each financial year, the AER determines network fees and publishes network tariffs in May. These tariffs include both fixed and variable charges. Retailers recover these network costs by passing them through to customers in retail prices.

In 2024-25, network costs for small customers (residential and small business) increased across all 3 NSW distribution networks. Ausgrid and Endeavour Energy recorded the largest average increases, while Essential Energy's increase for residential customers was more modest. The impact on average customer bills in 2024-25 is shown in Table 6.1.

Table 6.1 Change in average impact of network costs on customer bills, (nominal, incl. GST)

Network and Customer Type	Change 2021-22 to 2022-23		Change 2022-23 to 2023-24		Change 2023-24 to 2024-25	
	$	%	$	%	$	%
Ausgrid						
Residential flat-rate	-$16	*-2.9%*	$24	*+4.7%*	+$87	*+16.5%*
Residential TOU			$37	*+5.5%*	+$102	*+14.4%*
Small business flat-rate	-$13	*-1.3%*	$53	*+5.2%*	+$209	*+19.2%*
Small business TOU			$88	*+5.8%*	+$287	*+17.8%*
Endeavour Energy						
Residential flat-rate	+$29	*+4.9%*	$44	*+7.5%*	+$82	*+13%*
Residential TOU			$34	*+5.9%*	+$114	*+18.6%*
Small business flat-rate	+$78	*+5.1%*	$129	*+4.0%*	+$456	*+13.5%*
Small business TOU			$172	*+2.4%*	+$1,324	*+18.3%*
Essential Energy						
Residential flat-rate	+$25	*+2.8%*	$116	*+14.2%*	+$76	*+8.2%*
Residential TOU			$116	*+12.4%*	+$88	*+8.4%*
Small business flat-rate	+$44	*+2.3%*	$192	*+10.9%*	+$393	*+20.1%*
Small business TOU			$132	*+2.4%*	-$456	*-8%*

Source: AER, Annual prices for Ausgrid, Endeavour Energy and Essential Energy 2022-23 to 2024-25.

Because network charges usually comprise a little under half of a typical retail electricity bill,[233] a 15% increase in network tariffs (for example) should result in only a 6-7% increase in an average customer's total bill, all else equal. However, retailers have flexibility in their pricing structures. Some may choose to spread costs differently across different tariff and customer types. For example, some retailers might smooth out network costs by adjusting fixed vs variable charges or by cross-subsidising between high-use and low-use customers.

6.2.1 Key drivers of network cost increases

In 2024-25, higher network prices were driven by increasing costs in both distribution and transmission networks, along with increased jurisdictional scheme costs. The AER has attributed these increases across the 3 DNSPs to several common factors. These included higher contributions to the NSW Electricity Infrastructure Roadmap, increased transmission costs, and the impact of higher inflation and interest rates.[234]

Below, we outline the driving factors of network cost increases for 2024-25.

Transmission costs

Transmission costs are charges for transporting electricity over high-voltage transmission lines owned and operated by Transgrid. Transgrid does not bill customers directly. Instead, it recovers costs through charges to the distribution networks,[235] which then pass these costs on to retailers as part of their network tariffs.

The AER has cited 'increased transmission and NSW Renewable Energy Zone costs' as a major driver of higher network prices in 2024-25.[236] Increases in distribution and metering costs were smaller than the rises in transmission and scheme charges, which together cover transmission network charges and state schemes.

Ausgrid's overall revenue cap in 2024-25 increased by $343 million (17.4%) compared to 2023-24. About one third of this increase was due to cost changes in its distribution network. An additional 41% was due to higher transmission costs.[237]

Endeavour Energy and Essential Energy also faced similar pressures. Higher transmission costs contributed 40% of Essential Energy's total network price increases and 28% of Endeavour Energy's.[238]

Major projects driving up Transgrid's costs in 2024-25 included the EnergyConnect interconnector, HumeLink, and upgrades to support Renewable Energy Zones (REZs) and system reliability.[239] These large capital projects increased Transgrid's annual revenue allowance for 2024-25, which was passed through to electricity customers.

Base revenue path and capital expenditure

In 2024-25, higher distribution use-of-system (DUOS) charges[a] reflected each DNSP's revenue path under the AER's 5-year determinations, which run from 2024-25 to 2029-30.

As discussed above, increases in each DNSP's distribution-related revenue allowances contributed around one third of their total cost rise for 2024-25. The remainder came from transmission costs and jurisdictional schemes.

Ausgrid's distribution revenue allowance rose by 7.7% in 2024-25 (after adjustments).[240] Over half of this increase was driven by higher allowances for capital expenditure. These allowances were increased to fund network replacements of ageing assets, resilience and cyber-security programs, consumer energy resource integration, new customer connections and changes to zone substations.[241]

Endeavour Energy's distribution-related revenue allowance increased by 9.9% (after adjustments).[242] Essential Energy's distribution revenue was set to rise about 7.5% in 2024-25 but was partly offset by true-up refunds from the previous determination period, resulting in a net 2% increase to its revenue allowance.[243]

NSW Electricity Infrastructure Roadmap contributions

In 2020, the NSW Government released the NSW Electricity Infrastructure Roadmap: a 20-year plan to transform the NSW electricity system into one that provides affordable, clean and reliable energy.[244] Each year, the AER determines how much each DNSP must pay for the Roadmap through jurisdictional scheme charges.[b]

In 2024-25, Roadmap costs increased by 145% across all distribution networks compared to 2023-24. Total costs rose from $138 million in 2023-24 to $341 million in 2024-25 to be recovered through NSW network tariffs.[245]

The DNSPs estimated these higher contributions would increase overall revenue requirements by 4.2% to 4.5%.[246, c] This represents the amount each DNSP can recover from retailers, and in turn from customers, through network charges.

6.3 Retail operating costs and margins

Retail operating and environmental costs make up around 12% of the average residential cost stack.[247]

To identify retail operating cost trends over 2024-25, we assessed the DMO 6 - which sets the benchmark cost for supplying standing offer contracts - and financial statement data from AGL and Origin, which together supply over 50% of customers in NSW.

[a] The portion of network charges related to local poles and wires, operating costs and capital recovery.
[b] Jurisdictional Scheme Charges are composed of the NSW Electricity Infrastructure Roadmap as well as the NSW Climate Change Fund.
[c] Endeavour Energy has stated the 4.2% increase in customer bills is based on all jurisdictional scheme costs, which includes Roadmap costs as well as Climate Change Fund costs. However, the portion of this increase that is driven by the Climate Change Fund appears to be very low.

In 2024-25, the AER increased total retail cost allowances in the DMO across all NSW distribution networks. The higher allowances reflected higher bad debt provisions, customer service costs, and spending to prepare for the accelerated smart meter rollout. For residential customers without controlled load, the retail cost allowance rose to $248 (Ausgrid, +18%), $269 (Endeavour Energy, +24%), and $270 (Essential Energy, +27%) per residential customer.[248] Allowances for small business customers rose between 24% and 37% depending on the distribution network.[249]

The AER attributed these increases mainly to higher operating costs, rising smart meter costs from new installations, and a rise in customer non-payments and bad debt.[250]

Company financial data indicates mixed outcomes for 2024-25. AGL reported a 4.8% decrease in net bad debt expenses to $119 million, supported by portfolio improvements and government relief programs that minimised the debt impact of cost-of-living pressures.[251] This helped lower operating costs in its Customer Markets segment by 6.5%.[252, d] Similarly, Origin recorded a $26 million (-14%) reduction in bad debt expenses for 2024-25, contributing to a 7% reduction in its overall 'cost to serve' compared to 2023-24.[253] Both retailers linked the reductions in operating costs to retail transformation programs and efficiency gains.[254]

Despite these results, the AER's DMO determination for 2025-26 increased cost allowances again by 25-35%, depending on customer type and distribution network.[255] This is because the DMO reflects industry-wide estimates and forward adjustments, rather than any one retailer's results.

6.4 Retailer profit margins

Retailer profit margins show the balance between efficient cost recovery and competitive pricing. This section compares regulatory benchmarks from the AER's 2024-25 Default Market Offer (DMO 6), market margins observed in the ACCC's cost-stack analysis from 2023-24, and financial results reported by AGL and Origin for 2024-25.

The AER set retail margins in DMO 7 (2025-26) at 6% for residential and 11% for small business customers. The DMO 7 also excluded a competition allowance.[256] These margins were informed by data on retailer costs and market offers collected during 2024-25, including ACCC monitoring results and industry submissions.[257]

The AER noted that the updated margins reflected the prevailing 2024-25 cost environment, including rising bad debt and metering costs, inflationary pressures, and changes in competition, rather than the earlier 2022-23 period that underpinned DMO 6. In effect, the benchmark represents the AER's view of efficient expenditure and profitability under 2024-25 trading conditions.

The ACCC's most recent cost-stack analysis, covering 2023-24, found that retailer margins averaged about 6% of residential bills and 9% of small business bills, measured by earnings before income, tax, deductions and amortisations (EBITDA).[258]

[d] AGL's Customer Markets includes electricity, gas, and other fields. However, in 2023-24 over 92% of its total 'cost of sales' for its Customer Markets were from the electricity portfolio. See: AGL, *Annual report 2024*, August 2024, p 59.

The ACCC found margins for 2023-24 were slightly higher than in 2022-23, particularly for the 3 largest retailers, reflecting lower wholesale costs rather than wider retail mark-ups. While long-run trends for retailer margins had been lower, the ACCC noted that the higher 2023-24 outcomes partly reflected specific circumstances in that year.[e, 259]

Although the ACCC data predates actual financial outcomes for 2024-25, the AER cited it as supporting evidence when setting DMO 7 margins, concluding that market outcomes remained close to efficient benchmark levels.[260]

Company results for 2024-25 are consistent with modest margins. AGL's Customer Markets division reported underlying EBIT of $182 million[261] on $9.68 billion in revenue[262] (an EBIT margin of around 1.9%). Origin Energy reported underlying Energy Markets EBIT of $950 million, down 28% from 2023-24,[263] primarily due to higher generation costs and lower regulated retail tariff prices.[264] After adjusting for non-energy segments, these results imply mid-single-digit retail EBIT margins, consistent with the AER's DMO efficient range and ACCC market data.[f]

Financial accounts and regulatory cost-stack estimates are not directly comparable, as accounting margins (revenue-based EBIT) differ from the AER's estimate of an efficient return and the ACCC's cost stack methodology.[265] Even so, all sources indicate that across 2024-25, retailer profitability remained within the mid-single-digit range for residential customers and around 10% for small business customers. These levels appear consistent with efficient cost recovery amid rising operating costs, rather than excessive returns or increased profitability.

6.4.1 We do not consider a detailed review of retail prices and profit margins is required at this time

Under Section 234A(4)(g) of the *National Energy Retail Law (NSW)*, IPART must consider each year whether a detailed review of retail electricity and gas prices and profit margins is warranted. Based on current evidence, we do not consider a detailed review necessary at this time.

The decision reflects 3 main considerations:

- **Comprehensive national monitoring by the ACCC:** The ACCC is continuing its Inquiry into Prices, Profits and Margins in the National Electricity Market, which covers small customers in NSW.[266] This inquiry provides detailed cost-stack analysis of retailer margins and remains the primary mechanism for ongoing scrutiny of retailers' profitability outcomes. The inquiry has been extended until August 2026.
- **Alignment of available evidence:** As discussed in Section 6.4, the AER's 2025-26 Default Market Offer benchmarks and the latest ACCC data both indicate that retailer margins remain moderate and broadly consistent with efficient cost recovery. These findings provide no evidence of sustained or excessive margins that would justify a separate NSW-specific investigation.

[e] The ACCC noted unique circumstances including high and volatile wholesale contract prices in the lead-up to 2023-24, which increased costs for most retailers but advantaged those that had hedged early. Further, some retailers reported one-off events that distorted their financial results for the year.

[f] These are NEM-wide results rather than NSW-specific, therefore the outcomes for NSW may vary slightly.

- **Existing regulatory powers:** The ACCC currently holds powers under *Part XICA* of the *Competition and Consumer Act 2010* to ensure that substantial and sustained reductions in electricity procurement costs are passed through to small customers. These provisions are scheduled to sunset on 31 December 2025 unless renewed or replaced by future legislation.

Given these factors, we consider that the existing national oversight arrangements remain sufficient. However, if the ACCC's inquiry powers and *Part XICA* provisions are not extended beyond 2025, IPART may reassess whether an independent review is required in the future.

Finding

9. A detailed review of retail prices and profit margins in the NSW retail electricity market is not warranted at this time. The ACCC continues to inquire into prices, profits and margins in the National Electricity Market and retailers are required to ensure that any substantial and sustained cost reductions are passed on to small customers.

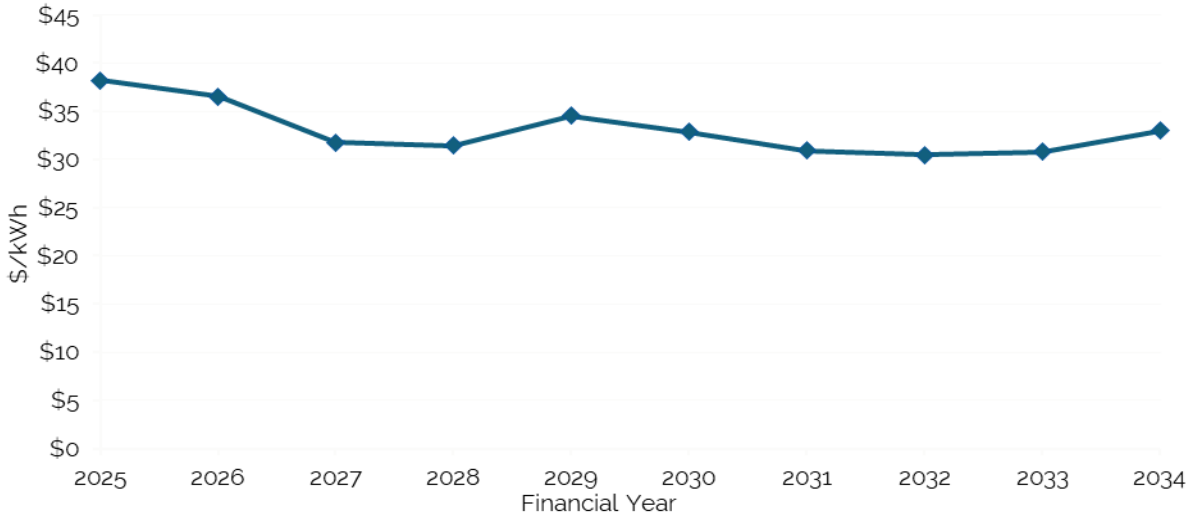
6.5 Future outlook for NSW retail electricity prices

In November 2024, the AEMC published its 10-year outlook for residential electricity prices across the NEM, including for NSW. This report identified overall trends and key cost drivers of electricity prices over the coming decade, from 2024-25 through to 2034-35, based on a large volume of simulations for electricity dispatch.[267]

The report projected that, on average in NSW, residential electricity prices will fall by around 14% in real terms between 2025 and 2034,[268] provided investment is timely and policy remains coordinated.[269] The largest declines are expected over the next few years, due to the extension of Eraring's retirement from FY26 to FY28.[270]

Beyond the mid-2020s, price movements are expected to stabilise as the electricity system transitions toward a higher share of variable renewables and new firming capacity.

Figure 6.2 AEMC 10-year NSW residential electricity price outlook, real price 2025



Source: AEMC, *Residential electricity price trends 2024*, November 2024, p 29.

The AEMC's 10-year projections are not forecasts, but conditional outlooks assuming efficient investment and no major policy shocks. They complement (but are distinct from) the AER's annual Default Market Offer, which caps standing offer prices and reflects one-year cost movements.

While the AER's DMO 6 (2024-25) set slight nominal price decreases in NSW of around 1-6% for most customer types,[271] the AEMC's longer-term modelling expects a structural easing in wholesale and retail costs.

6.5.1 How cost components are expected to change

The AEMC models each element of the retail cost stack (wholesale, network, environmental scheme and retail costs) using AEMO's ISP inputs and public data. The AEMC's modelling shows the following trends.

Wholesale electricity costs are expected to fall in real terms as low-marginal-cost renewable generation is built in FY27 according to the 'Step Change' ISP scenario.[272] However, volatility remains a key risk. Prices will depend on when generators retire, fuel prices, and the build-out of firming and transmission projects. In NSW, wholesale contract prices have already fallen by 7-11% since 2023-24 (DMO 5) levels.[273] Further decreases are projected as more renewable and storage capacity are built through the NSW Electricity Infrastructure Roadmap.

Network charges, representing about 40% of a typical NSW residential bill, are projected to rise in real terms over the medium term before stabilising later in the decade. The AEMC's analysis links early rises to higher capital expenditure to connect renewable energy zones and replace ageing infrastructure. As utilisation improves, costs are expected to stabilise.[274] The AER DMO 6 determination found that 2024-25 network costs rose by 6% (Essential Energy) to 16% (Ausgrid) for residential customers.[275] Over the long term, network costs are expected to follow investment cycles and growing demand as more households electrify.

Environmental and renewable-energy scheme costs, which include the Renewable Energy Target and state energy-efficiency schemes, are expected to remain stable or fall slightly. Large-scale Generation Certificate prices should fall as renewable supply grows, while existing Small-scale Technology Certificate obligations decrease towards 2030.[276]

Retail and metering costs, which cover customer service, billing, metering and bad-debt expenses, are expected to decrease gradually[277] as digitalisation and the smart-meter rollout improve efficiency.[278]

6.5.2 Projections depend on timely investment

The AEMC has cautioned that projected price decreases depend on coordinated investment in transmission and renewable projects, consistent with AEMO's 'Step Change' ISP scenario.[279] Delays or policy uncertainty could reverse downward pressures.

For NSW, the outlook is sensitive to when Eraring closes and the delivery of new firming projects under the Electricity Infrastructure Roadmap.[280]

At the retail level, falling wholesale costs and relatively stable retail margins suggest limited upward pressure on retailer prices, although increases in network tariffs may offset part of these gains. Overall, the AEMC's analysis points to a gradual decrease in total retail prices after 2025-26, if network investments are delivered efficiently and early.[281]

Chapter 7

Consumer energy resources and new energy services

07

Chapter summary

- NSW continues to have a strong uptake of CER. By 30 September 2025, there were over 1.1 million rooftop solar installations with a cumulative capacity of almost 7.8 GW. Battery installations have also accelerated – in 2024, there were close to 4,600 batteries installed by residential and small businesses. Over 1 January to 31 October 2025, there were just under 8,000 batteries installed.
- Payback periods for batteries have fallen significantly. Recent research found that with the Cheaper Home Battery Program rebate, NSW households could, on average, pay back the cost of a battery in 7.3 years. For households who join a VPP, this could be as few as 4 years.
- We identified 4 behavioural demand response programs in NSW. These were offered by the 3 largest retailers (Origin, AGL and EnergyAustralia) and Engie. The 3 largest retailers account for over 95% of most residential demand response customers across NSW, Southeast QLD, VIC and SA.
- Behavioural demand response programs provide a simple, low-risk way for consumers to participate in new energy services. However, the financial rewards from reducing usage during peak demand events are small, which may limit future growth.
- We conducted desktop research on VPP offers in NSW. We identified 21 VPPs available for residential or small business customers, provided by 17 operators. These vary widely in eligibility, payments, and how much control the VPP operator has over the battery.
- In NSW, the 3 largest retailers held a market share of 22% (2,874) of VPP customers in January 2025. Other VPP operators held a market share of 78%. The ACCC has reported the presence of smaller retailers and other energy service providers is a positive outcome for competition and consumer choice in the supply of VPPs. Competition is currently focused on product differentiation and innovation to cater for different customer needs and preferences.
- NSW VPP customers have lower bills than other customer types, including those with solar and a battery (who are not part of a VPP). For example, over Q3 2023 to Q3 2024, the median quarterly bill for VPP customers was between 34% and 72% lower than for customers with a battery and solar (depending on the quarter).
- Lower bills for VPP customers are due to greater self-consumption (and lower grid usage), shifting usage to off-peak periods, higher feed-in tariffs, and VPP bill credits.

CER are playing an increasingly important role in the operation of the NEM, and the NSW retail electricity market. CER refers to the hardware located at a customer's premises that allows them to generate, store and actively manage energy usage.[282] This includes rooftop solar, battery systems, EVs and charging infrastructure, and control enabled assets, such as air conditioners or pool pumps.[283]

Smart meters[a] are essential to unlock these benefits. Smart meters record electricity usage and export data in 5 or 30-minute intervals. They enable DNSPs, retailers and other parties (such as aggregators) to offer new tariffs that price electricity more efficiently and to develop new energy services that interact with CER. These include:

- newer tariffs such as time-of-use (including solar sharer and EV charging) tariffs, demand tariffs, and wholesale spot price pass through tariffs
- new energy services including demand response programs, VPPs, home management and optimisation tools, and community solar and battery programs.

These new energy services allow consumers to share in the benefits from reducing or shifting their usage during certain times.

Recent research conducted by Energeia for the AEMC found that operating CER more flexibly could deliver $45 billion of system benefits in net present value terms by 2050. The majority of these benefits come from using coordinated residential CER – in particular, household batteries.[284] However, the research found that consumers providing this flexibility could be worse off on their retail bills. This is because there is a misalignment between actual system costs and retail tariffs.[285]

For most households CER represents a significant financial investment. For example, the ACCC found the most common solar and battery system would cost a customer around $20,800 in 2025.[b, 286] After accounting for Federal and NSW subsidies, the upfront cost could fall to around $13,100.

The ACCC has reported that the key to realising the system-wide benefits of CER is to provide customers with the right incentives to invest in CER and participate in new energy services.[287] Effective competition among providers of new energy services (such as VPP operators) can encourage uptake of CER as it incentivises operators to:

- pass on the benefits they receive from control of CER to consumers
- innovate and improve product offerings to better meet different needs and preferences.[288]

This remainder of this chapter outlines:

- IPART's role in reporting on demand response programs and virtual power plants in NSW
- the rollout of smart meters and uptake of CER in NSW
- demand response programs in NSW and customer engagement
- virtual power plants in NSW and their benefits for customers
- complaints related to CER.

[a] Smart meters record electricity usage and export data in 5 or 30-minute intervals.

[b] This estimate was based on the most common solar and battery system in AEMO's distributed energy resources register data (a 6.6 kW solar system and 13.5 kWh battery). It is before subsidies and includes installation costs, which can vary depending on several factors such as location.

7.1 Reporting on new energy products and services, including demand response programs and VPPs

The *NSW Government's Consumer Energy Strategy* (NSW CES) was released in September 2024. The strategy highlights the important role that demand response programs and VPPs will play in the energy supply chain in NSW. However, it also recognises the increasing complexity associated with these new energy services.[289]

The NSW Government has asked IPART to report on demand response programs and VPPs in the annual Market Monitoring Reports.[290] The purpose of this function is to:

- provide independent advice to households and small businesses on the different energy retail offerings, and the potential benefits available to customers to help them make more informed decisions
- help the NSW Government to determine if new consumer protections are required to ensure customers receive the expected benefits from participating in these programs and promote new energy saving services.[291]

This report includes information on demand response programs and VPPs in NSW, based on submissions and publicly available data.

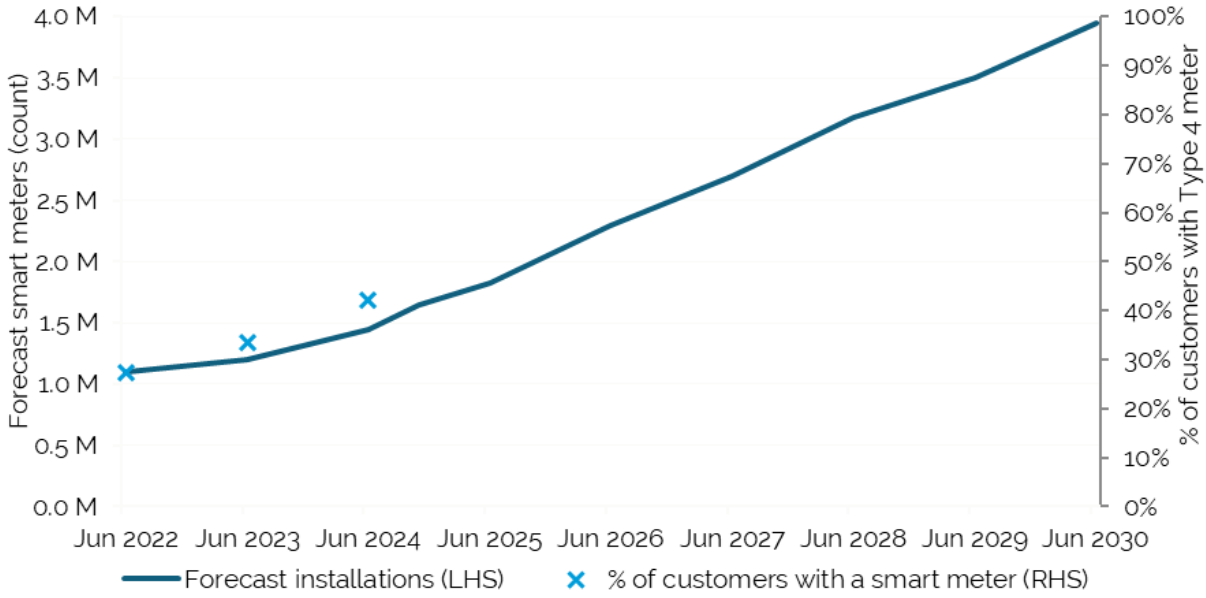
7.2 Uptake of smart meters

Smart meters are becoming more common in NSW. Between June 2021 and June 2024, the number of NSW residential customers with smart meters rose by 92%, while small business customers rose by 48%.[c] As of 30 June 2024, over 42% of low-voltage customers in NSW had a Type 4 smart meter (Figure 7.1).[292]

Under the Accelerated Smart Meter Rollout, nearly all NSW small customers are forecast to have a smart meter installed by 2030. Figure 7.1 shows how the rollout of smart meters in NSW is expected to progress under the AEMC's forecast. Data for 2024-25 is not yet available from the AER (as of November 2025).

[c] These figures are based on the AER's annual DNSP disclosures, which show the number of DNSP customers by meter type. Because some customers may have multiple meters, these figures may not reflect the actual share of meters in NSW.

Figure 7.1 Percent of residential and small business NSW customers with a smart meter, and forecast installations until 2030



Notes: This figure presents the proportion of low-voltage customers in NSW (both residential and non-residential) who have a 'Type 4' smart meter as of 30 June each year. The solid line reflects the AEMC's 2022 forecast of smart meter installations until 2030.
Source: AEMC, *Smart Better Rollout Cost Benefit Analysis*, September 2022; AEMC, *AEMC finalises landmark reform to accelerate smart meter rollout*, 28 November 2024.

7.2.1 Smart meter concerns raised by EWON

EWON submitted that many customers with smart meters are still not receiving the expected benefits of the smart meter rollout but instead are experiencing a range of issues.[293]
These include:

- more estimated bills
- more billing delays and back bills
- delays with billing reviews and dispute resolution
- electricity tariffs and feed-in tariff errors
- problems accessing energy data
- delays with external dispute resolution.

EWON submitted that a disconnect between retailers, customers, and MSPs is contributing to these issues and impacting trust in the smart meter rollout. This could also affect confidence in CER, VPPs and the energy transition.[294]

In its submission, EWON encouraged IPART's monitoring of smart metering to consider how these issues can be systematically addressed, including whether:

- changes are needed to the commercial relationships between retailers and MSPs to ensure fairer outcomes from smart metering
- MSPs should be brought into the NECF and requiring them to join an external dispute resolution scheme.[295]

There are several reforms underway that are considering related issues.[d] These include:

- the AEMC is considering a rule change 'Real-time data for consumers'. A draft rule was released on 11 September 2025, and the final rule determination is expected in early December 2025.[296] The draft determination noted stakeholders said that information needed to resolve energy disputes can be difficult to access,[e] and disputes involving respect of real-time data services may compound the problem.[297] It also noted that MSPs are not required to be a member of an energy ombudsman scheme.[298]

  As a result, the AEMC proposed draft rule that would allow retailers (who receive a request from an Ombudsman) to obtain information and assistance from a metering coordinator. [299]

- the NSW Consumer Energy Strategy includes an action (Action 25) to consult on expanding EWON's jurisdiction to new energy services such as VPPs and demand response programs. Given the interaction between CER data, smart meter data, and the issues detailed by EWON, this may be a relevant consideration for this consultation.[300]

We recognise the concerns raised by EWON may not be fully addressed by the reforms above. We will continue to monitor smart meter uptake in our Market Monitoring reports and issues raised about their rollout in submissions.

7.3 Rooftop solar installations

By installing solar panels, consumers can save on their electricity bills in 2 ways:

- the largest savings come from using the electricity generated directly, rather than buying electricity from their retailer. We estimate a typical household with a 5kW solar system could save around $400 per year by using the solar they generate.[f]
- consumers can also earn money for the unused electricity they export back into the grid for other customers to use. For a typical customer, FiTs can provide an extra $210 per year.[g, 301]

Ultimately, the total savings from self-consumption and FiTs will depend on factors including the orientation and size (in kilowatts) of their solar panels, their retail offer, and how much electricity they use and when they use it.

Figure 7.2 shows that the number of solar PV installations and cumulative capacity of solar systems installed each year in NSW. By 31 October 2025, there were over 1.1 million rooftop solar installations in NSW with a cumulative capacity of almost 7.8 GW.

---

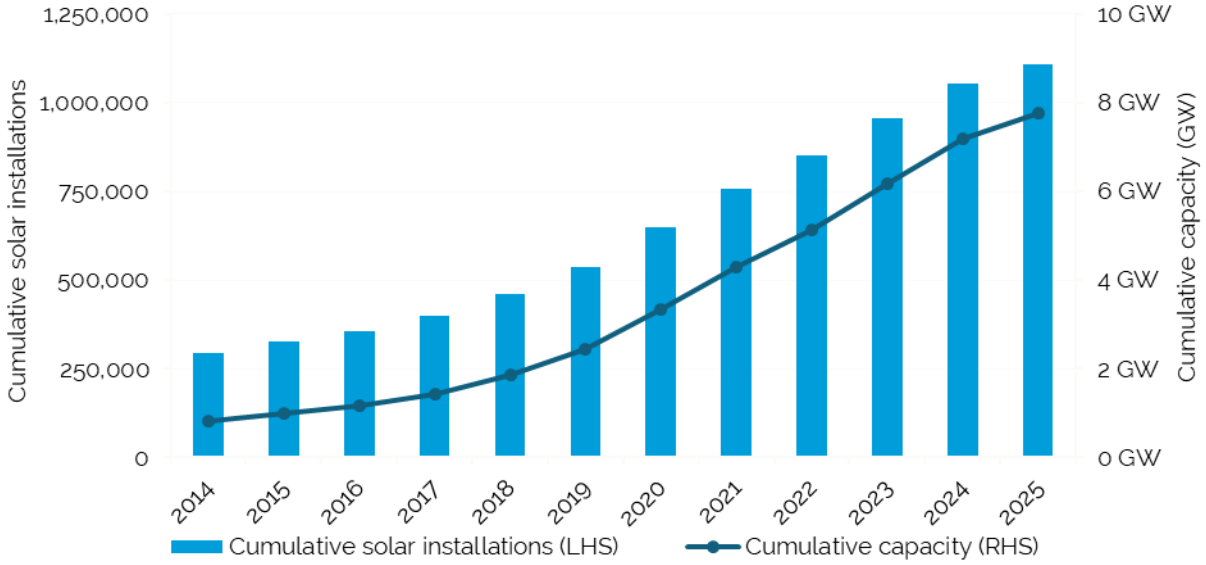
[d] In addition to these reforms, in 2024 the AEMC made a rule determination for the accelerated smart meter rollout. This rule determination incorporated additional consumer safeguards when a smart meter is installed. These include that customers must provide their explicit informed consent before their retail tariff is changed following a smart meter installation, as well as additional disclosure. This may address some of the concerns raised by EWON regarding electricity tariffs.

[e] For example, the draft rule noted energy ombudsmen often need metering information held by MSPs, but MSPs may not always respond to a retailers' request for information or assistance in a timely manner.
Source: AEMC, *Draft rule Determination: Real-time data*, 11 September 2025, p 46

[f] A typical household is assumed to:
- use 3,900 kWh of electricity each year (the average usage level in the Ausgrid distribution network)
- consume 30% of the solar electricity they generate
- be on the median time-of-use usage rates in the Ausgrid distribution network as of 1 May 2025 (peak: 46 c/kWh, off-peak: 22 c/kWh)

[g] Assumes the customer exports 70% of their solar generation and receives a FiT of 5.6 c/kWh. This is the midpoint of IPART's solar FiT benchmark for 2024-25.

Figure 7.2 Cumulative total installations of small-scale solar systems and capacity (GW) in NSW, 2001 to 31 October 2025, residential and small business customers



Notes: Data available from March 2001 to 31 October 2025. Figure includes both residential and small business installations and capacity. It covers all systems for which small-scale technology certificates have been created. The data includes new installations, upgrades to existing systems and standalone (off-grid) systems.

Source: Clean Energy Regulatory, *Small-scale installation postcode data*, updated 15 October 2025.

The JEC submission to the Consultation Paper considered the strong growth of rooftop solar combined with the rollout of smart meters could provide an opportunity for retailers to develop offers that reward daytime electricity use and share the benefits of solar more broadly.[302]

We reviewed electricity offers available on Energy Made Easy in February 2025 and August 2025. We found that there were 2 '*solar soaker*' plans offered in NSW:

- GloBird Energy's Free Lunch plan which provides $0 per kWh usage between 12pm to 2pm each day
- Pacific Blue's Retal plan, which has $0 per kWh usage from 10am to 3pm each day.[h, 303]

These plans were only available to households with solar panels. We did not identify any retailers offering similar plans to non-solar customers or small business customers.[304]

While there are currently few offers available in NSW for households to share in the broader benefits of solar generation, the Australian Government has recently announced consultation on a solar sharer standing offer to be included as part of the DMO from 1 July 2026 (Box 7.1 below).

[h] We also identified 1 VPP, the CovaU Energy VPP, which provided free electricity during the hours of 11am to 2pm. See Table 7.2 below for further information.

Box 7.1 Solar Sharer Offer

The Australian Government has proposed a Solar Sharer Offer (SSO) to commence from 1 July 2026 in DMO-regulated jurisdictions (NSW, Southeast Queensland, and South Australia).

Under the SSO, retailers would be required to make a standing offer available with zero-cost electricity for at least 3 hours during the middle of the day. Outside this window, prices would continue to be regulated under the AER's DMO framework.

To be eligible, customers must have a smart meter and must actively select an SSO plan from their retailer. Customers do not require rooftop solar. Customers can benefit if they can shift some of their consumption into the free window.

According to Commonwealth DCCEEW, the objectives of the SSO are to shift demand into periods of abundant daytime solar when wholesale prices are typically low or negative. This can reduce evening peak demand and broaden access to solar benefits to households without solar systems.

Commonwealth DCCEEW held consultation on the SSO design and implementation in November 2025.

Source: Commonwealth DCCEEW, *Have your say on a Solar Sharer Offer*, 4 November 2025.

7.4 Battery storage

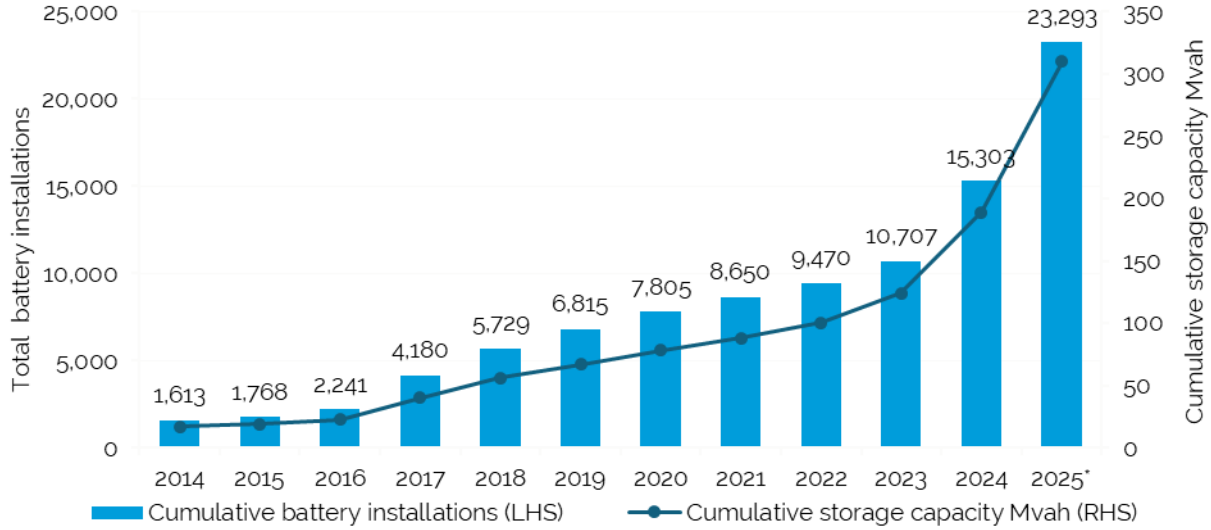
As the shift to renewable energy sources continues, both small scale and large-scale battery storage systems will play an increasingly important role in managing the intermittency of wind and solar.

Battery storage systems allow consumers to store surplus energy from their rooftop solar system (or to charge the system during off-peak periods) to then draw on it when needed.

This reduces how much electricity they need from the grid during peak times. Community batteries can also provide storage close to sources of rooftop solar generation and extend the benefits of batteries to those who cannot install them.

Battery installations have grown rapidly over the past 2 years. In 2024, NSW residential and small business customers installed nearly 4,600 batteries. From 1 January to 31 October 2025, just under 8,000 batteries were installed. As of October, the cumulative storage capacity of these batteries was just over 300 MVah.[305]

Figure 7.3 Cumulative total battery installations and storage capacity in NSW, 2014 to October 2025, residential and small business



Notes: 2025 data covers the period of 1 January 2025 to 31 October 2025.

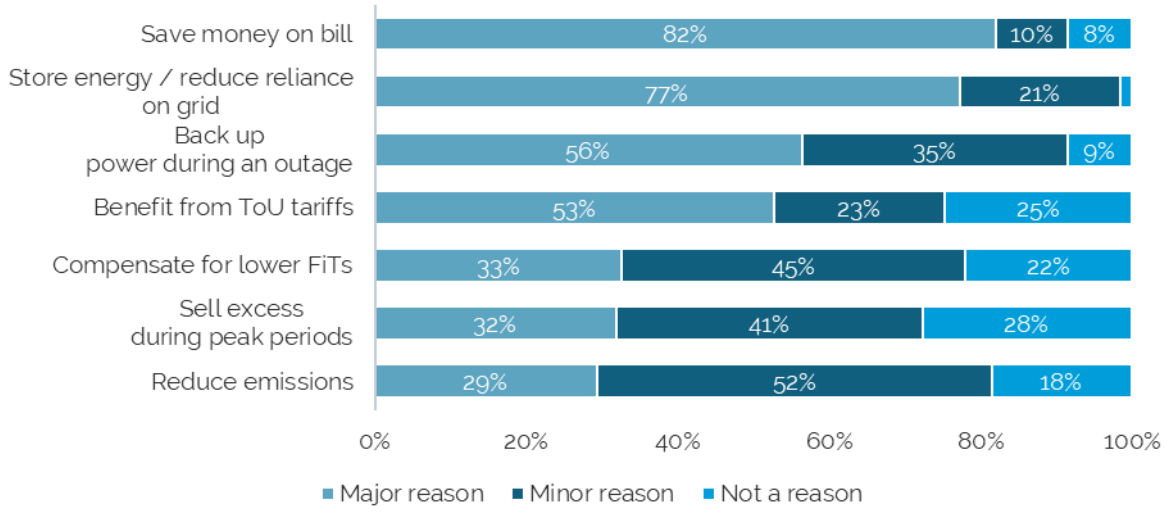
Source: AEMO, *DER Data Dashboard*, accessed 7 November 2025.

ECA's 2025 CERC survey asked households why they installed a battery, and for those not considering one, the reasons why. The main reasons NSW households installed a battery are to:

- 'save money on their electricity bill' – reported as a major reason by 82%
- 'reduce reliance on the electricity grid' – reported as a major reason by 77%
- have 'backup power during an outage' – reported as a major reason by 56%.

Households were less likely to install a battery to 'compensate for lower FiTs' (reported as a major reason for 33% of respondents) and to 'Sell excess electricity during peak periods' (32%).

Figure 7.4 Reasons for installing a battery, households in NSW

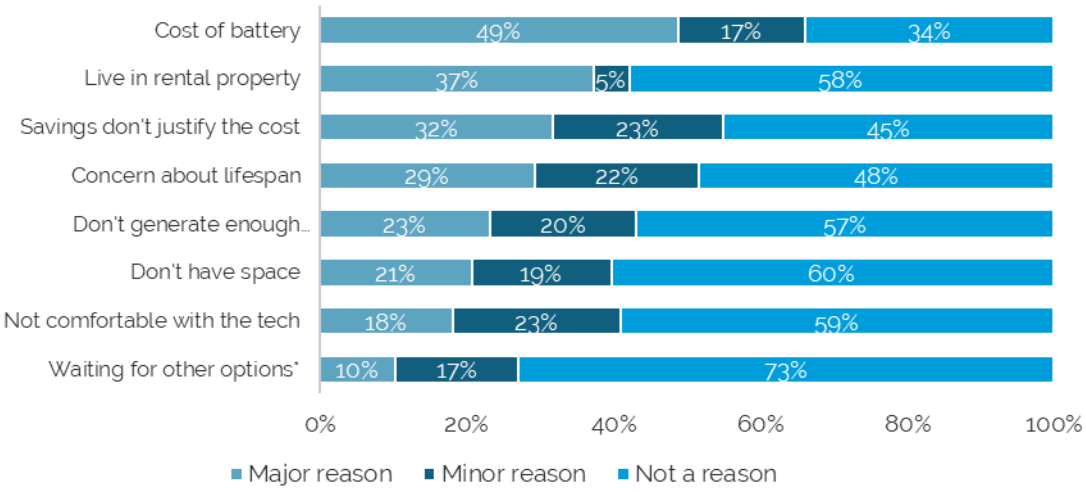


Question: Were the following things a major reason, minor reason or not a reason you had a battery system installed.
n = 42. The number of responses to this survey question is relatively small, which limits the strength of the insights that can be drawn from this analysis. However, we also examined responses to this question at the national level, where the distribution of responses was broadly similar. The reasons for installing a battery have been shortened for readability in Figure 7.4. See the topline results for the full reasons.

Source: ECA, *Consumer Energy Report Card – Topline Results*, July 2025

The main reasons NSW households reported they had not installed a battery were the cost (reported as a major reason by 49% of respondents), living in a rental property and not able to install a battery (37%), or believing the savings do not justify the cost (32%).

Figure 7.5 Reasons for not installing a battery, households in NSW



Question: Are the following things a major reason, minor reason or not a reason why you are not considering having a battery system installed. n = 443. The reasons for installing a battery have been shortened for readability in Figure 7.5. See the topline results for the full reasons.
Source: ECA, *Consumer Energy Report Card – Topline Results*, July 2025

While cost, savings and lifespan were some of the top reasons households reported for not installing a battery, recent analysis by the AEMC has found that government subsidies, improvements in technology and lower battery costs, have meant many systems now have a positive payback period[306] (Box 7.2). This is likely to support continued uptake.

Box 7.2 AEMC Research – falling payback periods for NSW residential batteries

Recent research by the AEMC has found that payback periods for residential batteries in NSW fell to between 4 and 7.3 years in 2024. This is a substantial decline in payback periods, which were on average 19 years in 2016 and 10 years in 2022.

As a result, 2024 was the first time that battery storage could deliver positive returns for a typical household in NSW. However, payback periods still vary depending on installation costs and electricity price differentials.

Battery and installation costs range from several thousand to almost $20,000 depending on model and capacity. The AEMC found that battery capacity costs fell from $0.80/kWh in 2016 to $0.39/kWh in 2022 and were expected to fall further by 2024.

Box 7.2 AEMC Research – falling payback periods for NSW residential batteries

In terms of price differentials, the AEMC found NSW peak time-of-use prices can range from 45 to 75 c/kWh, while solar feed-in tariffs averaged 4 to 5 c/kWh. This provides a net arbitrage benefit between 40 to 70 c/kWh for energy stored and used during peak periods. The AEMC found that households with higher evening consumption benefit the most, as they can maximise arbitrage between low feed-in tariffs and high import charges.

The AEMC also found that government incentives materially improve the economics of buying a battery. With the federal government Cheaper Home Battery program rebate, NSW households could achieve a battery payback in 7.3 years on average. For high-consumption households this could reduce to 6.4 years, while households that join a VPP (and receive the NSW VPP incentive) can achieve a payback period as little as 4 years.

The Cheaper Home Batteries Program provides approximately 30% off the upfront cost of installing a battery (based on its usable capacity), while the NSW VPP incentive can provide an incentive up to $1,500, depending on the usable capacity of the battery (all batteries with a capacity between 2 kWh and 27 kWh are eligible for the incentive, with larger batteries receiving a larger incentive).

The AEMC identified 2025 as the 'turning point' where payback periods consistently fall within 10-year warranty lifetimes. The battery market grew 80% in 2 years, yet penetration remains low at only 4.1% of solar households.

The AEMC projects storage capacity needs to increase from 1.5 GW to 46 GW by 2050, requiring approximately $64 billion in storage-specific investment, with two-thirds expected to come from distributed technologies rather than utility-scale installations.

Source: AEMC, *Charging ahead: Residential batteries are growing in popularity and profitability*, accessed November 2025; AEMC, *Energy storage systems and the NEM*, 7 March 2023; AEMC, *Turning point for incentives to invest in residential batteries*, accessed November 2025.

7.5 Flexible demand and how it works

As Australia continues to transition to a net zero energy system, electricity will be sourced primarily from renewable generation including solar and wind.

As the supply of energy becomes dominated by solar and wind, the ability to make demand more flexible so it can adjust quickly to constrained supply will become increasingly important.[307]

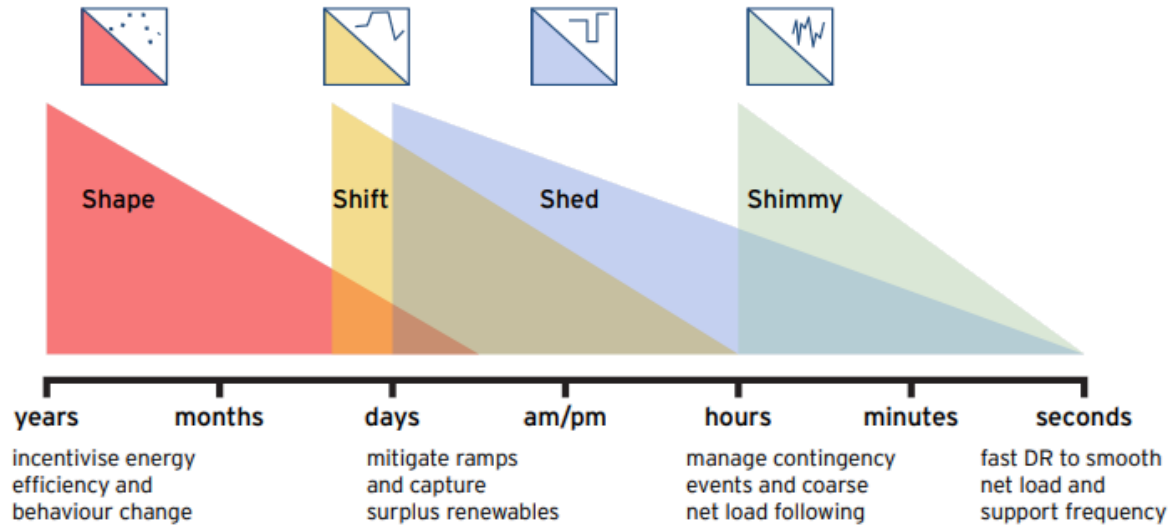
Flexible demand (or demand flexibility) is the ability to vary customer demand in response to generation, network or market signals.[308] Demand flexibility can occur in real time in response (price-responsive) or be scheduled ahead of time when it is known the electricity supply will be abundant (scheduled).[309]

There are several types of flexible demand, which can be categorised by how quickly demand can respond to these generation, network or market signals. These include:

- **Shaping (shape) or shifting demand (shift)**: bringing forward or delaying consumption. For example, charging electricity vehicles or heating water in the middle of the day to take advantage of low prices when solar generation is high.
- **Shedding demand (shed)**: avoiding high prices by temporarily reducing demand. For example, by turning off air-conditioning during periods of high wholesale spot prices or when there is strain on the network.
- **Shimmying demand (shimmy)**: very rapid changes in demand to manage frequency, typically over millisecond to second timeframes. For example, battery charging or discharging.[310]

These different types of demand flexibility are shown in Figure 7.6 below, including the speed of the demand response on the horizontal axis.

Figure 7.6 Types of flexible demand



Source: University of Technology Sydney, *Flexible demand - the current state of play in Australia*, May 2024, p 7

Demand response programs and VPPs are 2 types of flexible demand that the NSW Government has asked IPART to report on in the Market Monitoring reports. We explore each of these below.

7.5.1 Demand response programs

Demand response programs are one type of flexible demand that residential and small business customers can participate in. In NSW, these programs are offered by some retailers and provide a financial reward (or incentive) for customers who lower their energy usage during periods of peak system demand.[i]

There are 2 main types of demand response programs. These are:

[i] Peak demand occurs when electricity demand is close to or exceeding the electricity supply available.

- **Behavioural demand response**: customers are notified about an upcoming demand response event. Those who reduce or shift their energy usage during the event below a benchmark level receive a financial reward.
- **Automated demand response**: retailers and third parties are given external control of certain appliances, such as air conditioners or pool pumps, which can be operated at lower capacity or turned off for short periods.[j, 311]

Behavioural demand response programs are more common than automated demand response programs. For this reason, we focus on behavioural demand response programs below.

7.5.2 How behavioural demand response programs work

In a behavioural demand response program, a customer is notified by a retailer about an upcoming peak demand event. The customer then confirms they are willing to participate, for example by replying to a text, a push notification or email. During the peak demand event, if the customer can reduce or shift their energy usage below a benchmark level, they receive a reward.

In November 2025, we identified 5 demand response programs offered by retailers to residential and small business customers in NSW. These programs were run by the 3 major retailers, Engie and Amber Electric.

The demand response programs run by the 3 Origin, Energy Australia, AGL and Engie are summarised in Table 7.1 below.

Amber Electric offers customers a wholesale price pass-through offer. Under this plan customers pay a monthly subscription fee and the usage charge varies every 30 minutes based on the wholesale price of electricity.[312] Amber notifies customers (via SMS, push notification or email) when prices are forecast to spike (which typically occurs during evening periods) and when the wholesale price rises above a specified level (such as $3/kWh during a 5-minute interval). This provides an opportunity for customers to reduce their demand and avoid higher prices.[313]

Table 7.1 Behavioural demand response programs offered by retailers to small customers in NSW

	Origin - Spike	Energy Australia - PowerResponse	AGL - Peak Rewards	Engie - Reduce and Review
Requirements to participate	• Origin electricity account • smart meter • no one on life support equipment • no centralised electricity (common in large apartment buildings)	• EnergyAustralia electricity customer • smart meter • no one on life support equipment	• AGL electricity customer • smart meter • residential owner or tenant responsible for electricity account • consent to receive AGL marketing by email and text message.	• Engie residential customer and billable for at least 2 months • aged 18 and over • smart meter • no one on life support equipment

j The ACCC explained that other trial programs exist in which usage reductions are automated through the external control of devices. These include the demand response model being trialled by SA Power Networks in South Australia and more established programs such as PeakSmart in Southeast Queensland. These automated programs are designed to help manage demand when the distribution network is under extreme stress.

	Origin - Spike	Energy Australia - PowerResponse	AGL - Peak Rewards	Engie - Reduce and Review
How the program works	A customer that has signed up to Spike is invited by SMS to participate in a *Spikehour* event. Several days' notice is be provided, and the customer must opt-in. Customers will be notified 2 to 3 days after the event if they receive a reward.	A customer will receive an SMS when an event is known. The customer must opt-in to participate. This will include details of the start and stop times of the event. Credit earned through PowerResponse will be applied to electricity account within 20 days.	A customer will be invited by SMS to join a 'peak event'. The customer must respond to opt in. AGL notifies customers within 7 business days if they have earned a bill credit.	A customer will be notified by SMS 2 hours prior to a peak demand event. A customer must reply within an hour of receiving the notification to participate. Soon after the event, Engie will email customers if they have received a bill credit.
Incentive for participating	Customers who use less than their baseline earn a free hour of electricity as a credit on their bill. The free hour covers up to 10 kWh for residential customers or 35 kWh for small business customers. This free hour cannot be used in peak times (4pm-9pm).	Customers will earn: • $1 for reducing usage by any amount compared to the baseline • $2 for every kWh thereafter.	If usage is reduced below the baseline level, customers will receive: • $5 for a 1-hour peak event • $10 credit for a 2- or 3-hour peak event.	• **Silver savers** - customers who use reduce their usage by 30% or more compared to the benchmark receive a $5 bill credit. • **Gold super savers** - the top 2% of savers receive a $100 bill credit.
How the baseline is calculated	Based on the average usage from the past 10 days for weekday demand events or the last 4 weekend days for weekend demand events.	Based on the average electricity usage for the last 10 business days. A 3-hour period on the morning of the event is also used to adjust the baseline to account for event day usage. Customers with solar may have a negative baseline. This is in line with the CAISO10 baseline calculation methodology.	Based on how much electricity that customer would typically use during the peak event hours. This is adjusted for certain variables such as weather and time of day. Participant is notified of baseline prior to each event. Solar customers may be asked to export more or import less.	**Non-Solar:** baseline is calculated by taking the average usage over the last 10 days at the same time as the event. **Solar**: baseline calculated by taking average usage across the 5 biggest of the last 10 days at the same time as the event.
Customer numbers	The number of Spike customers as of 30 June 2025 was 81,000.	Data not available	Data not available	Data not available
Source:	Origin, *Spike*, accessed 11 November 2025;	EnergyAustralia, *about PowerResponse*, accessed 11 November 2025	AGL, *Peak energy rewards*, accessed 11 November 2025	Engie, *Reduce and Reward*, accessed 11 November 2025

7.5.3 Customer participation in behavioural demand response programs

The ACCC found that in January 2025 there were approximately 839,000 residential customers and 3,600 small business customers in NSW, South Australia, Queensland and Victoria who had signed up to participate in a behavioural demand response program.[314] This represented just over 9% of residential customers in these states, but less than 0.5% of small business customers.[315] The ACCC also found that the 3 largest retailers accounted for over 95% of behavioural demand response customers.[k, 316]

Behavioural demand response programs are often structured as an add-on to existing retail energy plans, with the main requirement being a customer has a smart meter installed. As the rollout of smart meters continues, there will likely be a growing number of consumers in NSW who participate.[l]

For each event, retailers may not contact every customer who has joined a behavioural demand response program. The ACCC noted the large number of residential customers that have signed up to participate in these programs is likely because it does not require any upfront investment and there is no penalty for not participating.[317]

The ACCC found that 43% of customers who received a notification about a peak demand event also received a reward, meaning they successfully reduced their usage below the benchmark during the event.[m, 318]

7.5.4 Financial benefits from participating in demand response programs

The ACCC found the median annual value of demand response bill credits (for those who successfully participated in a demand response event) was $5.86 per customer over 2023-24. [319]

The median credit for customers participating in demand response programs over 2023-24 varied across the year with spikes more likely during summer months, when peak demand events are more common (Figure 7.8).

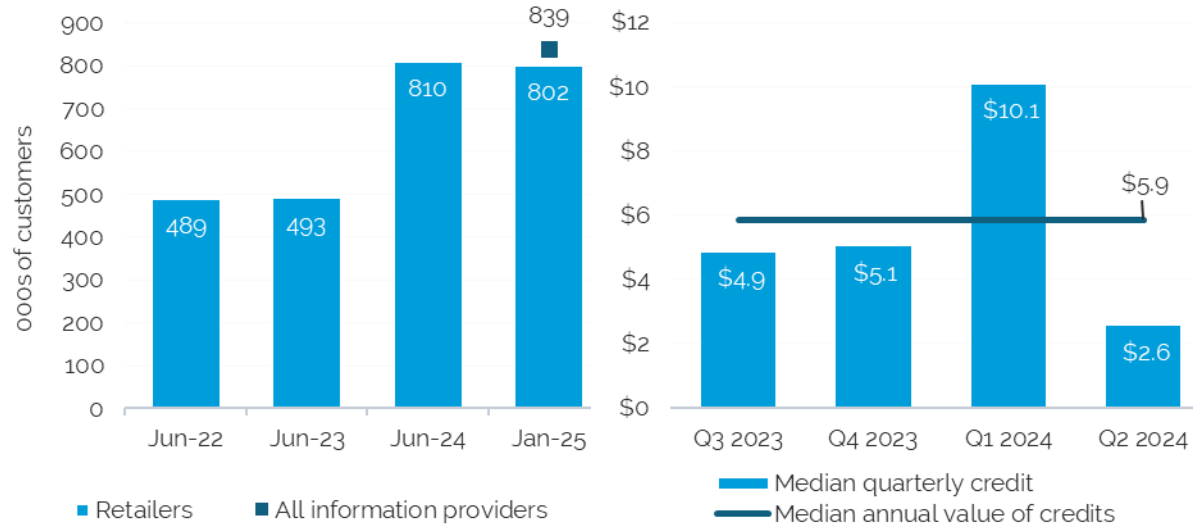
k This figure was based on small customers participating in demand response programs across NSW, SA, QLD and VIC.

l The ACCC reported highlighted that Victoria, which has a smart meter penetration of over 99%, had the largest number of customers participating in demand response programs.
Source: ACCC, *Inquiry into the National Electricity Market - July 2025*, p 49

m The ACCC noted that, given the way billing data is requested, it could not observe how many demand response event notifications each customer received or how many events each customer successfully participated in.

Figure 7.7 Total residential behavioural demand response customers

Figure 7.8 Quarterly median bill credit for behavioural demand response participation



Notes: The increase in the number of behavioural demand response customers from January 2023 to January 2024 was mainly due to the ACCC increasing the sample of billing data collected from retailers, as opposed to growth in the number of behavioural demand response customers.
The number of residential customers in demand response programs is based on customers in NSW, Southeast QLD, VIC and SA.
Source: ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025

The ACCC considered that some behavioural demand response contracts did not clearly explain the rewards available.[320] This means it could be difficult to understand whether participating and reducing energy usage would be worthwhile.

At the same time, the opt-in nature of behavioural demand response programs, and the fact customers retain control of devices, means these programs are an easy and low risk way for consumers to participate in a new energy service.

Findings

10. There are 5 behavioural demand response programs running in NSW. These offer customers an easy way to participate in a new energy service. However, the savings from participating may not be enough to encourage greater participation.

7.6 Outlook for behavioural demand response programs

Many behavioural demand response programs are still considered trials by retailers, and the way they are designed and operated may change over time to become more efficient and effective.[321] Origin submitted to the Consultation Paper that it expects participation in its VPP and demand response programs to increase significantly in coming years, driven by greater uptake of CER.[322]

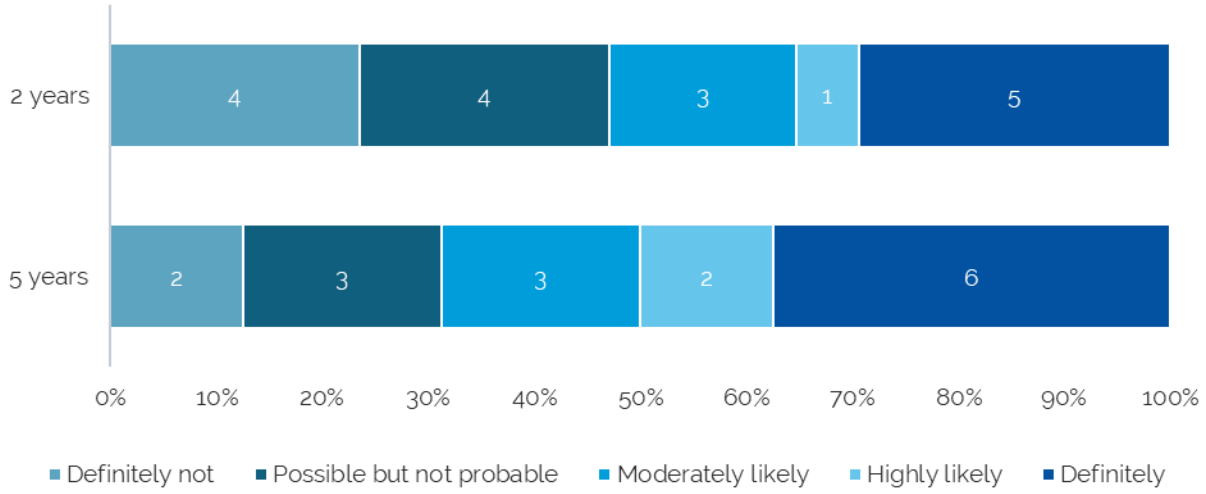
To understand views on new energy services, the ACCC also surveyed retailers and third-party providers on their perspectives about offering new energy services and the barriers to providing these services.

The ACCC surveyed 17 retailers and 2 new energy service providers about the likelihood of offering new energy services to residential customers over the next 2 and 5 years. Over the next:

- 2 years, 6 respondents (35%) said they are 'definitely' or 'highly likely' to offer demand response programs to residential customers
- 5 years, 8 respondents (just over half) said they are 'definitely' or 'highly' likely to offer demand response programs (Figure 7.9).[323]

This suggests there will be a growing number of entities offering behavioural demand response programs to customers in the coming years.

Figure 7.9 Likelihood of offering demand response programs to residential customers in next 2 and 5 years, January 2025



Note: The ACCC surveyed 17 retailers and 2 new energy service providers through a voluntary survey. The figures in the bars show the number of retailers and new energy service providers that selected each answer in response to the survey question. The ACCC received 17 responses to the question on the likelihood of offering behavioural demand response programs to customers over the next 2 years and 16 responses regarding the likelihood of offering behavioural demand response programs to customers over the next 5 years.
Source: ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025, Tab: 13. Survey data

Across the retailers and new energy service providers that responded to the ACCC survey, there were mixed views about customer interest in behavioural demand response programs. The survey found:

- 7 respondents considered less than 10% of residential customers would be interested over the next 5 years
- 7 respondents considered between 10% to 25% of residential customers would be interested
- 3 respondents considered more than 25% of residential customers would be interested.[324]

In terms of barriers for offering behavioural demand response programs:

- 9 respondents (53%) considered there were 'minor to no barriers'
- 4 respondents considered there were 'moderately strong barriers' and

- 4 respondents considered there were 'very strong barriers' or 'extremely strong barriers'.[325]

As behavioural demand response programs are typically an add-on to a retailer's core offering, it is likely that larger retailers with an existing customer base may start offering these programs in the coming years.

The ACCC found that with enough customers participating, behavioural demand programs could provide system-wide benefits by reducing grid usage during periods of acute peak demand, when the system is most constrained. However, the current rewards for participating may not provide a sufficient incentive for customers to sign up or take part in peak demand events.[326]

7.7 Virtual power plants

VPPs are a relatively new energy service where individual sources of energy generation and storage across different locations are aggregated and controlled by a central operator.[327] The purpose is to use aggregated energy resources to provide services to the broader electricity market that were traditionally performed by conventional power plants.[328]

VPPs primarily coordinate rooftop solar and battery storage systems. They are managed by a central operator or 'aggregator', who contracts with consumers for access to their CER under certain conditions (e.g. when wholesale prices are high or for a maximum number of times (or cycles) per year.[329] Aggregators then use software to coordinate the resources in the VPP and manage when energy is consumed, stored and exported to the grid.

7.7.1 Benefits for consumers from participating in VPPs

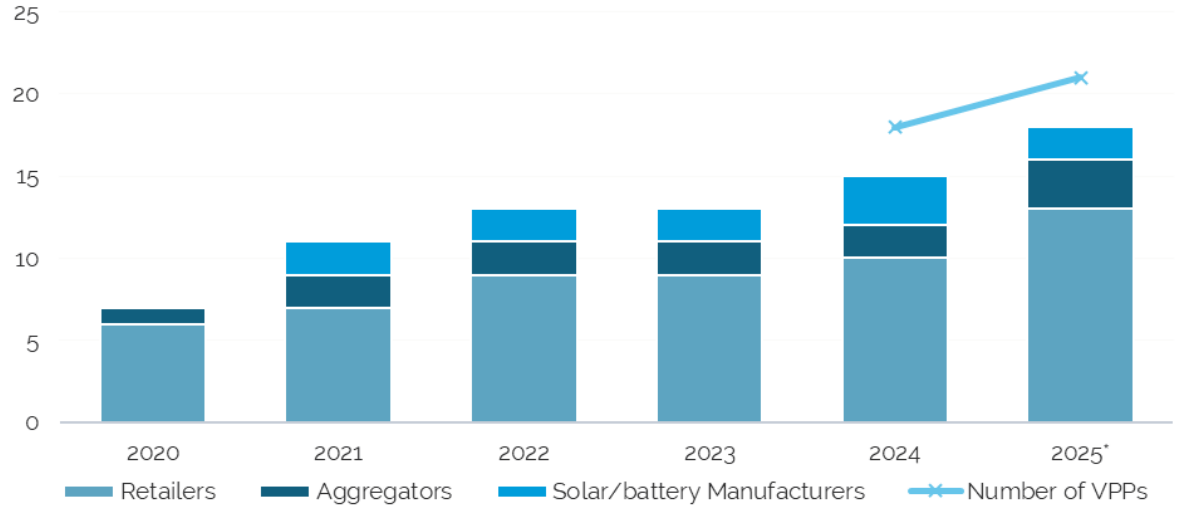
VPPs have the potential to provide a range of benefits to the energy system.

VPPs can benefit the electricity grid by reducing maximum demand and responding almost instantly to fluctuations in supply and demand. They do this by charging or discharging a battery to smooth out fluctuations. This means VPPs can help keep the grid stable, with the potential for fewer disruptions and a more reliable electricity supply during periods of high demand.[330]

Better integration of CER (including through VPPs) in the NEM could lead to more efficient network and wholesale market services. This would reduce the overall cost of providing reliable electricity to consumers.[331]

We conducted desktop research on the VPPs offerings in NSW as of November 2025. We identified 21 VPPs available for residential or small business customers. These were provided by 17 VPP operators (Figure 7.10). The majority of VPPs (13) were provided by retailers, with smaller numbers offered by aggregators and solar or battery manufacturers.

Figure 7.10 Number of VPP operators and offers in NSW



Note: the number of VPP operators and offers in 2024 and 2025 is based on desktop research undertaken in October 2024 and November 2025 respectively. Data for past years (2020 to 2023) is based on the Sunwiz Annual Battery Market Reports and AEMC research.
Source: IPART desktop research; Sunwiz, Annual Battery Market Reports, various years; AEMC, *VPP offers available*, 2020

Across the offers available, we identified 5 main ways that consumers are paid for participating in a VPP plan. These are:

- **Upfront payments**: 4 VPPs offered an up-front payment or a sign-up bonus when a customer joins. These ranged from $100 to $200.
- **Ongoing bill credits**: 6 VPPs offered monthly or quarterly bill credits. These are fixed amounts and ranged from $80 to $480 per year.
- **Feed-in tariffs or discharge credit**: 9 VPPs provided a higher FiT than a customer's accompanying retail plan. These VPPs require exports were required to occur during peak hours or overnight, or the higher FiTs only apply to a set export limit. 6 VPPs provide an additional payment for electricity discharged during special 'grid events'. These discharge payments range from 45c/kWh to $1/kWh.
- **Discounts on solar and battery systems**: some VPPs offer discounts on the upfront price of a solar and/or battery system if the customer joins the VPP. These varied significantly by offer and the conditions attached. Others offered a $0 upfront cost for installing a battery if the customer joins for a minimum period. Offers with discounts usually include a minimum contract length between 5 and 7 years and an exit fee if the customer leaves early.
- **Profit sharing agreements**: the Discover Energy, offered a profit-sharing model, where they customer receives a feed-in tariff, plus 50% of the wholesale market profit from exports during VPP events.[332]

Depending on the type of payments offered, the VPP operator and customer take on different risks. For example, with upfront payments and bill credits, the VPP provider carries the risk of whether the return from operating the VPP will be sufficient to cover these payments. However, for VPPs that offer higher FiTs or discharge payments, customers take on a higher degree of risk, as the returns are contingent on exports and whether certain grid events occur.

The key features of NSW VPP offerings as of November 2025 are shown in Table 7.2. These VPPs varied significantly across incentives, fees, and eligibility. These differences indicate that providers are targeting different market segments.

Table 7.2 Virtual power plant offers in NSW as of November 2025

VPP	Must be retail customer	BYOD option	Solar or battery discount	Sign-up credit	Bill credits and incentives	Feed-in tariffs	Fees	Min lock-in contract length	Approved batteries	Min owner reserve	Max discharge per year	NSW PDRS rebate
ActewAGL Battery Saver plan	Yes	Yes	-	-	$15 monthly bill credit or 50% supply charge discount for 12 months	Same as plan	-	No lock-in, 12 months default	Tesla, SolarEdge, LG Chem HV	20% of storage capacity	No	Yes
AGL VPP	Yes	Yes	Up to $1,000	$200	$20 quarterly bill credit $1/kWh for exports during VPP events	Same as plan	-	No lock-in, 12 months default	Tesla, LG RESU, SolarEdge	20% of storage capacity	30 events per year	Yes
Amber Smartshift	Yes	Yes	-	-	-	Wholesale price pass-through	$25/month	No lock-in	Most batteries, check with provider	25% default, owner-controlled	No fixed cap	Yes
CovaU Energy VPP	Yes	Yes	Yes, not disclosed	-	Free electricity 11am-2pm	15 c/kWh 5pm-9pm	-	No lock-in	GreenESS, PotisEdge ALOE, Fox ESS, Alpha ESS	20% target of storage capacity	-	Yes
Diamond Energy WATTBANK VPP	Yes	Yes	-	-	$250-$450 yearly credit	Same as plan + 30 c/kWh 6pm-8am	$68 initial fee	No lock-in	Sungrow, Alpha ESS	Check with provider	Check with provider	No
Diamond Energy LAVO Life	No	No	-	-	800 kWh free usage per month	Same as plan	Ongoing, check with provider	None for Diamond plan, LAVO Life agreement is fixed-term	LAVO systems	Check with provider	Check with provider	No
Diamond Energy NRN VPP	Yes	No	$0 upfront	-	10% discount on grid use	Same as plan + 6pm-6am	$0.18/kWh cost for battery use	No lock-in	NRN battery systems	Check with provider	Check with provider	Yes

VPP	Must be retail customer	BYOD option	Solar or battery discount	Sign-up credit	Bill credits and incentives	Feed-in tariffs	Fees	Min lock-in contract length	Approved batteries	Min owner reserve	Max discharge per year	NSW PDRS rebate
						overnight credit						
Discover Energy VPP	Yes	Yes	-	-	Profit-sharing scheme	Same as plan	-	No lock-in, 12 months default	Huawei, Sungrow, Alpha ESS, SolarEdge, Growatt, GoodWe	Check with provider	10 hours per event	Yes
Energy Australia Battery Ease	Yes	Yes	Up to 30% discount	-	$15 per month bill credit	12 c/kWh for first 15 kWh/day	-	No lock-in, 12 months default	Most batteries, check with provider	10% of storage capacity	80 hours / 200 kWh per year, or 1 cycle per day	Yes
Engie VPP Advantage	Yes	Yes	Up to 30% discount	$200	$20 per month credit	Same as plan	-	No lock-in	Tesla, Sungrow, Sigenergy, Alpha ESS	20% of storage capacity	405 kWh per year	Yes
GloBird Energy ZeroHero VPP	Yes	Yes	Up to 30% discount	-	$1 per kWh for event discharges	15 c/kWh 6pm-8pm, first 10 kWh	-	No lock-in	Most batteries, check with provider	Owner-controlled	Check with provider	Yes
LocalVolts	Yes	Yes	-	-	Peer-to-peer trading	Custom	-	No lock-in	Any solar system	N/A	N/A	Yes
Nectr BEE Super FiT	Yes	Yes	-	$100	-	50 c/kWh 4pm-9pm	-	No lock-in	Alpha ESS, QCells, Sungrow, Tesla	Check with provider	Check with provider	Yes
Nectr BEEyond	Yes	Yes	-	-	Bill discounts as low as 3.75 c/kWh	-	Quarterly fee	No lock-in	Alpha ESS, QCells, Sungrow, Tesla	20% of storage capacity	Check with provider	Yes
Origin Loop VPP	Yes	Yes	Up to $1,500, or $0 upfront	$200	$1/kWh for event discharges	-	-	None for BYOD, 5 years for upfront discount	Tesla, LG Chem	20% of storage capacity	200 kWh per year	Yes

VPP	Must be retail customer	BYOD option	Solar or battery discount	Sign-up credit	Bill credits and incentives	Feed-in tariffs	Fees	Min lock-in contract length	Approved batteries	Min owner reserve	Max discharge per year	NSW PDRS rebate
Plico Energy VPP Rewards	No	Yes	Up to $1,500	-	-	Plan FiT + 50 c/kWh for specific peak periods	$350-$400 loan fee, check with provider	Varies by offer	Vendor-supplied	Check with provider	Check with provider	Yes
Powershop VPP	Yes	Yes		-	Up to $40/month	Same as plan		Check with provider	Most batteries, check with provider	20% of storage capacity	Check with provider	
Powow VPP	Check with provider	Yes	-	-	$1/kWh for event discharges	Same as plan	-	No lock-in, 12 months default	Hinen + Powow meter	Check with provider	Check with provider	Yes
Reposit 'No Bill'	No	No	Bundled solar + battery	-	Guaranteed $0 electricity bills for 7 years	None	-	No lock-in	Reposit-managed systems	Check with provider	Check with provider	Check with provider
Shinehub VPP	No	Yes	Up to $2,000	-	45-55c/kWh for event discharges	Same as plan	-	5-year default, varies by offer	Hinen or BYD	10% of storage capacity	Check with provider	Yes
Solarhub VPP	Yes	Yes	Up to $4,950	-	Bill credits for event discharges	17 c/kWh for first 10 kWh/day	-	No lock-in, 12 months default	LG Chem RESU, Tesla, SolarEdge, SolaX	No minimum	Check with provider	Check with provider
Sonnen Connect	No	No	-	-	Fixed daily payment for battery availability	Same as plan	-	Varies by offer	Sonnen Batterie	Varies by application	Check with provider	Check with provider

Notes: Information is as of November 2025. Details may change as VPP offers are updated regularly. BYOD refers to Bring your own device.
Sources: ActewAGL, *ActewAGL Virtual Power Plant Services Agreement*, October 2025; ActewAGL, Battery Saver, accessed November 2025; AGL, *AGL's bring your own battery VPP*, accessed November 2025; Amber, *Smartshift*, accessed November 2025; CovaU, *CovaU Virtual Power Plant*, accessed November 2025; Diamond Energy, *WATTBANK VPP*, accessed November 2025; Diamond Energy, *LAVO Life EAAS*, 2023; Diamond Energy, *NRN VPP*, accessed November 2025; Discover Energy, *Discover VPP*, accessed November 2025; EnergyAustralia, *An electricity plan made for battery owners*, accessed November 2025; Engie, *Solar panels, battery storage and our Virtual Power Plant*, accessed November 2025; Globird, *VPP Rebate*, accessed November 2025; Globird, *ZEROHERO VPP Residential (Flexible Rate CTL)-Ausgrid*, accessed November 2025; LocalVolts, *Frequently Asked Questions*, accessed November 2025; Green Review, *Nectr launches ground-breaking VPP plan with unprecedented FiT rates*, accessed November 2025; SolarQuotes, *Virtual Power Plant Comparison Table*, accessed November 2025; ADSSolar, *Nectr Evolve VPP*, accessed November 2025; Origin, *Origin Loop*, accessed November 2025; Plico, *Plico Virtual Power Plant Rewards*, accessed November 2025; Powow, *Join the Powow VPP*, accessed November 2025; Powershop, *Powershop Virtual Power Plant*, accessed November 2025; Powow, *VPP*, accessed November 2025; Energy Matters, *Powow: Power Purchase Agreement and Virtual Power Plant*, accessed November 2025; Reposit, *Reposit No Bill*, accessed November 2025; ShineHub, *The ShineHub Virtual Power Plant*, accessed November 2025; Solarhub, *Virtual Power Plant*, accessed November 2025; SolarChoice, SonnenConnect VPP, accessed November 2025; NSW Energy, *Connect your battery to a Virtual Power Plan*, accessed November 2025.

7.7.2 How the benefits from VPPs are shared

Several submissions to the Consultation Paper considered there is little transparency around how the benefits (or revenues) from VPPs are distributed between VPP operators (retailers or aggregators), and customers.[333]

The JEC submitted that a general lack of trust in retailers and aggregators, combined with the lack of robust regulation for VPPs, compounds concerns about the distribution of benefits.[334] EWON also submitted that customers need clear information on what benefits they are entitled to (such as rebates or lower energy rates) and how to check they are being received.[335]

VPP operators have the potential to generate revenue in several ways. These include:

- **Providing frequency control ancillary services**: VPPs can participate and bid in the FCAS market. Operators can coordinate batteries to provide a fast injection or reduction of electricity which can help to manage supply and demand.[a, 336]
- **Wholesale price arbitrage**: VPPs can charge participants' batteries when the wholesale price is low (or negative) and export electricity when wholesale electricity prices are high.[337]
- **Reduced hedging costs**: retailers operating VPPs can use them to reduce exposure to wholesale spot market prices. This can be done by coordinating CER to feed into the grid during peak periods. This may reduce the need for hedging contracts and reduce hedging costs.[b, 338]
- **Subscription or membership fees**: some VPPs charge customers a subscription or membership fee. These VPPs typically offer more flexibility and focus on optimising the charge and discharge times to maximise the customer's value of self-consumption.
- **Margins on solar or battery sales and financing**: VPP operators may have a commercial partnership with solar or battery manufacturers. Depending on the agreement, they may receive commissions or margins on CER sales or for arranging financing.[339]

VPPs are a new energy service, and currently there is limited information on the revenue or profit they generate. VPP trials to date suggest they have not been profitable and have high startup costs, including for software development and customer acquisition.[340]

However, one recent study conducted by Energeia for the AEMC found that, on average, 50% of earnings from 5 typical VPPs were passed through to consumers with the remaining 50% retained by the VPP operator (Box 7.3).[341]

[a] Participants in FCAS markets are paid by AEMO for the services they provide.

[b] The ACCC explained in their July NEM Inquiry report that high retail margins may create an incentive for new retailers to enter the VPP market and compete on price, which can put downward pressure on margins. Further, the retail pricing prohibition under section 153 E of the Competition and Consumer Act 2010, requires retailers to make reasonable price adjustments to reflect sustained and substantial reductions in the underlying cost of procuring electricity.

Box 7.3 Benefit Analysis of Load-Flexibility from Consumer Energy Resources: Final Report

In 2025, Energeia conducted an analysis of existing VPPs operated by retailers and third-party aggregators to determine the current pass-through value of VPP offers. The analysis was undertaken to demonstrate the net economic benefit to consumers compared with the VPP operator.

Energeia researched 17 VPPs offered in Australia and narrowed these to 5 that included explicit annual discharge limits and a representative set of consumer incentives. Energeia then modelled the benefits that:

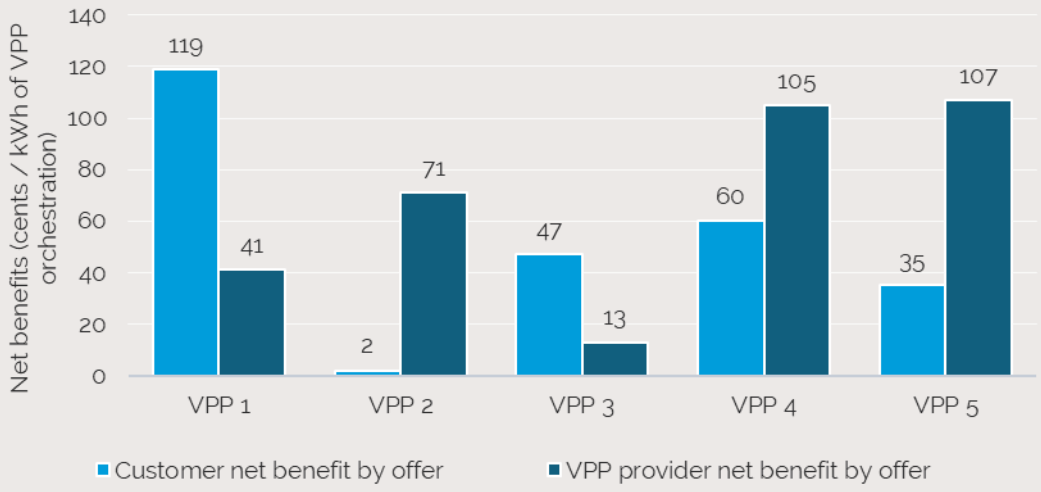
- operators could achieve through orchestration (FCAS revenue and retailer cost reduction)
- customer could receive (annualised sign-up bonuses, VPP credits and customer bill impacts), relative to maximising self-consumption (no orchestration).

The results were normalised per kWh of battery charged or discharged by the VPP provider.

Energeia found that all modelled VPP offers produced a net benefit for consumers, however the size of the benefit varied across offers. Net customer benefits ranged from 2 cents to $1.19 per kWh of VPP orchestration, with an average of 52 cents per kWh.

Energeia also found that all VPP offers produced net benefits for the VPP operator. These ranged from 13 cents per kWh to $1.07 per kWh, with an average net benefit to the provider of 67 cents per kWh.

Figure 7.11 Customer and VPP provider net benefit, by VPP offer



Source: *Benefit Analysis of Load-Flexibility from Consumer Energy Resources: Final Report*, 26 March 2025, pp 40

Box 7.3 Benefit Analysis of Load-Flexibility from Consumer Energy Resources: Final Report

Energeia found that, on average, 50% of the earnings from a VPP would be passed through to consumers, with the remaining 50% retained by the VPP provider.

Notes: The modelling assumes the VPP operator has perfect foresight and maximises the value of retailer cost reductions or FCAS value within designated limits specified in the VPP contract. No orchestration was assumed outside of the VPP orchestration days or limits. The modelling assumed batteries were 5kW (or 10 kWh), sign-up bonuses were annualised over a 5-year contract, VPP event bonuses were applied to the maximum kWh for orchestration, and a consistent retail tariff was applied to all VPPs. The 5 VPPs modelled were available in SA, which have a higher amount of VPPs registered with AEMO to provide FCAS compared to NSW.

Source: Energeia, *Benefit Analysis of Load-Flexibility from Consumer Energy Resources: Final Report*, 26 March 2025, pp 38-41

7.7.3 Competition in the supply of VPPs

In January 2025, across NSW, SA, VIC and Southeast QLD, the ACCC found there were 91,861 batteries installed by residential customers, with 38,756 participating in VPPs.[c, 342] This represents 42% of customers with batteries participating in a VPP. Based on the ACCC data, in NSW there were 13,769 batteries, and 12,873 VPP participants. This represents 93% of residential customers participating in a VPP.

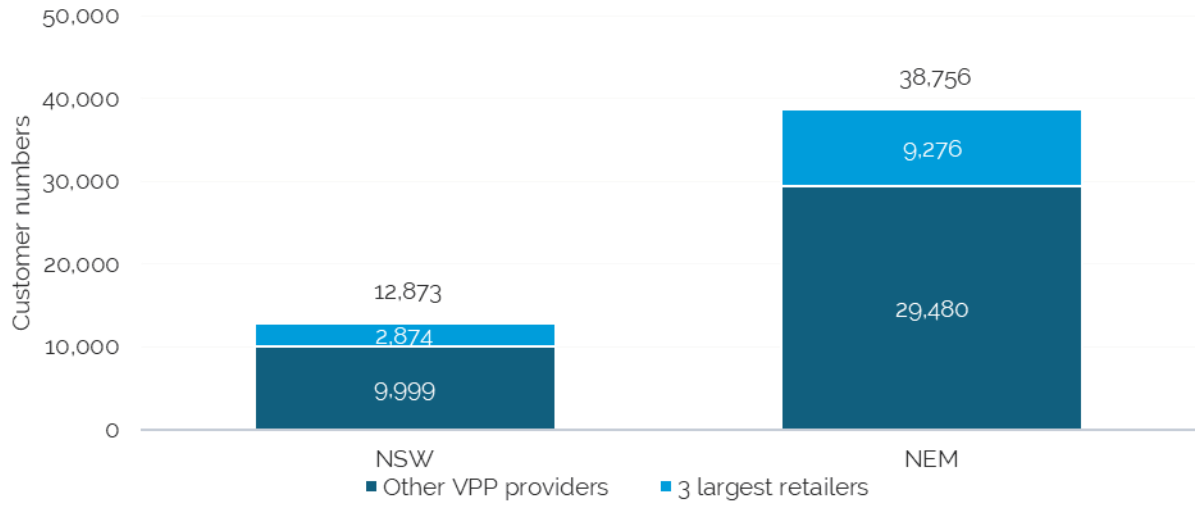
In NSW, the 3 largest retailers held a market share of 22% (2,874 of VPP customers) in January 2025. Other VPP operators held a market share of 78% based on VPP customer numbers.

This was similar to the level of market share held by the 3 largest retailers hold across the NEM. The ACCC found the 3 largest retailers held a 24% market share of VPP customers across the NEM. In contrast, as noted in Chapter 3, the 3 largest retailers held a market share of 74% of small customers in NSW as of 31 March 2025.

The ACCC reported the presence of smaller retailers and other energy service providers in the supply of VPPs is a positive outcome for competition and consumer choice.[343] The ACCC highlighted there is product differentiation and innovation among VPPs, with providers offering new services and pricing models catering for different customers' needs.[344]

[c] The figures on the number of batteries installed in each state is based on data from AEMO's distributed energy resource register. This may not capture all batteries installed and as a result, the figures in this section may overstate the level of VPP participation amongst battery holders.

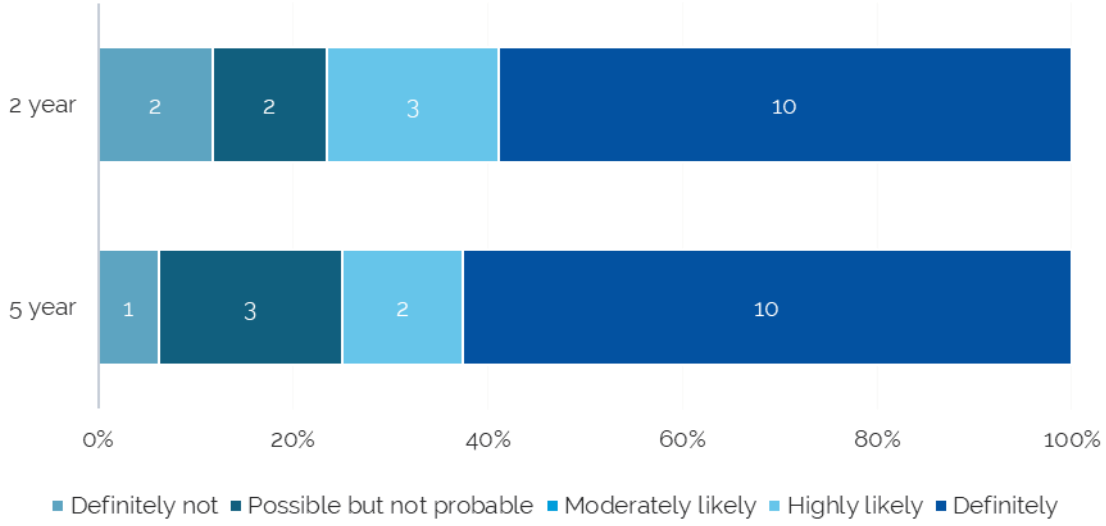
Figure 7.12 Number of VPP customers, NSW and NEM-wide



The three largest retailers are Origin, AGL and EnergyAustralia. Other VPP providers include both retailers and new energy service providers (who are not retailers).
The bolded figures above the bars show the total number of VPP customers.
Source: ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025

Growth in the number of operators providing VPP offers is expected to continue in the coming years. The ACCC's 2025 survey of retailers and new energy service providers found that around three-quarters responded that they are 'definitely' or 'highly likely' to offer VPPs to residential customers over the next 2 and 5 years (Figure 7.13).

Figure 7.13 Likelihood of offering VPPs to residential customers in next 2 and 5 years, January 2025



Note: The ACCC surveyed 17 retailers and 2 new energy service providers through a voluntary survey. The figures in the bars show the number of retailers or new energy service providers that selected each answer in response to the survey question. The ACCC received 17 responses to the question on the likelihood of offering VPPs to customers over the next 2 years and 16 responses regarding the likelihood of offering VPPs to customers over the next 5 years.
Source: ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025

Across the NEM, survey respondents (retailer and new energy services provider) also expressed mixed views on residential customer interest in VPPs over the next five years. The survey found:

- 7 respondents (41%) considered less than 10% of residential customers would be interested in VPPs over the next 5 years
- 8 respondents considered between 10% and 50% of residential customers would be interested in VPPs
- 2 respondents considered more than 50% of residential customers would be interested in VPPs.[345]

In terms of barriers to offering VPPs, 5 respondents (28%) said there were only minor to no barriers, while 8 respondents said there were moderately strong barriers (44%). 5 respondents (28%) said there were very strong barriers.[346]

7.7.4 Customers in VPPs have lower median bills and grid usage

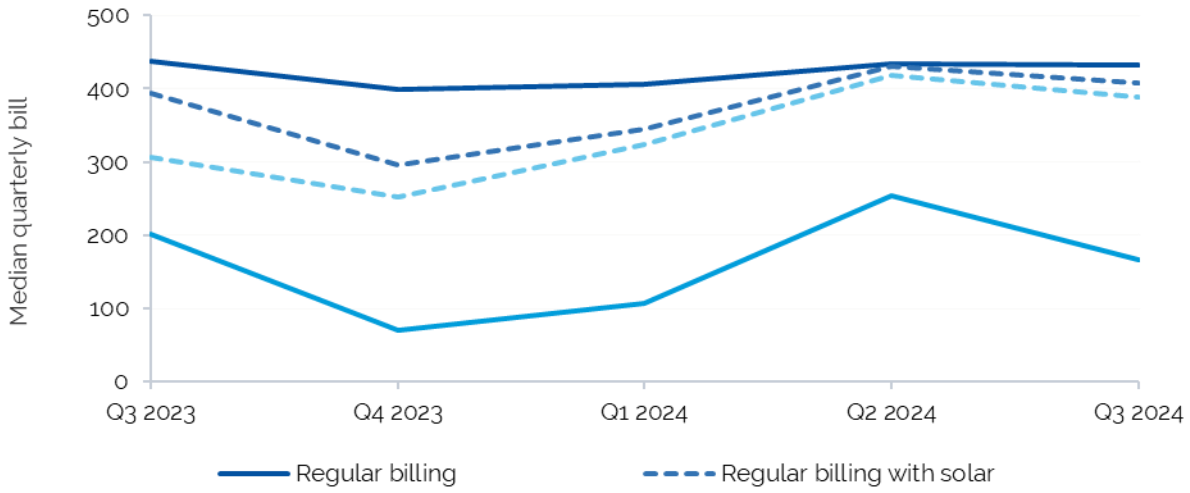
VPP customers also pay lower electricity bills compared with both regular customers, and customers with CER (who are not part of a VPP).[d]

Over Q3 2023 to Q3 2024, the median quarterly bills for VPP customers were between 42% and 82% lower than the median quarterly bill for a regular billing customer, depending on the quarter.[347] Over the same period, the median quarterly bill for VPP customers was also between 34% and 72% lower than the median quarterly bill for customers with a battery and solar.

The median quarterly bills also show considerable seasonal variation for VPP customers. In the summer months (Q4 2023 to Q1 2024) quarterly bills were much lower for VPP customers, and across all customers with CER. This reflects higher solar generation, greater self-consumption, and the receipt of FiT credits.

[d] The ACCC's billing analysis could not observe behind-the-meter self-consumption for solar and new energy service customers, so usage results reflect only electricity drawn from the grid.

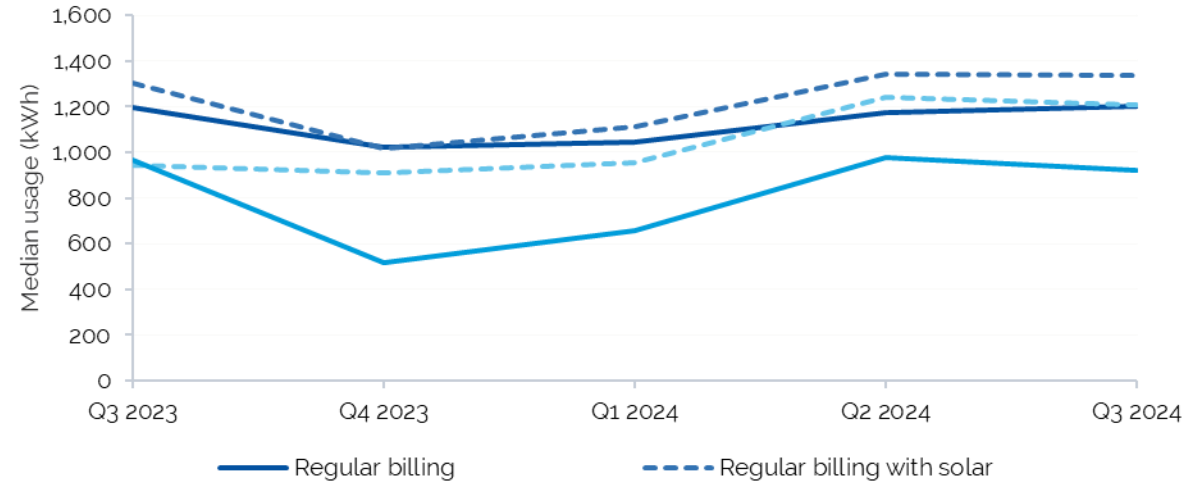
Figure 7.14 Median quarterly bills for different types of NSW residential customers (regular, solar, battery with solar, and VPP)



Source: ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025, Tab: Chapter 3

NSW VPP customers also had the lowest level of grid usage across customer groups (Figure 7.15).[e] The ACCC noted that one factor contributing to higher grid usage for NSW customers with solar and a battery is this group had a larger share of high energy users compared to VPP customers.[348] However, both VPP customers and those customers with solar and a battery had lower median grid usage than customers with only solar.

Figure 7.15 Median quarterly electricity grid usage by different types of NSW residential customers (regular, solar, battery with solar, and VPP)



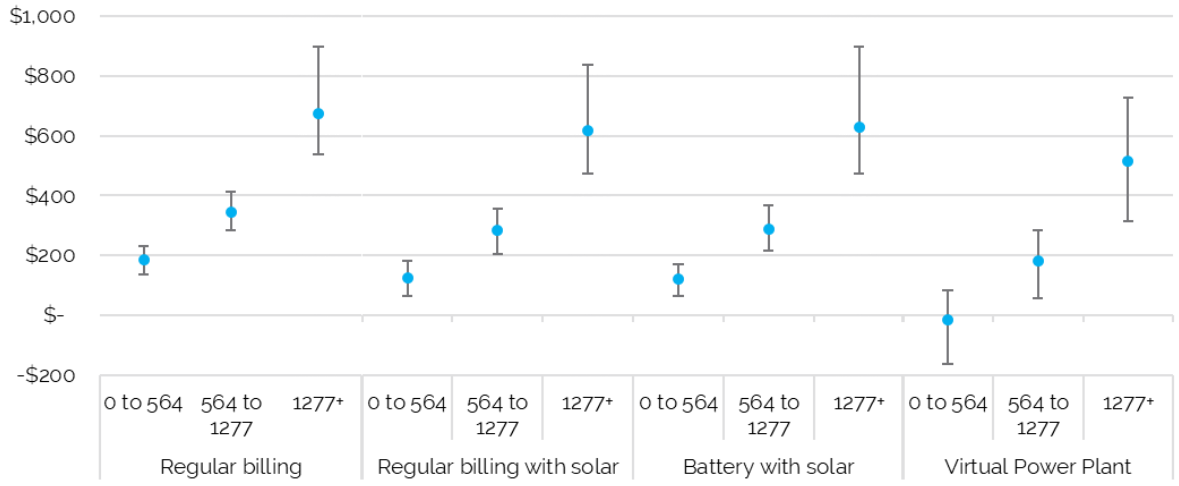
Source: ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025, Tab: Chapter 3

[e] The ACCC data reported by the ACCC does not capture self-consumption which occurs behind the meter.

The median quarterly bills for different customer types (Figure 7.14) do not account for differences in usage levels. Based on quarterly bills for Q3 2024, VPP customers had notably lower median bills across all usage levels. This was compared to all other customer types, including those solar and a battery (Figure 7.16).

The ACCC explained that the largest driver of bill savings for VPP customers was lower overall usage, and lower usage during peak and shoulder periods.[349] A smaller contributor was bill credits and FiTs. This may indicate that VPP operators are helping customers reduce grid usage by optimising systems for self-consumption during more expensive periods (peak and shoulder periods).[350]

Figure 7.16 Quarterly bill outcomes across usage bands for different types of NSW residential customers (regular, solar, battery with solar and VPPs), Q3 2024



Note: Quarterly grid usage has been grouped into 3 categories (0 to 564, 564 to 1277, 1277+ kWh) which are shown on the horizontal axis. This is based on customer imports from the grid and does not include self-consumption (this occurs behind the meter and was not captured in the ACCC dataset). Bills include GST and solar FiTs.
The blue dot shows the median quarterly bill for the specified usage category and customer type. The error bands show the results for the 25th percentile quarterly bill (lower band) and 75th percentile quarterly bill (upper band) for the specified usage level and customer type.
Source: ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025, Tab: Chapter 3.

The way a VPP operator coordinates CER can affect a customer's ability to self-consume tier own solar generation and influence their grid consumption. The ACCC reported that, across the NEM, the total volume of electricity coordinated by VPPs for 2023-24 was 138 MW, an increase of 75% from 2021-22. However, the average amount dispatched into the grid per VPP customers remains small and has been steady at 16 kWh per year over the 3 years to 2023-24.[351]

However, as shown in Table 7.2, VPP contracts often provide operators with the ability to dispatch larger amounts of electricity. For example, 8 of the VPP contracts we analysed in NSW only had a minimum owner reserve of between 10% to 20% of the battery storage capacity.

Findings

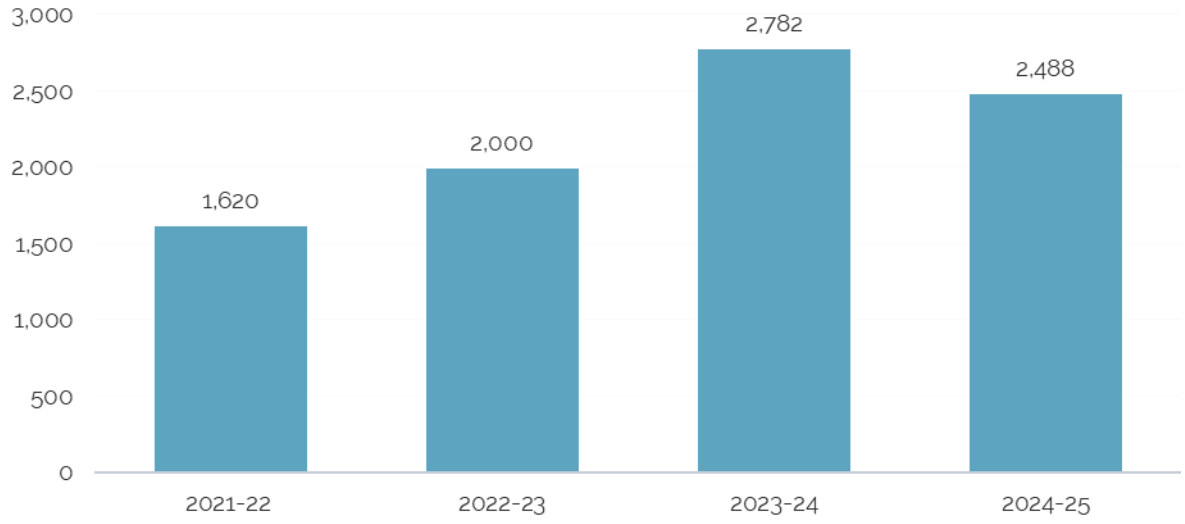
11. Virtual power plant customers in NSW are benefiting from competition through product differentiation and lower bills. We identified 21 virtual power plant offers from several suppliers with different eligibility criteria, participation payments, and control over the customer's battery.

12. Stakeholders continue to report consumers find virtual power plants difficult to understand, with limited information and tools available to compare and assess offers. Contracts may not clearly specify how virtual power plant operators control batteries and other large appliances, or what settings the customer can adjust.

7.8 Complaints to EWON about consumer energy resources

Complaints to EWON about CER fell to 2,488 in 2024-25, down from 2,782 in 2023-24 (Figure 7.17). However, total complaints remained higher than in previous years (2021-22 and 2022-23).

Figure 7.17 Consumer energy resource complaints to EWON



Source: EWON, *EWON insights* - multiple editions, 2021 to 2025

EWON's submission highlighted that some customers are not realising expected benefits from CER due to:

- smart meter issues (estimated bills, billing delays, difficulties accessing data)
- limited transparency on the benefits from participating in VPPs
- customers may not have clear information on how the VPP operator will control CER and other large appliances
- jurisdictional gaps, where some CER issues arise from third-party sales and installations or from CER services provided by retailers through separate legal entities.[352]

EWON noted these factors can make it difficult to identify VPP-related complaints, which may limit the number of CER issues recorded by EWON.[353]

EWON submitted that complaints about batteries and VPPs are often complex as they involve the sale and installation of CER, which may be bundled with VPP contracts, and may include finance.[354] However, the external dispute resolution (EDR) model is based on service providers being members of EWON's scheme. As a result, EWON cannot resolve complaints about third party sales and CER installations.[f, 355]

Further, some energy retailers structure their business so that energy and CER services are provided by different legal entities. This means EWON cannot always address a customer complaint involving the sale of CER and behind-the-meter services – even when these services are offered under a single brand.[356]

The NSW Consumer Energy Strategy includes an action (Action 25) to conduct public consultation to expand EWON's jurisdiction to new energy services, such as VPPs and demand response programs. We consider this is a positive action and support the expansion of EWON's jurisdiction to ensure consumers have access to external dispute resolution for CER, regardless of who provides the services or the legal structure of the entity involved in the sale or installation.[357]

Findings

13. There is often no dispute resolution process for bundled energy services which can involve a retail contract, third-party consumer energy resources, financing, and a virtual power plant.

[f] This is not a new issue. For example, EWON's submission to our 2023-24 Energy Market Monitoring Report detailed around 3 quarters of CER related complaints are from customers that had purchased battery storage from a third party (as opposed to an energy retailer). However, EWON is unable to deal with complaints about third party sales and installations because the relevant companies are not required to be members of EWON (as they are not an authorised retailers).

Chapter 8

Energy affordability, hardship and complaints

Chapter summary

- In 2025, NSW households ranked the cost of electricity as the third most concerning issue, after the 'cost of living' and the 'economy'. 83% of households said they are 'quite concerned' or 'extremely concerned'.
- Based on indicators developed by ECA, around one in 5 households in NSW are vulnerable to, or experiencing, some form of energy hardship. This varies by distribution network – one in 4 households in the Endeavour Energy distribution network reported energy hardship, compared to one in 7 households in the Ausgrid distribution network.
- Some households in NSW receiving government income support face very high energy cost burdens, with electricity bills exceeding 10% of income, even after accounting for rebates.
- Energy rebate uptake has improved, but many households still miss out. Over 2023-24 around 470,000 households in NSW that were eligible for a rebate did not receive it. The impact of missing out on rebates is significant. For example, over 2023-24, together the average NSW Government rebate amount, and the National Energy Bill Relief payment were around $800, which was enough to cover just over 40% an average electricity bill for a rebate customer.
- Most energy rebates are fixed amounts that have not changed since 2017-18, despite rising electricity prices. National Energy Bill Relief payments have helped shield households but are scheduled to end in 2025. As a result, reviewing the value and structure of rebate payments is important in the short term.
- Electricity complaints to retailers and EWON were steady from 2023-24 to 2024-25 but remain elevated compared with previous years. Complaints to retailers have risen by two-thirds since 2020-21, and complaints to EWON have nearly doubled.

Several submissions to our Consultation Paper raised concerns about energy affordability and the ongoing challenges households in NSW face due to high energy costs.[358]

The JEC submission called for a renewed focus on energy affordability. It considered that IPART's standard indicators of energy affordability[a] only provide limited insight into the challenges households face.[359] This is partly because the current system relies heavily on self-reporting and households often cope by cutting back on other essentials or borrowing money, which shifts energy payment difficulty elsewhere.[360]

The JEC also suggested that IPART analyse a broader range of energy hardship indicators and, over time, develop a comprehensive measure of energy poverty for market monitoring.[361]

[a] The standard indicators we report on include:
- the number of customers on hardship programs and payment plans
- the number of customers with and level of energy debt
- complaints to retailers and the Ombudsman.

While there are limits on the information we can consider in our role as the Market Monitor, we have expanded our reporting on energy affordability and hardship indicators.

We consider this expanded analysis important given the material rise in retail electricity prices in recent years, broader cost of living pressures and the ongoing rollout of smart meters.[b]

In this chapter we report on:

- household concerns regarding the rising cost of electricity
- energy affordability and indicators of energy hardship in NSW
- the use and value of energy rebates in NSW
- households with energy debt, payments plans and on hardship programs
- electricity complaints to retailers and the Ombudsman.

8.1 The cost of electricity is a major concern for most households

The 2025 CERC survey asked households what issues they are most concerned about. Households in NSW ranked the cost of electricity as their third-largest concern (Figure 8.1). Eighty-three percent of households in NSW said they were 'extremely concerned' or 'quite concerned' about the cost of electricity.[362] 'The only issues that rated higher were the 'cost of living' and 'economy'.[c]

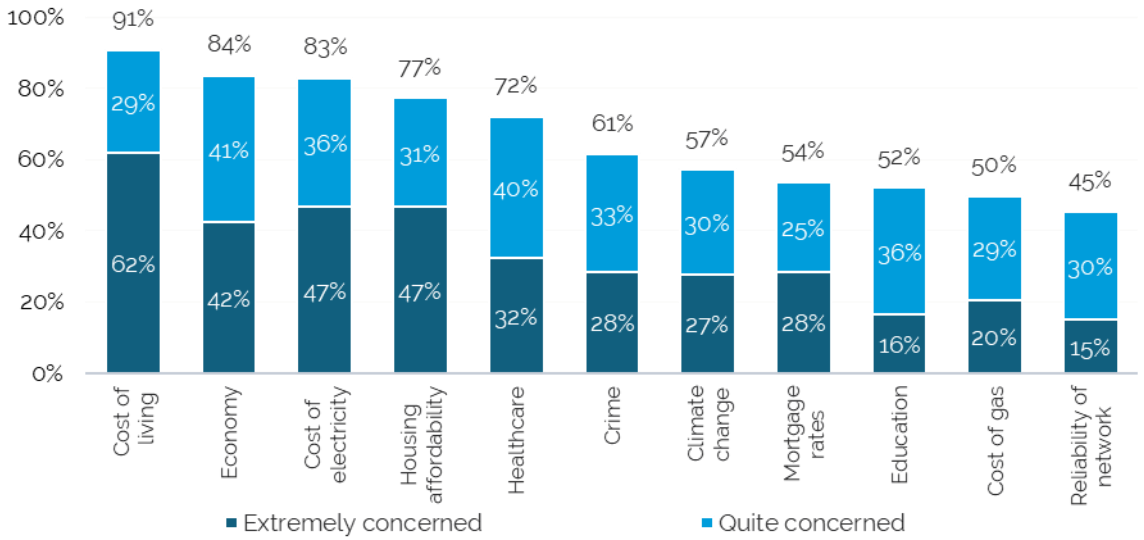
[b] Smart meters enable cost-reflective tariff structures, including time-of-use and demand tariffs. While these tariffs can result in savings for households who shift their electricity usage to off-peak periods, those with high usage in peak periods or who do not shift their usage, may have higher electricity bills.

[c] These findings around concerns over the cost of electricity are similar to what we found in our *2023-24 NSW Retail Electricity Report*. Last year we found:

- electricity was the reported as the bill that most households in NSW were concerned about
- over 50% of households were concerned that electricity and gas will become unaffordable for them in the next 3 years.

Source: IPART, *Monitoring the NSW retail electricity market – 2023-24*, 30 November 2024, p 162

Figure 8.1 Issues that households in NSW are most concerned about, 2025



Notes: Households were asked to respond whether they are 'not concerned at all', 'slightly concerned', 'quite concerned' or 'extremely concerned' about each topic.
Responses are for NSW households only. N = 660.
The figures above each bar show the proportion of responses from NSW households that responded either 'extremely concerned' or 'quite concerned'.
These results in these charts differ slightly to those reported in the Topline Data tables. This is because we have filtered out respondents that had missing data in key variables including bill amounts and incomes.
Source: IPART analysis of Energy Consumers Australia, *June 2025 Household raw survey data*, June 2025

8.2 One in 5 NSW households are vulnerable to or experiencing energy hardship

In July 2025, ECA published research on understanding and measuring energy hardship. The research explained that while the *National Energy Equity Framework* defines energy hardship and gives initial guidance on how to measure it, there is no shared or practical approach in Australia to measure and track its scale.[d,363]

ECA has developed 3 indicators of energy hardship that can be assessed using consumer survey data (CERC data). These indicators are explained in Box 8.1 below.

Box 8.1 ECA measures of energy hardship

Drawing on international frameworks and the National Energy Equity Framework, ECA has developed 3 indicators to estimate the extent of energy hardship and track this over time.[e] The indicators are:

[d] The *National Energy Equity Framework* defines a household as being in energy hardship when it is unable to afford and/or use energy services in the home to live a comfortable and healthy life.

[e] The ECA research detailed that its indicators are broadly aligned with those recommended in the *National Energy Equity Framework*, including action-based indicators (such as reducing energy use to cope) and situation-based indicators (such as difficulty paying bills or thermal discomfort).

Box 8.1 ECA measures of energy hardship

- **Spending more than 6% of income on energy bills**: households that spend more than 6% of their income on energy were flagged as indicative of being vulnerable to, or experiencing, energy hardship.[f]
- **Difficulty paying energy bills**: based on responses to the question 'in the last 6 months how easy or difficult has it been to pay your electricity or gas bill?' Households selecting 'very difficult' were considered at risk.
- **Financial stress and avoiding heating and cooling**: a composite indicator based on 2 questions: whether respondents describe their financial situation as 'having a lot of difficulty covering basic living expenses and paying bills', and whether they self-report avoiding heating and cooling to save money.

ECA identified a household as vulnerable to, or experiencing, energy hardship if they met at least one of these indicators. While each measure has limitations (e.g. low energy expenditure may not reflect affordability) combining multiple indicators provides a more accurate picture of household experiences and challenges.

Source: Energy Consumers Australia, *Understanding and Measuring Energy Hardship in Australia*, 28 July 2025

ECA found that nearly 1 in 5 households in Australia reported at least one of these indicators of energy hardship. However, there was limited overlap between the spending-based and experience-based indicators, reflecting the multi-dimensional nature of energy hardship.[364]

In the section below, we report on these indicators for households in NSW, and for each DNSP region.

[f] The ECA research also explained that expenditure (or energy bill to income metrics) vary across countries. For example, in the UK a household is considered energy poor if it spends more than 10% of income on energy. In the US, the US Department of Energy uses a 6% threshold. While the ECA adopted the 6% threshold in their research, we have reported both the 6% and 10% thresholds in the analysis below.

Table 8.1 Indicators of energy hardship, NSW and Australia-wide, 2025

	Australia	NSW	Ausgrid	Endeavour Energy	Essential Energy
Indicator 1 – Spending more than 6% of income on energy bills	11.2%	10.6%	5.2%	15.1%	14.7%
Spending more than 10% of income on energy bills	4.2%	3.4%	2.5%	4.7%	1.6%
Indicator 2 – responding 'Very difficult to pay energy bills'	7.8%	8.8%	6.7%	11.1%	6.5%
Indicator 3 – indicating financial stress and avoiding heating / cooling	7.3%	6.8%	4.2%	9.2%	4.4%
One or more indicators	**19.4%**	**19.3%**	**13.9%**	**25.0%**	**18.9%**
2 or more indicators	5.6%	5.6%	2.2%	8.9%	5.5%
3 indicators	1.3%	1.3%	0%	1.5%	1.2%
n	3,085	660	340	217	75

Notes: The ECA considered a household is in energy hardship if they reported 1 or more of the indicators.
The sample size for the DNSP region results, in particular Essential Energy is small. This limits the strength of insights that can be drawn from the analysis.
n is the number of respondents in each region.
Source: IPART analysis of Energy Consumers Australia, *June 2025 Household* raw survey data, accessed 15 October 2025

Similar to the Australia-wide results, around one in 5 households in NSW show at least one indicator of energy hardship. This highlights energy hardship is not a marginal issue.

Within NSW there are notable differences in electricity bills depending on the distribution network a household is in. This reflects several factors including differing network costs which are passed through in retail pricing, and differing climate zones (and dwelling structures) that affect how much electricity households use.

This variation in electricity bills is clear across the distribution networks. For example, 1 in 4 households in the Endeavour Energy distribution network reported at least 1 indicator of energy hardship, compared with only 1 in 7 households in the Ausgrid distribution network.

Findings

14. Based on indicators of energy hardship developed by Energy Consumers Australia, rural and regional households are more likely to be vulnerable to or experience energy hardship, compared to households in metropolitan areas.

The ECA research highlighted several limitations in their analysis. For example:

- household income and energy bills were self-reported

- annualised energy costs were based on the most recent bill, which may not reflect seasonal fluctuations.[365]

Given these limitations, we have undertaken further analysis to understand:

- bill-to-income ratios for households on different Government support payments
- bill-to-income ratios across Local Government Areas (LGAs).

8.2.1 Households on government support payments face higher energy cost burdens

The ECA research found that households receiving government income support payments are more likely to be vulnerable to, or experiencing, energy hardship.

Across Australia, just over one in 3 recipients of government income support payments showed one or more indicators of energy hardship.[366] In NSW, the share was slightly lower; about 30% of households receiving government income support showed at least one indicator of hardship.[367]

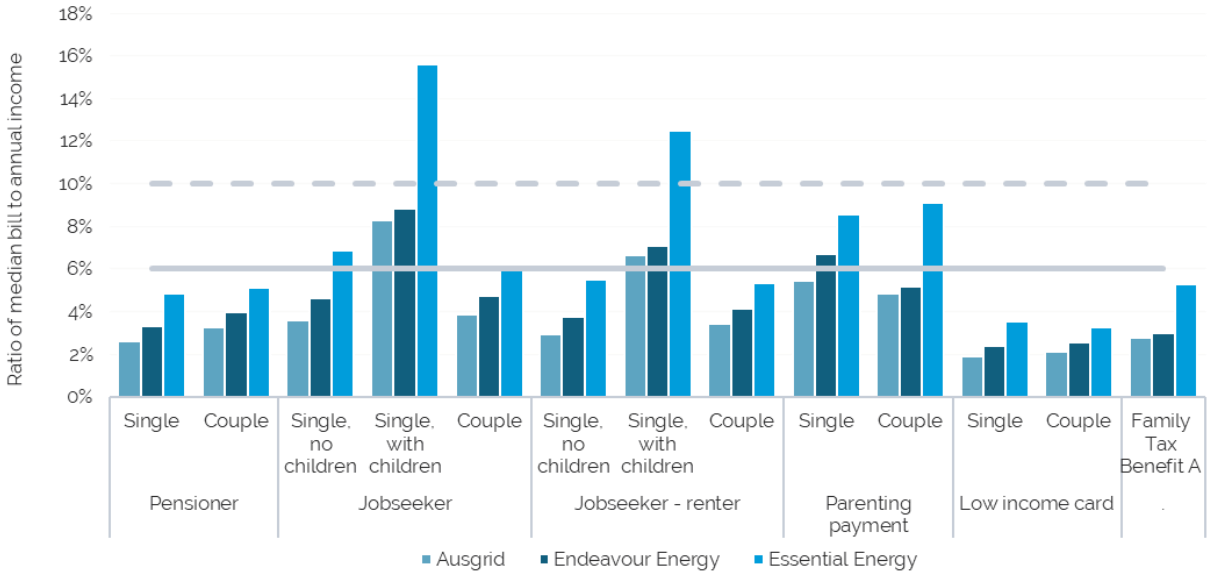
To better understand the impact of rising energy prices on these households, we calculated median electricity bills for 2024-25 for different size households and compared these to the annual income for different income support payment groups.[g]

As shown in Figure 8.2, larger households (3 or more people), and households in the Essential Energy distribution network have median bill-to-income ratios above the 6% threshold suggested by the ECA. Single parents with children on the JobSeeker payment are also estimated to have annual bill-to-income ratios above 10%.

This analysis includes NSW Government energy rebates and the 2024-25 National Energy Bill Relief (NEBR) rebate of $300. With rebates, some households are likely to continue needing additional support to manage rising electricity prices. This will be particularly important as the NEBR rebate payments conclude at the end of 2025.

[g] For select income support recipient groups (pensioners, Jobseeker payment recipients, Parenting payment, Low income card holders, and Family tax benefit A), we estimated the annual income they would receive over 2024-25 from income support payments (we assume this is their only source of income). We estimated the number of members in the household for each income support recipient group. These ranged from 1 person (for example, a single pensioner) to 3 people (for example, couple recipients of the parenting payment)). We then used the electricity and gas benchmarks developed by Frontier Economics for the AER, to estimate the annual household electricity usage for each income support recipient group. We calculated the median market offer for September 2024 for each distribution network. Using the median market offer daily supply charge and usage charge we calculated the estimated annual electricity bill. We assumed these households would receive rebates including the low-income household rebate, where applicable the family energy rebate (part) and the 2024-25 National Energy Bill Relief payment of $300. We then divided the estimated annual electricity bill, less rebates, by the annual income.

Figure 8.2 Estimated median annual electricity bill as a share of annual income support payments, by income category, September 2024



Notes: The horizontal axis shows the government income support category. The vertical axis shows the ratio of the median annual electricity bill in September, compared to the annual income from government support payments for that category in September 2024. The median electricity bill varies depending on estimated household size and distribution network.
The solid grey line represents the 6% bill-to-income threshold suggested by the ECA. The dashed grey line represents the 10% bill-to-income threshold used in the United Kingdom to assess whether a household is energy poor.
This analysis considers rebate payments that households in NSW are likely to receive, including the Low Income Household Rebate, Family Energy Rebate and the 2024-25 NEBR payment.
Many households in NSW will be on electricity offers that are higher than the median market offer. As a result, this represents a conservative estimate of bill-to-income ratios.
Source: IPART analysis of Energy Made Easy data, AER, *Electricity and Gas consumption benchmarks for residential customers 2020*, 11 June 2020

Findings

15. Across several categories of income support payment recipients, we found households in the Endeavour Energy and Essential Energy distribution networks would spend a higher proportion of income on the median electricity bill, compared to the Ausgrid distribution network. This was due to both higher estimated usage levels and to a lesser extent higher median electricity prices in the Endeavour Energy and Essential Energy distribution networks.

8.2.2 How much income households in different areas spend on electricity bills

Table 8.1 shows there is significant variation in the proportion of households that spend more than 6% of income on energy bills, depending on the distribution network. As noted above, the findings in Table 8.1 are based on consumer survey responses and ECA has explained there are limitations with the data.

Given these limitations, we have also analysed data to understand how much households spend across different local government areas (LGAs). This is new analysis that we have not conducted in past years.

Electricity use varies across LGAs due to differences in dwelling types and climate zones. In the analysis below, we have used average electricity usage data for each LGA in the Ausgrid and Essential Energy distribution networks to calculate the median annual bills.[h] We have then compared these median bills to the 25th percentile and median income levels for each LGA.

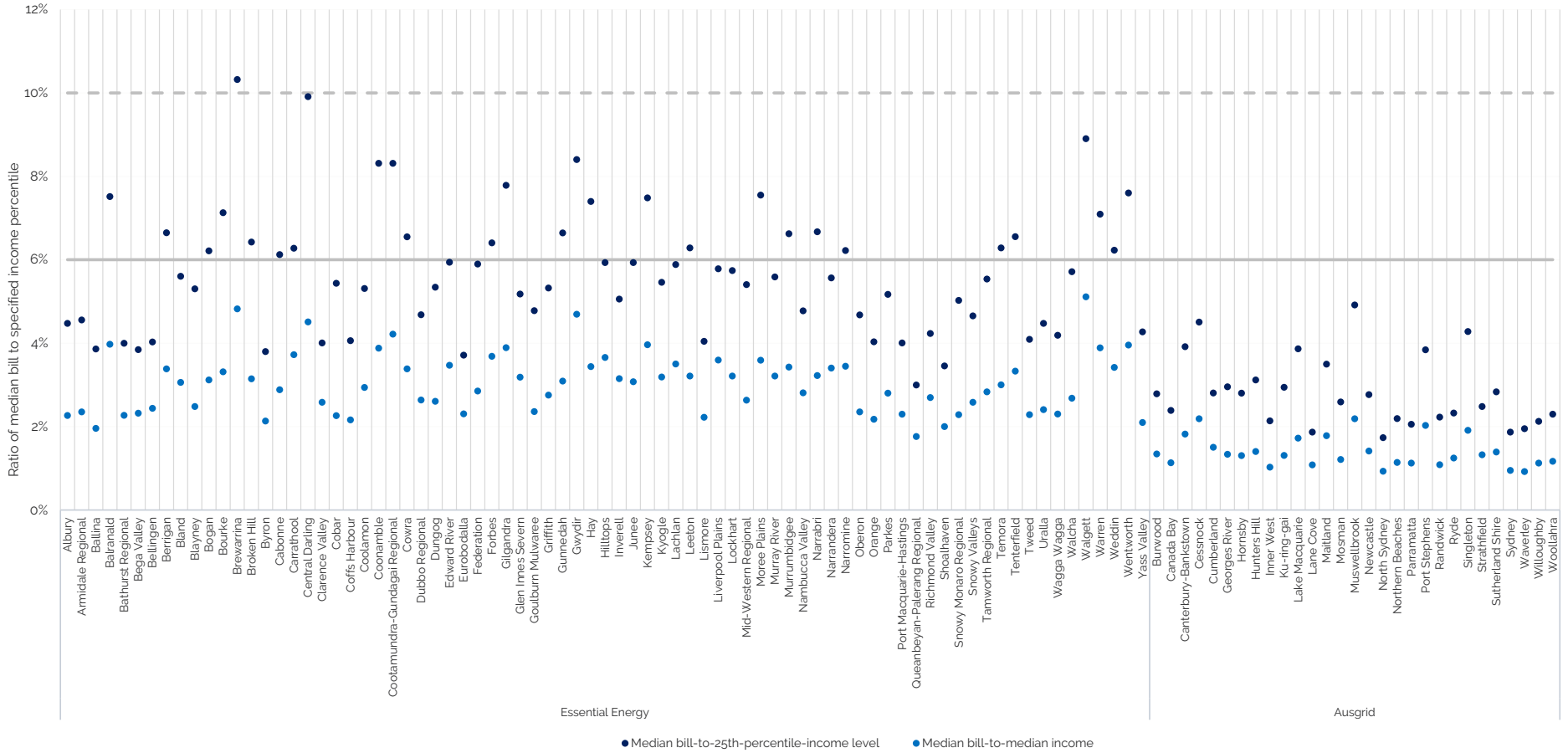
This analysis incorporates the 2024-25 National Energy Bill Relief payment of $300, which we subtracted off the median electricity bill. The results are shown in Figure 8.3.

Across all LGAs in the Ausgrid and Essential Energy distribution networks, the ratio of the median annual bill to median annual income was below 6%.

At the 25th percentile income level, 38% of LGAs in the Essential Energy distribution network had median bill-to-income ratios greater than 6%. In the Ausgrid network, no LGAs had median bill-to-25th percentile-income ratio greater than 6%.

[h] We used average residential (household) electricity consumption data for each LGA. This data is published by Ausgrid and Essential Energy. Endeavour Energy does not publish electricity consumption data at the LGA level.
Estimated annual bills were calculated based on the June 2024 median time-of-use market offer for each LGA. This median market offer was based on the usage average usage level for each LGA and exclude controlled loads, solar exports and FiTs.
The consumption data relates to the 2023-24 financial year. However, residential usage across LGAs is relatively consistent year-on-year. As a result, we used the 2023-24 consumption level to calculate estimated annual bills for 2024-25.

Figure 8.3 Proportion of income spent on electricity bills, by LGA, 2024-25



Notes: The median bill includes the 2024-25 National Energy Bill Relief payment of $300 for households in NSW.
The solid grey line is the 6% bill-to-income threshold suggested by the ECA. The dashed grey line shows 10% bill-to-income threshold used in the United Kingdom to assess if a household is energy poor.
Data on average electricity usage is not available for LGAs in the Endeavour Energy network.
Source: IPART analysis based on Energy Made Easy data; Ausgrid, *Average electricity consumption by LGA FY 2024*, 8 January 2025; Essential Energy, *LGA consumption data*, 2023-24

8.3 Energy debt, payment plans and hardship programs

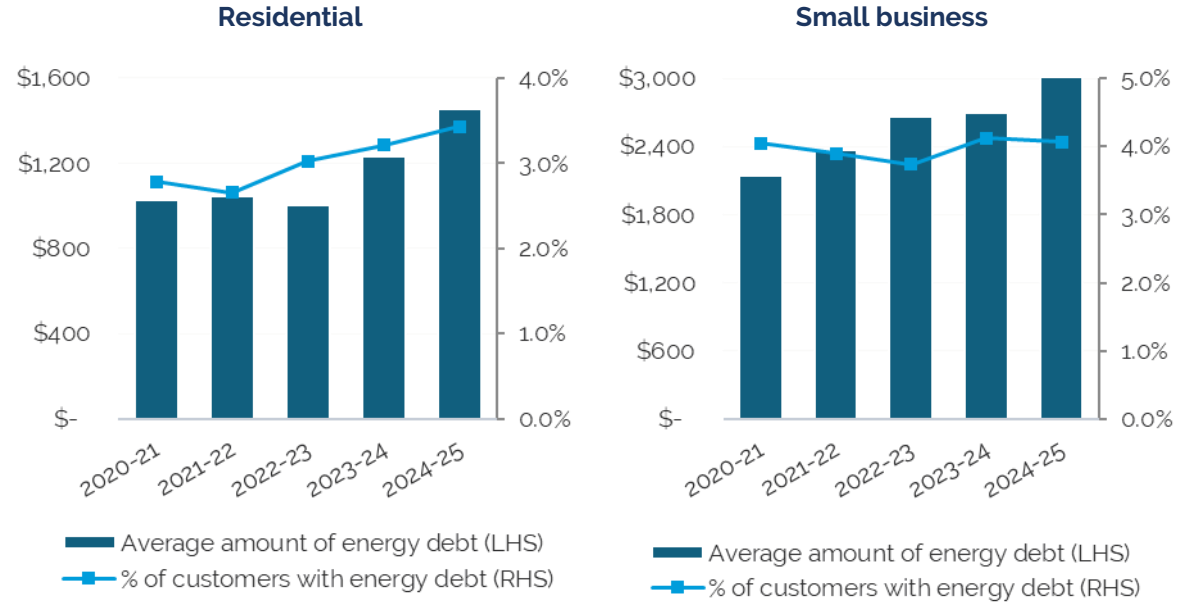
8.3.1 Energy debt in NSW continues to rise

Energy debt refers to electricity and gas charges that are outstanding for 90 days or more.[a, 368] The proportion of customers in energy debt and the average level of energy debt provide an insight into the extent to which customers are experiencing difficulty paying their energy bills and whether retailers are effectively assisting their customers to meet their debt repayments.[369]

As of 31 March 2025, 3.4% of residential customers in NSW had energy debt, an increase of 20 basis points from 30 June 2024. The proportion of residential customers with energy debt has risen each year since 2021-22. The average energy debt level has grown by 42% (nominal terms) since 2020-21 (Figure 8.4).

For small businesses, 4.1% had energy debt as of 31 March 2025. While the proportion of small businesses in debt has remained steady, the average value of energy debt has increased by 41% since 2020-21, consistent with the trend among residential customers (Figure 8.4).

Figure 8.4 Percentage of NSW customers with energy debt and average energy debt



Notes: the average amount of energy debt includes both electricity and gas debt.
Data for 2024-25 is as of 31 March 2025. Data for other years, is as of 30 June of the relevant financial year.
Source: AER, *Schedule 3 – Quarter 3 2024-25 Retail Performance Data*, 27 June 2025; AER, *Schedule 3 – Quarter 3 2021-22 Retail Performance Data*, 30 November 2022

[a] The number of customers repaying debt excludes customers on hardship programs and non-active debts that retailers may still have on record.

8.3.2 The share of households on payment plans has remained stable

Payment plans allow customers to repay energy debt in affordable, regular instalments. This support option can be provided outside of hardship programs.[370]

Retailers must offer a payment plan to a residential customer who informs the retailer that they are experiencing payment difficulties or where the retailer otherwise believes the customer may be experiencing payment difficulties.[371]

In NSW, 1.6% of residential customers were on payment plans as of 31 March 2025. This was unchanged from the percentage of customers on payment plans as of 30 June 2024. Over the past 5 years the proportion of customers on payment plans has risen 24 basis points.[372]

8.3.3 The number of customers on hardship programs has fallen

All energy retailers in NSW are required to have programs in place to help customers facing financial hardship. These programs aim to identify residential customers experiencing payment difficulties and to help them to better manage their energy bills over time.[373]

Customers may enter a hardship program through one of 3 ways:

- **self-identification:** the customer requests to join their retailer's program. This accounted for 63% of entries into NSW hardship programs in Q3 2024-25
- **retailer identification:** the retailer identifies and refers the customer to their hardship program. This accounted for around 36% of entries
- **financial counsellor referral:** a financial counsellor refers the customer to a hardship program. This accounted for around 1% of entries.[374]

From 30 June 2024 to 31 March 2025, the number of electricity customers in NSW on hardship programs fell by 11% from around 70,500 to 63,000 customers. As of 31 March 2025, this represented 1.8% of electricity customers in NSW, down from 2% as of 30 June 2024 (Figure 8.5).

While this decline is positive, the number of residential customers on hardship programs has doubled over the past 5 years. Participation rose over 2022-23 and 2023-24, as customers faced large price increases and broader cost of living challenges.[b]

Further, since 2022-23, both the average debt on entry and the average debt level of hardship program customers have also increased each year (Figure 8.6).

[b] AER data shows the increase in the proportion of customers on hardship programs in recent years has occurred across most regions in the NEM.

Figure 8.5 Residential customers in NSW on hardship programs

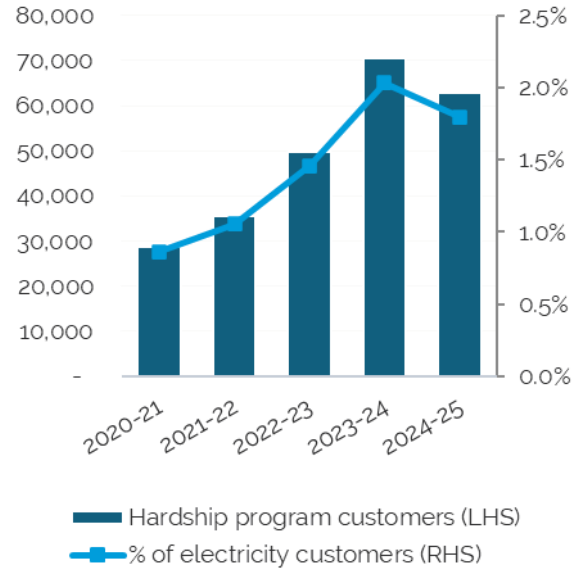
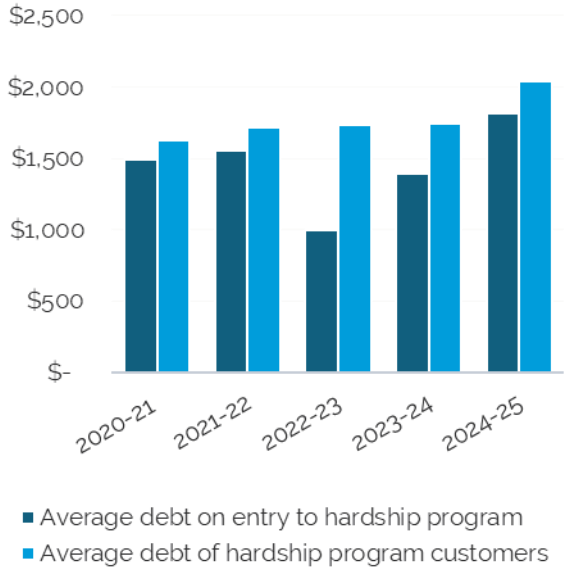


Figure 8.6 Average debt for hardship program customers in NSW



Data for 2024-25 is as of 31 March 2025. Data for other years, is as of 30 June of the relevant financial year.
Source: AER, *Schedule 4 - Quarter 2 2024–25 retail performance data*, 27 June 2025

Customers on hardship programs and payment plans pay higher bills

In NSW, customers on hardship and payment plans have materially higher median electricity bills than general customers[c] (Figure 8.7).

Over the 2023-24 financial year, the median annual bill was $2,185 for a hardship customer and $2,711 for a payment plan customer (without concessions). These were 22% and 52% higher, respectively, than the median bill paid by general customers in NSW.[375]

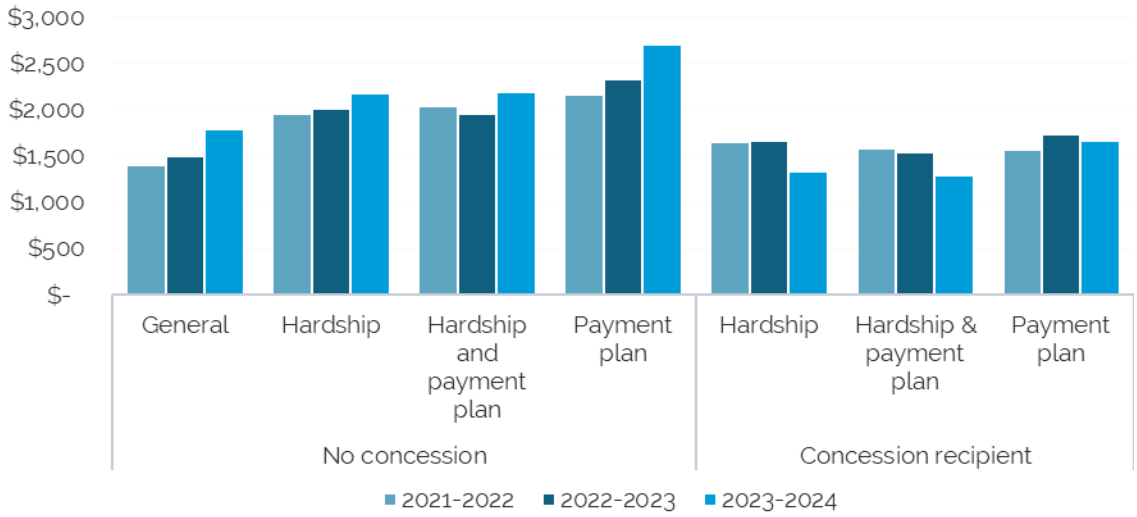
The main driver of these higher bills was higher electricity usage. Over 2023-24, the median usage among hardship program and payment plan customers was between 70-85% higher than usage by general customers.[376]

Hardship program and payment plan customers who received concessions have significantly lower bills. In 2023-24, the median bill was $1,335 for hardship program customers and $1,670 for payment plan customers with a concession. Around 55% of hardship customers in NSW received an energy concession over the same period.[377]

These lower bills reflected the impact of NSW Government energy rebates and the National Energy Bill Relief rebate of $500 that was available to eligible households in 2023-24.[378]

[c] General customers are those that are not on a hardship program or payment plan.

Figure 8.7 Median annual bill for residential customer groups in NSW



Source: ACCC, *Inquiry into the National Electricity Market – Appendix E: Supplementary spreadsheet with billing data and figures,* July 2025, Tab: 2. Residential Bills

While the annual bills for residential customers in NSW on hardship programs and payment plans are notably higher than those of general customers, the AEMC has introduced a recent rule change to ensure that hardship customers are not on plans with higher prices. This rule change is discussed in Box 8.2 below.

Box 8.2 AEMC rule change – assisting hardship customers

In July 2024, the Energy and Climate Change Ministerial Council (ECMC) proposed a rule change to help customers facing hardship. This proposal built on recommendations from the *AER's Game Changer Report* and highlighted that hardship customers face barriers to engaging with the energy markets and moving to the best offer available for them. These barriers can result in hardship customers remaining on higher cost plans, making it more difficult to reduce debt and manage ongoing energy use.

On 25 June 2025, the AEMC made a preferred rule change to ensure hardship customers pay no more than the best offer available for them. The rule change has 3 components:

- **new principle-based obligation**: requiring retailers to make sure hardship customers who are not on the retailer's deemed better offer are no worse off than if they were on that offer
- **clearer information requirement**: requiring retailers to tell hardship customers if a better offer is available when they join a hardship program, and to keep them informed when a better offer becomes available

Box 8.2 AEMC rule change – assisting hardship customers

- **new hardship program indicators**: requiring the AER to include new hardship indicators in its *Performance Reporting Procedures and Guidelines.* Retailers will report this data to the AER, who will publish the results in its annual retail market reports.

This rule commences on 30 December 2026.

Source: The Hon. Chris Bowen, *Rule change proposal, Assisting Hardship Customers*, 19 July 2024; AEMC, *Final Determination: Assisting Hardship Customers*, 25 June 2025

8.4 Rebates and assistance for consumers in NSW

The NSW Government provides a range of energy rebates to help lower-income households pay for electricity and gas. The rebates available in 2024-25 are listed in Table 8.2.

Service NSW also operates an in-person Savings Finder service to help customers access savings and rebates that match their individual circumstances.

Table 8.2 NSW Government energy rebates - 2024-25

Program	Eligibility	Annual value for retail customers ($)	Annual value for embedded network and LPG customers ($)	Customer application process
Low Income Household Rebate	Holds a current card from the following: • Pensioner Concession • Health Care • Veteran Gold marked with either 'War Widow', 'War Widower pension', 'Totally and Permanently Incapacitated' or 'Disability Pension'.	$285	$313.50	Retail customers apply directly with authorised energy retailer. Embedded network and LPG customers online at the Service NSW website.
Gas Rebate	As above	$110	$121	Retail customers apply directly with authorised energy retailer. Embedded network and LPG customers online at the Service NSW website.
Medical Energy Rebate	As above and the cardholder or an individual in the household is unable to self-regulate body temperature.	$285	$313.50	Retail customers apply directly with authorised energy retailer.

Program	Eligibility	Annual value for retail customers ($)	Annual value for embedded network and LPG customers ($)	Customer application process
				Embedded network and LPG customers online at the Service NSW website.
Family Energy Rebate	Part rate - Receives the Family Tax Benefit A or B and eligible for the Low-Income Household Rebate.	$20	$22	Retail customers apply online on the Service NSW website. Embedded network and LPG customers apply by post.
	Full rate - Receives the Family Tax Benefit A or B and is not eligible for the Low-Income Household Rebate.	$200	$198	
Seniors Energy Rebate	Holds a current Commonwealth Seniors Health Card issued by Services Australia or the DVA.	$200	$200	Apply with Service NSW.
Life Support Rebate	Uses approved energy-intensive life support equipment.	Up to $1,343.20 (rates vary according to equipment)	N/A	Retail customers apply directly with authorised energy retailer. Embedded network and LPG customers online at the Service NSW website.
Energy Accounts Payment Assistance	Experiencing a short-term financial crisis or emergency.	Up to $500 for electricity and $500 for gas, twice per financial year.	N/A	Retail customers apply online on the Service NSW website over the phone.

Notes: In addition to NSW Government energy rebates, households and small businesses in NSW have also received rebates through the National Energy Bill Relief (NEBR) program.
Source: NSW Department of Climate Change, Energy, the Environment and Water, *NSW Energy Social Programs – Annual Report 2023-24*, May 2025, p 4

In 2023-24, the NEBR program provided up to $500 for eligible residential customers[d] (in addition to NSW Government rebates), with payments made quarterly.[379]

In 2024-25, the NEBR program provided all households with $300 in energy rebates,[e] while eligible small businesses received $325, also paid in quarterly instalments.

NEBR payments have been extended until the end of 2025. From 1 July 2025 to 31 December 2025, households and eligible small businesses in NSW will receive a further $150 in energy bill rebates[380]

[d] Eligible households included those receiving or holding a Pensioner Concession Card, Health Care Card, DVA Gold Card, Commonwealth Seniors Health Card, as well as recipients of Family Tax Benefit A and B or the Carer Allowance. Eligibility also extended to households already receiving an existing energy concession, including the Life Support Rebate or Embedded Network Rebate.

[e] Embedded network customers received the $300 NEBR rebate as a lump sum credit, paid directly to a nominated bank account.

8.4.1 The uptake of rebates has increased, but many households still miss out

In 2023-24, across all NSW Government rebates, the uptake rate by eligible customers was 61%. This was up from 58% in 2022-23 and 55% in 2021-22. Over 2023-24, uptake of the NEBR rebate was higher at 66% (Figure 8.8).

In recent years the Seniors Energy Rebate has seen the largest growth in uptake. Uptake by eligible customers increased from 26% in 2020-21 to 49% in 2023-24. Over the same period, uptake of the Low-Income Household Rebate (the rebate used by the largest number of households) also rose by 5 percentage points from 64% to 69% (Figure 8.9).

The rise in rebate uptake in recent years has likely been driven by:

- ongoing cost of living pressures, including rising electricity and gas prices, prompting more households to seek financial assistance, and
- increased awareness through NEBR program advocacy. For example, in Q1 of 2023-24, households not already receiving an energy rebate, but holding a Low-Income Health Card or Veteran Gold Card, were contacted by Services Australia or the Department of Veteran Affairs to inform them how to apply for the NEBR.[381]

While uptake has improved, a significant proportion of eligible households in NSW still do not receive rebates. In 2023-24 around:

- 470,000 (or 39%) households eligible for NSW Government energy rebates did not receive a rebate they were eligible for, and
- 527,000 (or 34%) of households eligible for the NEBR rebate did not receive the payment.[382]

The impact of not accessing rebates for households is significant. For example, in 2023-24, the average electricity rebate customer in NSW received $821 in electricity rebates. This would have covered 42% of the average annual electricity bill for a rebate customer.[f, 383]

[f] This is made up of the average annual rebate of $321 in 2023-24 received by NSW electricity rebate customers, plus the $500 NEBR rebate. The average annual electricity bill for rebate customers on market offers in 2023-24 was $1920.

Figure 8.8 Proportion of customers entitled to a rebate and uptake

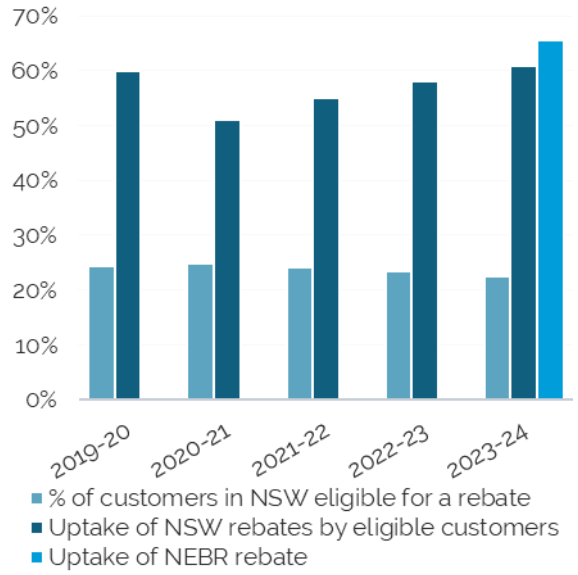
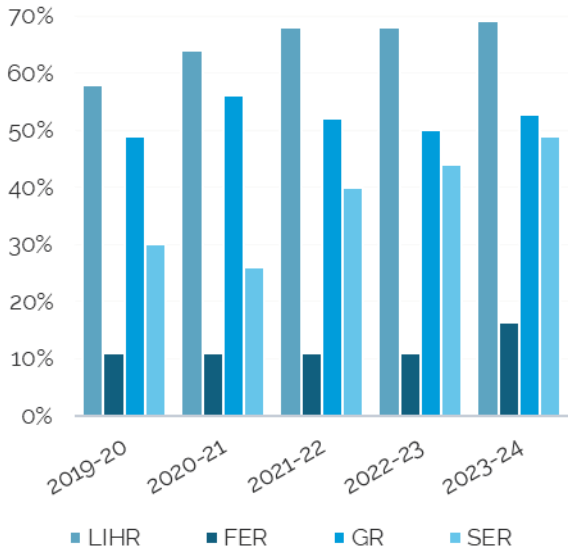


Figure 8.9 Uptake of NSW rebates by eligible customers



a. LIHR is the Low-Income Household Rebate, FER is the Family Energy Rebate, GR is the Gas Rebate and SER is the Seniors Energy Rebate. Data is not available for the uptake level by eligible customers for other rebate types in NSW.

Source: NSW Government, *Energy Social Programs dashboard and reports*, accessed 15 October 2025; NSW Government, *NSW Energy Social Programs Annual Report 2023-24*, May 2025, p 7; AER, *Schedule 3 - Quarter 2 2024–25 retail performance data*, 27 June 2025

The AEMC has recently made a rule change that aims to improve the uptake of rebates (or concessions). This rule change is detailed in Box 8.3 below.

Box 8.3 Improving the application of concessions to bills

On 25 September 2025, the AEMC made a rule change to improve consumer awareness of, and access to, support available for energy bills. The rule change will take effect on 1 July 2026.

When a consumer signs up for an energy plan or switches to a new contract, retailers will be required to:

- Provide jurisdiction-specific information on concessions, rebates and relief schemes, to help consumers understand what is available and how to access it.
- Ask consumers about their eligibility for support, prompting consideration and voluntary disclosure of relevant information.

The AEMC found that consumers face a range of barriers to accessing concessions, including a lack of awareness, communication challenges, stigma around seeking help, time constraints and verification issues.

While this rule change will help increase awareness of available rebates, consumers must still proactively inform their retailer that they are eligible.

Box 8.3 Improving the application of concessions to bills

The rule change proposal originated from the AER's *Game Changer Report*, which recommended automating the application of concessions and rebates.

The AEMC supports concessions and rebates being automatically applied to energy accounts and recommended that DCCEEW, Services Australia and state and territory governments work together to determination the next steps to enable this.

Source: AEMC, *Information Sheet: Rule Change – Improving the application of concessions to bills*, 25 September 2025

8.4.2 The value of NSW Government rebates has remained stable as electricity prices have risen

The JEC submission detailed that the value of rebates has been eroded in recent years due to rising electricity prices. On average, NSW rebates covered 20.3% of energy bills in 2020-21, falling to 15.4% in 2023-24.[384]

Most energy rebates in NSW are delivered as fixed (flat) payments, and most rebate values have not changed since 2017-18 (Figure 8.10). However, data from the NSW Social Energy Programs Dashboard shows the average electricity bill for rebate customers increased by 24%-26% between 2022-23 and 2023-24, depending on the distribution network (Figure 8.11).

Figure 8.10 Value of NSW energy rebates

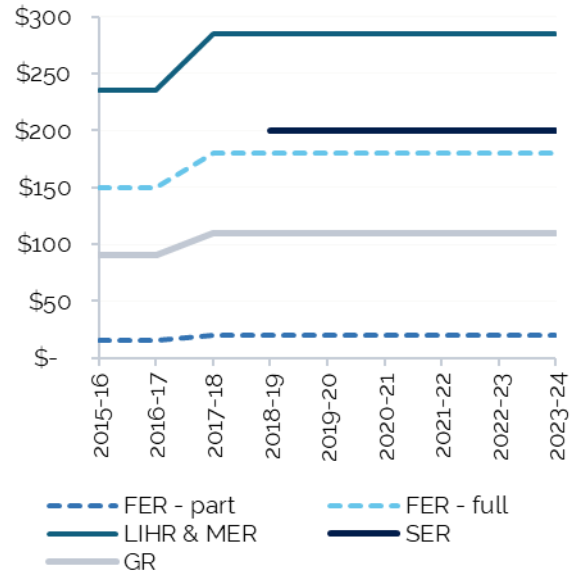
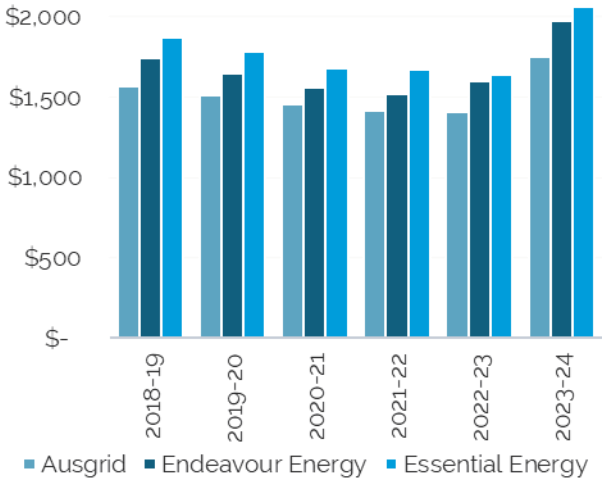


Figure 8.11 NSW average annual electricity bill for rebate customers



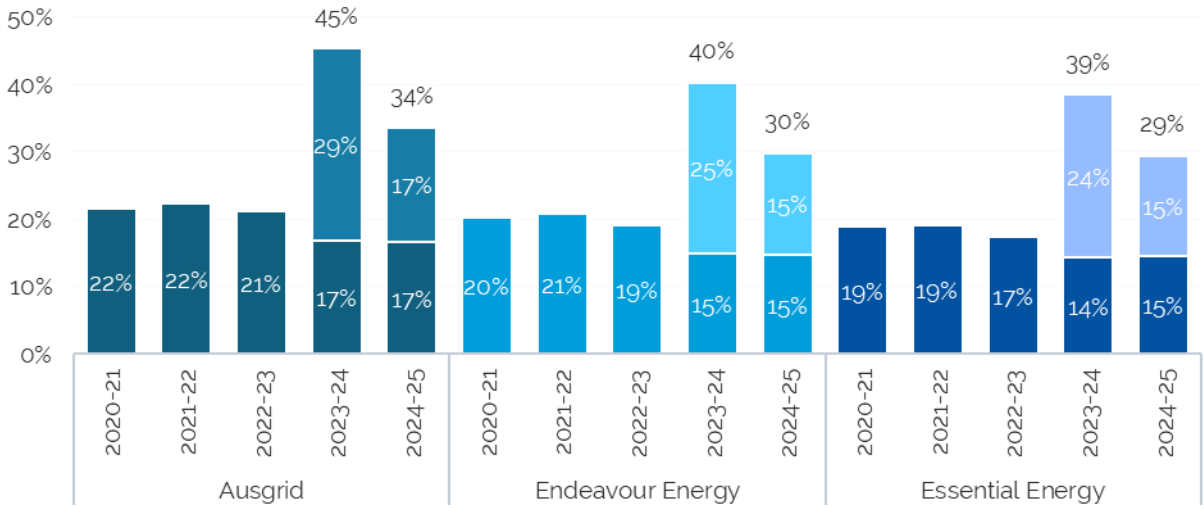
Notes: LIHR is the Low Income Household Rebate, FER is the Family Energy Rebate, GR is the gas rebate and SER is the Seniors Energy Rebate. Data is not available for the uptake level by eligible customers for other rebate types in NSW. Data on the average annualised bill for NSW rebate recipients is only available from 2018-19 onwards.
Source: NSW Government, *Energy Social Programs dashboard and reports*, accessed 15 October 2025; NSW Government, *Energy Social Programs Annual Reports*, various editions, accessed 10 November 2025; Audit Office of NSW, *Energy rebates for low income households*, 19 September 2017

Many households in NSW have been shielded from the sharp electricity price rises eroding the value of rebates due to NEBR rebates, which are provided in addition to existing NSW Government rebates.

In 2023-24, between 39% and 45% of the average household electricity bill for the average NSW rebate recipients was covered by rebate payments, depending on the distribution network (Figure 8.12).

While data is not yet available for 2024-25, we estimate that around 29% to 34% of average household electricity bill was covered by rebate payments over the year, depending on the distribution network (Figure 8.12).

Figure 8.12 Proportion of the average electricity bill covered by NSW Government rebate payments, by distribution network



Notes: the darker bars show proportion of the average electricity bill in each distribution network for rebate customers covered by the average NSW Government rebate amount received in each distribution network for that financial year.
The shaded stacked bar above for 2023-24 and 2024-25 shows the proportion of the average electricity bill in each distribution network covered by the NEBR rebate for that financial year.
The analysis above shows the results for NSW Government rebate customers only.
Data for 2024-25 is an estimate. Data from the ACCC shows that from Q3 2023 to Q3 2024, the median electricity bill in NSW fell by 2%, without rebates. As a result, we have used the 2023-24 average electricity bill for rebate customers, in each distribution network area, and decreased this by 1%.
For 2024-25, we have assumed rebate customers in each distribution network will receive the same average rebate amount received in 2023-24. In 2023-24 the NEBR payment was $500 for NSW rebate customers and in 2024-25, it was $300 for all households in NSW.
Source: NSW Government, *Energy Social Programs dashboard and reports*, accessed 15 October 2025; IPART analysis; ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025

8.4.3 Reviews have called for reforms to how energy rebates are structured

Over the past decade, several reviews and reports have called for reforms to the structure of energy rebates. These include the:

- Audit Office of NSW review into rebates for low-income households[385]
- ACCC's *Retail Electricity Price Inquiry*[386]
- SACOSS and ACOSS research into *Reforming electricity concessions to better meet need*[387]
- ECA's research into *Understanding and measuring energy hardship*.[388]

These reviews and reports have recommended:

- specifying a measurable outcome so the Government can assess if the level of assistance is sufficient to assist households to meet a specified goal (such as avoiding energy debt, payment difficulty, or disconnection)
- moving from fixed (flat) rebates to bill percentage-based or hybrid-based rebates.[g]

These reviews have highlighted that the current fixed structure of rebates do not account for:

- different household sizes and electricity usage levels
- variations in energy costs across distribution networks
- access to CER, such as solar panels, that lowers bills
- changes in electricity prices over time.

As a result, the current rebate structure creates inequities in the assistance provided. Some households receive significantly more support than they need, while others receive far less.

This is illustrated in Figure 8.13 and Figure 8.14 which shows the proportion of annual electricity bills covered by rebate payments for households of different sizes, with and without solar.[h]

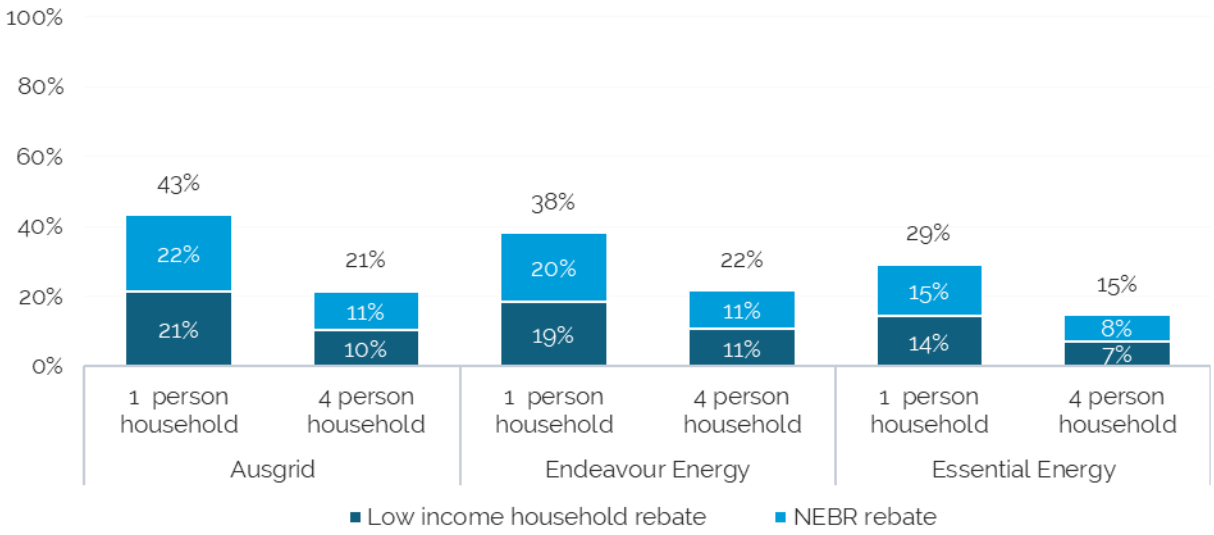
This analysis shows:

- larger households (4-person households) receive a much smaller rebate (as a proportion of the bill) compared to smaller households (one-person households)
- non-solar households have a much smaller proportion of their electricity bills covered by rebates
- customers in the Ausgrid network generally receive the largest proportion of electricity bills covered by rebates, mainly due to lower electricity usage, (and to a smaller extent, lower usage charges).

[g] The ACCC *Retail Electricity Price Inquiry* recommended a hybrid approach to concession payments, combining a fixed dollar amount to offset daily supply charges with a percentage-based discount to offset variable usage charges. Research by SACOSS and ACOSS recommended a percentage-based concession where the rebate is a consistent percentage of the electricity bill, calculated on the total bill amount.
The NSW Audit Office and ECA reports did not propose an alternate rebate structure but recommended reforms to ensure rebates are better targeted and deliver meaningful support to consumers in need.
These reports also made a range of other recommendations to improve outcomes for vulnerable customers. We have not explored these recommendations further as they fall outside the scope of our Market Monitoring role.

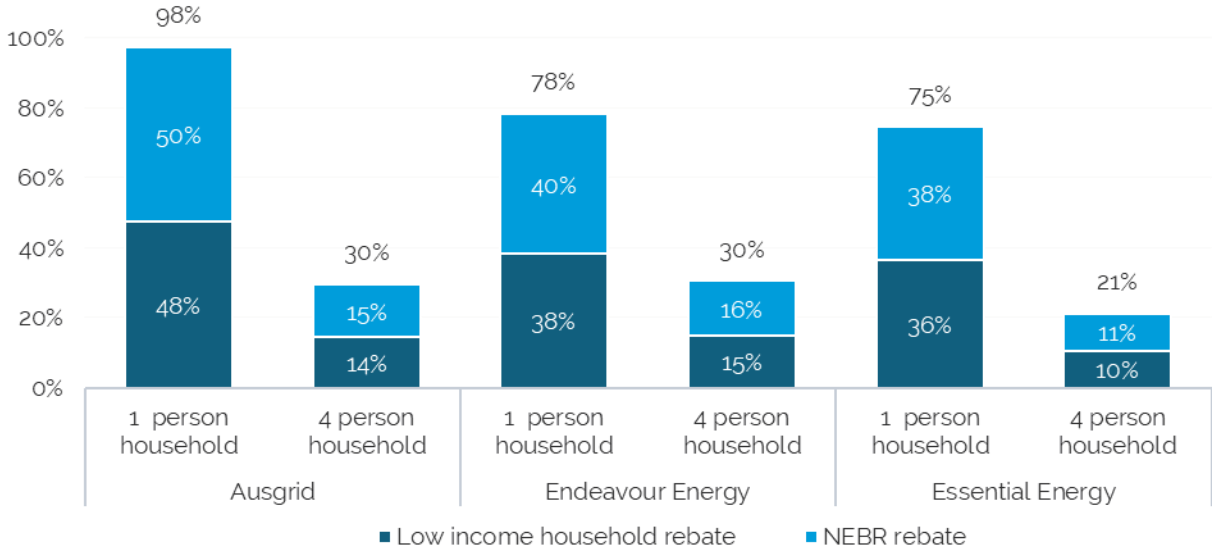
[h] The examples shown in Figure 8.9 and Figure 8.10 are stylised bill examples to illustrate the different levels of support provided under the current rebate structure.

Figure 8.13 Proportion of electricity bills for non-solar customers covered by rebate payments, 2024-25



Notes: Electricity bills were estimated using the median market flat-rate offer for each distribution network in June 2024.
To estimate consumption levels for each household, we used the AER's 2021 *residential electricity consumption benchmarks* for the most commonly occurring climate zone in each distribution network.
The rebates used for this analysis were the low-income household rebate of $285 for 2024-25, and the 2024-25 National Energy Bill Relief rebate of $300.
Source: IPART analysis of Energy Made Easy data, AER, *Electricity and gas consumption benchmarks for residential customers 2020*, 11 June 2020

Figure 8.14 Proportion of electricity bills for solar customers covered by rebate payments, 2024-25



Notes: Electricity bills were estimated using the median market flat-rate offer for each distribution network in June 2024.
To estimate consumption levels for each household, we used the AER's 2021 *residential electricity consumption benchmarks* for the most commonly occurring climate zone in each distribution network. To calculate the bill reduction from solar, we assumed households had a 5kW solar panel system and exported 70% of solar electricity generated. We assumed households received the mid-point of IPART's solar feed-in tariff benchmark range for 2024-25. The reduction in bills from solar considers self-consumption from solar and feed-in tariffs.
The rebates used for this analysis were the low-income Household Rebate of $285 for 2024-25, and the 2024-25 National Energy Bill Relief payment of $300.
Source: IPART analysis of Energy Made Easy data, AER, *Electricity and gas consumption benchmarks for residential customers 2020*, 11 June 2020

Given the material increases in electricity prices in recent years, the growing uptake of CER and ongoing reforms to improve access to rebates, this is an important time for the NSW Government to make reforms to the rebate system.

The NSW Consumer Energy Strategy includes an action (Action 16) to review all NSW energy rebates to streamline existing rebates, improve the customer experience and ensure support reaches customers who need it most. This review is scheduled to commence in 2025.[389]

Findings

16. NSW Government energy rebates have not kept pace with electricity price increases over time and may not be sufficient to protect vulnerable customers from falling into energy hardship. A rebate based on a percentage of the total bill, could result in a more equitable outcome across eligible customers.

8.5 Electricity complaints have stabilised but remain high

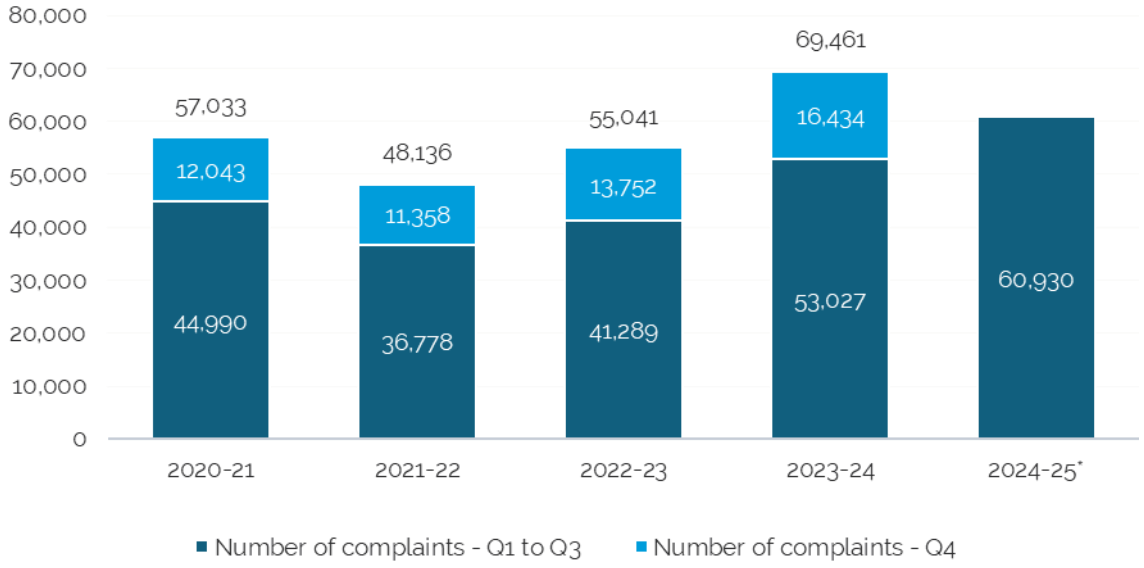
Customers in NSW that have an issue with their electricity service are encouraged in the first instance to lodge a complaint with their retailer. If customers are unable to resolve their complaint with the retailer, or they are not happy with their retailer's response, they can make a complaint to the EWON.

The JEC submission noted the limitations of complaints data, as it only captures the experiences of a relatively small proportion of customers who have the awareness, capacity and confidence to make a complaint. The JEC suggested that IPART seek additional information on consumers' experiences and perceptions of pricing and competition.[390] We have reported consumer experiences and perceptions in Chapter 4 using consumer survey data.

Residential customer complaints to retailers continued to rise over Q1 to Q3 of 2024-25, with close to 61,000 complaints recorded. This represents an increase of 28% compared with the same period in 2023-24, and a 44% increase compared with 2021-22, when complaints were at their lowest value in the past 5 years.[391]

Over 2024-25, around 2.3% of residential electricity customers in NSW made a complaint to their retailer. This was a small increase of 25 basis points from 2023-24, when 2% of customers lodged a complaint. Around 1.6% of customers had made a complaint in 2022-23.[392]

Figure 8.15 Number of complaints to retailers by residential customers in NSW



Notes: data is not yet available for Q4 2024-25. To enable comparison between years, data for Q1 to Q3 has reported for each financial year, with separate data shown for Q4 for 2019-20 to 2023-24. The total number of complaints for each financial year are shown above each stacked bar.
Source: AER, *Schedule 3 - Quarter 3 2024 – 25 retail performance data*, 27 June 2025

While the number of complaints by residential customers and the proportion of customers making a complaint has increased in recent years, the reasons for complaints have remained stable.

Complaints related to 'billing' (60%) and 'other' (27%) together account for close to 9 in 10 complaints. This trend has been consistent over the past 5 years. Smart meter issues accounted for around 6% of complaints in 2024-25, up slightly from 5.7% in 2023-24.[393]

8.5.1 Complaints to the Energy and Water Ombudsman of NSW (EWON)

Over 2020–21 and 2021–22, the number of complaints to EWON from electricity customers in NSW remained relatively stable. Between 2021-22 to 2022-23, complaints increased by 23%, followed by a 66% rise between 2022-23 and 2023-24.

In 2024-25, the number of complaints fell by 3% compared with the previous year but remained elevated relative to the levels prior to 2023-24 (Figure 8.16).

In Q1 of 2024-25, EWON received 7,613 electricity-related complaints. This was the highest quarterly total on record, representing a 34% increase compared with Q1 2023-24.

EWON explained that while high bills accounted for most of the rises in complaints, rebate error complaints (up 12%), estimated meter read complaints (up 32%), and rebate information complaints (up 64%) also contributed to the higher level of complaints. EWON also noted that customer confusion around new tariff structures contributed to higher complaint volumes.[394]

Figure 8.16 Number of EWON complaints from electricity customers in NSW

Source: EWON, *EWON Insights* - multiple editions, accessed 20 October 2025.

Appendices

Appendix A

IPART's evolving role as the Market Monitor

Until 2002, there was a single government-owned supplier for each distribution network in NSW. This supplier provided both energy distribution and retailing services to customers. At this time, IPART's role was to set the maximum prices that could be charged (and as a result, revenue that could be earned) for transmission, distribution and retailing services.[395]

In 2002, the NSW Government opened the retail electricity and gas markets to competition, allowing the entry of new retailers.[396] Then in 2004, following the Australian Energy Market Agreement, Federal, State (including NSW) and Territory Governments agreed to phase out retail price regulation where effective competition could be demonstrated.[397]

However, while competition was still developing, IPART continued to set maximum prices for standing offer contracts for retail electricity provided by incumbent suppliers in NSW.[398]

Retail price regulation in NSW was removed in July 2014 for electricity and in July 2017 for gas.[399] This occurred as the AEMC found that retail competition was sufficiently developed, such that retail price regulation was no longer necessary.

Following the removal of retail price regulation, IPART has been required under the National Retail Energy Law (NSW) 2012 to monitor the performance and competitiveness of the retail electricity and gas markets in NSW.[400]

We do this role through our annual Energy Market Monitoring reports. We have published annual Market Monitoring reports for the supply of retail electricity in NSW since 2015 and for the supply of retail gas in NSW since 2017.[a] The matters we are required to consider and report on each year are set out in the Section 234(A) of the National Energy Retail Law (NSW) and are detailed in Table B.1 below.

However, in 2019, following recommendations in the ACCC's Retail Electricity Price Inquiry,[401] the Australian Government reintroduced price regulation for standing offer contracts through the DMO.[402] The DMO sets the maximum price that can be charged on standing offer contracts in NSW, SA and Southeast QLD and is updated annually by the AER.[b] The Commonwealth DCCEEW has recently conducted a review of the DMO framework and made 10 recommendations to strengthen customer protections, improve its effectiveness for price comparisons, and ensure it is fit-for-purpose as the market evolves.[403]

In addition, the Electricity Retail Code came into force from 1 July 2019. This is a mandatory industry code that sets requirements for how prices and discounts for retail electricity must be advertised. This includes a requirement for retailers to advertise electricity prices with reference to the DMO. The ACCC enforces compliance with the Electricity Retail Code.[404]

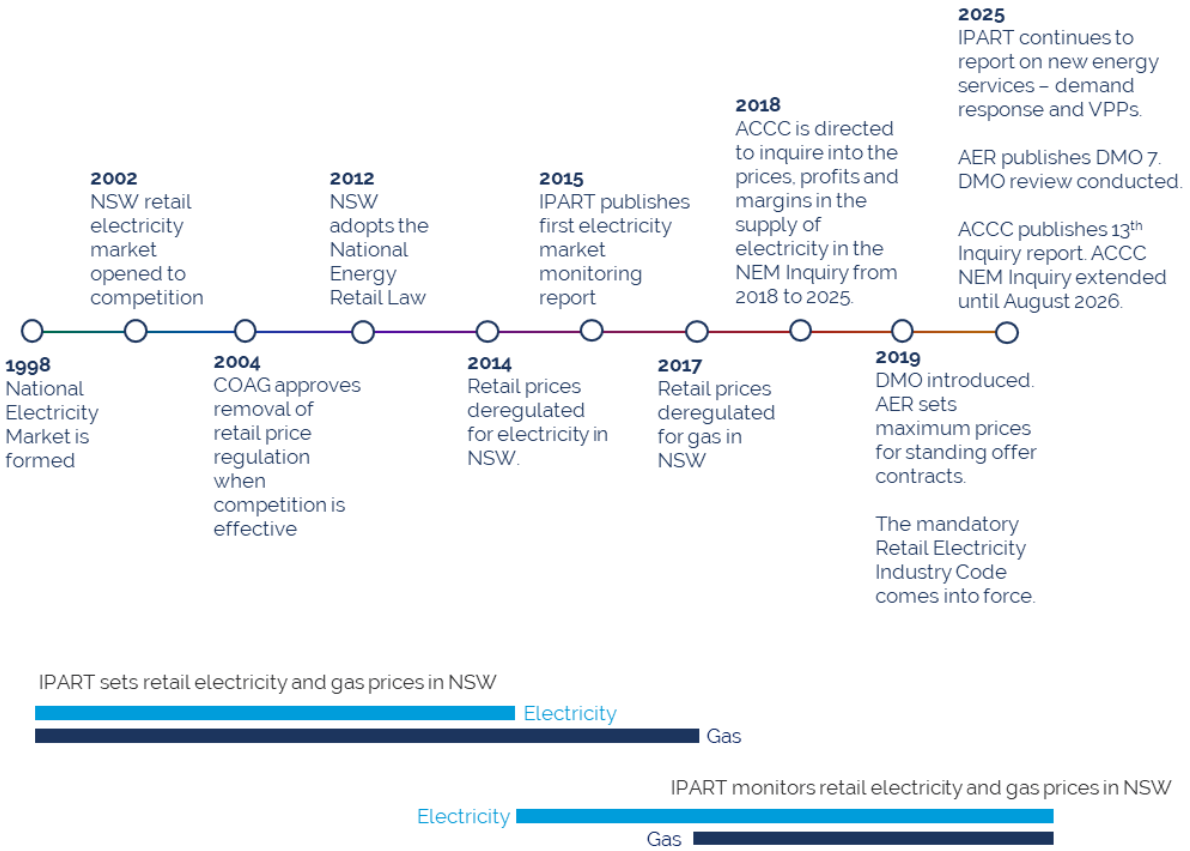
Further, in June 2020, Part XICA of the Competition and Consumer Act came into effect. This prohibits certain conduct in relation to retail pricing, financial contract markets and electricity spot markets. Under Part XICA, retailers are required to make reasonable adjustments to the prices of their offers to reflect sustained and substantial reductions in the underlying costs of procuring electricity.[405] A review of this legislation in 2025 found that while the legislation is generally effective, there are challenges regarding price adjustments such as determining what constitutes a 'reasonable adjustment' to prices.[406]

[a] IPART's past Energy Market Monitoring reports are available here: IPART Energy Market Monitoring.
[b] In Victoria the Essential Services Commission sets the maximum price that can be charged for standing offer contracts through the Victoria Default Offer.

The matters we are required to report on in our Energy Market Monitoring have also been expanded over the past 2 years. In August 2024 and April 2025, we received letters from the Hon. Penny Sharpe, MLC, Minister for Climate Change, Energy, the Environment and Heritage. These letters detailed that energy products and services in NSW are becoming increasingly complex and requested that IPART include specific analysis on new energy services including demand response programs and VPPs, and the impact on competition in the NSW retail energy markets.[c,407]

The evolution of IPART's role in setting and monitoring electricity prices in NSW, and other regulator's roles for setting and monitoring prices are shown in Figure A.1 below.

Figure A.1 Timeline of price regulation for the NSW retail energy markets and IPART's evolving role



[c] Further, the NSW Consumer Energy Strategy included an Action (Action 25) for the NSW Government to require IPART to report on demand response programs and VPPs in the annual energy retail market monitor reports from 2025. This expanded role is expected to be formalised in the National Energy Retail Law (NSW) in 2026.

Appendix B

What we are required to report on and where we have done this

Our market monitoring role is set out in the National Energy Retail Law (NSW). Under this legislation we are required to consider and report on specific matters each year (Table B.1).

The Hon. Penny Sharpe, MLC, has also requested that we include analysis on demand response programs and VPPs, and the impact on competition in the NSW retail electricity market in this report.[408]

The matters we are required (or have been requested) to report on and where we have done this are shown in Table B.1.

Table B.1 What we are required to report on

Matters we are required to report on	Where we have done this in the NSW electricity market monitoring report
Participation of small customers in the market, and if the Market Monitor thinks it appropriate, particular groups of small customers	We report on the participation of small customers in: • **Chapter 4:** Customer engagement and switching
Price of electricity or gas for small customers in regional areas	We report on the pricing differences between metropolitan areas (based on offers available in the Ausgrid and Endeavour Energy distribution networks) and regional areas (the Essential Energy distribution network) in: • **Chapter 5:** Pricing outcomes for customers in NSW We report on the impact of different prices across metropolitan and regional areas in: • **Chapter 8**:**Chapter 8**: Affordability, hardship and complaints
Any barriers to entry or exit from, or expansion in the market	We report on barriers to entry and expansion in: • **Chapter 3:** Market structure, and barriers to entry and expansion
The extent to which retailers are competing to attract and retain small customers	We report on the nature, extent and dynamics of competition, including the extent of retailer competition in: • **Chapter 3:** Market structure, and barriers to entry and expansion • **Chapter 5:** Pricing outcomes for customers in NSW
Whether price movements and price and product diversity in the market are consistent with a competitive market	We report on price movements in: • **Chapter 5:** Pricing outcomes for customers in NSW We report on product diversity and new energy services in: • **Chapter 7:** Consumer energy resources and new energy services
If the Market Monitor is of the opinion it is required, steps necessary to improve the competitiveness of each market	We have not made recommendations to improve the competitiveness of the NSW retail electricity market in this report.
Whether there is a need for a detailed review of retail prices and profit margins in each market	We do **not** consider there is a need for a detailed review of retail prices and profit margins at this point in time. We discuss this in: • **Chapter 6:** Retailer costs, margins and profit
Request from the NSW Minister for Energy for 2025 New energy retail offerings including demand response programs and virtual power plants and how they are impacting the performance and competitiveness of the NSW retail energy markets	We report on new energy services, including demand response programs and virtual power plants, and their impact on competition in: • **Chapter 7:** Consumer energy resources and new energy services

Under the National Energy Retail Law (NSW) we can also report on any other matter that is relevant to the electricity and gas markets for small customers in NSW.

Consistent with our past Energy Market Monitoring reports, we have also reported on energy affordability, hardship protections and customer complaints in Chapter 8.

B.1 What information we considered in preparing this report

The National Energy Retail Law (NSW) limits the information we can consider in our market monitoring role to:

- information provided by the AEMC and the AER
- any publicly available information
- information provided by a retailer with particulars:
  - of the number of market offer customers of the retailer
  - the market offer prices of those customers
  - the number of customers on each standing offer price offered by the retailer that has been publicly advertised
  - those standing offer prices.[409]

In preparing this report and assessing the performance and competitiveness of the retail electricity and gas market in NSW, we have primarily relied on:

- information in public submissions to the Energy Market Monitoring Consultation Paper we published in July
- electricity and gas pricing data provided to the AER for the operation of Energy Made Easy
- electricity consumption profile data provided by the AEMC for a sample of customers in the Ausgrid, Endeavour Energy and Essential Energy distribution networks
- publicly available reports and datasets on the retail energy market published by other regulators, including the AER and ACCC.

Appendix C

Recommendations from IPART's 2023-24 Energy Market Monitoring report

In Table C.1 below, we list the recommendations that were made in our electricity market monitoring report for 2023-24. We also discuss if a response to the recommendation has been made, or if it has been superseded (and is no longer required) due to other market developments or changes in policy and/or regulation.

Table C.1 Recommendations made in IPART's Energy Market Monitoring Report, 2023–24

Recommendation	Response to recommendation
Recommendation 1 As part of the AER's new Contract Market Monitoring role, the AER should consider and report on the emerging issue of whether retailers have sufficient access to suitable hedging contracts as coal-fired generators retire. This should also consider whether policy changes could assist in facilitating the development of new hedging products to support retailers through the energy transition.	The AER's new contract market monitoring powers will enable deeper insights into retail markets and drivers underpinning prices ultimately paid by customers. The AER is in the early phases of implementing these new powers. The Nelson Review (National Electricity Market wholesale market settings review) is considering the issue of access to hedging contracts as baseload generation retires.
Recommendation 2 As part of the Review of the Electricity Retail Code, the Commonwealth Department of Climate Change, Energy, the Environment and Water should consider whether retailers should be required to display on any advertisement of an offer the meter type or network tariff the offer is compatible with.	There is no update regarding this recommendation.
Recommendation 3 The AER should consider whether additional disclosure or functionality could be added to the Energy Made Easy website, to clearly show users which meter type or network tariff type a plan is compatible with.	Energy Made Easy includes additional information explaining to users which retail offers are compatible with different meter types and how to check what meter types a plan is compatible with.
Recommendation 4 As part of the rule change proposal to improve the ability to switch to a better offer, the AEMC should consider the issue that customers are being notified on their bill that they can save money by switching to the plan they are already on. This issue may create confusion if customers are unsure whether they need to take action to switch offers and how to do this.	In May 2025, the AER made a decision to require retailers that re-use plan names to include additional disclosure on customer bills to address this issue.
Recommendation 5 The AER should make the source code for the Energy Made Easy website open source. This includes the functionality for accessing a customer's electricity usage data (with their consent) and estimating the total cost of plans for different tariff types.	The source code for Energy Made Easy has not been made open source at this stage.
Recommendation 6 The AER should consider amending the Retail Pricing Information Guidelines and the Retail Performance Reporting Guidelines to require: a. retailers to submit to the AER the energy plan data and information (specified in Retail Pricing Information Guidelines) for all standing and market offer plans that have customers on them as at the end of each quarter b. retailers to submit to the AER the number of customers on each standing and market offer plan as at the end of each quarter.	The intention of this recommendation was to ensure that data was collected on the prices charged to customers on legacy contracts (as well as publicly available retail contracts listed on the EME website). In 2024, we considered this would be particularly important as the ACCC's NEM Inquiry role was expected to conclude in August 2025. However, it has since been extended by an additional 12 months to conclude in August 2026.

Recommendation	Response to recommendation
Recommendation 7 The AER should update the Energy Made Easy website to enable it to show the cost of a customer's current electricity plan, even if it is a legacy offer. This will enable customers to compare alternative offers with the plan that they are actually on.	There is no update regarding this recommendation.
Recommendation 8 As part of the Review of the Electricity Retail Code, the Commonwealth Department of Climate Change, Energy, the Environment and Water should consider whether changes are required to protect customers from unjustifiably high prices, given: a. the wide range of outcomes experienced by customers, including over 50% of flat-rate market offer customers in NSW were paying an annual cost equal to or more than the Default Market Offer in August 2023 b. the price cap and reference price requirements under the Default Market Offer do not apply to demand tariff plans and time-of-use tariff plans for small business customers, and there are an increasing number of customers on these plans.	Commonwealth DCCEEW has published an Outcomes Paper for the Review of the Default Market Offer. It recommends the introduction of a new DMO benchmark for: • customers on demand tariffs • small business customers on time-of-use tariffs • embedded network customers.
Recommendation 9 The AER should update the Energy Made Easy website as a matter of priority to enable demand charges to be included in the total cost of an electricity plan.	The AER has expanded the fields that are required to be submitted by retailers to Energy Made Easy to include additional information on demand charges. At this stage, Energy Made Easy has not been updated to include demand charges in bill estimates.
Recommendation 10 The AER should ensure that any new network tariff structure that it approves – to the extent the network tariff structure is expected to be reflected in the retail tariff structure – is able to be incorporated into the Energy Made Easy website's annual bill estimates before DNSPs can assign customers onto that network tariff structure.	There is no update regarding this recommendation.

Appendix D

Section 234A of the National Energy Retail Law (NSW) No 37a of 2012

1. In this Part, the Market Monitor is the person prescribed by the NSW regulations as the Market Monitor for the purpose of this Part.
2. The Market Monitor is to monitor the performance and competitiveness of the retail electricity market and the retail gas market in New South Wales for small customers.
3. The Market Monitor is to report annually to the Minister on the performance and competitiveness of each of the retail electricity market and the retail gas market in New South Wales for small customers, including on the following matters:
    a. the participation of small customers in each market and, if the Market Monitor thinks it appropriate, particular groups of small customers;
    b. prices of electricity or gas for small customers in regional areas;
    c. any barriers to entry to or exit from, or expansion, in each market;
    d. the extent to which retailers are competing to attract and retain small customers;
    e. whether price movements and price and product diversity in each market are consistent with a competitive market;
    f. if the Market Monitor is of the opinion that it is required, steps necessary to improve the competitiveness of each market;
    g. whether there is a need for a detailed review of retail prices and profit margins in each market;
    h. any other matters the Market Monitor thinks appropriate.
4. An annual report is to be prepared for each year commencing on 1 July.

4A. The first annual report for the retail gas market is to be for the year commencing 1 July 2017.

5. The annual report is to be provided to the Minister not later than 30 November following the end of the year to which the report relates.
6. The Minister is to lay the annual report or cause it to be laid before both Houses of Parliament of this jurisdiction not later than 30 days after receiving the report.
7. In preparing an annual report, the Market Monitor is to have regard only to the following-
    a. information provided by the AEMC and the AER;
    b. any publicly available information;
    c. information provided by a retailer under subsection (8).
8. The Market Monitor may, by notice in writing served on a retailer, require the retailer to provide particulars to the Market Monitor of the number of market offer customers of the retailer, the market offer prices of those customers, the number of customers on each standing offer price offered by the retailer that has been publicly advertised and those standing offer prices.

[1] R. Webb, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025; A. Sumit, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025; Individual (Name suppressed) [W25/2084], *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, 17 July 2025.
[2] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 7.
[3] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 9.
[4] G. Olsen, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, 17 July 2025; A. Sumit, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025.
[5] G. Olsen, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, 17 July 2025.
[6] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 6.
[7] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 8.
[8] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper,* August 2025, p 8
[9] R. Webb, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025; Name suppressed [W25/2096], *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025.
[10] R. Webb, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025.
[11] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 6.
[12] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 9.
[13] IPART, *Annual Report - Monitoring the NSW retail electricity market 2023-24*, November 2024, pp 13-14.
[14] AEMC, *Improving the ability to switch to a better offer,* 11 September 2025; AEMC, *Improving consumer confidence in retail energy plans*, 26 June 2025.
[15] B. Ratten, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025; Name suppressed, *Confidential Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025; B. WATSON-WILL, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025, p 1; S. Cromie, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025; R. Webb, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025; Name suppressed [W25/2098], *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025.
[16] B. Ratten, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025.
[17] R. Webb, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025.
[18] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, pp 27-28.
[19] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, pp 27-28.
[20] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 17; B. Ratten, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025; G. Sage, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025.
[21] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 17.
[22] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 17.
[23] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 17.
[24] B. Ratten, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025.
[25] IPART, *Monitoring the retail electricity and gas markets in NSW*, 17 July 2025.
[26] Origin, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, pp 3–4.
[27] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 15.
[28] G. Olsen, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, 17 July 2025.
[29] Name suppressed [W25/2097], *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, 25 July 2025.
[30] Energy and Water Ombudsman NSW, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 4.
[31] Energy and Water Ombudsman NSW, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 4.
[32] Energy and Water Ombudsman NSW, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 3.
[33] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 15.
[34] National Seniors Australia, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, pp 2-3.
[35] Name suppressed [W25/2132], *Submission to IPART's 2024-25 Energy Market Monitoring Consultation Paper*, 11 August 2025; B Ratten, *Submission to IPART's 2024-25 Energy Market Monitoring Consultation Paper*, 13 August 2025.
[36] Energy and Water Ombudsman NSW, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 7.
[37] Energy and Water Ombudsman NSW, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 7.
[38] Energy and Water Ombudsman NSW, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 7.
[39] Energy and Water Ombudsman NSW, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 7.
[40] The Hon. Penny Sharpe, *Letter to IPART regarding the 2024-25 Energy Market Monitoring Report*, April 2025.
[41] S. Cromie, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025.
[42] Name suppressed [W25/2101], *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025.
[43] Master Electricians Australia, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 2.

[44] Energy and Water Ombudsman NSW, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 2.
[45] Energy and Water Ombudsman NSW, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, pp 2, 7-8.
[46] Energy and Water Ombudsman NSW, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 8.
[47] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 17; National Seniors Australia, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 2.
[48] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 17.
[49] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 17.
[50] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 17; National Seniors Australia, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 2.
[51] Origin, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 1.
[52] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 5.
[53] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, pp 23-24.
[54] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, pp 21-22.
[55] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 20.
[56] Name supressed [W25/2098], *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025; R Webb, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025; A Sumit, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025.
[57] Origin, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 1.
[58] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 5.
[59] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, pp 11, 25.
[60] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, pp 8, 10–12.
[61] IPART, *Monitoring the NSW retail electricity market 2023-24*, November 2024, p 17.
[62] NSW Department of Climate Change, Energy, the Environment and Water, *New measures to manage rooftop solar exports during grid emergencies*, accessed 1 October 2025.
[63] ACCC, *Inquiry into the National Electricity Market*, December 2023, pp 21-21.
[64] *National Energy Retail Law 2012* (NSW), s 88.
[65] ACCC, *Inquiry into the National Electricity Market*, December 2023, pp 22.
[66] Energy Made Easy, *EME published offers for NSW data*, accessed September 2025.
[67] Banpu Energy Australia, *Application for electricity retailer authorisation*, 9 April 2025, p 4; Energy Trade Pty Ltd, *Electricity Retail Authorisation Application*, 4 August 2025, p 3; ERC Energy, *Energy Retail Authorisation Application – Electricity*, August 2021, p 3; Eureka Energy, *Public Application Retailer Authorisation*, 1 February 2024, p 2; Tas Gas Retail, *Application for electricity retailer authorisation*, July 2023, p 4.
[68] AEMC, *Final Report: Review into the arrangements for failed retailers' electricity and gas contracts*, 24 June 2024, p 2.
[69] AEMO, *Suspension of Pooled Energy from the National Electricity Market in May 2022*, November 2022, pp 6-7.
[70] AEMO, *Suspension of Enova Energy from the National Electricity Market in June 2022*, December 2022, p 7.
[71] AEMO, *Suspension of Power Club from the National Electricity Market in July 2022*, January 2023, p 7.
[72] AEMO, *Suspension of Mojo Power East from the National Electricity Market in July 2022*, January 2023, p 7.
[73] AEMO, *Suspension of Social Energy Australia from the National Electricity Market in August 2022*, January 2023, p 7.
[74] AEMO, *Suspension of Elysian Energy from the National Electricity Market in September 2022,* February 2023, p 7.
[75] AEMO, *Suspension of QEnergy Limited from the National Electricity Market in June 2023*, December 2023, p 7.
[76] AEMO, *Suspension of Mojo Power from the National Electricity Market in June 2023*, December 2023, p 7.
[77] AEMO, *Suspension of Sanctuary Energy from the National Electricity Market in June 2023*, December 2023, p 7.
[78] AEMO, *Suspension of Maximum Energy from the National Electricity Market in August 2024*, February 2025, p 7.
[79] AER, *Notice of AER decision to grant surrender of Rush Energy's electricity retailer authorisation*, 14 July 2022, pp 1-2.
[80] AER, *Schedule 2 – Quarter 4 2023-24 retail performance data*, December 2024, Tab: Res Elec Cust#s Mkt Contr.
[81] AER, *Notice of AER decision to grant surrender of ReAmped Energy's electricity retailer authorisation*, April 2024, p 1.
[82] Energy Source Distribution, *ReAmped Energy advises customers to look elsewhere*, accessed September 2025.
[83] AGL, *Application to surrender the Powerdirect Pty Ltd Electricity Retail Authorisation*, 8 July 2022, p 4; Ampol Energy, *Application to Surrender the Ampol Energy (Retail) Electricity Retail Authorisations*, July 2025, p 6.
[84] AER, *Iberdrola Australia Holdings Pty Limited - authorised electricity retailer - surrendered*, accessed September 2025.
[85] AER, *Schedule 2 – Quarter 3 2024-25 retail performance data*, June 2025, Tab: Res Elec Cust#s & Mkt Contr.
[86] Ampol Energy, *Application to Surrender the Ampol Energy (Retail) Electricity Retail Authorisations*, July 2025, p 6.
[87] Justice and Equity Centre, *Submission on IPART Monitoring the retail electricity and gas markets in NSW 2025*, August 2025, pp 10-11.
[88] Justice and Equity Centre, *Submission on IPART Monitoring the retail electricity and gas markets in NSW 2025*, August 2025, p 5.
[89] AER, *Schedule 2 – Quarter 3 2024-25 retail performance data*, June 2025, Tab: Res Elec Cust#s & Mkt Contr: K149.
[90] AER, *Schedule 2 – Quarter 3 2024-25 retail performance data*, June 2025, Tab: SmlBiz Elec Cust#s & Mkt Contr: K145.
[91] AEMO, *Quarterly Energy Dynamics Q2 2025*, July 2025, p 3.
[92] AEMO, *Quarterly Energy Dynamics Q2 2025*, July 2025, p 4.
[93] AER, *Wholesale electricity market performance report 2024*, December 2024, p 27.
[94] AER, *Final determination: Default market offer prices 2025-26*, 26 May 2025, pp 3, 41-42.
[95] AER, *Final determination: Default market offer prices 2025-26*, 26 May 2025, p 42.

96 ACCC, *Inquiry into the National Electricity Market 2023*, 1 December 2023, p 103.
97 ASX, *ASX Australian Morning and Evening Peak Electricity Futures Fact Sheet*, June 2025.
98 AER, *State of the Energy Market 2024*, 7 November 2024, p 32.
99 IPART, *Annual Report – Monitoring the NSW retail electricity market 2023-24*, November 2024, pp 33-34.
100 ACCC, *Inquiry into the National Electricity Market 2023*, 1 December 2023, p 99.
101 AER, *Wholesale electricity market performance report 2024*, December 2024, p 48.
102 ASX, *Trading Contracts and Market Access: Australian Electricity Brokers*, accessed 21 August 2025.
103 AER, *Wholesale electricity market performance report 2024*, December 2024, pp 40-41.
104 AEMC, *National Electricity Amendment (Shortening the settlement cycle) Rule*, 8 August 2024, pp 14-15.
105 AEMC, *Application of offsets in the prudential margin calculation*, accessed November 2025.
106 AEMO, *Voluntarily Scheduled Resource Guidelines*, 3 June 2025, p 28.
107 AER, *Wholesale electricity market performance report 2024*, December 2024, 45.
108 AER, *Wholesale electricity market performance report 2024*, December 2024, 45.
109 AER, *State of the Energy Market 2024*, 7 November 2024, p 32.
110 ACCC, *Inquiry into the National Electricity Market 2023*, 1 December 2023, p 100.
111 DCCEEW, *National Electricity Market wholesale market settings review*, August 2025, p 146.
112 IPART, *Annual Report – Monitoring the NSW retail electricity market 2023-24*, November 2024, p 34.
113 DCCEEW, *National Electricity Market wholesale market settings review*, August 2025, p 58.
114 DCCEEW, *National Electricity Market wholesale market settings review*, August 2025, p 120.
115 DCCEEW, *National Electricity Market wholesale market settings review*, August 2025, p 142.
116 DCCEEW, *National Electricity Market wholesale market settings review*, August 2025, p 141.
117 ACCC, *Inquiry into the National Electricity Market 2024*, December 2024, p 79.
118 ACCC, *Inquiry into the National Electricity Market 2024*, December 2024, p 78.
119 ACCC, *Inquiry into the National Electricity Market 2024*, December 2024, pp 59, 79.
120 ACCC, *Inquiry into the National Electricity Market 2024*, December 2024, pp 78-79.
121 AER, *Final determination: Default Market Offer prices 2025-26*, May 2025, pp 61-62.
122 ACCC, *Inquiry into the National Electricity Market 2024*, December 2024, p 78.
123 ACCC, *Inquiry into the National Electricity Market 2024*, December 2024, p 80.
124 ACCC, *Inquiry into the National Electricity Market 2024*, December 2024, p 80.
125 Justice and Equity Centre, *Submission on IPART Monitoring the retail electricity and gas markets in NSW 2025*, August 2025, p 11.
126 ACCC, *Retailer Electricity Pricing Inquiry – Final Report*, June 2018, pp 231-232.
127 ACCC, *Retailer Electricity Pricing Inquiry – Final Report*, June 2018, pp 151, 232.
128 AEMC, *Reducing customers switching times: Final rule determination*, December 2019, p 1.
129 CDR, *CDR in the energy sector*, accessed October 2025.
130 ACCC, *Inquiry into the National Electricity Market 2024*, December 2024, p 80.
131 AER, *Final determination: Default Market Offer prices 2025-26*, May 2025, pp 63-64.
132 Fletcher A, *The Role of Demand-Side Remedies in Driving Effective Competition*, Centre for Competition Policy, 7 November 2016, p 12.
133 Fletcher A, *The Role of Demand-Side Remedies in Driving Effective Competition*, Centre for Competition Policy, 7 November 2016, pp 12-13.
134 R. Webb, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025; A. Sumit, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025; Individual (Name suppressed) [W25/2084], *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, 17 July 2025.
135 G. Olsen, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, 17 July 2025; A. Sumit, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025.
136 Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 9.
137 Dr Ron-Ben David, *Reforming and Re-forming the consumer electricity market*, Monash Energy Institute, September 2025.
138 R. Webb, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025; Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 8.
139 Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 8
140 ACCC, *Inquiry into the National Electricity Market*, December 2023, p 73.
141 Energy Consumers Australia, *Consumer Energy Report Card data*, 24 July 2025.
142 IPART analysis of Energy Consumers Australia, *Consumer Energy Report Card Survey raw data*, June 2025.
143 Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 8
144 ACCC, *Inquiry into the National Electricity Market*, December 2024, p 22.
145 ACCC, *Inquiry into the National Electricity Market*, December 2024, p 52.
146 IPART analysis of ACCC, *Inquiry into the National Electricity Market Appendix C - Supplementary spreadsheet with retail pricing data, cost stack data and charts*, December 2024, Tab: 1. Residential (Conditional).
147 ACCC, *Inquiry into the National Electricity Market*, December 2024, p 48.
148 Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper,* August 2025, p 8
149 AEMC, *Contract terms*, accessed 23 October 2025.
150 R. Webb, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025; Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper,* August 2025, p 8.
151 AER, *Better Bills Guideline – key obligations for energy retailers*, February 2023, p 4.
152 ACCC, *Inquiry into the National Electricity Market – December 2024*, December 2024, pp 83, 89.
153 ACCC, *Inquiry into the National Electricity Market Appendix C - Supplementary spreadsheet with retail pricing data, cost stack data and charts*, December 2024, Tab: 2. Residential (unconditional).

154 IPART, *Monitoring the NSW Retail Electricity Market 2023-24*, 30 November 2024, pp 59-61.
155 CHOICE, *THE POWER OF CONFUSION: CHOICE 'super' complaint on energy plans*, May 2025.
156 AER, *AER requires retailers to include additional information on bills*, 23 May 2025.
157 AER, *Network tariff reform*, accessed 19 November 2025
158 A. Sumit, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025.
159 R. Webb, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025.
160 Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 17; National Seniors Australia, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 2.
161 Master Electricians Australia, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 2; National Seniors Australia, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 2; Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 17.
162 ECA, *Consumer knowledge of electricity pricing and responsiveness to price signals*, January 2025.
163 ECA, *Consumer knowledge of electricity pricing and responsiveness to price signals*, January 2025.
164 ACCC, *Inquiry into the National Electricity Market*, December 2024, p 35.
165 ACCC, *Inquiry into the National Electricity Market*, December 2024, p 38.
166 ACCC, *Inquiry into the National Electricity Market*, December 2024, p 38.
167 ACCC, *Inquiry into the National Electricity Market*, December 2024, p 42.
168 R. Webb, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025, p 1; A. Sumit, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025; Individual (Name suppressed) [W25/2084], *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, 17 July 2025, p 1
169 G. Olsen, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, 17 July 2025; A. Sumit, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025.
170 Justice and Equity Centre, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025, p 15.
171 Treasury & Consumer Standards Body, *Consultation Paper 368: Energy Switching Experiment*, 29 October 2025, p 2.
172 Treasury & Consumer Standards Body, *Consultation Paper 368: Energy Switching Experiment*, 29 October 2025, p 2.
173 Ausgrid, *ES7 Network Price Guide*, July 2025, pp 6-7.
174 ACCC, *Inquiry into the NEM July 2025 report*, 10 July 2025, p 4.
175 Renew Economy, *Bill Shock: Energy retailers have a nasty surprise with smart meters and time of use tariffs*, accessed November 2025.
176 AGL, *Electricity tariffs*, accessed October 2025.
177 AGL, *Letter to Independent Pricing and Regulatory Tribunal*, 26 September 2024, p 2.
178 Name suppressed, *Submission to IPART 2024-25 Market Monitoring Consultation Paper*, 28 July 2025, p 1.
179 Ausgrid, *Ausgrid's 2024-25 Pricing Proposal*, 17 May 2024, p 7.
180 Ausgrid, *Ausgrid's 2024-25 Pricing Proposal*, 17 May 2024, p 7.
181 Endeavour Energy, *Pricing Proposal Summary: Prices effective 1 July 2024*, 16 May 2024, p 8; Endeavour Energy *Network Tariffs 2024-25*, 14 June 2024, p 35.
182 Essential Energy, *Network Price List and Explanatory Notes 2024-25*, June 2025, p 6.
183 Energy and climate change ministerial council, *National Consumer Energy Resources Roadmap*, 18 July 2024, p 23.
184 ACCC, *Inquiry into the National Electricity Market report – July 2025*, 10 July 2025, p 38.
185 Energy & Water Ombudsman NSW, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025, pp 2, 8; Justice and Equity Centre, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025, pp 7, 16-17.
186 AER, *Schedule 2 – Quarter 3 2024 – 25 retail performance data*, *27 June 2025,* Tab: 'SmLBiz Elec Cust#s & Mkt Contr'.
187 Justice and Equity Centre, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025, pp 16-17; National Seniors Australia, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025, pp 1-2; Name suppressed, *Submission to Energy Market Monitoring consultation paper*, 28 July 2025, p 1.
188 AEMC, *Final determination: Accelerating smart meter deployment*, 28 November 2024, pp 27-28.
189 AEMC, *Final determination: Accelerating smart meter deployment*, 28 November 2024, pp 27, 31.
190 ACCC, *Inquiry into the National Electricity Market report – July 2025*, 10 July 2025, p 39.
191 ACCC, *Inquiry into the National Electricity Market report – December 2024*, December 2024, pp 3, 19.
192 AEMC, *Final determination: Accelerating smart meter deployment*, 28 November 2024, p 30.
193 Ausgrid, *ES7 Network Price Guide*, July 2025, pp 6-7.
194 CHOICE, *Experts sound alarm on complex household energy tariffs*, accessed November 2025.
195 Ausgrid, *Ausgrid's 2024-25 Pricing Proposal*, May 2024, p 8.
196 ACCC, *Inquiry into the National Electricity Market report – December 2024*, December 2024, p 30.
197 IPART, *Monitoring the retail electricity market 2023-24*, November 2024, pp 124-125.
198 ACCC, *Inquiry into the National Electricity Market report – December 2024*, December 2024, p 3.
199 IPART, *Monitoring the retail electricity market 2023-24*, November 2024, pp 124-125.
200 ACCC, *Inquiry into the National Electricity Market report – December 2024*, December 2024, p 27.
201 ACCC, *Inquiry into the National Electricity Market report – December 2024*, December 2024, p 30.
202 Name suppressed, *Submission to Energy Market Monitoring consultation paper*, 24 July 2025; A. Sumit, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025; R. Webb, *Submission to Energy Market Monitoring consultation paper*, 30 July 2025.
203 AEMC, *Final determination: Accelerating smart meter deployment*, 28 November 2024, p 27.
204 National Seniors Australia, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025, p 1.
205 Justice and Equity Centre, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025, pp 13, 15, 17.
206 Name suppressed, *Submission to Energy Market Monitoring consultation paper*, 17 July 2025; Name suppressed, *Submission to Energy Market Monitoring consultation paper*, 24 July 2025.

[207] G. Olsen, *Submission to Energy Market Monitoring consultation paper*, 17 July 2025, p 1; S. Cromie, *Submission to Energy Market Monitoring consultation paper*, 17 July 2025, p 1; A. Sumit, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025, p 1; Justice and Equity Centre, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025, p 15.
[208] Justice and Equity Centre, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025, pp 7, 12; Name suppressed, *Submission to Energy Market Monitoring consultation paper*, 17 July 2025, p 1; Name suppressed, *Submission to Energy Market Monitoring consultation paper*, 24 July 2025, p 1; R. Webb, *Submission to Energy Market Monitoring consultation paper*, 30 July 2025, p 1.
[209] Master Electricians Australia, *Submission to Energy Market Monitoring consultation paper*, 18 August 2025, p 2.
[210] IPART, *Monitoring the retail electricity market 2023-24*, November 2024, pp 117-120.
[211] IPART, *Monitoring the retail electricity market 2023-24*, November 2024, p 120.
[212] AEMC, *Final determination: Accelerating smart meter deployment*, 28 November 2024, p 27.
[213] National Seniors Australia, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025, p 2; Justice and Equity Centre, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025, pp 16-17.
[214] AER, *Letter to IPART – Australian Energy Regulator's response to the Monitoring the NSW Retail Electricity Market 2023-24 Annual Report*, 21 March 2025, p 2.
[215] ACCC, *Inquiry into the National Electricity Market December 2024 report*, December 2024, p 74.
[216] ACCC, *Inquiry into the National Electricity Market December 2024 report*, December 2024, pp 65-66.
[217] AER, *Final Determination: Default Market Offer 2025-26*, May 2025, p 2.
[218] AEMO, *Quarterly Energy Dynamics Q2 2025*, July 2025, p 4.
[219] AER, *State of the Energy Market 2022*, September 2022, p 7.
[220] AER, *Final Determination: Default Market Offer 2024-25*, May 2025, p 3.
[221] IPART, *Monitoring the NSW retail electricity market 2023-24*, November 2024, p 132.
[222] AER, *Wholesale Electricity Market Performance Report 2024*, December 2024, pp 1-2.
[223] AER, *Final Determination: Default Market Offer 2024-25*, May 2024, p 2.
[224] AER, *Wholesale Electricity Market Performance Report 2024*, December 2024, p 13.
[225] AER, *Final Determination: Default Market Offer 2025-26*, May 2025, pp 2-3.
[226] AER, *Quarterly base futures prices and volume traded*, accessed 1 October 2025.
[227] AER, *Final determination: Default market offer prices 2025-26*, 26 May 2025, p 3.
[228] ACCC, *Inquiry into the National Electricity Market December 2024 report*, December 2024, p 6.
[229] ACCC, *Inquiry into the National Electricity Market December 2024 report*, December 2024, p 70.
[230] AEMO, *Electricity Statement of Opportunities 2025*, August 2025, pp 3-5.
[231] AEMC, *Residential electricity price trends 2024*, November 2024, p 8.
[232] AEMC, *Residential electricity price trends 2024*, November 2024, p 12.
[233] AER, *Inquiry into the National Electricity Market – December 2024 report: Appendix C – Supplementary spreadsheet with retail pricing data, cost stack data and charts*, December 2024, Tab 7.
[234] AER, *Statement of reasons: Endeavour Energy Annual Pricing Proposal 2024-25*, May 2024, p 1.
[235] Transgrid, *Network pricing*, accessed October 2025.
[236] AER, *Statement of reasons: Ausgrid Annual Pricing Proposal 2024-25*, May 2024, p 1.
[237] AER, *Stakeholder report: Ausgrid – 2024-25 Annual Pricing Proposal*, May 2024, Tab: Stakeholder report.
[238] AER, *Stakeholder report: Essential Energy – 2024-25 Annual Pricing Proposal*, May 2024, Tab: Stakeholder report; AER, *Stakeholder report: Endeavour Energy – 2024-25 Annual Pricing Proposal*, May 2024, Tab: Stakeholder report.
[239] Transgrid, *2025 Transmission Annual Planning Report*, October 2025, p 13.
[240] AER, *Stakeholder report: Ausgrid – 2024-25 Annual Pricing Proposal*, May 2024, Tab: Stakeholder report.
[241] AER, *Final Decision Attachment 5 - Capital expenditure - Ausgrid - 2024–29 Distribution revenue proposal*, April 2024, pp 6, 31-35.
[242] AER, *Stakeholder report: Endeavour Energy – 2024-25 Annual Pricing Proposal*, May 2024, Tab: Stakeholder report.
[243] AER, *Stakeholder report: Essential Energy – 2024-25 Annual Pricing Proposal*, May 2024, Tab: Stakeholder report.
[244] NSW Energy, *Electricity Infrastructure Roadmap*, accessed 2 October 2025.
[245] AER, *NSW Electricity Infrastructure Fund - Contribution determination 2024–25*, 30 May 2024, p 6.
[246] Ausgrid, *Ausgrid 2024–25 Price Proposal Overview*, May 2024, p 5; Endeavour Energy, *Endeavour Energy 2024–25 Pricing Proposal*, May 2024, p 4.
[247] AER, *Final Determination: Default Market Offer 2024-25*, May 2024, p 3.
[248] AER, *Final Determination: Default Market Offer prices 2024-25 – Cost assessment model*, May 2024, Tab: Summary detailed.
[249] AER, *Final Determination: Default Market Offer prices 2024-25 – Cost assessment model*, May 2024, Tab: Summary detailed.
[250] AER, *Final Determination: Default Market Offer 2024-25*, May 2024, p 95.
[251] AGL, *AGL Energy Limited Annual Report 2025*, August 2025, p 51.
[252] AGL, *AGL Energy Limited Annual Report 2025*, August 2025, p 51.
[253] Origin, *2025 Annual Report*, August 2025, p 33.
[254] AGL, *AGL Energy Limited Annual Report 2025*, August 2025, p 51; Origin, *2025 Annual Report*, August 2025, p 33.
[255] AER, *Final Determination: Default Market Offer prices 2025-26 – Cost assessment model*, May 2025, Tab: Summary detailed.
[256] AER, *Final Determination – Default Market Offer 2025-26*, May 2025, p 73.
[257] AER, *Final Determination – Default Market Offer 2025-26*, May 2025, pp 72-73.
[258] ACCC, *Inquiry into the National Electricity Market - July 2025*, 10 July 2025, pp 10-12.
[259] ACCC, *Inquiry into the National Electricity Market - December 2024*, 3 December 2024, pp 77-78.
[260] AER, *Final Determination – Default Market Offer 2025-26*, May 2025, p 73.
[261] AGL, *AGL Energy Limited Annual Report 2025*, August 2025, p 44.

[262] AGL, *AGL Energy Limited Annual Report 2025*, August 2025, p 56.
[263] Origin, *2025 Annual Report*, August 2025, p 29.
[264] Origin, *2025 Annual Report*, August 2025, p 30.
[265] ACCC, *Inquiry into the National Electricity Market - December 2024*, 3 December 2024, p 65.
[266] ACCC, *Inquiry into the National Electricity Market - July 2025*, 10 July 2025, p 12.
[267] AEMC, *Residential electricity price trends 2024*, November 2024, p 5.
[268] AEMC, *Residential electricity price trends 2024*, November 2024, p 29.
[269] AEMC, *Residential electricity price trends methodology report 2024*, November 2024, p 45.
[270] AEMC, *Residential electricity price trends 2024*, November 2024, p 29.
[271] AER, *Final Determination: Default Market Offer 2024-25*, May 2024, p 1.
[272] AEMC, *Residential electricity price trends methodology report 2024*, November 2024, pp 35.
[273] AER, *Final Determination: Default Market Offer 2024-25*, May 2024, p 3.
[274] AEMC, *Residential electricity price trends methodology report 2024*, November 2024, pp 24, 31-32, 47.
[275] AER, *Final Determination: Default Market Offer 2024-25*, May 2024, p 3.
[276] AEMC, *Residential electricity price trends 2024*, November 2024, p 37.
[277] AEMC, *Residential electricity price trends 2024*, November 2024, p 29.
[278] AEMC, *Residential electricity price trends 2024*, November 2024, p 37.
[279] AEMC, *Residential electricity price trends 2024*, November 2024, pp 6, 25.
[280] AEMC, *Residential electricity price trends 2024*, November 2024, p 29.
[281] AEMC, *Residential electricity price trends 2024*, November 2024, p 8.
[282] ACCC, *Inquiry into the National Electricity Market*, July 2025, pp 13-14.
[283] ACCC, *Inquiry into the National Electricity Market*, July 2025, pp 14
[284] Energeia, CER Flexibility Benefit Analysis Final Report, 26 March 2025, p 4.
[285] Energeia, CER Flexibility Benefit Analysis Final Report, 26 March 2025, p 7.
[286] ACCC, *Inquiry into the National Electricity Market*, July 2025, p 8.
[287] ACCC, *Inquiry into the National Electricity Market*, July 2025, p 14.
[288] ACCC, *Inquiry into the National Electricity Market*, July 2025, pp 83-84.
[289] NSW Government, *NSW Consumer Energy Strategy*, September 2024, p 50.
[290] The Hon. Penny Sharpe MLC, *Letter to IPART*, 29 August 2024; The Hon. Penny Sharpe MLC, *Letter to IPART*, 21 April 2025
[291] NSW Government, *NSW Consumer Energy Strategy*, September 2024, p 50.
[292] AER, *Ausgrid RIN response 2023-24*, 31 October 2025; AER, *Essential Energy RIN response 2023-24*, 31 October 2025; AER, *Endeavour Energy RIN response 2023-24*, 31 October 2025.
[293] EWON, *Submission to IPART 2024-25 Energy Market Monitoring consultation paper*, 22 August 2025, p 2.
[294] EWON, *Submission to IPART 2024-25 Energy Market Monitoring consultation paper*, 22 August 2025, p 8.
[295] EWON, *Submission to IPART 2024-25 Energy Market Monitoring consultation paper*, 22 August 2025, p 2.
[296] AEMC, *Rule Changes – Real-time data for consumers*, accessed 10 November 2025
[297] AEMC, *Draft rule Determination: Real-time data*, 11 September 2025, p 45
[298] AEMC, *Draft rule Determination: Real-time data*, 11 September 2025, p 46
[299] AEMC, *Draft determination – Real-time data for consumers*, September 2025, p i.
[300] EWON, *Submission to IPART 2024-25 Energy Market Monitoring consultation paper*, 22 August 2025, p 7.
[301] IPART, *Final Report: Solar feed-in benchmark ranges for 2025-26*, May 2025, p 1
[302] Justice and Equity Centre, *Submission to Energy Market Monitoring consultation paper*, 22 August 2025, p 17
[303] IPART analysis of Energy Made Easy data, February and August 2025.
[304] IPART analysis of Energy Made Easy data, February and August 2025.
[305] AEMO, *DER Data Dashboard*, accessed 7 November 2025.
[306] AEMC, *Turning point for incentives to invest in residential batteries*, accessed November 2025
[307] University of Technology Sydney, *Flexible demand - the current state of play in Australia*, May 2024, p 5.
[308] University of Technology Sydney, *Flexible demand - the current state of play in Australia*, May 2024, p 7.
[309] University of Technology Sydney, *Flexible demand - the current state of play in Australia*, May 2024, p 7.
[310] University of Technology Sydney, *Flexible demand - the current state of play in Australia*, May 2024, p 7.
[311] ACCC, *Inquiry into the National Electricity Market*, July 2025, p 47.
[312] Amber Electric, *What are Amber's rates*, 15 February 2023, accessed 26 November 2025
[313] Amber Electric, *How will you warn me about price spikes?*, 15 February 2023, accessed 26 November 2025
[314] ACCC, *Inquiry into the National Electricity Market*, July 2025, p 48.
[315] ACCC, *Inquiry into the National Electricity Market*, July 2025, p 48.
[316] ACCC, *Inquiry into the National Electricity Market*, July 2025, p 48.
[317] ACCC, *Inquiry into the National Electricity Market*, July 2025, pp 49-50.
[318] ACCC, *Inquiry into the National Electricity Market*, July 2025, p 51.
[319] ACCC, *Inquiry into the National Electricity Market*, July 2025, p 50.
[320] ACCC, *Inquiry into the National Electricity Market - July 2025*, 10 July 2025, p 93.
[321] ACCC, *Inquiry into the National Electricity Market - July 2025*, 10 July 2025, p 47.
[322] Origin, *Submission to IPART 2023-24 Energy Market Monitoring consultation paper*, August 2025, p 2.
[323] ACCC, *Appendix C - Supplementary spreadsheet with retail pricing data, cost stack data and charts - Inquiry into the National Electricity Market*, December 2025
[324] ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025, Tab: 13. Survey Data.
[325] ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025, Tab: 13. Survey Data.
[326] ACCC, *Inquiry into the National Electricity Market*, July 2025, p 51.

[327] ACCC, *Inquiry into the National Electricity Market,* July 2025, p 61
[328] ARENA, *AEMO Virtual Power Plant Demonstrations*, 1 February 2022, accessed 26 September 2025.
[329] Gabrielle Kuiper, *What is the State of Virtual Power Plants in Australia? From Thin Margins to a Future of VPP-tailers*, March 2022, p 8.
[330] Solar Victoria, *Benefits of joining a virtual power plant*, 14 August 2024, accessed 25 September 2025; and Australian Government Transparency Portal, *Virtual Power Plants: Empowering electricity consumers*, accessed 26 September 2025.
[331] AEMC, *Integrating Price-Responsive Resources*, 3 August 2023.
[332] Solar Choice, *Discover Energy VPP: An Independent Review*, 15 September 2025
[333] EWON, *Submission to IPART 2024-25 Energy Market Monitoring consultation paper*, 22 August 2025, pp 3-4; Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 15.
[334] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 15.
[335] EWON, *Submission to IPART 2024-25 Energy Market Monitoring consultation paper*, 22 August 2025, p 4.
[336] Gabrielle Kuiper, *What is the State of Virtual Power Plants in Australia? From Thin Margins to a Future of VPP-tailers*, March 2022, p 24.
[337] Gabrielle Kuiper, *What is the State of Virtual Power Plants in Australia? From Thin Margins to a Future of VPP-tailers*, March 2022, pp 25; ACCC, *Inquiry into the National Electricity Market,* July 2025, p 76.
[338] ACCC, *Inquiry into the National Electricity Market*, July 2025, p 76
[339] Gabrielle Kuiper, *What is the State of Virtual Power Plants in Australia? From Thin Margins to a Future of VPP-tailers*, March 2022, p 29.
[340] Gabrielle Kuiper, *What is the State of Virtual Power Plants in Australia? From Thin Margins to a Future of VPP-tailers*, March 2022, pp 25.
[341] Energeia, *Benefit Analysis of Load-Flexibility from Consumer Energy Resources: Final Report*, 26 March 2025, p 41.
[342] ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025.
[343] ACCC, *Inquiry into the NEM July 2025 report*, 10 July 2025, p 67.
[344] ACCC, *Inquiry into the NEM July 2025 report*, 10 July 2025, pp 66-67.
[345] ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025, Tab: 13. Survey Data.
[346] ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025, Tab: 13. Survey Data.
[347] ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report*, July 2025, Tab: Chapter 3.
[348] ACCC, *Inquiry into the NEM July 2025 report*, 10 July 2025, p 68.
[349] ACCC, *Inquiry into the NEM July 2025 report*, 10 July 2025, p 73.
[350] ACCC, *Inquiry into the NEM July 2025 report*, 10 July 2025, p 73.
[351] ACCC, *Inquiry into the NEM July 2025 report*, 10 July 2025, p 77.
[352] EWON, *Submission to IPART 2024-25 Energy Market Monitoring consultation paper*, 22 August 2025, p 7.
[353] EWON, *Submission to IPART 2024-25 Energy Market Monitoring consultation paper*, 22 August 2025, p 3.
[354] Energy and Water Ombudsman NSW, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 7
[355] Energy and Water Ombudsman NSW, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 7
[356] Energy and Water Ombudsman NSW, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 7
[357] NSW Government, *NSW Consumer Energy Strategy*, September 2024, p 50.
[358] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 19; Individual [W25/2098], *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025; Individual [W25/2098], *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, July 2025; A. Sumit, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025
[359] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, pp 19, 23.
[360] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 23.
[361] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 24.
[362] Energy Consumers Australia, *June 2025 Household raw survey data*, accessed 15 October 2025; IPART analysis.
[363] Energy Consumers Australia, *Understanding and Measuring Energy Hardship in Australia,* 28 July 2025, p 3.
[364] Energy Consumers Australia, *Understanding and Measuring Energy Hardship in Australia,* 28 July 2025, pp 3, 10
[365] Energy Consumers Australia, *Understanding and Measuring Energy Hardship in Australia,* 28 July 2025, p 22.
[366] Energy Consumers Australia, *Understanding and Measuring Energy Hardship in Australia,* 28 July 2025, p 15.
[367] Energy Consumers Australia, *June 2025 Household raw survey data*, accessed 15 October 2025; IPART analysis.
[368] AER, *Retail Law Performance Reporting Procedures and Guidelines*, 1 July 2025.
[369] AER, *Annual Retail Markets Report 2023-24*, 30 November 2024, p 67.
[370] AER, *Annual Retail Markets Report 2023-24,* 30 November 2024, p 73.
[371] AER, *Annual Retail Markets Report 2023-24,* 30 November 2024, p 73.
[372] AER, *Schedule 3 - Quarter 3 2024 – 25 retail performance data,* 27 June 2025.
[373] AER, *Annual Retail Markets Report 2023-24,* 30 November 2024, p 77.
[374] AER, *Schedule 4 - Quarter 2 2024–25 retail performance data*, 27 June 2025.

[375] ACCC, *Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report - July 2025*, accessed 21 October 2025.
[376] ACCC, *Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market report - July 2025*, accessed 21 October 2025, Tab: 3. Residential Usage; IPART analysis.
[377] AER, *Schedule 4 - Quarter 2 2024–25 retail performance data*, 27 June 2025.
[378] Commonwealth Government, *Energy Bill Relief Fund - New South Wales*, 9 August 2023.
[379] Commonwealth Government, Energy Bill Relief Fund – NSW, August 2023, pp 3-4.
[380] Service NSW, *Apply for the household National Energy Bill Relief payment*, August 2025.
[381] NSW Government, *NSW Energy Social Programs Annual Report – 2023-24 Financial Year*, May 2025, p 9.
[382] NSW Government, *NSW Energy Social Programs Annual Report – 2023-24 Financial Year*, May 2025, p 7.
[383] IPART analysis of NSW Government, *Energy Social Programs dashboard,* accessed 24 November 2025
[384] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, pp 20-21.
[385] Audit Office of NSW, *Energy rebates for low income households*, Department of Planning and Environment, 17 September 2017.
[386] ACCC, *Retail Electricity Pricing Inquiry – Final Report*, 1 June 2018.
[387] SACOSS and ACOSS, *Reforming electricity concessions to better meet need*, 9 December 2022.
[388] Energy Consumers Australia, *Understanding and Measuring Energy Hardship in Australia,* 28 July 2025.
[389] Department of Climate Change, Energy, the Environment and Water, *NSW Consumer Energy Strategy*, September 2024, p 42.
[390] Justice and Equity Centre, *Submission to IPART 2024-25 Energy Market Monitoring Consultation Paper*, August 2025, p 10.
[391] AER, *Schedule 3 - Quarter 3 2024 – 25 retail performance data*, 27 June 2025.
[392] AER, *Schedule 3 - Quarter 3 2024 – 25 retail performance data*, 27 June 2025.
[393] AER, *Schedule 3 - Quarter 3 2024 – 25 retail performance data*, 27 June 2025.
[394] EWON, *EWON Insights – July to September*, November 2024.
[395] IPART, *Monitoring the NSW retail electricity market 2023-24,* November 2024, p 178
[396] IPART, *Review of the performance and competitiveness of the retail energy market in NSW*, 2017-18, p 12
[397] ACCC, *Inquiry into the National Electricity Market*, December 2023, pp. 25 - 26
[398] IPART, *Monitoring the NSW retail electricity markets 2021-22*, October 2022, p 15
[399] NSW Government, *Letter from the Hon Anthony Roberts MP to Peter Boxall*, 7 April 2014.
[400] NSW Government, National Energy Retail Law (NSW), 2012, No 37a.
[401] ACCC, *Restoring electricity affordability and Australia's competitive advantage: Retail Electricity Pricing Inquiry – Final Report*, June 2018, p 252
[402] ACCC, *Inquiry into the National Electricity Market*, December 2023, p 26
[403] DCCEEW, *Review outcomes: 2025 reforms to the Default Market Offer*, November 2025, pp 6 - 10
[404] ACCC, *About the Electricity Retail Code*, accessed 28 November 2024
[405] ACCC, *Inquiry into the National Electricity Market*, December 2023, p 28
[406] DCCEEW, *Review into the effectiveness of the PEMM Act 2019*, June 2025, p 25.
[407] The Hon. Penny Sharpe MLC, *Letter to IPART from the Hon Penny Sharpe,* 29 August 2024, p 1.; The Hon. Penny Sharpe MLC, *Letter to IPART from the Hon Penny Sharpe,* 21 April 2025,
[408] The Hon. Penny Sharpe MLC, *Letter to IPART from the Hon Penny Sharpe,* 21 April 2025,
[409] NSW Government, National Energy Retail Law (NSW), 2012, No 37a (3)