IPART Independent Pricing and Regulatory Tribunal | NSW

Monitoring the NSW retail electricity market 2023-24

Annual Report

November 2024

Energy »

Acknowledgment of Country

IPART acknowledges the Traditional Custodians of the lands where we work and live. We pay respect to Elders both past and present.

We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

Tribunal Members

The Tribunal members for this review are:

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The Independent Pricing and Regulatory Tribunal

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1 Executive summary

IPART is required to report annually to the Minister for Energy on the performance and competitiveness of the NSW retail electricity and gas markets for small customers.[a]

A 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 that products meet changing customer needs and preferences. Further, a competitive retail electricity market will also help ensure that the long-term benefits of the energy transition are passed onto customers.

We have found the NSW retail electricity market is not delivering good outcomes for many residential and small business customers. Retail prices rose sharply over 2022-23 to 2023-24, reflecting rising wholesale prices in recent years and higher network costs. While there are better offers available, many customers in NSW are facing difficulties when trying to switch retailer or plan to get a better offer. This is primarily because of complex tariff structures and insufficient information.

As a result of these price increases, over 50% of residential customers on flat-rate tariff plans in NSW were paying prices higher than the Default Market Offer in August 2023. This is despite the fact the Default Market Offer is designed to protect customers from unjustifiably high prices.[1]

Further, the NSW retail electricity market remains concentrated among the 3 largest retailers and smaller retailers face barriers to entry and expansion, in particular through challenges in accessing hedging contracts. If barriers to expansion continue to persist, in the medium term, this may limit competitive pressure on incumbents and choice for consumers.

Consumers are also facing challenges in interpreting and responding to complex demand tariff plans. Our analysis found that for non-solar customers, on average, demand tariff plans lead to worse outcomes compared to flat-rate and time-of-use tariff plans. Rather than offering cost savings or promoting efficient energy use, demand tariff plans appear to lead to higher annual bills and customer confusion.

In our view, improving outcomes for consumers in NSW requires simplifying the switching process and improving the transparency of pricing information. We also consider further information on the actual prices charged to customers is necessary for regulators to continue monitoring prices and customer outcomes during the energy transition.

This report sets out our findings of the performance and competitiveness of the NSW retail electricity market for 2023–24. We have produced a separate report on the NSW retail gas market.

[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.

1.1 Concentration in the NSW retail electricity market remains high and new entrants face barriers to expansion

Over the past decade, the market share of the 3 largest retailers (Origin, AGL and EnergyAustralia) has declined from 93% in June 2014 to 76% in March 2024. This decline has mainly been due to strong growth from Red Energy, who has expanded its market share from around 2% to 11% over this period.[b] Even so, the market remains concentrated among the largest 3 retailers.

Of the remaining retailers in NSW, most hold a market share of less than 1% and are not vertically integrated. These smaller retailers have not materially expanded their market share in recent years and face barriers to expansion, particularly from challenges in accessing hedging products during periods of wholesale market volatility. As the transition to renewable energy continues, these barriers to expansion may increase as a result of less availability of baseload hedging contracts and higher volatility in the wholesale spot market (at least in the short to medium term before larger scale energy storage is available).

We discuss market concentration and barriers to entry and expansion in Chapter 3.

1.2 Electricity prices have risen by a significant amount and there is limited data on the prices customers actually pay

The Australian Competition and Consumer Commission (ACCC) collected data on the actual prices charged to customers in the National Electricity Market in August 2022 and August 2023.[2]

Over this period, the weighted average flat-rate residential customer bill in NSW increased between 31% and 37%, depending on the distribution network.[3] This was significantly higher than the annual increase in the relevant Default Market Offer (around 20%) and the increase in median market offers in NSW based on data from Energy Made Easy (16% to 19%).

The price increases over August 2022 to August 2023 followed periods of high and volatile wholesale electricity prices in 2022 and early 2023, due to rapidly rising input prices (coal and gas), generator outages and unusually cold weather. The smaller price increase for offers published on Energy Made Easy compared to actual bills, suggests retailers may be passing a higher proportion of cost increases to existing customers rather than to new customers.

As a result of these price increases, as at 1 August 2023, over 50% of residential customers in NSW on flat-rate tariff plans were estimated to have annual bills equal to or above the relevant Default Market Offer annual bill. The Default Market Offer is designed to protect customers that have not engaged in the market (standing offer customers) from unjustifiably high electricity prices.[4]

Apart from this data collected by the ACCC for 2022 and 2023, there is limited information on the prices charged by retailers to existing customers.[c] We have recommended that data on all plans offered by retailers should be reported and accessible to regulators on an ongoing basis.

[b] Market share is based on the number of residential customers in NSW.

[c] As at the date of publication of this report, the ACCC has not reported data on actual prices charged to customers and the annual bills for 2024. As a result, we have reported on the annual bills using the latest available data which covers August 2022 and August 2023.

We discuss electricity prices charged to customers in NSW and our recommendations to improve the price transparency for customers and regulators in Chapter 6.

1.3 Bills are higher for customers on demand tariff plans

The National Electricity Rules require distribution network service providers (DNSPs) to gradually make their tariffs more accurately reflect the costs of serving their customers.[5] To date this has involved DNSPs transferring their customers from a flat-rate network tariff to a time-of-use or demand network tariff when a smart meter is installed.[6] When a customer's network tariff changes, retailers generally also change the customer's retail tariff to align with the network tariff.[d] Further, when a customer has a smart meter installed they are generally not able to move back to a flat-rate network tariff or flat-rate retail tariff plan.

Several stakeholders raised concerns around the complexity of time-of-use and demand tariffs and the lack of information or tools to help consumers understand these complex tariffs. These concerns include that the Australian Government's Energy Made Easy website is not able to calculate the demand charge component of bills for demand tariff plans.

To date there has been limited analysis on the outcomes for customers on demand tariff plans at the retail level. This is despite there being an estimated 10% of residential customers and 13% of small business customers in NSW on network demand tariffs,[e, 7] and demand tariff plans are not subject to price protections through the Default Market Offer.

We estimated annual bills using a sample of non-solar residential and small business customer consumption profiles in the Ausgrid distribution network. This analysis found:

- There is a significant variation in the demand charge component of annual bills, depending on the demand tariff plan. The annual demand component could range from as little as $10 (on an introductory demand tariff plan) to over $800 for the same customer, depending on the plan.
- Non-solar customers on demand tariff plans are likely to have annual bills that are, on average, $200 to $300 higher compared to if they were on a flat-rate or time-of-use tariff plan.

We consider there is an urgent need for improvements to customer information and tools to help customers understand and compare demand tariff plans. This includes urgently updating the Energy Made Easy website so it can calculate bills for demand tariff plans. Without this demand tariffs plans are unlikely to change customer behaviour (and reduce peak demand) and consumers will continue to face challenges in choosing the best offer available to them.

We discuss our analysis on demand tariff plans and the associated recommendations in Chapter 9.

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[d] This is because it reduces the retailer's risk by guaranteeing the customer pays them enough to cover what the retailer is charged by the distribution network.
Source: Powershop, *Submission to the Energy Market Monitoring Consultation Paper*, September 2024, p 3; Engie, *Submission to the Energy Market Monitoring Consultation Paper*, September 2024, p 2; Origin, *Submission to the Energy Market Monitoring Consultation Paper*, September 2024, p 2

[e] Data is not available on the number of residential and small business customers that are on demand tariff plans. However, we expect a similar proportion of customers to be on demand tariff plans with their retailer.

1.4 An increasing number of households in NSW are concerned about energy affordability

Following the large increase in retail electricity prices in recent years, the June 2024 Energy Consumer Sentiment Survey found the expense that households in NSW are most concerned about paying is their electricity bill. This is despite the annual cost of electricity being notably less than other annual expenses including mortgage repayments and groceries. Further, in the same survey nearly 60% of households in NSW reported they are concerned that electricity will become unaffordable in the next 3 years.

The number of complaints from residential and small business customers in NSW to retailers and the Energy and Water Ombudsman of NSW (EWON) increased notably from 2022-23 to 2023-24. In particular, EWON reported a substantial increase (nearly 60%) in the number of complaints about high bills compared to a year earlier.

We discuss customer concerns about the rising costs of electricity in Chapter 4 and trends in complaints in Chapter 12.

1.5 There are savings available from switching, but barriers in the process

Most households and small businesses in NSW can save money by switching retailer or offer. We estimate that in July 2024 a residential customer on the median flat-rate standing offer could have saved around $350 per year by switching to one of the lowest offers in the market and a small business customer could have saved around $750 per year.[f]

Switching rates increased over 2023–24 compared to 2022–23, with 25% of households in NSW reporting they had switched retailer or offer in the past 12 month to June 2024 (up from 15% reported in June 2023). However, stakeholder submissions detailed several barriers continue to persist in the search and switching process, and if these are not addressed, they could reduce trust and discourage customer engagement in the market. These include:

- flat-rate offers are typically not available to customers with a smart meter
- customers don't have the tools available to calculate the cost of and compare complex plans, including demand tariff plans
- recently introduced disclosure requirements (the *Better Offer* requirement in the *Better Bills Guideline*), may be having a limited effect due to the pricing practices of retailers.

We discuss the barriers in the search and switching process and the associated recommendations in Chapter 5.

[f] There are a wide range of offers available in the market. In this report, we use offers at the 10th percentile to measure lowest offer available, to ensure that we exclude any outliers.

1.6 More information is required on new energy services including virtual power plants and demand response

Consumer energy resources, in particular rooftop solar and batteries, are playing an increasingly important role in the operation of the National Electricity Market. These resources enable consumers to generate or store their own electricity, export electricity to the grid and actively manage their own consumption.

The growth in consumer energy resources in NSW has been led by rooftop solar. In recent years we have also started to see a higher level of uptake of battery storage systems and electric vehicles in NSW. There has also been an increase in the number of virtual power plants being offered in NSW. Virtual power plants coordinate consumer energy resources and can provide additional benefits to the wholesale market and distribution networks. The roll out of smart meters is also enabling new services, including demand response programs.

While these innovations are delivering benefits to the electricity supply chain, they are also increasing the complexity of energy products and services. As a result, the NSW Government has asked IPART to report on virtual power plants and demand response programs in NSW. We will consult with stakeholders on how to undertake this new role and what data we should report on in 2025.

We discuss consumer energy resources, virtual power plants and demand response programs in Chapter 11.

1.7 A forward-looking review of electricity pricing is important

The accelerated deployment of smart meters means that all electricity customers in NSW will have a smart meter by 2030. This is essential to facilitate a more innovative and responsive energy system. However, the complexity of network tariffs and the practice of retailers moving customers to new tariff structures without consent, has eroded trust in the rollout of smart meters and more broadly, the energy sector.

This issue has been compounded by the significant increase in electricity price increases, at a time of a broader cost-of-living crisis. A recent consumer survey found that over 60% of households had a negative or neutral view that the electricity market is working in their long-term interests.

Given the findings in this report regarding the increasing complexity of tariffs, outcomes for customers on demand tariff plans, the growing uptake of consumer energy resources, and declining customer confidence, we consider the AEMC's Review of Electricity Pricing for a Consumer-Driven Future is timely. This review is considering the role of network and retail electricity pricing, products and services in supporting the diverse needs of customers, and consumer energy resources necessary for the energy transition (see Appendix D for more details).

Recommendations

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. 36

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. 58

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. 58

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. 62

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. 67

6. The AER should consider amending the Retail Pricing Information Guidelines and the Retail Performance Reporting Guidelines to require: 77
   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. 77
   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. 77

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. 79

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: 80
   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 80
   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. 80

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. 120

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. 120

2 What we heard from stakeholders

We published a Consultation Paper for our Energy Market Monitoring report in August 2024.[8] We sought feedback on:

- our analytical approach for Energy Market Monitoring and the metrics we report on
- the impact of changing tariff structures, including time-of-use and demand tariffs on households and small businesses, including whether they are creating barriers to switching
- information available to help IPART understand and report on virtual power plants in NSW and the experience of customers who have participated in virtual power plants
- other emerging issues in the NSW retail electricity and gas markets that we could consider in this report (or in future Energy Market Monitoring reports).

We received 14 submissions, including 1 confidential submission. These submissions were from a broad range of stakeholders and canvassed a diverse range of views.

This chapter summarises the key themes and views from submissions related to the NSW retail electricity market and how we have incorporated and responded to these views in our report.[9] Detailed analysis in response to each of the themes and views is included in the relevant chapter(s) of this report.

Table 2.1 Number of submissions by stakeholder group

Stakeholder group	Number of submissions	Name of stakeholders that provided a submission
Consumer advocacy groups	2	• Justice and Equity Centre • National Seniors Australia
Individuals	4	• P. Robertson • M. Fletcher • H. Griffiths • Name supressed
Energy retailers	5	• EnergyAustralia • AGL • Origin • Engie • Powershop (Shell Energy)
Distribution Network Service Provider	1	• Ausgrid
Ombudsman	1	• EWON
Confidential submission	1	

[9] Several submissions also discussed issues, concerns and views regarding the retail gas market in NSW. We discuss these separately in our NSW Retail Gas Market Monitoring report.

2.1 Changing network tariff structures and proposed reforms

The issue most frequently discussed across submissions was the impact of changing tariff structures on electricity customers. This included:

- concerns regarding network tariff reassignment following the installation of a smart meter and subsequently a retailer changing the customer's retail tariff plan (to reflect the network tariff)
- views on the AEMC's proposed Consumer Safeguards which are being consulted on as part of their review into Accelerating Smart Meter Deployment (Appendix D).

As set out below, different stakeholder groups had materially different views on this topic.

Submissions from Consumer Advocacy Groups and the Ombudsman

The submissions from Consumer Advocacy Groups and EWON raised concerns with the current practice of retailers changing a customer's flat rate tariff plan to a time-of-use or demand tariff plan, to reflect the underlying network tariff after a smart meter is installed.[9]

Submissions from Consumer Advocacy Groups considered that consumers should be able to select offers which meet their needs in an affordable way, and this includes the ability to access flat-rate tariffs regardless of the underlying network tariff.[10]

These submissions discussed there are many consumers who have limited ability to shift their usage, including those who have dwellings with poor thermal qualities and those who are unable to shift usage due to health issues, disability, old age or work patterns.[11] These submissions also detailed several academic studies into the compulsory assignment of dynamic tariffs (e.g. time-of-use or demand tariffs), which have found that this practice can exacerbate existing inequalities and lead to poor outcomes for vulnerable consumers.[12]

EWON and National Seniors Australia also raised concerns that many consumers are not in a position to understand the complex price signals in time-of-use and demand tariff plans and there is insufficient information on these plans.[13] The concerns include:

- retailers (and other third parties) are not providing accessible and easy to understand information to customers before the installation of a smart meter, which typically results in a change to the network tariff and a subsequent change in the retail plan (and generally the inability to change back to a flat-rate tariff plan)[h, 14]
- customers do not have access to their own real-time electricity data which is required to understand their own consumption behaviour and respond to demand charges[i,15]
- online tools, such as the Energy Made Easy website, are not able to calculate the cost of demand tariff plans, as they does not have the capability to estimate a *'demand charge'*.[16]

[h] The submission from EWON included details of several case studies demonstrating the impact of a smart meter being installed and then a customer's network and retail tariff changing with little to no information being provided to the customer.

[i] In regard to this issue, on 24 June 2024, the AEMC received a rule change proposal from Energy Consumers Australia seeking to provide consumers (and their authorised representatives) access to real time energy data. Consumers currently only have the right to access historical metering data and do not have a right to their real time electricity usage.

Source: Energy Consumers Australia, *Rule change request: Access to real time data for consumers and their authorised representatives*, 24 June 2024

The submission from EWON reported that it has seen an increase in tariff-related complaints in 2024 and considers this has been driven by the increasing complexity of tariffs. EWON submitted that consumer challenges associated with time-of-use and demand tariffs are a shared problem between retailers and distribution networks, and it should not fall onto consumers to solve.[17]

Submissions from retailers

Several submissions from retailers discussed that while they manage volatile wholesale electricity costs on behalf of customers through hedging, they do not have any tools available to hedge against the variability of network costs on behalf of their customers. As a result, they typically align their retail plans with the underlying network tariff.[18] These submissions explained that network tariffs are typically the largest cost component of retail plans, and the ability to structure retail plans to match the underlying network tariffs is important to ensure they can manage and recoup costs.[19]

Several retailers referred to their submissions to the AEMC Directions Paper on the consumer safeguards and raised concerns with the AEMC's proposals.[20] This includes:

- The proposed safeguards may exacerbate the mismatch between what a DNSP charges a retailer and what a retailer can charge a customer. This is because while a DNSP will re-assign a customer with a smart meter to a time-of-use or demand network tariff, a retailer would be required to obtain explicit informed consent from a customer before they change their retail plan under the AEMC's draft rule change.[21]
- While retailers recognised the AEMC's Direction Paper discussed the mismatch between network tariffs and retail plans may mean that flat-rate plan customers face higher prices, as the mismatch is passed through via a risk premium,[22] retailers raised concerns this will be difficult to communicate to customers and likely lead to confusion.[23]

Retailers also submitted that the National Energy Rules require DNSPs to ensure network tariffs are not overly complex and can be readily understood by consumers. Retailers considered that their recent customer experience with demand tariff plans (which mirror the structure of the network tariffs) demonstrates this has not been achieved.[24]

In response to these issues, retailers considered that:

- network tariff reassignment should be opt-in, or opt-out following the example of Victoria[25]
- DNSPs should be required to have a flat-rate tariff available for customers with a smart meter[26]
- if cost-reflective tariffs are ineffective at the network level, then network tariff reform should be considered.[27]

Submission from Ausgrid (Distribution Network Service Provider)

The submission from Ausgrid discussed that consumers should be able to decide which is the best retail tariff for their needs, including having access to a flat-rate retail tariff plan.[28]

Ausgrid's submission discussed their support for the NSW Government's recent commitment for a prohibition of retailers automatically assigning customers to demand tariff plans, without their explicit informed consent as part of the NSW Consumer Energy Strategy.[29]

2.1.1 How we have considered these views and issues

In late August 2024, we received a letter from the Hon. Penny Sharpe, Minister for Climate Change, Energy, the Environment and Heritage, requesting that we include analysis in this report on new and complex retail offerings including demand tariffs, virtual power plants and demand response programs.[30]

In October 2024, the AEMC provided IPART with a sample of consumption profiles from household and small business customers in NSW for 2023–24. This has enabled us to analyse and report on outcomes for customers on demand tariff plans. This analysis in contained in Chapter 9 and explores:

- the size and variability of annual bills for demand tariff plan customers
- how much demand charges contribute to the annual bills of customers on demand tariff plans
- the estimated annual bills for customers on demand tariff plans (based on their actual consumption), compared to if those customers were on flat-rate or time-of-use tariff plans.

2.2 Virtual power plant and demand response programs

Several submissions discussed the benefits that can arise from virtual power plants including:

- reducing maximum demand for the electricity network, potentially deferring or avoiding the need for network upgrades
- allowing consumers to receive additional benefits from having a battery storage system installed, for example discounts on the purchase price of the battery or credits on their electricity bill.[31]

Most submissions from retailers provided details of their virtual power plant and/or demand response programs. This includes the size of the virtual power plant or demand response program (such as customer numbers and/or capacity), features, eligibility criteria, and consumer benefits such as discounts on energy bills or credits.[32]

The submissions from EnergyAustralia, Engie, Origin and Ausgrid discussed the growing body of literature on virtual power plant and demand response trials published by Australian Renewable Energy Agency (ARENA).[33] These submissions highlighted the findings of several recent trials and considered the market is still maturing.[34] The submissions from EnergyAustralia and Ausgrid suggested that IPART use publicly available data for reporting on virtual power plants, including monitoring the number of retailers offering virtual power plant programs under the voluntary New Energy Tech Consumer Code (NETCC).[35]

The submission from EWON discussed that complaints around virtual power plants and battery storage systems are complex as they often involve the sale of a device with a retail electricity contract.[36] Customers purchasing battery storage systems and joining a virtual power plant operated by a retailer can access external dispute resolution from EWON. However, if the battery storage system or virtual power plant is not provided by a retailer, but another third party such as a battery distributor or aggregator, consumers will **not** have access to external dispute resolution and can only report the issue to Fair Trading NSW.[37] The submission noted the NSW Consumer Energy Strategy includes a commitment for the NSW Government to consult on an Expansion to EWONs jurisdiction in 2025.[38]

The submission from EWON also detailed some of the key causes of complaints around virtual power plants and demand response programs including:

- a lack of customer knowledge
- customers being unable to determine if they are benefiting
- unclear and complex terms and conditions
- unclear or misleading marketing
- problems arising with joining due to battery interoperability
- a lack of access to energy data related to virtual power plant participation.[j,39]

2.2.1 How we have considered these views and issues

As discussed above, in late August 2024, we received a letter from the Hon. Penny Sharpe, requesting we include analysis on new retail offerings including virtual power plants and demand response programs in this report.[40] Further, the NSW Government's Consumer Energy Strategy included an action for IPART to report on virtual power plants and demand response programs in each Energy Market Monitoring report from 2025.[41]

Chapter 11 in this report provides information on what virtual power plant and demand response programs are, what programs are on offer to customers in NSW and some of the key questions consumers should consider before they join a virtual power plant or demand response program. This chapter has largely been informed by the information in submissions and insights from studies or trials on virtual power plant and demand response programs.

We are considering what information will be required to annually report on virtual power plant and demand response programs in our future Energy Market Monitoring reports, and will consult on this further next year.

[j] EWON also included several case studies in their submission related to virtual power plants and demand response programs.

2.3 IPART's approach to Energy Market Monitoring and regulatory burden

Submissions from retailers discussed there are several energy reviews and proposed rule changes in progress and a range of data already is reported to various regulators and market bodies.[42] These submissions supported IPART's existing approach of using publicly available data for Energy Market Monitoring rather than requesting new information or data.[43] These stakeholders submitted that information requests add to a retailer's compliance costs, which are ultimately borne by end customers.[44]

The Justice and Equity Centre raised several issues with the metrics we report on and our approach to energy market monitoring.[k,45] These include:

- analysis of offers on the Energy Made Easy website does not indicate what prices households in NSW are actually paying or can access through switching
- switching rates are not a robust proxy for good consumer outcomes and switching does not indicate whether a household is on a better deal (or engaged)
- reporting on the savings from switching needs additional context as lower cost offers may not be available to all customers and retailers often increase prices soon after sign-up
- reporting on the average or median offer disguises cohorts of households who are on worse offers and those who are on better offers
- tracking the number of market offers and standing offers assumes market offers are better priced than standing offers
- reporting on the number retailers is not a good proxy for competitive dynamism where market allows poor practices, and where customer switching mainly occurs between the big-3 retailers.[46]

2.3.1 How we have considered these views and issues

We are cognisant of the regulatory burden of information requests and the compliance costs that can result from different regulatory requirements across regions in the National Electricity Market. This has been a key consideration for IPART in recent years (and including for this report), when deciding **not** to issue information requests to retailers and when formulating and assessing recommendations.[l]

We agree with the Justice and Equity Centre that our analysis of competitive dynamics should consider outcomes for a range of customers and metrics including median prices, the percentage of customers on market and standing offers, and the potential savings from switching do not capture the full range of customer experiences. To address this, we have included additional context when we report on these metrics to discuss the limitations of the analysis.

Further, we have included additional analysis and reporting on a range of customer outcomes. This includes reporting on:

[k] The Justice and Equity Centre (formerly known as the Public Interest Advocacy Centre) have raised similar issues with IPART's approach to Energy Market Monitoring in several past submissions. For example see: PIAC, *Letter to the Independent Pricing and Regulatory Tribunal on Energy Retail Market Monitoring*, 9 November 2023, pp 1-2.

[l] Appendix E contains a table of recommendations from IPART's Energy Market Monitoring reports over the past 5 years.

- the annual cost and distribution of outcomes for flat rate tariff customers in NSW in Chapter 6.
- the annual cost of time-of-use and demand tariff plans for a range of customers in NSW. To report on demand tariff plans we have used a random sample of consumption profiles from households and small business in NSW. We report on time of use tariff plans in Chapter 8 and demand tariff plans in Chapter 9.

We have also investigated when and how frequently retailers increase the prices of their offers listed on Energy Made Easy to investigate the issue of prices being raised soon after customers sign up (Chapter 5).[m]

2.4 Concerns regarding the structure or pricing of retail electricity plans

Two submissions raised concerns regarding the structure or pricing of retail electricity contracts.

The submission from the Justice and Equity Centre is concerned that:

- retailers frequently increase prices soon after customers sign up, eroding the benefits of engagement and switching
- retailer offers have the same plan name, but different prices and this creates confusion for customers and issues with mandatory bill disclosure requirements[n]
- offers listed on the Energy Made Easy website are not actually available when a customer tries to sign up or switch
- conditional discounts offer little to no benefit for most customers but impose high costs for a small number that do not meet the conditions (often those on lower incomes).[47]

This submission discussed these practices add a significant burden for many consumers to ensure they are on a fair deal,[48] and this is harder for consumers with low digital and/or English language skills.[49]

The submission from Ausgrid discussed that most retailers had not aligned their retail time-of-use periods to Ausgrid's new network time-of-use periods (which have come into effect over the last few years).[50] The submission explained that while is not a requirement for a retailers' pricing structure to reflect the underlying network pricing structure, Ausgrid's preference is that retailers' reflect the charging windows defined in the network pricing structure when they adopt that tariff structure in their retail plans.[51]

[m] While the submission from the Justice and Equity Centre discussed concerns with other metrics, including that the number of retailers is not a good proxy for competitive dynamism as switching mainly occurs among the 3 largest retailers, data was not available to investigate these issues further.

[n] This submission also discussed a recent investigation by CHOICE that discussed two cases where retailers had the same name for a plan, but different pricing structures applied to a customer.
Choice, *Are you paying more than other customers for the same energy plan?,* 19 June 2024

2.4.1 How we have considered these views and issues

We have considered the issues raised by the Justice and Equity Centre around switching and the ability to access offers on the Energy Made Easy website in Chapter 5. This includes:

- the data available to determine the extent of the practices and the impact on customers
- whether a policy response is currently being considered by other regulatory processes, and if not, our views on whether we think further investigation is required.

We have not conducted analysis into conditional discounts as the ACCC has recently undertaken in-depth analysis on offers with large conditional discounts and reported on this in their December 2023 Inquiry Report.[52] Further, Minister Bowen has proposed 7 consumer related rule changes to AEMC that, if implemented, will address the concerns on conditional discounts. We provide an overview of the ACCC's findings and the proposed rule changes in Appendix D.

Regarding Ausgrid's concerns, we have conducted analysis on the alignment of network and retail pricing periods (peak, shoulder and off-peak period) in Chapter 8.

2.5 Concerns regarding solar PV and consumer energy resources sales practices

Two submissions raised concerns with door-to-door marketing and sales practices for consumer energy resources.

The submission from the Justice and Equity Centre discussed that door-to-door and other high-pressure sales tactics are being used to target vulnerable consumers in the sale of consumer energy resources, including solar panels.[53] The submission explained that consumer energy resources are often sold in conjunction with buy now pay later and other credit products and often *'piggy-back'* on NSW Government programs or rebates.[54]

Similarly, EWON submitted that the door-to-door marketing complaints it receives are often linked to the sale of consumer energy resources, such as rooftop solar and batteries.[55] EWON advised that it has recently written to the NSW Minister for Energy to call on a ban of unsolicited door-to-door marketing and telesales of energy products and services in NSW.[56]

The Justice and Equity Centre is also concerned that customers do not always have a clear understanding of solar offers. In particular, customers are generally not aware the greatest benefit of solar panels is derived through self-consumption as opposed to feed-in tariffs.[57] This submission also discussed the introduction of 2-way pricing (export tariffs) has confused consumers, and there is little understanding of how retailers will include 2-way pricing in their offers.[58]

2.5.1 How we have considered these views and issues

We have included a discussion on the issues raised regarding the sales practices for consumer energy resources (including solar PV) in Chapter 11. We also report on the trends in complaints for consumer energy resources in Chapter 12 and will continue to report on this on an ongoing basis in our Energy Market Monitoring reports.

We have not addressed the issues raised regarding households considering the benefits of solar PV and the impact of export charges on solar feed-in tariffs.

We set annual solar feed-in tariff benchmark ranges and will be consulting on our methodology to set the benchmarks for 2025–26 onwards in early 2025. As part of this review, we will consider the benefits of solar PV for consumers, including the impact of export charges on solar feed-in tariffs.

2.6 Current indicators on payment plans, assistance measures and disconnections, only give limited insight

The submission by the Justice and Equity Centre raised concerns regarding retailer processes and practices for rebates, payment difficulty and disconnections.[59]

Regarding rebates, the submission discussed that rebates often do not reach those eligible and those who need them.[60] Research by the Justice and Equity Centre has found that awareness of rebates was low, there are gaps in eligibility requirements, and rebates may 'slip off' a customer's account (as they are not processed correctly by a retailer).[61]

Regarding payment difficulty, the submission explained that indicators of payment difficulty including energy debt, hardship and disconnection do not capture hidden costs of payment difficulty. These include going without energy, going without essentials and shifting payments difficulty elsewhere (such as credit card or buy now pay later).[62] The submission also noted a rise in the proportion of higher income households entering payment difficulty.[63]

Regarding disconnection, this submission detailed findings from their research on the threat of disconnection and the experience of disconnection. This research found that disconnection (and/or the threat of disconnection) impacts the customer's relationship with their retailer and undermines the customer's ability to manage debt repayment and seek payment assistance.[64] The submission also highlighted that groups of consumers with structural disadvantage experience higher rates of disconnection including includes those with a disability, First Nations people and those with lower incomes.[65]

2.6.1 How we have considered these views and issues

Chapter 11 of this report includes analysis on the number of customers accessing hardship or payment plans, access to rebates and complaints reported to retailers and EWON.

We have also included insights and findings from the Powerless Research conducted by the Justice and Equity Centre in our analysis. This provides deeper insight into experience of customers groups impacted by hardship and payment plans, and disconnection.

In addition, we note that one of the rule changes proposed by Minister Bowen to the AEMC (*Improving the application of concessions to bills*), if implemented, may assist in improving access to and the usage of rebates. We provide further detail on this in Appendix D.

2.7 Other issues raised in submissions

In addition to the key issues detailed above, some submissions raised other issues including:

- greenwashing fossil gases - renewable fuels and gases can only be regarded as zero-emissions or low emissions where they are not blended, where their source genuinely removes high intensity emissions and replaces it with lower-intensity emissions which are offset, and where the source of the renewable gas (such as biomethane) is genuinely unable to be removed by any other means. These qualifiers are not presented to the public and important information is omitted or intentionally obfuscated.[66]
- the use of AI by retailers – retailers have reported using AI for some customer centred services and this use should be monitored carefully to ensure it improves customer experience and outcomes and does not impact vulnerable consumers or have unintended consequences.[67]
- reforms to assist renters - the energy transition continues to increase the gap between households who can reduce energy use in healthy ways and those who cannot. In particular, people living in rented homes are at risk of missing out on being part of the energy transition with limited ability to improve energy efficiency, install consumer energy resources or to electrify.[68]

For this report we have prioritised the key issues across submissions and from the Minister, and therefore we have not conducted analysis on these other issues.

3 Market structure and barriers to entry and expansion

Key findings

- The number of active retailers (those with 50 or more customers in NSW) declined from 41 in 2022-23 to 38 in 2023-24. The number of retailers with published offers (that is, offering plans to new customers) was unchanged at 25.
- The market share of the 3 largest retailers (Origin, AGL and EnergyAustralia) declined by 2 percentage points from 2022–23 to 2023–24. However, the NSW retail electricity market continues to be concentrated with these 3 retailers holding an aggregate market share of 76%.
- Most retailers in NSW hold a market share of less than 1% and do not own electricity generation assets. These smaller retailers have not materially expanded market share in recent years and barriers to expansion are relatively high. These barriers appear likely to increase as the transition to renewable energy continues.

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

New entrants into a market can contribute to improved competitive outcomes as they challenge existing suppliers on price, product offerings and customer service. Even the threat of new entrants can be sufficient to incentivise existing suppliers to compete more aggressively on price and to innovate their product offering. This demonstrates the importance of ensuring that barriers to entry are sufficiently low.[69]

Business exits are also a part of a well-functioning market. These can occur for a range of reasons including changing consumer preferences, evolving market dynamics or economic shocks. However, several retailers exiting the market at a point in time (or no longer competing for new customers) can be detrimental to competition.[70]

In this chapter, we report on:

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

3.2 More retailers entered the market in 2023–24 compared to 2022-23

To provide electricity retailing services in NSW, an entity must obtain a retailer authorisation from the AER.[71] In most cases, a retailer authorisation is sought to operate in NSW, the ACT, Queensland, SA and Tasmania.[a]

A retailer may exit the NSW market in several ways. For example, a retailer may have their retailer authorisation revoked by the AER if they fail to meet their obligations under legislation or if a Retailer of Last Resort event is triggered.[72] A retailer may also surrender their retailer authorisation if they no longer wish to provide retailing services.[73]

From 2015–16 to 2020–21, 47 retailers were authorised by the AER to operate in NSW (in addition to those already authorised).[74] Over this period, 4 retailers exited the NSW market (Figure 3.1).[b, 75] This resulted in a significant increase in the number of authorised retailers in NSW. The ACCC has recently reported that retail competition in Australia has increased over the last decade as new retailers have entered and diversified the market.[76]

From 2021–22 to 2022–23 while 9 retailers were authorised by the AER, 13 retailers exited the market, resulting in a decline in the number of retailers.[77] The ACCC explained in their December 2023 Inquiry report that the increase in the number of retailers exiting the market over 2021–22 and 2022–23 was due to rising and volatile wholesale electricity spot prices over 2021–22. This culminated in the suspension of all regions in the National Electricity Market in June 2022.[78]

The ACCC reported that several retailers that exited were more exposed to price and volume risk.[79] However, the longer-term trend of more retailer authorisations than exits resumed over 2023–24 with 4 retailers being authorised.[80] Over the start of the 2024-25 financial year to 18 November 2024, there have been 2 retailer authorisations and 3 exits.[81]

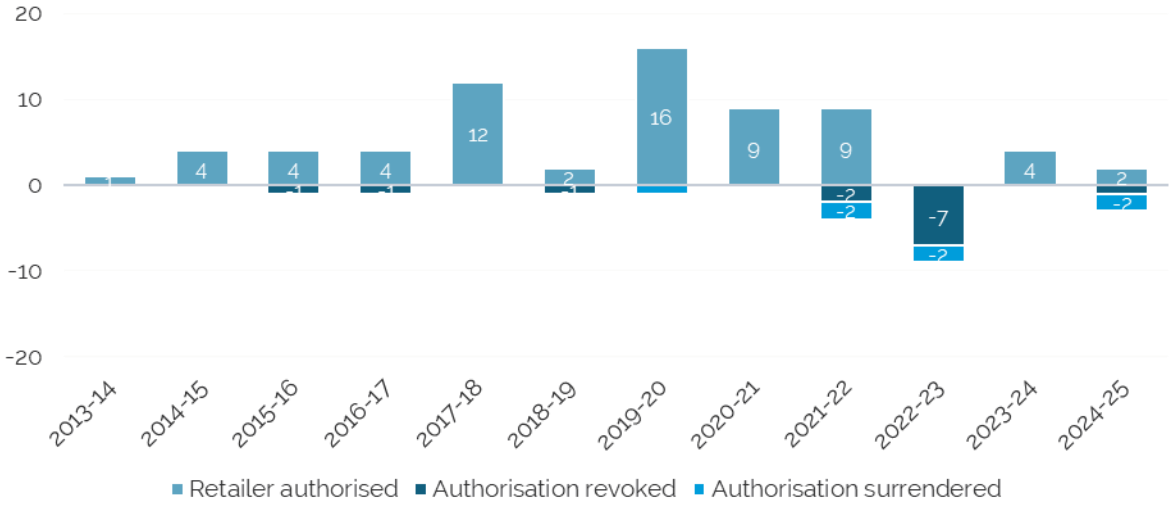
[a] Unlike other jurisdictions in the National Electricity Market (including NSW) to provide electricity retailing services in Victoria, an entity must obtain a licence from the Essential Services Commission.

Source: Essential Servies Commission, *Electricity and gas licences*, accessed 18 November 2024

[b] If a retailer with an existing customer base leaves the market, the AER transfers their customers to the "*retailer of last resort*" for that distribution region. In NSW, the retailers of last resort are Origin Energy and EnergyAustralia. While the underlying causes of the exit may vary, a retailer will generally enter the retailer of last resort scheme when it can no longer supply its customers. The retailer of last resort scheme is designed to ensure that, in the event of a retailer failing, customers continue to receive their electricity (or gas) supply.

Source: AER, *Retailer of Last Resort Plan*, July 2015; EWON, *FAQs: Retailer of Last Resort events*, accessed 18 November 2024

Figure 3.1 Number of retailer authorisations, revoked authorisations and surrendered authorisations, by financial year



Source: IPART analysis of the AER's *Register of authorised retailers*, accessed 23 July 2024; ACCC, *Inquiry into the National Electricity Market*, December 2023, p 23

3.3 The number of active retailers and retailers with published offers has fallen in recent years

In the section below we report on the number of active retailers and the number of retailers with published offers.

Active retailers are those with 50 or more customers in NSW on the specified reporting date.[c] However, while an active retailer has an existing customer base, they may not be seeking new customers. As a result, we also report on the number of retailers with offers in NSW published on the Energy Made Easy website. Retailers must have all offers that are *'generally available'* published on the Energy Made Easy website.[d] Therefore, the number of retailers with published offers provides an indication of the number of retailers in the market that are competing for new customers at a specific point in time.[e]

The number of active retailers in NSW increased each year from 2013–14 to 2021–22, reaching a peak of 46 active retailers in 2021–22. Since this time, the number of active retailers has declined to 38 as of 31 March 2024 (the latest available data, see Figure 3.2).[82]

From 2013–14 to 2021–22, the number of retailers with offers in NSW also increased each year, reaching a peak of 40 retailers in 2020–21. Since this time, the number of retailers with published offers has declined to 25 in June 2024.

[c] This definition of active retailers (those with 50 or more customers at the specified reporting date) is consistent with the definition of active retailers used by the ACCC in their Inquiry into the National Electricity Market.
Source: ACCC, *Inquiry into the National Electricity Market*, December 2023, p 24

[d] We provide detail on what information is published on Energy Made Easy and how we report on this data in Appendix B.

[e] Changes in the number of active retailers and retailers with offers in NSW does not always align with the number of retailer entries and exits reported in Section 3.2. Differences can arise for several reasons for example, an entity may receive a retailer authorisation, however they may not launch a product until several years later.

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

Notes: Data is reported as at 30 June of the relevant financial year, except for:

- the number of retailers with published offers for 2020-21 is reported as at 31 May 2021 due to data quality issues
- the number of active retailers is reported as at 31 March 2024 (which is the latest available data on customer numbers)

Different retail brands or retailers that are owned by the same parent company (ultimate holding company) have been grouped together and are only counted once.

Source: IPART analysis of Energy Made Easy data; IPART analysis of AER, *Schedule 2 - Quarter 3 2023–24 Retail Performance Data*, 21 June 2024, accessed 7 August 2024

In addition to the increase in the number of retailer's exiting the market in 2021–22 to 2022–23, the ACCC reported they observed unusual retailer behaviour in mid-2022 where high wholesale electricity prices created an incentive for some retailers to shed customers and capitalise on the value of hedging contracts.[83]

Retailer hedging contracts significantly increased in value in May to November 2022 when spot prices rose rapidly (see Chapter 10 for further detail). Retailers that were able to significantly reduce their load, for example, by reducing customer numbers, would no longer require these hedging contracts and would then be able sell them at a material profit.[84] This resulted in several retailers ceasing to accept new customers and some retailers contacting existing customers recommending they switch retailer (or they likely face a material price increase).[85]

In addition, over this period several clearing participants[f] also restricted their services (for example, through increasing credit or risk limits) for smaller retailers due to market volatility.[86] This limited the ability for smaller retailers to enter hedging contracts. These actions by retailers and clearing participants explain the sharper drop in the number of retailers with published offers in NSW compared to the number of active retailers (Figure 3.2).

[f] Clearing participants, also known as third party clearers, are entities that authorised to clear trades of derivative contracts through a Central Counter-Party (ASX 24). Clearing participants post margin (collateral) to the exchange that is sufficient to cover all plausible contract settlement outcomes. Clearing participants then collect that margin from their clients to protect their own financial interests.

As a result of active retailers exiting the markets and actions by retailers to encourage customers to switch, the ACCC found that from May to October 2022, very small retailers and small retailers lost 77% and 14% of meters respectively across the National Electricity Market.[g,87] Despite this, the market share of the 3 largest retailers has continued to decline from 2022–23 to 2023–24.

3.4 Concentration in the retail electricity market has continued to decline over 2023–24

Market concentration provides a snapshot of market structure as well as an approximation of the size of suppliers in a market. Changes in market concentration over time can assist in understanding the frequency of new entry and provide insight into the ability of new entrants and smaller competitors to attract customers and grow market share.[88] High and stable rates of concentration in a market can lower the incentive for firms to innovate or improve product offerings and over time, may lead to higher prices.

The NSW retail electricity market is concentrated with the 3 largest retailers (Origin, AGL and EnergyAustralia) holding an aggregated market share of 76% for both households and small business customers as at 31 March 2024 (Figure 3.3 and Figure 3.4).[89]

However, the market share of the 3 largest retailers has declined from 93% for residential customers and 95% business customers as at 30 June 2014 (a fall of 17 percentage points for residential customers and 19 percentage points for small business customers). This ongoing decline in market share has been consistent over the last decade, including a reduction in market of around 2 percentage points from 2022-23 to 2023–24 for both the residential and small business customer segments.

The decline in market share of the 3 largest retailers has primarily been due to strong growth by Red Energy. Over the past decade, Red Energy's market share of residential customers has increased from around 2% as of 30 June 2014 to 11% as of 31 May 2024. Further, over this period, Red Energy's market share of small business customers has increased from less than 1% to close to 7%.[h,90] The remaining retailers (rest of the market in Figure 3.3 and Figure 3.4) held an aggregate market share of 13% of residential customers and 17% of small business customers as of 31 March 2024.[91]

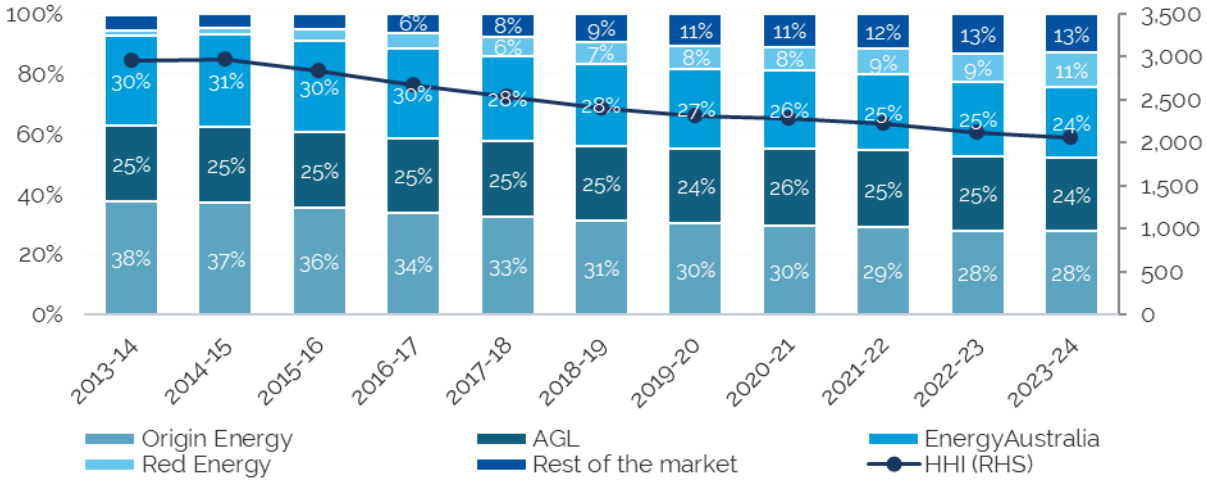
The Herfindahl-Hirschman Index is another measure of market concentration and is typically used in horizontal merger analysis (Box 3.1). The Herfindahl-Hirschman Index for residential customers was 2,058 as of 31 March 2024. It has consistently declined year-on-year since 30 June 2014 (when it was 2,949), including a fall of 51 points from 2022-23 to 2023–24 (Figure 3.3).[92]

[g] We note the ACCC reported meter numbers rather than customer numbers and that some customers may have multiple meters. However, the ACCC noted they consider the figures on meters are broadly representative of customer movements. In addition, the meter numbers reported by the ACCC covered all states in the National Electricity Market, however we consider it is likely the change in NSW would be similar.

[h] We note this growth of includes Red Energy's acquisition of the retailer Lumo Energy in 2014. This acquisition occurred when Snowy Hydro (the owner of Red Energy) acquired Infratil's Australian assets.
Source: Red Energy, *Snowy Hydro acquires Lumo Energy*, 12 September 2014

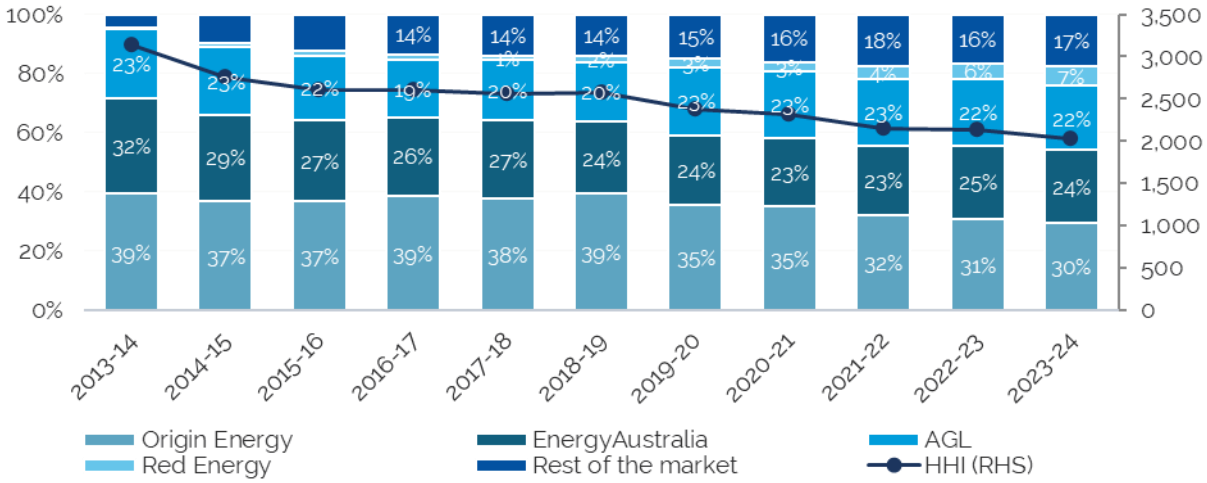
The Herfindahl-Hirschman Index for small business customers was 2,024 as of 31 March 2024. While the Herfindahl-Hirschman Index was flat between 30 June 2016 and 30 June 2019, since this time it has declined year-on-year (Figure 3.4).[93]

Figure 3.3 Market shares and the Herfindahl-Hirschman Index for residential electricity in NSW



Note: Market shares and the Herfindahl-Hirschman Index are based on the number of residential customers with each retailer as at 30 June of the relevant financial year. Data for 2023–24 is based on customer numbers for 31 March 2024 (which was the latest available data point).
Source: IPART calculations AER, *Schedule 2 - Quarter 3 2023–24 Retail Performance Data*, 21 June 2024, accessed 7 August 2024.

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



Note: Market shares and the Herfindahl-Hirschman Index are based on the number of small business customers with each retailer on 30 June of the relevant year. Data for 2023–24 is based on customer numbers for 31 March 2024 (which was the latest available data point).
Source: IPART calculations AER, *Schedule 2 - Quarter 3 2023–24 Retail Performance Data*, 21 June 2024, accessed 7 August 2024.

Box 3.1 The Herfindahl-Hirschman Index

The Herfindahl-Hirschman Index is a commonly used measure of market concentration.

The Herfindahl-Hirschman Index is calculated by summing together the squared market shares of each supplier in a market at a point in time. The Herfindahl-Hirschman Index can range from close to zero for a highly competitive market (where there are a large number of retailers all holding small market shares) to 10,000, which represents a monopolistic market (a market with a single supplier).

The ACCC and other competition regulators use the Herfindahl-Hirschman Index as one concentration metric in horizonal merger analysis and market studies.

The ACCC considers it is less likely to identify competition concerns where a post-merger Herfindahl-Hirschman Index is:

- less than 2,000, or
- greater than 2,000, with a delta less than 100

The US Department of Justice considers:

- a market with a Herfindahl-Hirschman Index greater than 1,800 is highly concentrated, and
- a change in the Herfindahl-Hirschman Index of more than 100 points is a significant increase

The ACCC's and US Department of Justice's Horizontal Merger Guidelines explain that while market concentration is not determinative in and of itself of the level of competition in a market, it can provide an indication of whether a market and a merger within that market may be more likely to result in suppliers exercising market power through unilateral or coordinated effects.

Source: ACCC, *Horizonal Merger Guidelines*, 2008, update 2017, pp 33-35; US Department of Justic, Horizontal Merger Guidelines, 2023, pp 5-6

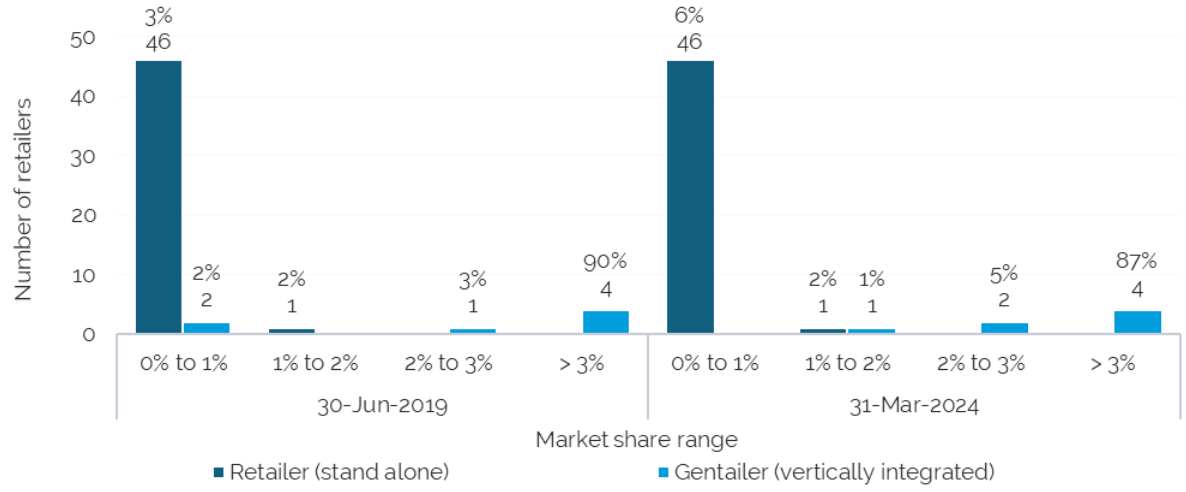
3.5 There are a large number of very small retailers

In NSW, there is a long tail of smaller retailers. While there are several markets in Australia that are dominated by a small number of large suppliers and have a long tail of smaller suppliers,[i] we have concerns regarding the height of the barriers to expansion for new entrants and small retailers that are not vertically integrated.

We estimate that gentailers supplied around 95% of residential customers in NSW as of 30 June 2019. While this has decreased to 93% as of 31 May 2024 (Figure 3.5),[94] there are several factors that make it more difficult for retailers that are not vertically integrated to expand market share.

In the next section we explain these challenges and how they may increase during the energy transition.

Figure 3.5 Number of retailers by market share and type of retailer (stand alone or vertically integrated), 30 June 2019 and 31 May 2024



Notes: Gentailers (vertically integrated retailers) in the chart above are defined as those that have generation capacity in the National Electricity Market and residential customers in NSW.
Percentage figures above the bars show the total market share for that group of retailer or gentailer. The number below this is the number of retailers or gentailers in that group.
The market share of retailers is based on the numbers of residential customers at the specified date. A similar distribution exists for the market share for small business customers.
Source: IPART calculations AER, *Schedule 2 - Quarter 3 2023–24 Retail Performance Data*, 21 June 2024; AER, *State of the Energy Market*, 2024, pp 53; AEMO, *Generation Information File*, 23 January 2023, accessed 18 November 2024

3.6 Barriers to entry and expansion

In the section below, we discuss how the transition to net zero emissions is likely to drive increased spot price volatility in the short to medium term. In this context, we then discuss how barriers to entry and expansion for small retailers may increase due to challenges in accessing hedging contracts.

[i] For example, some of these markets include retail banking, mobile telecommunications, internet service provision, insurance and pathology.
ACCC, *Protecting and promoting competition in Australia keynote speech*, 27 August 2021

3.6.1 Volatility in the spot market is likely to increase over the short to medium term

The transition to net zero emissions is having a material impact on all aspects of the electricity supply chain – from generation, transmission, distribution networks, and retailing. Further, any impact or changing dynamics on one component of the supply chain generally flows downwards, and impacts (in one way or another) the retail component.[j]

Currently, spot price outcomes are reasonably predicable for market participants, and have been since the introduction of the National Electricity Market, with demand the primary driver of peak prices in the spot market.[95] However, Frontier Economics have recently detailed that the current drivers of peak prices will be less relevant in the future. With the retiring of baseload generation, the output from renewable generation sources, primarily wind and solar, will likely be the key driver of prices movements.[96] In addition, Frontier Economics have discussed that peak prices are expected to consistently rise to higher levels while off-peak prices will be consistently lower; particularly in the short to medium term before additional pumped-hydro and larger scale battery storage is available.[97]

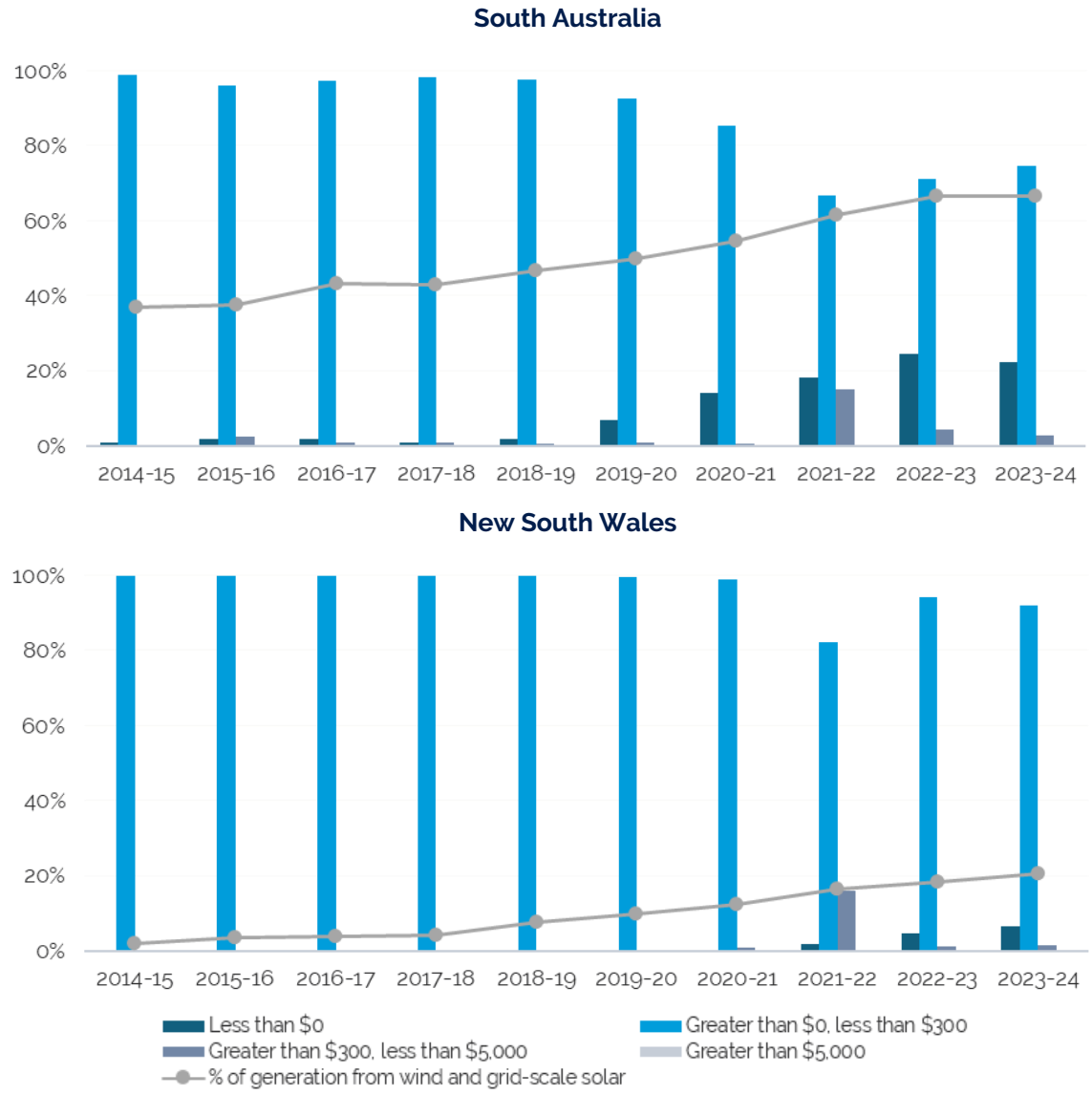
The impact of higher levels of renewable generation on wholesale price volatility can be seen in Figure 3.6 below. This figure shows the share of renewable generation from wind and grid-scale solar in South Australia and NSW for each year from 2014–15 to 2023–24 and the distribution of spot prices for each financial year. As can be seen in Figure 3.6, as the share of generation from renewable sources (wind and grid-scale sources) has increased in South Australia (reaching a peak of 66% in 2023–24) the volatility of spot prices has also risen.[k, 98] In contrast, the spot prices in NSW have been less volatile, particularly in recent years.

[j] We note there are also cases where impacts on lower components of the supply chain can feedback or impact other higher components of the supply chain. For example, if there is a in change contracting behaviour of retailers, this may flow back through the contract market and impact generators that supply the majority of hedging contracts.

[k] South Australia has one interconnector (a transmission link) with Victoria, whereas New South Wales (NSW) has interconnectors with both Victoria and Queensland.

Interconnectors transfer energy from lower-price regions to higher-price regions, often equalizing prices between regions and helping to manage price volatility. The two regional interconnectors for NSW also play a role in reducing price volatility within NSW.

Figure 3.6 Distribution of spot prices by financial year and share of generation from wind and grid-scale solar, 2014–15 to 2023–24



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

Source: IPART analysis of AEMO, *Aggregated price and demand data*; AER, *Wind output as a percentage of total output - regions*; AER, *Grid-scale solar output as a percentage of total output – regions*, accessed 10 November 2024

The expected increase in volatility and of higher peaks in wholesale prices will mean access to hedging contracts will become increasingly important. Hedging contracts enable retailers (and generators) to manage their exposure to volatility in the wholesale electricity spot market.[99]

However, changes in the source of generation from baseload coal generation to intermittent renewable generation are likely to impact the supply and terms of the hedging contracts offered.[100] For example, many retailers are dependent on gentailers with baseload coal generators selling hedging contracts off the back of their excess generation. As baseload coal generators retire, gentailers are likely to replace this capacity with renewable generation and they may only build the generation they require.[101]

This may mean the supply of financially firm hedging contracts will decrease and Frontier Economics considers this may pose a serious obstacle to the continued operation of small retailers and a barrier to entry and expansion for new retailers.[102]

3.6.2 Challenges in access to hedging contracts may increasingly become a barrier to entry and expansion

Retailers primarily manage financial risks by entering into hedging contracts (Box 3.2). The ability of retailers to execute a preferred hedging strategy is one of the primary ways that retailers compete.[103] Similarly, difficulty (or the inability) to access hedging contracts has a direct impact on retail competition.

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

A hedging contract sets out the terms on which a generator will sell 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 period arrives for the contract to be settled, the generator sells the contracted amount of electricity on the spot market (at the spot price), and the retailer buys the contracted amount of electricity from the spot market.

The hedging contract is settled by one party paying the other party, so the net amount paid by the retailer and the net amount received by the generator match the contract terms.

For retailers, hedging contracts provide certainty around the cost of wholesale electricity over a specified period. This allows retailers to manage the risk associated with offering their customers a fixed price over a specific period, 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 assists in meeting operational costs and securing funding for investment in 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. By volume, most hedging contracts for the NSW region in the National Electricity Market are traded on the Australian Securities Exchange (ASX).

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

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

ASX-traded contracts offer more standardised terms and have greater liquidity, while the 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.

Note: 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, accessed 29 July 2024, p 78, 84, 96

The ACCC and AER have recently raised concerns regarding small retailers' access to hedging contracts, particularly during periods of heightened market volatility.[104] In a 2023 survey of retailers conducted by the ACCC, found around 90% of small retailers responded that they cannot access hedging contracts traded on the ASX.[105] In contrast, this survey found that all large generators and gentailers were able to trade the hedging products they required on the ASX.[106]

The primary reason that most small retailers reported they were unable to trade on the ASX is that they could not find a clearing participant.[107] In some cases this was due to credit or risk limits being reached or the retailer was unable to engage at all with clearing participants.[108]

To buy or sell ASX listed hedging contracts, retailers and generators must use a clearing participant that is registered with the ASX. A clearing participant is typically a broker that is authorised to clear derivative contracts trades through ASX Clear (Futures). Clearing participants require counterparties on a contract (such as retailers) to meet daily cash and credit margin requirements.[109]

The AER has recently explained that for ASX listed hedging contracts, the cash requirements of clearing participants through initial and daily margining of contract positions can impose significant costs. In particular, the use of standardised terms with a minimum trade size of 1 MW is too high for many smaller retailers.[110]

There are currently 6 ASX 24 clearing participants for the Australian electricity derivative market, following the entry of Marex over 2023–24.[111] The number of clearing participants reduced by 2 over 2022 as Bell Potter and Macquarie withdrew services from the market[112] The AER has noted that access to clearing services has been a key issue raised by retailers over the past 2 years (since the periods of high market volatility in 2022). The AER has also reported a seventh clearing participant is expected to join the ASX to offer clearing services over the short term.[113]

The ACCC has noted that having almost all listed hedging contract trading with a small number of clearing participants is an area of concern as these participants bear the majority of market risk and may restrict services during periods of volatility. This occurred during the periods of volatility in 2022 when some clearing participants stopped taking on new retailers.[114]

If small retailers are unable to access hedging contracts through the ASX, they can still access hedging contracts through the OTC market. However, in the ACCC's survey of retailers in 2023, 33% of small retailers reported they were not able to obtain all contracts they required (or they faced difficulty in obtaining contracts) in the OTC market.[115] Further, as noted in Box 3.2, OTC contracts may impose a higher transaction cost as the retailer must invest additional time into finding and negotiating with suitable counterparties and credit risk requirements in the OTC market may be a barrier for smaller retailers.

In the context of the potential for higher volatility in the National Electricity Market and the lack of access to ASX listed hedging contracts for small retailers, the challenges that may result from only having access to the OTC market is an area of concern. If this issue persists, it may impact small and newer retailers' ability to effectively compete. Further, the ACCC has noted that dependence on the OTC market likely places practical limits on when and how much a retailer trades and creates a barrier to retailers growing beyond a certain size.[116]

3.6.3 Other strategies to manage financial risk may impose additional barriers to entry or expansion

While retailers primarily manage financial risk through the contract market, there are other non-financial methods that can be used to manage financial risk and volatility in the spot market. We discuss these below, including the degree to which smaller retailers may be able to use these methods to manage spot price risk.

- **Vertical integration** – this is where a retailer invests in generation assets (or a generator invests in developing a retail arm). Vertically integrated entities have an internal hedge where the impact of high prices on the retail segment of the business can be offset by the benefit of high prices to the generator segment of the business (and vice versa).[l]

  The capital requirements for electricity generation assets are substantial and often require investment grade credit ratings to secure funding. Small retailers are unlikely to have the financial capacity to invest in these assets and generally do not possess the required credit rating.[m, 117] However, technological advancements in renewables and battery storage have reduced costs in recent years. This may offer some smaller retailers an opportunity to develop a small-scale vertically integrated position.[n, 118]
- **Virtual Power plants** – these are networks of connected consumer energy resources, such as rooftop solar and batteries that are managed by a central operator or 'aggregator'. The aggregator uses software to coordinate these resources to manage when energy is consumed, stored and supplied to the grid. This coordination is designed to minimise the cost of electricity for customers in the virtual power plant and to generate additional revenue streams for the operator (Chapter 11).[119]

[l] As discussed in Section 5.2, the largest suppliers of electricity to residential and small business customers in NSW are gentailers.

[m] While in generators may seek to enter the retail electricity market and this may expand competitive pressures, there are only a small number of generators (with material capacity) that are already not vertically integrated in NSW.

[n] Purchasing power agreements can also provide a similar hedging benefit to vertical integration, but they do so through contractual arrangements between a retailer and a generator, rather than through ownership. However, purchasing power agreements with renewable generations sources such as wind and solar are not *'financially firm'* as these generators cannot supply electricity during all periods of the day.
Source: Frontier Economics, *Future Financial Risk-Management in the NEM*, December 2023, p 24

Virtual power plants may assist retailers in managing spot-price risk. However, virtual power plants may be more useful to large retailers as they have a larger customer base to spread the high upfront cost of developing these technological solutions over.[120] Further, to have sufficient scale to be used as a non-financial risk management tool, a sufficiently large customer base (with rooftop solar, batteries or electric vehicles) is required. It is uncertain how long it may take for this to occur or how widely these consumer energy resources technologies will be adopted.[121]

- **Spot price pass through** - where a retailer charges their customers the wholesale spot price (possibly with some upper and lower limits involved). As a result, the retailer passes through the spot price risk directly to customers. There are several retailers who use this strategy to varying degrees, including Amber and Energy Locals. While this strategy may assist in managing financial risk for some retailers, the ACCC has recently discussed there is likely to only be a small number of retail customers who would be willing to accept this risk.[122]

A recent survey of retailers conducted by Frontier Economics found that if wholesale spot outcomes are expected to become more volatile and less predictable, the general consensus from respondents was that vertical integration would be the best strategy to manage this risk.[123] In the absence of vertical integration, highly sophisticated hedging strategies would be required, and respondents reported this may be beyond the level of sophistication available new entrants and other smaller retailers.[124]

As discussed above, vertical integration is likely prohibitively expensive for most smaller retailers and spot price pass through is likely to have a relatively small customer base. Further, there are only currently a small number of generators in NSW that do not have a retailing business. However, virtual power plants may become an increasingly important component of offers by retailers and this may assist in managing spot price risk.

The challenges for small retailers (that are not vertically integrated) in accessing hedging products and the cost at which they access these products, particularly during times of market volatility, is becoming an increasingly large barrier to entry and expansion.

The AER has recently been given additional powers to monitor and report on wholesale and contract electricity and gas markets. This will involve reporting on wholesale and contract electricity and gas markets at least once every 2 years, including:

- whether the outcomes in wholesale markets reflect effective competition
- whether wholesale markets are operating efficiently
- how retail markets are impacted by contract and wholesale markets.[125]

Given the issues raised above, we consider this is an important time for monitoring and reporting on outcomes in contract markets and the impact on competition in the retail market.

Recommendations

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.

Further, based on the outcomes of the monitoring by the AER, in the short-to-medium term, consideration could be given to whether renewable energy projects in NSW that involve Government funding could be structured to support stand-alone and new-entrant retailers by providing access to a certain amount of financially firm hedging contracts.[o]

[o] This builds on the ACCC's recommendation (Recommendation 4) in their December 2023 Inquiry report that:

"*To support retail competition, government-funded projects could support qualifying standalone and new-entrant retailers by providing priority access to a certain quantity of hedging contracts. This priority access would recognise that standalone retailers are expected to face the largest challenges in hedging risk during the transition. Such a mechanism would require appropriate safeguards to ensure that access to contracts supports retail competition.*"

Source: ACCC, *Inquiry into the National Electricity Market*, December 2023, p 12

4 Customer engagement, switching and satisfaction

Key findings

- In June 2024, 25% of households in NSW reported they had switched energy retailer or offer in the past 12 months. This was a material increase on the 15% of households who reported they switched retailer or offer in the 12 months to June 2023.
- Most households and small businesses in NSW can save money by switching electricity retailer or offer. We estimate that in July 2024, a household on the median standing offer could have annual savings of around $350 by switching to the 10th percentile market offer, and a small business customer could have annual savings of around $750.
- However, these savings may not be enough to encourage many households and small businesses to switch. Adjusted for inflation, households in NSW reported they would need to save around $500 per year to seriously consider switching, while small businesses in NSW reported they would need to save around $1,000.
- In June 2024, less than 40% of households in NSW reported a positive view on the cost of electricity and whether the market is working to deliver outcomes in their long-term interests.

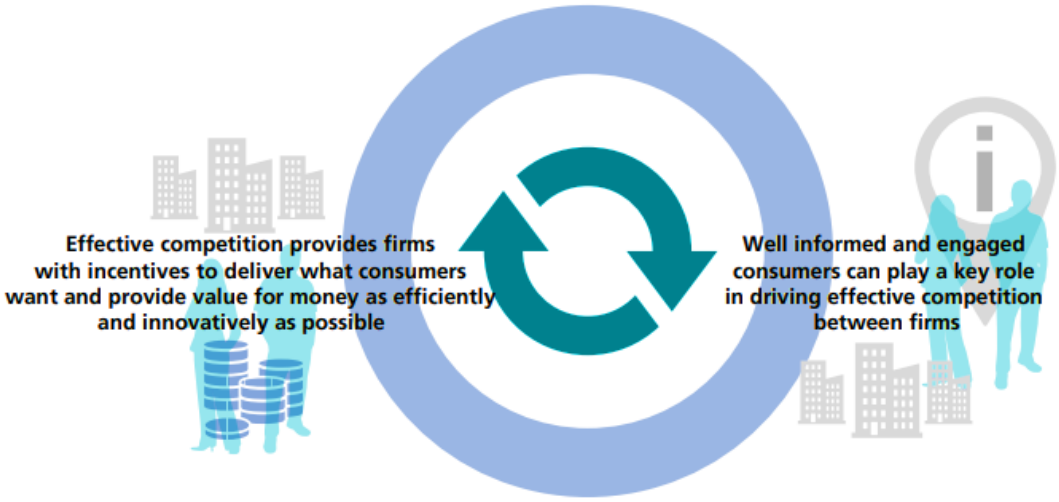
4.1 Why we assess customer engagement, switching and customers satisfaction

A 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 frictions.[126]

When a market has both characteristics, there is a virtuous cycle of competition with profit-seeking firms competing to win well-informed customers who frequently engage and switch.[127] Over time, this will lead to lower cost offerings, innovations in products to meet changing consumer needs and preferences, and greater consumer confidence in the market (Figure 4.1).[128]

Figure 4.1 Supply side and demand side forces in the virtuous cycle of competition



Source: Financial Conduct Authority, *Credit card market study: Interim Report: Figure 1: Virtuous circle of competition*, November 2015, accessed 1 November 2024

However, if consumers are disengaged or if they choose not to engage (for example, due to poor experiences) the disciplining effect consumers can have on retailer behaviour is diminished.[129] Similarly, if the search or switching process is difficult (for example, as prices are not clear and transparent) or if consumers only have limited information (or focus on a subset of information), this can lead to distorted consumer choices and only some of the benefits of competition flowing to a segment of customers.[130]

4.1.1 Additional considerations when assessing engagement, switching and satisfaction for an essential service

There are additional factors to consider when assessing engagement, switching and satisfaction in the market for retail electricity, compared to other markets. These include:

- Electricity is an essential service for households and businesses. While customers can choose not to participate in most other markets (for example, by not purchasing a good or service), this is not possible for electricity.[a]
- Consumers do not demand electricity directly. Electricity is consumed when households and businesses use appliances or machinery, and therefore the demand for electricity is derived demand.
- Customers are billed in arrears for usage, in most cases on a quarterly or monthly basis. This means customers may not be aware of the full price impact of a change in price or usage until several months (or weeks) later.

[a] While efficient and competitive markets often allocate risk to those best placed to deal with it, the fact customers in the retail electricity market cannot withdraw from the market, often means that risks that are unable to be hedged are transferred down the supply chain to the end customer (who often is the worst placed to deal with this risk).
Source: Dr Ron Ben David, *What if the consumer energy market were based on reality rather than assumptions?* Monash Energy Institute, July 2024, p 35 – 36

In relation to engagement and switching, taken together, we consider these factors necessitate additional disclosure and regulatory intervention (compared to other markets) to enable an effective demand side response.

The remainder of this chapter reports our analysis and findings on engagement, switching, and customer perceptions and satisfaction with the NSW retail electricity market. The following chapter discusses barriers and impediments in the search and switching process raised in stakeholder submissions.

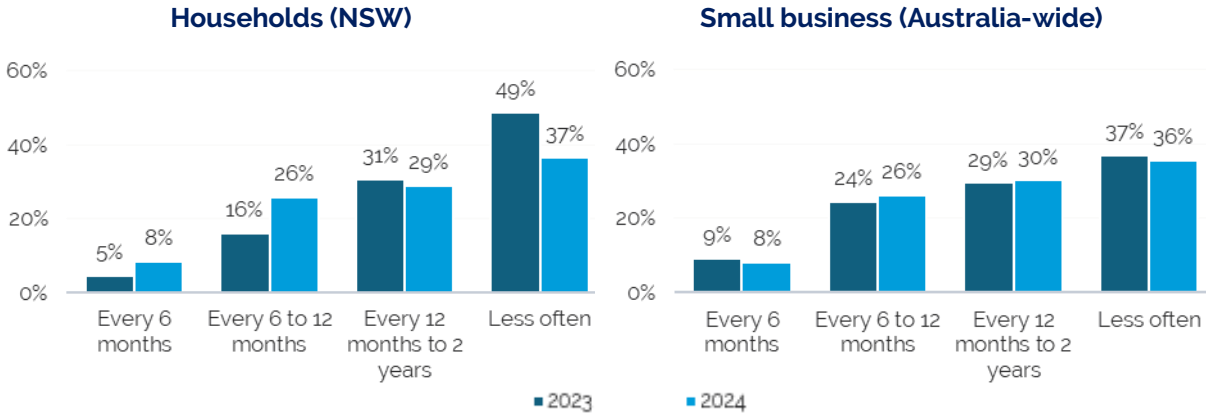
4.2 Households in NSW are investigating offers and switching more frequently in 2024

Data from the latest Energy Consumer Sentiment Survey shows that households in NSW were investigating changing energy retailer or offer more frequently in 2024 compared to 2023.[b, 131]

In June 2024, 8% of households in NSW reported they investigated switching every 6 months (up from 5% in June 2023) and 26% of households reported they investigated switching every 6 to 12 months (up from 16% in June 2023). The number of households that did not investigate switching at least once over the past 2 years decreased 12 percentage points from 49% in June 2023 to 37% in June 2024 (Figure 4.2).[132]

Similarly, in June 2024, 8% of small businesses reported they investigated changing energy company or offer every 6 months (down from 9% in June 2023) and 26% of small businesses reported they consider switching every 6 to 12 months (up from 24% in June 2023).[133]

Figure 4.2 How frequently households and small businesses investigate changing retailer or offer



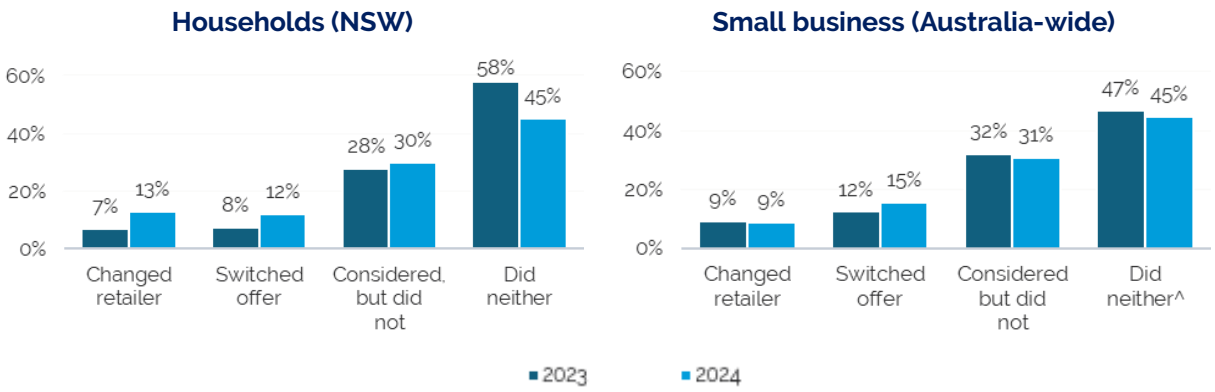
Notes: Question - How frequently do you usually investigate changing energy company or contact your current retailer for a better offer? Household data is for households in NSW. Small business data is for all small businesses in Australia as there was an insufficient sample to only report this for businesses in NSW.
Number of NSW household respondents: 2023: 400, 2024: 401. Number of small business respondents: 2023: 505, 2024: 506
This chart includes responses from customers in relation to switching for both electricity and gas retailers or offers. Data was not available on switching for only electricity retailers or offers.
Source: IPART analysis of Energy Consumers Australia, *Consumer Sentiment Survey June 2024 – Topline Data; Consumer Sentiment Survey June 2023 – Household Topline Data, Consumer Sentiment Survey June 2023 – Small Business Topline Data*, accessed 23 October 2023

[b] In this survey, consumers were asked how frequently they investigate switching energy retailer or offer. As a result, the responses include switching for both electricity and gas for customers in NSW.

In June 2024, 25% of households reported they had changed energy retailer or offer in the past 12 months (of this, 13% of households reported they changed retailer, while 12% reported they had switched offer with the same retailer).[134] This was a 10-percentage point increase over the number of households that reported they did either of these actions in the 12 months to June 2023 (Figure 4.3).

In June 2024, 24% of small businesses reported they changed retailer or switched offer (9% reported they changed retailer, while 15% reported they changed offer with the same retailer) in the past 12 months. This was up from 21% of small businesses that reported they did either of these actions in the 12 months to June 2023.[135]

Figure 4.3 Actions taken by consumers in the past 12 months

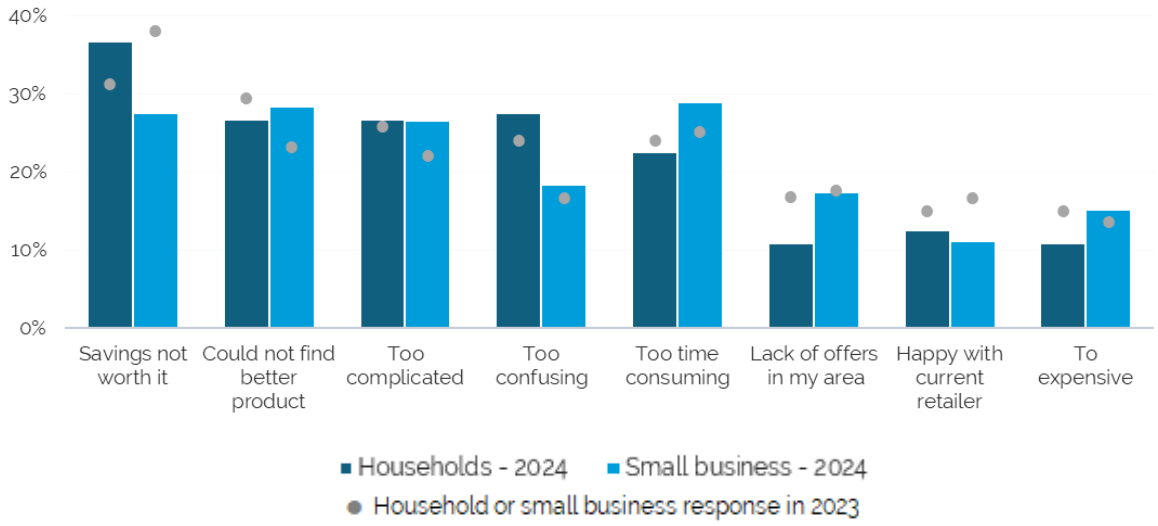


Notes: Question - Which of the following best describes what you have you done in the last year?
Household data is for households in NSW. Small business data is for all small businesses in Australia.
Number of NSW household respondents: 2023: 400, 2024: 401. Number of small business respondents: 2023: 505, 2024: 506
This chart includes responses from customers in relation to switching for both electricity and gas retailers or offers. Data was not available on switching for only electricity retailers or offers.
Source: IPART analysis of Energy Consumers Australia, *Consumer Sentiment Survey June 2024 – Topline Data; Consumer Sentiment Survey June 2023 – Household Topline Data, Consumer Sentiment Survey June 2023 – Small Business Topline Data*, accessed 23 October 2024

In June 2024, 30% of households and 31% of small businesses considered switching but did not.[136] For households and small businesses that considered, but did not switch, the most commonly reported reason was the *'savings were not worth it'*. This was reported by 37% of households and 28% of small businesses.[137] Further, close to 30% of households reported they *'couldn't find a better product'*, or the process was either '*Too complicated'* or '*Too confusing'*.[138c,139] (Figure 4.4).

[c] Customers could select more than one answer in response to this question. As a result, the response percentages add to more than 100%.

Figure 4.4 Reasons customers did not switch, despite considering it



Notes: Question: Thinking about the last time you considered changing energy companies/switching to a better offer, but did not end up doing so, what were the reasons you didn't switch?
Number of NSW respondents: 2023: 400, 2024: 401
Respondents were able to choose more than 1 response
Source: IPART analysis of Energy Consumers Australia, *Consumer Sentiment Survey June 2024 – Topline Data; Consumer Sentiment Survey June 2023 – Household Topline Data, Consumer Sentiment Survey June 2023 – Small Business Topline Data*, June 2024

In the section above, we report on household and small business engagement and switching using consumer survey data. In the section below, we report on the actual switching rate for small electricity customers in NSW.

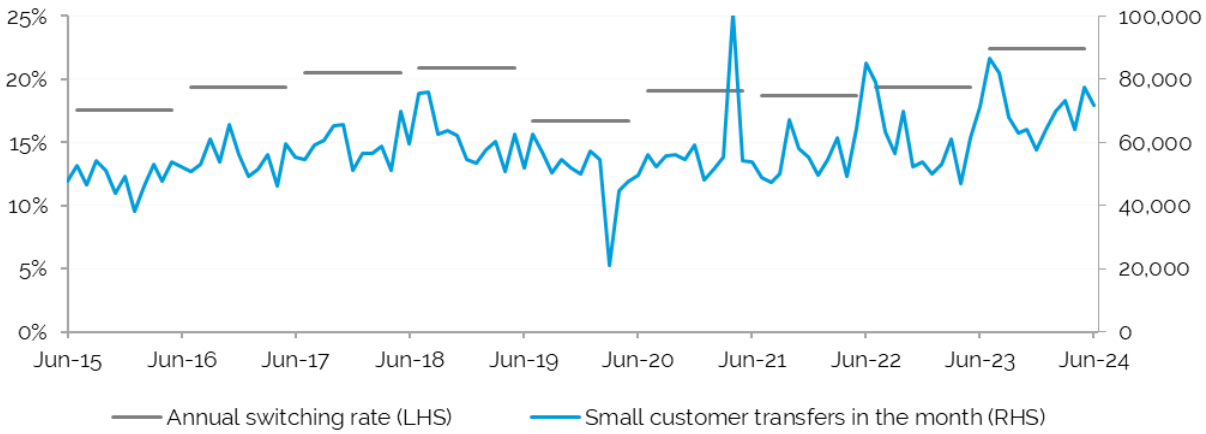
Over the 2023–24 financial year, an estimated 22% of small customers switched retailer (this is based on the number of National Metering Identifiers that transfer retailer in the relevant period).[140]

While the rate of switching between retailers is one indicator of customer engagement, there are limitations with this datapoint. For example, this includes cases where a customer moves house but keeps their current retailer, and it captures when the same customer switches more than once.[141]

As discussed above, only 13% of households and 9% of small business reported they had switched retailer (in the Energy Consumer Sentiment Survey) over 2023–24.[142] Given the difference between the data on the actual rate of switching and the reported switching rate in survey data, it may be the case there are a cohort of highly engaged consumers that frequently switch retailers.[d]

[d] This cohort of consumers would increase the rate of switching (in the data reported by the Australian Energy Regulator, as they switch frequently) however would only be captured as switching retailer once in the past 12 months, given the phrasing of the question in the consumer survey.

Figure 4.5 Quarterly switching rate and number of small customer transfers per quarter (NSW)



Note: To calculate the annual switching rate, we divide the number of small customer 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 2023–24. As a result, we used the number of customers as at the end of Q3 2023–24 when calculating the switching rate for 2023–24.
Source: IPART calculations based on AEMO, *retail transfer statistics data* and AER, *Schedule 2 – Quarterly Retail Performance data*, 21 June 2024

The percentage of small customers switching retailer has increased over 2022-23 and 2023-24, compared to 2019-20 to 2021-22. This may be due to several factors including:

- an increase in the number of retailers exiting the market and being transferred to other retailers (known as Retailer of Last Resort events - Chapter 3)
- higher wholesale price volatility and larger retail price increases in NSW over 2022 and 2023, which may have triggered customers to engage with the market (see Chapter 10)
- additional disclosure requirements which came into effect in 2022, including the *Better Bills Guideline*, which requires retailers to inform customers if a better offer may be available (Chapter 5).

4.3 More households in NSW are on market offers

Under the National Energy Customer Framework, a retailer can provide household and small business customers electricity under a market offer contract or standard offer contract.[143] A customer must actively sign up to a market offer, whereas they can be put onto a standard offer contract by default. Therefore, another measure of customer engagement in the NSW retail electricity market is the proportion of customers on market offers compared to standing offers.

We provide details of these type of contracts in Box 4.1 below.

Box 4.1 Market offer and standard offer contracts

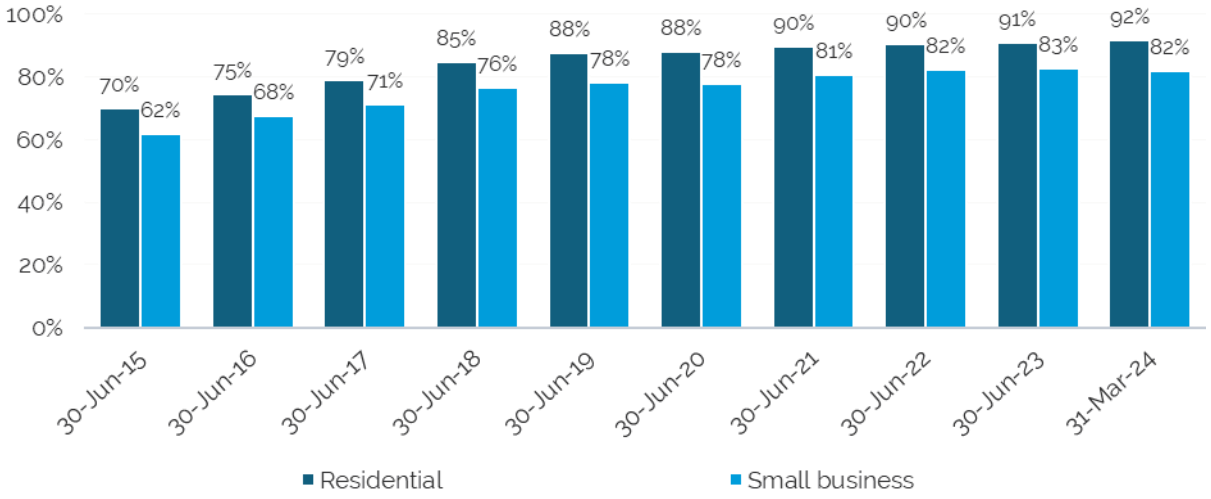
Market offer contracts are the electricity plans that retailers advertise to attract customers. These may include discounts and a range of fees and charges. Market offers may last for a fixed period or can be ongoing contracts. Market offers have fewer customer protections in place, compared to standing offer contracts, and are their prices are not capped by the Default Market Offer. However, retailers must compare the price of a market offer contract with the Default Market Offer.

Standard offer contracts are the default contract for a customer when they do not engage and choose a market offer contract. For example, when a customer moves house (and does not choose a market offer), when a customer's existing market offer expires, or when a customer's retailer is changed due to a retailer of last resort event. Standing offer contracts are typically higher priced than market offers and have additional customer protections in place. Further, a retailer cannot decline to enter into a standing offer contract. The price of standard offer contracts also cannot be higher than the Default Market Offer.

Source: AEMC, *Contract terms*, accessed 5 November 2024; ACCC, *Electricity prices and plans*, accessed 5 November 2024

As at 31 March 2024, 92% of residential customers in NSW were on market offers. This was a 1 percentage point increase from 30 June 2023. Further, as at 31 March 2024, 82% of small business customers were on market offers, down 1 percentage point from 30 June 2023 (Figure 4.6).[144]

Figure 4.6 Percentage of residential and small business customers in NSW on market offers



Note: Data for 2024 is reported as at 31 March 2024 which is the latest data available.
Source: AER, *Schedule 2: Q2 2023–24 Quarterly Retail Performance Data*, 21 June 2024

The submission from the Justice and Equity Centre discussed they consider comparing the number of customers on standing offer and market offer contracts is not meaningful, as many customers are market offers with prices higher than the Default Market Offer.[145]

We agree with the Justice and Equity Centre 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 not engaged with the market (either at all or in recent years).

In Chapter 6, we include analysis on the actual prices paid for electricity by households and small businesses in NSW. Our findings align with the concerns raised by the Justice and Equity Centre that a large proportion of residential and small business customers on market offers are paying prices equal to or above the Default Market Offer, and therefore a customer being on a market offer is not a good indicator that they are experiencing better outcomes.[146]

4.4 Most customers in NSW can save money by switching

In the section below, we report on the estimated annual savings that could be made by customers in NSW from engaging with the market and switching to a better priced offer.

We estimate the annual savings that could be made from switching, by calculating the annual bill for an electricity offer at a point in time, and estimating how much a customer could save by switching to a specific lower priced offer. More detail is provided in Box 4.2.

The submission from the Justice and Equity Centre detailed issues with this approach, including the analysis of offers on the Energy Made Easy website do not indicate what prices are actually available to households in NSW (and as a result what savings they can actually make through switching), and reporting on the savings from switching needs additional context as lower cost offers may not be available to all customers.[147]

We agree with the Justice and Equity Centre that these estimated savings will not represent the savings available to all customers. This will depend on a range of factors including:

- the actual offer (and prices on the offer) a customer is on before and after switching
- the customer's own electricity usage levels (including when they use electricity for time-of-use offers)
- whether a retailer increases the price on the new offer after the customer switches (and how quickly they do this).

Box 4.2 How we estimate annual savings from switching

Each month we download data for all residential and small business offers published on the Energy Made Easy website. This includes data on the prices of each offer (including the supply charges, usage charges and demand charges), fees, conditions and discounts.

First, we exclude all offers that are not accessible to the majority of customers. This includes offers with strict eligibility requirements, for example requiring customers to own a pool, be a member of a certain organisation or reside in a particular area. We also exclude offers with controlled load and/or solar feed-in tariffs.

Second, we estimate the total annual bill for each remaining offer based on an annual usage level of 4,215 kWh for residential customers and 10,000 kWh for small business customers.

Then, we group these remaining annual bills by the distribution network and rank them by the total annual cost to obtain percentiles, such as the 10th, 25th, 50th (median), 75th and 90th percentile offers.

Using these estimated total annual bills, we calculate the savings from switching by subtracting the total annual bill for one offer from the total bill on another offer. For example, we subtract the median standing offer in the Ausgrid network from the median market offer to estimate the annual savings from switching at that point in time.

For this review, we report the savings from switching for a customer moving from:

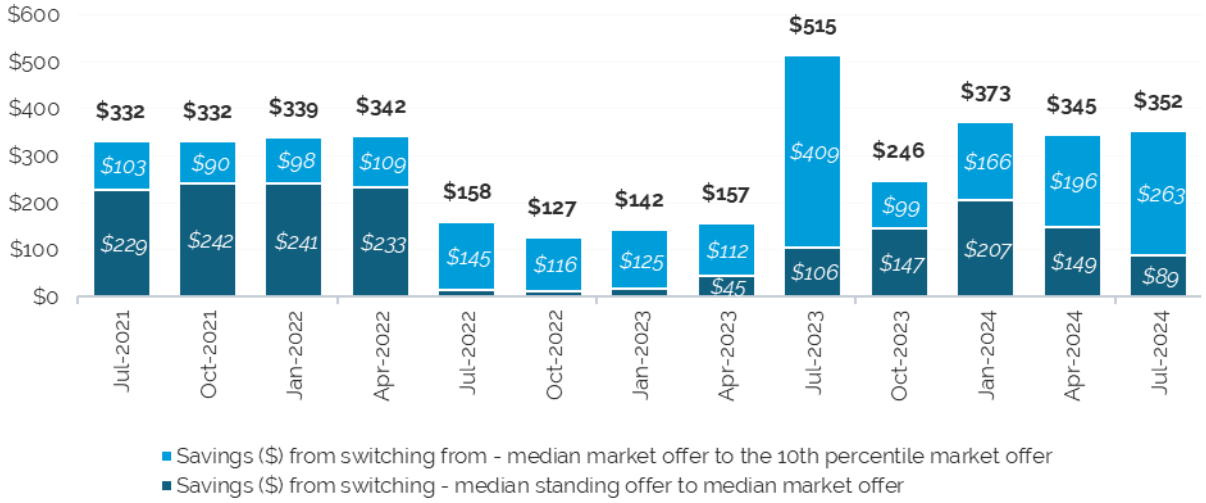
- the median standing offer to the median market offer
- the median market offer to the 10th percentile market offer.

This recognises the feedback from the Justice and Equity Centre that the lowest offer overall may not be available to all customers or the customer may not be able to search and find the lowest offer.

In July 2024, a typical residential customer in the Ausgrid network, using 4,215 kWh per year, could have saved $89 over the coming year by switching from the median standing offer to the median market offer.

Further, if a residential customer on the median market offer, was able to switch to a lower cost offer (at the 10th percentile), we estimate they could have saved around $263 over the coming year (Figure 4.7). We found similar annual savings could be made by switching for residential customers in the Endeavour Energy and Essential Energy distribution networks.

Figure 4.7 Estimated annual savings for households from switching, flat-rate offers, Ausgrid network



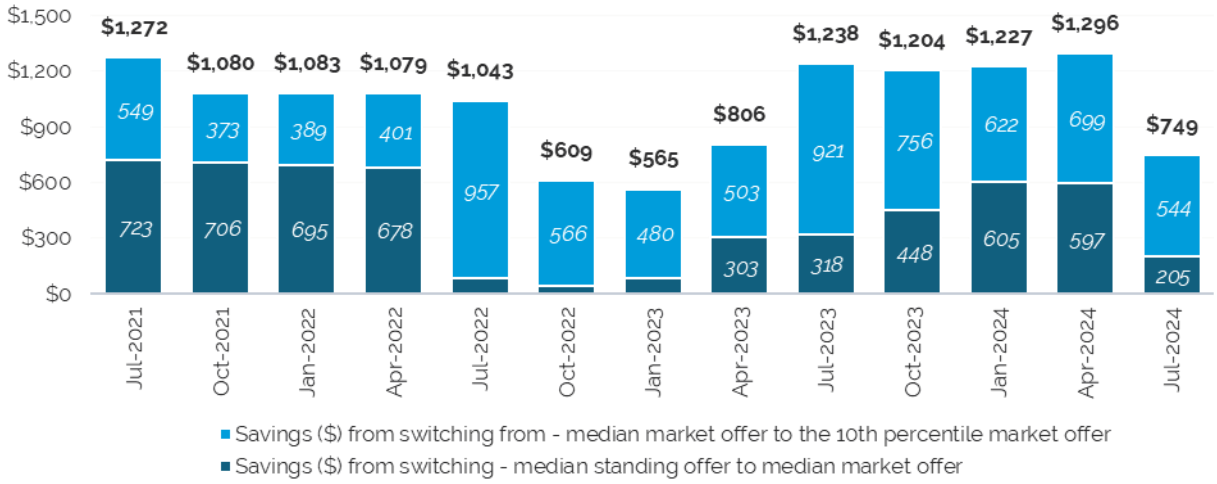
Notes: Residential savings are calculated assuming usage of 4,215 kWh per year.
Italicised numbers show the savings from switching from one specific offer to another. Bolded numbers above the bar charts show the total savings from switching from the median standing offer to the 10th percentile market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

In general, small business customers can make larger savings, in dollar terms, from switching (as they generally use more electricity and therefore have higher bills).

In July 2024, a typical small business customer in the Ausgrid network using 10,000 kWh per year could have saved an estimated $205 (over the coming year) by switching from the median standing offer to the median market offer.

Further, if a small business customer on the median market offer was able to switch to a lower cost offer (at the 10th percentile), we estimate they could have saved $544 per year. We found similar annual savings could be made by small business customers in the Endeavour Energy and Essential Energy distribution networks.

Figure 4.8 Potential savings for small businesses from switching, flat-rate offers, Ausgrid network



Notes: Small business customer savings are calculated assuming usage of 10,000 kWh per year.
Italicised numbers show the savings from switching from one specific offer to another. Bolded numbers above the bar charts show the total savings from switching from the median standing offer to the 25th percentile market offer.
Source: IPART analysis of data from Energy Made Easy

The estimated savings that a residential or small business customer could make vary significantly based on the point in time when the estimate is made. For example, from July 2021 to April 2022, the savings that could be made from switching were relatively stable. However, from July 2022 to April 2023, these potential savings were reduced as the spread between the median standing offer and median market offer reduced sharply and was close to $0.[148]

This occurred as retailers increased the price of their market offers, in response to rapidly rising and volatile wholesale electricity costs.[149] Over 2023–24, the spread between the median standing offer and median market offer increased and stabilised for residential electricity offers. However, it has since fallen since the introduction of the Default Market Offer 6 on 1 July 2024.[150]

4.5 How frequently do retailers increase prices on residential offers?

The submission from the Justice and Equity Centre raised concerns that IPART's approach of assessing the potential benefits from switching is problematic as it calculates savings assuming that customers will remain on the lower prices for the coming 12-month period. However, the Justice and Equity Centre submitted that that retailers often rapidly escalate prices as soon as 3 months after a customer signs up, which erodes the benefits from engagement and switching.[151]

This submission discussed that having to switch regularly to get a fair deal has a particularly detrimental impact on people experiencing digital exclusion, people who have limited English skills and people who are time poor.[152] The submission also highlighted findings from the AER's research on consumer vulnerability, which found that 47% of the population have do not have sufficient literacy and numeracy capability to navigate the energy market and successfully understand and assess deals which may be in their best interests.[153]

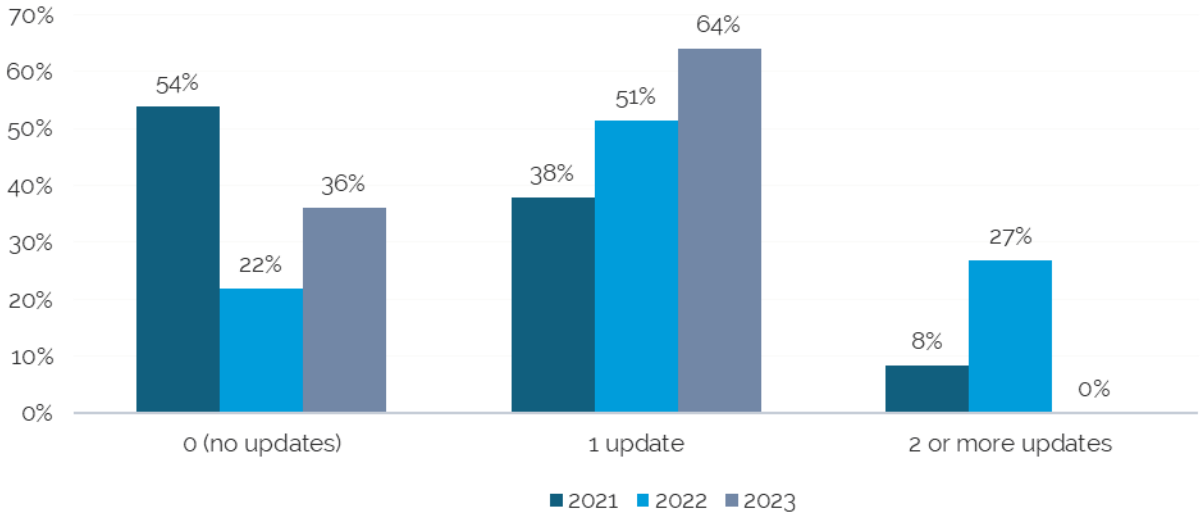
The ACCC's December 2023 Inquiry Report included similar findings. The ACCC found it is not uncommon for there to be increases in prices soon after a customer signs up to a new plan.[154] The ACCC discussed that while retailers in NSW typically undertake a repricing process on an annual basis (changing prices around July), out of cycle price increases were also observed.[e,155] The ACCC report explained that retailers typically recoup their costs over a customer's lifetime, by setting attractively low acquisition offers and making subsequent unilateral price increases for their existing customer base over time.[156]

To investigate the issue of how frequently retailers increase the prices of retail electricity offers, we calculated the number of times that retailers increased at least one of the price components (the supply charge or usage charge), for new flat rate offers published on the Energy Made Easy website in the 12 months after it was published. For example, if a plan was published in January 2022 on Energy Made Easy, we calculated the number of times that either the supply charge and/or usage charge was increased over the following 12 months.

We conducted this analysis for all new flat-rate offers in NSW that were published on the Energy Made Easy website over 2021, 2022 and 2023 by the 4 largest retailers –Origin, AGL, EnergyAustralia, and Red Energy.[f]

We found that in 2023, 36% of offers published on the Energy Made Easy website had no increases in the supply and/or usage charge for the following 12 months, while 64% had 1 increase in the supply and/or usage charge. For offers published on the Energy Made Easy website in 2022, 22% had no increase in the following 12 months, while 51% had one increase and 27% had 2 increases. The results of this analysis are summarised in Figure 4.9.

Figure 4.9 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 price components were not increased in the 12 months after the offer was published on Energy Made Easy. 1 update means that either the supply charge and/or usage charge was increased once in the 12 months after the plan was listed on Energy Made Easy. 2 or more updates means that the supply charge and/or usage charge was increased at least 2 times in the 12 months after the plan was listed on Energy Made Easy.

[e] In NSW, retailers can change prices for customers on market offers at any time, as long as they provide at least 5 days' notice.

[f] In aggregate, these retailers hold a market share of 87% as at 31 March 2024 (based on residential customer numbers). Source: AER, *Schedule 2: Q2 2023-24 Quarterly Retail Performance Data*, 21 June 2024

This analysis includes all cases where at least one price component of a flat-rate offer was increased. In some cases, a retailer increased one price component (for example, the usage charge), while decreasing the other component (the supply charge). We have still counted this as an increase (update) in the above analysis.
Source: IPART analysis of Energy Made Easy data

This analysis does not fully address the concerns raised by the Justice and Equity Centre. This is because retailers are only required to submit publish information on the Energy Made Easy website if the offer is generally available. Therefore, it is possible for a retailer to change prices for a group of customers without this price change being captured on the Energy Made Easy website, if those new prices are not also being offered to new customers.[g] This issue is discussed further in Chapter 6.

As discussed in Appendix D, Minister Bowen has proposed 7 consumer related rule changes to the AEMC to improve consumer outcomes. This includes a proposed rule change that would ensure retailers are not able to increase tariffs or charges under a retail market contract for a fixed period of time (following commencement of an energy plan).[157] The intent of this rule change is to provide customers with confidence that the prices they sign up for will remain in place for a reasonable amount of time.

4.6 Do consumers consider the savings from switching are worth it?

Consumer research conducted for the AEMC's 2017 Retail Competition Market Review, asked household and small business customers what value saving they would need to achieve to seriously consider switching retailer or offer.[158]

Households in NSW reported that on average they would need to save at least $97 per quarter (or $388 per annum) to seriously consider switching retailer or offer.[159] Adjusted for inflation until June 2024, this would equate to a household in NSW needing to save at least $122 per quarter (or $488 per annum) from switching.[h,160] This is higher than the estimated annual saving of $352 available to households from changing from the median standing offer to the 10th percentile market offer in July 2024.

Small businesses in NSW reported on average they would need to save at least $199 per quarter ($749 per annum) to seriously consider switching retailer or offer.[161] Adjusted for CPI until June 2024, this would equate to small businesses needing to save around $250 per quarter or $1,000 per year.[162] This is also higher than the estimated annual savings for small businesses from switching from the median standing offer to the 10th percentile market offer in July 2024.

This appears to be broadly consistent with the results of the Consumer Sentiment Survey which found the most reported reason that customers do not switch was the *'savings are not worth it'.* This was reported by 37% of households and 28% of small businesses in June 2024.[163]

[g] We did not have data available on the prices charged to existing customers to investigate this issue further.

[h] This analysis also assumes that households and small businesses continue to value their time and the effort involved in engaging and switching the same as they did in 2017. This may not be the case given changes in the market since 2017, including materially different (and more complex) tariff structures. However, more recent survey data on this is not available.

4.7 Customer perceptions, satisfaction and confidence in engaging with the retail electricity market

In addition to the analysis on customer engagement and switching above, we also report on household perceptions and satisfaction with electricity retailers.

This analysis covers 2 areas:

- satisfaction with customer service, access to account information and assistance in managing bills
- perceptions of the level of competition, the cost of electricity and confidence in the market to deliver good outcomes over the long term.

4.7.1 Satisfaction with customer service, access to account information and assistance in managing bills

Satisfaction with the provision of electricity service and customer service has remained stable over the past 3 years. Around 80% of households in NSW reported a positive score in relation to the provision of electricity services over the past 3 years, while around 70% of households reported a positive score in relation to customer service (Figure 4.10).[164]

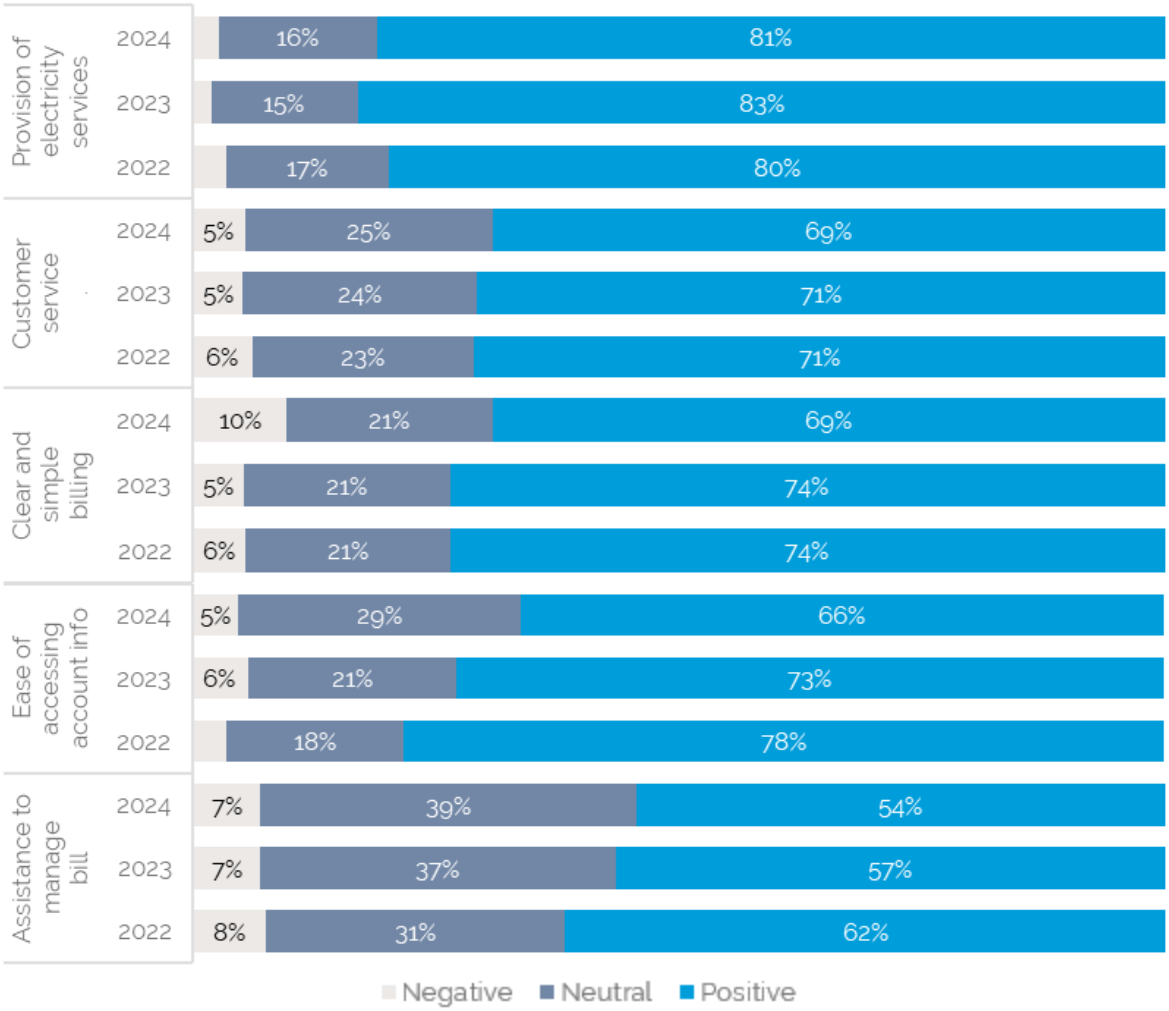
There has been an increase in the number of households reporting a negative or neutral score (and a corresponding decrease in the number of households reporting a positive outcome) in relation to clear and simple billing and the ease of accessing account information.[165]

In June 2024, 31% of households in NSW reported a negative or neutral score in relation to clear and simple billing. This was a 5-percentage point increase compared to June 2023. Further, 34% reported a negative or neutral outcome for the ease of access to account information. This is a notable increase from the 22% who reported this in June 2022.[166]

The increase in the proportion of customers reporting a negative or neutral outcome in relation to clear and simple billing may be due to the ongoing transition of customers from flat-rate to time-of-use and demand tariffs. When customers are moved to these tariffs, the bill must incorporate additional information including peak, shoulder and off-peak rates, peak, shoulder and off-peak usage, as well as maximum usage (for demand charges).

In June 2024, only 54% of households in NSW reported a positive score in relation to the assistance to manage their bill. This is a decrease of 8 percentage points from the 62% of households that reported a positive score in 2022.[167]

Figure 4.10 Satisfaction with customer service, access to account information and assistance, households in NSW



Notes: Number or respondents: 2022: 400, 2023: 400, 2024: 401
Survey questions:

- Provision of electricity services - How satisfied are you with the following elements of your electricity service over the past 6 months?
- Customer service -How satisfied are you with the following aspects of your electricity retailer in the past 6 months?
- Clear and simple billing - How satisfied are you with the following aspects of your electricity retailer in the past 6 months?
- Ease of accessing your account info - How satisfied are you with the following aspects of your electricity retailer in the past 6 months?
- Assistance to manage bill - How satisfied are you with the following aspects of your electricity retailer in the past 6 months?

Respondents were asked to select a score from 0 to 10 in response to each question. A score of zero to 3 is reported as a negative score. A score of 4 to 6 is reported as a neutral score. A score of 7 to 10 is reported as a positive score.
Source: Energy Consumers Australia, *Sentiment Survey – June 2024 – Topline data*, *Sentiment Survey – June 2023 – Household Topline Data*, Sentiment Survey – June 2022 – Topline Data, accessed 29 October 2024

4.7.2 Perceptions of the level of competition, the cost of electricity and confidence in the market

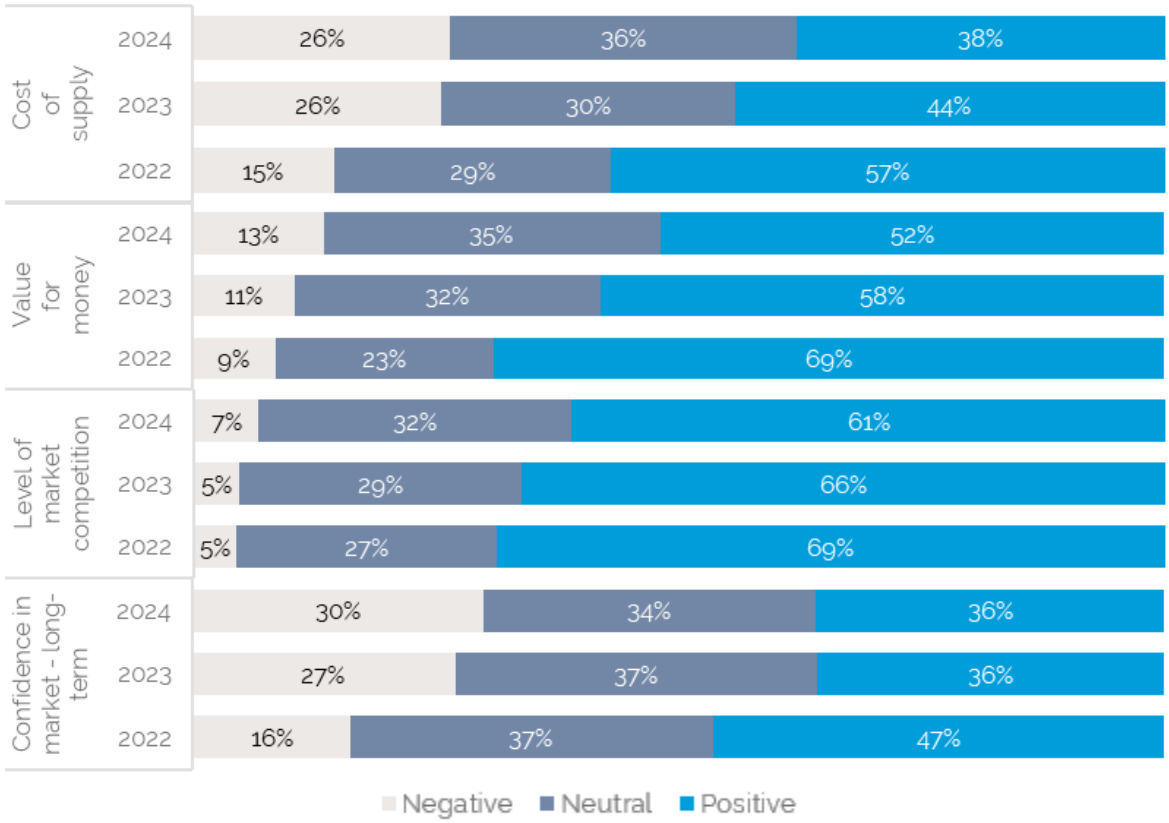
Over the past 3 years there has been a material increase in the proportion of households in NSW reporting a negative or neutral score for their view on the cost of supply of electricity and value for money.[168]

In June 2024, 62% of households reported a negative or neutral score in relation to their perception of the cost of supply, an increase of 18 percentage points from June 2022.[169] Further, 48% reported a negative or neutral score in relation to value for money, up from 31% in June 2022.[170] This increase is not surprising given the significant increase in the price of electricity experienced over 2022 to 2023 (Chapter 6).

There has also been an increase in the proportion of households reporting a negative or neutral score in relation to their perception of competition in the market. In 2024, 39% reported a negative or neutral score, up from 32% in 2022.[171]

Concerningly, 64% of households in NSW reported a negative or neutral score for their confidence that the market is working in their long-term interest. This is a significant increase on the 54% of households that reported a negative or neutral score in June 2022.[172]

Figure 4.11 Perception of competition, cost and confidence in the market, households in NSW



Notes: Number or respondents: 2022: 400, 2023: 400, 2024: 401

Survey questions:

- Cost of supply - How satisfied are you with the following aspects of your electricity retailer in the past 6 months – cost of your electricity supply?

- Value for money - How would you rate the overall value for money of the products and services provided by your electricity company in the past 6 months?
- Level of market competition - How satisfied are you with the following elements of your electricity service over the past 6 months – level of market competition (e.g. range of choices or number of potential suppliers) in the electricity market in your area)?
- Confidence in market – long term - How confident are you that the overall market is working in your long-term interests? By 'the market' we mean, the energy industry and energy regulators.

Respondents were asked to select a score from 0 to 10 in response to each question. A score of zero to 3 is reported as a negative score. A score of 4 to 6 is reported as a neutral score. A score of 7 to 10 is reported as a positive score.
Source: Energy Consumers Australia, *Sentiment Survey – June 2024 – Topline data*, *Sentiment Survey – June 2023 – Household Topline Data*, *Sentiment Survey – June 2022 – Topline Data*, accessed 29 October 2024

5 Challenges in searching and switching to a better deal

Key findings

- Several submissions raised concerns that although customers are proactively engaging and finding better offers, when they go to sign up, the offer is not available, or they are put on an offer with a different pricing structure. We consider this issue is likely related to smart meter and network tariff compatibility with different offers. If this is not addressed, it may further undermine trust and public support for the accelerated smart meter rollout and dissuade customers from engaging in the market.
- We identified several cases where retailers have different prices for existing customers compared to new customers (through acquisition offer pricing) on plans that have the same name. This is causing confusion as customers are being notified under the recently introduced *Better Offer* disclosure requirement that they can save by switching to the plan they are already on.
- There are limited tools available to assist consumers in understanding and comparing the cost and benefits of complex plans (time-of-use and demand tariff plans). This is despite customers in NSW being assigned to these tariffs at the network level and then in many cases, being moved onto these tariff structures for their electricity plan.

As discussed in Chapter 4, if there are barriers or frictions in the search and switching process, or if consumers do not have the information and/or tools needed to engage in the market, the disciplining effect that consumers can have on retailer behaviour is diminished.[173]

Several stakeholders raised concerns in their submissions that household and small business customers in NSW (and more broadly in the National Electricity Market) are facing barriers in the search and switching process. These include:

- customers are identifying offers, however when they go to sign up with the retailer the plan is not available, or they are put on a different plan[174]
- retailers have plans with the same name but different prices for existing customers compared to new customers, and this is creating confusion for customers when interacting with the Better Offer disclosure requirement in the Better Bills Guideline[175]
- tools are not available for customers to understand complex tariffs, in particular demand tariffs, despite customers being assigned to these tariffs at the network level and then moved onto these plans at the retail level.[176]

We analyse and discuss each of these issues below.

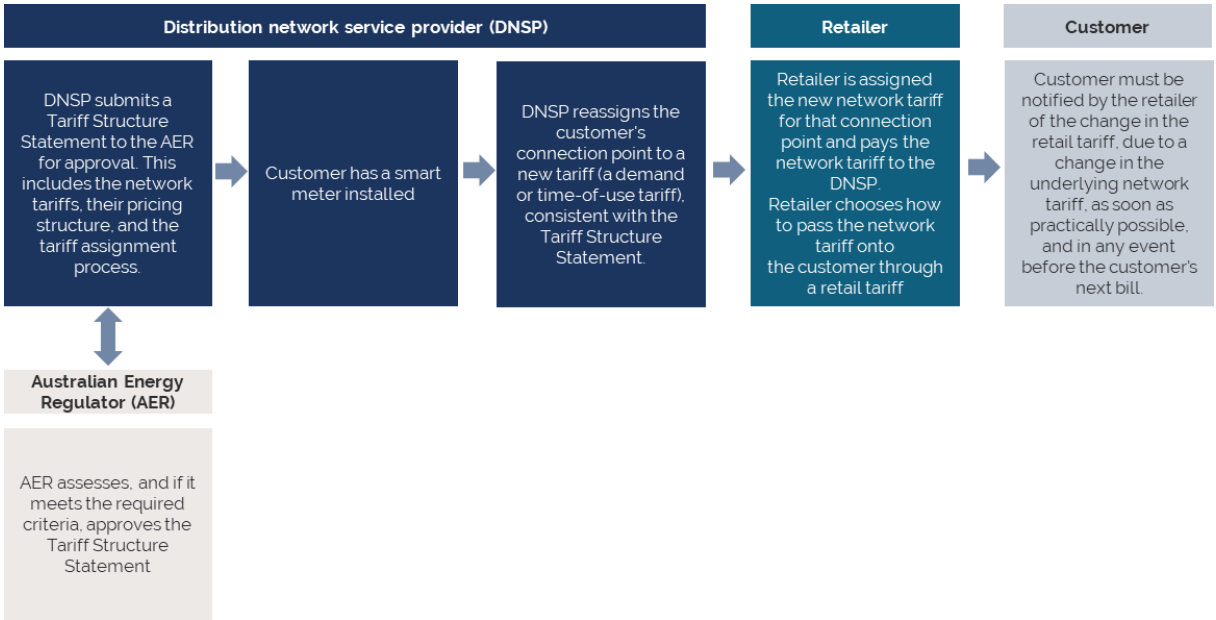
While stakeholder submissions discussed other impediments in the search and switching process, the issues above were those most commonly raised and where there was information available to investigate further.

5.1 Customers are unable to switch to the offer (and tariff) they want

The National Electricity Rules require DNSPs to gradually make their network tariffs more reflective of the cost involved in serving customers.[177] 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. Time-of-use and demand network tariffs aim to price electricity more efficiently by accounting for the higher (or lower) cost that is imposed on the distribution infrastructure when energy is used at peak (or off-peak) times.[178]

When a customer's network tariff changes, retailers generally also change the customer's retail plan to align with the underlying network tariff. This is because it reduces the retailer's risk by guaranteeing the customer pays them enough to cover what the retailer is charged by the distribution network.[179] Figure 5.1 below is a stylised diagram of the network and tariff reassignment process when a smart meter is installed.

Figure 5.1 Process for how a customer's tariff changes when a smart meter is installed (replacing a basic meter)



Source: AEMC, *Accelerating smart meter deployment rule change: Virtual public forum*, 29 August 2024, p 12

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] The ACCC's June 2024 Inquiry report discussed there is currently little information

[a] 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 customers behalf).

available on the extent to which customers on time-of-use or demand tariff plans have sought to switch back to a flat-tariff plan, or how successful these customers have been finding flat-rate plans with their existing retailer or a new retailer.[180]

The submissions from the Justice and Equity Centre and EWON both raised concerns that customers:

- often identify a better offer on the Energy Made Easy website but are unable to switch to that offer when they contact the retailer
- apply to sign up to a specific offer with a retailer but are then placed on an offer with a different tariff structure (and different prices) to the one they applied for.[181]

EWON also included several case studies that detailed examples of this issue. Two of these case studies are below.

Box 5.1 EWON case studies on tariff changes

EWON case study 1: A customer signed up for a flat tariff, but it was not available once he had transferred

The customer contacted a retailer in April 2024 to sign up to a flat-rate plan that was advertised on its website. He was offered a different plan with higher rates and demand charges. He was confused by the information the retailer gave about why he could not sign up to the flat-rate plan.

The retailer indicated that the flat-rate plan was not available to new customers and was "locked" to the people already on it. The retailer also indicated that its availability was restricted by the network. The matter was referred to a senior team at the retailer in the first instance.

EWON case study 2: Customer wanted a flat tariff, and retailer provided incorrect information that he could request one once the transfer was completed

The customer researched retailers online to choose a new energy plan in June 2024. He found a plan he liked which was based on a flat tariff. When he contacted the retailer, the retailer said he would have to sign up to a plan based on a time-of-use tariff first but could later switch to a flat-rate plan once he was their customer. After he had transferred to the retailer, he rang them to change to the flat-rate plan. The retailer advised that he was given incorrect information when he was told he would be able to change to the flat-rate plan. The matter was referred to a senior team at the retailer in the first instance.

Source: EWON , *Submission to the Energy Market Monitoring Consultation Paper*, September 2024, pp 9 - 10

In general, distribution networks in NSW do not allow customers with smart meters or new customers to have a flat-rate network tariff. However, customers are generally able to switch from a demand network tariff to a time-of-use network tariff and vice versa.

The case studies provide an illustration of the confusion that cost-reflective network tariffs can cause for consumers when they engage and try to switch to a better retail plan.[182] This submission also noted EWON frequently receives complaints related to retail tariff changes where customers are confused about the difference between a network tariff and their retail tariff, or about the relationship between the 2.[183]

We consider there are several reasons why customers are identifying an offer but are unable to change to it, or when they apply to switch, they are transferred onto an offer with a different tariff (and price) structure. These include:

- When customers search for plans, in many cases there is no clear, upfront disclosure on which plans are available to customers depending on the underlying network tariff and meter type (basic meter or smart meter).

  We identified several cases where this occurred on retailer websites,[b] independent price comparison websites and one case where it occurs on the Energy Made Easy website (based on one way that users can search for plans).[c]
- Retailers have plans with different tariff structures (flat rate, time of use or demand), but the same name. When a customer signs up, they are moved onto the plan that aligns with their underlying network tariff, even if they searched and applied for a different tariff type. For example, Powershop has a plan called *"Power House"* with different tariff structures and prices applied depending on the customers underlying network tariff (flat-rate, time-of-use, demand).[184]

  For customers with a flat-rate network tariff, a flat-rate retail tariff applies, however for customers with a smart meter and a network time-of-use tariff, a time-of-use retail tariff applies.[185]

Based on a review of residential offers on Energy Made Easy on 31 October 2024, for the 2233 postcode in the Ausgrid distribution network, we found that 48% of flat-rate offers available had the same name as time-of-use plans from the same retailer.[d, 186]

As a result, while a customer may identify one plan (and see an estimate of the total cost and the reference price compared to the Default Market Offer), when they sign up, different tariffs and prices may apply depending on their underlying network tariff and meter type.

[b] Some retailer websites had the functionality to input a user's address or National Metering Identifier, and the offers would update to show pricing structures that were aligned with the underlying network tariff. For example, if the address had a time-of-use network tariff only time-of-use offers would be shown. However, several retailers, including some of the major retailers in NSW, did not have this functionality on their website.

[c] Users can search for plans on the Energy Made Easy website in several different ways and depending on the user journey different plans will be shown by default. For example,

- if a user inputs their National Metering Identifier only those plans that are compatible with the user's meter type are shown by default
- if a user does not input their National Metering Identifier, but manually inputs their energy usage data, they are required to select if they have a Smart Meter and only, the relevant plans are shown by default
- if a user does not input their National Metering Identifier and uses the 'Quick compare' option, or if they do not have more than 12 months of electricity usage data available, by default flat-rate plans are shown (even if the customers has a smart meter).

Source: AER, Energy Made Easy, accessed 26 November 2024

[d] When a user on Energy Made Easy selects a plan, they are able to navigate to the "More Info" tab and this shows what metering type the plan is compatible with. However, users may not be aware of this information, and it is not disclosure upfront on the plan.

We consider it is essential that customers understand which plans are available to them based on their meter type and the underlying network tariff. This includes the ability to easily search and find offers that are compatible with their meter type and network tariff. This will reduce the likelihood that customers identify a plan they want to change to but are not being able to switch to them or are changed to an alternative plan.

Further, this is likely to be particularly important as the AEMC have proposed a draft rule change, as part of the Accelerated Smart Meter Deployment review, that retailers should be required to make a flat rate standing offer available to customers with a smart meter.[e]

Recommendations

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.

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.

[e] Under the National Energy Retail Law, jurisdictions, such as NSW, would need to opt into this new flat tariff requirement for it to come into effect. That is, the rule would only apply if and when a given jurisdiction declares that it applies in that jurisdiction. Jurisdictions would need to apply this rule through a local instrument.

5.2 Retailers have different prices for customers on the same plan

The Justice and Equity Centre submitted there are examples of retailers having high prices for existing customers compared to the advertised prices on that plan, and this is creating confusion for customers.[187]

This submission detailed a recent investigation by CHOICE that documented 2 examples of this. The CHOICE article explained that it is resulting in confusion for customers when they received a mandatory *Better Offer* disclosure under the Better Bills Guideline.[188] This article by CHOICE included an example where a customer was notified under the Better Offer requirement that he could save $260 by switching to the plan he was already on.[189] We discuss the mandatory *Better Offer* requirement in the Better Bills Guideline in Box 5.2.

Box 5.2 Requirement for the inclusion of a 'Better Offer' under the Better Bills Guideline

The Better Bills Guideline sets requirements for how energy retailers must prepare and issue bills to small customers. Under this Guideline, retailers are required to include a *'Better Offer'* statement in a customer's bill.

A retailer is required to calculate whether there is a *'better deemed offer'* available on any of the retailer's other generally available plans, having regard to the customer's annual usage history.

The retailer must include either the negative message (if a better plan is identified) or the positive message (if a better plan is not identified) in the bill.

Negative better offer message:

> *Could you save money on another plan?*
>
> *Based on your past usage, our "Name of Plan" may cost you up to "$ amount" less per year than your current plan.*

Positive better offer message:

> *Could you save money on another plan?*
>
> *Based on your past usage, you are on the best plan we can offer you.*

This message is intended to encourage consumers to switch to the best plan their retailer can offer them. The retailer must also include a link to the Energy Made Easy website where consumers can go to search for and compare offers.

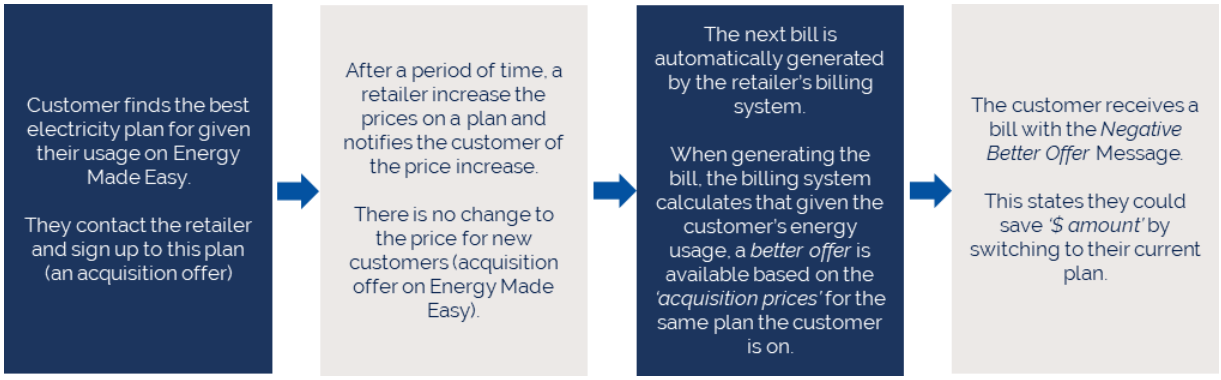
The Better Offer message must be provided on the bill at least every 100 days, or in alignment with a longer billing cycle (if agreed with the customer).

Source: AER, *Better Bills Guideline (Version 2)*, 30 January 2023, accessed 24 October 2024

As discussed in Chapter 6, the ACCC recently reported that retailers typically recoup costs over a customer's lifetime, by setting low acquisition offers and increasing prices for their existing customers over time.[190]

The unilateral price increases for existing customers (with no increase in the acquisition offer prices) is interacting with the *Better Offer* requirement in a concerning way. This is because it requires retailers to notify customers, they could be on a better offer on the plan they are already on. This has the potential to limit the effectiveness of the Better Offer disclosure as it is unclear what steps would need to be taken to move to this new pricing (on the plan the customer is already on). In Figure 5.2 we discuss how this issue appears to be occurring.[f]

Figure 5.2 Example of how customer price increases are interacting with the Better Offer requirement in the Better Bills Guideline

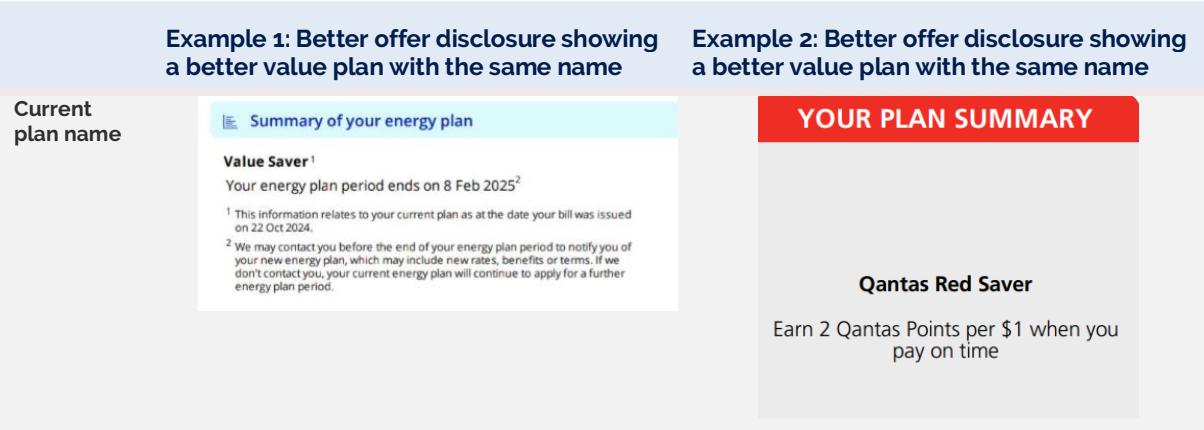


In preparing this report, we also identified several examples of customers receiving similar Better Offer messages on their electricity bills, that they could save money by switching to their current plan. Examples of this are shown in Table 5.1 below.

Table 5.1 Examples of *'Better Offers'* available on the same plan

	Example 1: Better offer disclosure showing a better value plan with the same name	Example 2: Better offer disclosure showing a better value plan with the same name
Mandatory better offer message with the same the plan name	**Could you save money on another plan?** Based on your past usage, our **Value Saver** plan may cost you up to **$48 less per year** (incl. GST) than your current plan.* This offer has eligibility criteria. To view the eligibility criteria or switch plans, simply visit **agl.com.au/offerdetails** or contact us on **131 245.** *The Australian Energy Regulator requires us to include this information.*	**Could you save money on another plan?** **Based on your past usage, our Qantas Red Saver plan may cost you up to $54.47 (including GST) less per year than your current plan*.** **To switch plans, call 131 806 or visit MyAccount.redenergy.com.au** **The Australian Energy Regulator requires us to include this information.** *Rates, charges and availability of plans subject to change. **You can compare plans from other retailers by visiting the Energy Made Easy website at www.energymadeeasy.gov.au**

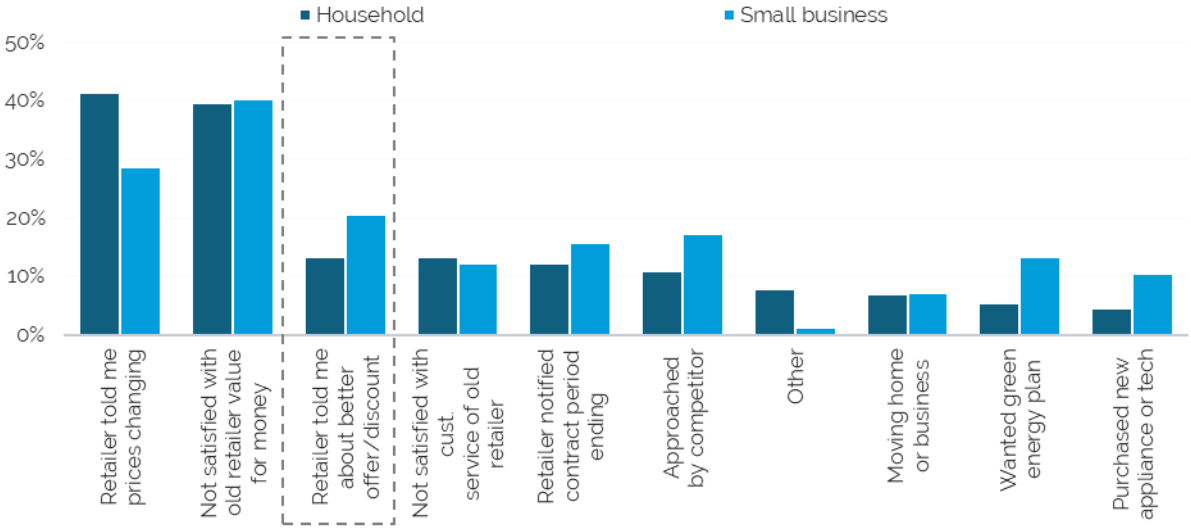
[f] There are other ways this issue could be occurring. For example, at a point in time retailers lower the prices on acquisition offers (those listed on Energy Made Easy), but do not lower the prices for existing customers (those who have already signed-up to the plan).



Source: Energy bills.

The *Better Offer* requirement is an important piece of disclosure for customers, particularly in the context of increasingly complex electricity pricing structures. The latest Energy Consumer Sentiment Survey found that *'retailers notifying customers about a better offer or discount'* was the third most reported reason why a household or small business considered looking at changing retailers or switching offers (with the same retailer)[191] (Figure 5.3).

Figure 5.3 What triggers a customer to consider switching retailer or offer



Notes: Survey question: Thinking about the last time you looked at changing energy companies/switching to a better offer, what made you consider it in the first place?
Number of respondents: households in NSW: 220, small businesses (Australia-wide): 289.
There was not a large enough sample to report robust results for small businesses in NSW only, as a result we reported this outcome on an Australia-wide basis.
Responses are ordered from the most commonly reported answer for households in NSW.
The dotted rectangle shows the answer from respondents relevant to this issue.
Respondents were able to choose more than one answer in response to this question.

Source: Energy Consumers Australia, *Sentiment Survey – June 2024 – Topline data*, June 2024, accessed 31 October 2024

As discussed in Appendix D, Minister Bowen has proposed a package of 7 consumer related rule changes to the AEMC to improve customer outcomes in the retail electricity market. This includes a rule change proposal to improve the ability to switch to a better offer.[192]

This rule change proposal discusses the Better Bills Guideline currently requires retailers to include a *'Better Offer'* statement on the front page of consumer bills, explaining whether the retailer offers a better deal and summary instructions on how to switch plans.[193] This rule change proposes amending the National Energy Retail Rules to introduce an obligation on retailers, to provide a streamlined process for consumers to switch to the better offer as presented on the customer's bill.[194]

As the AEMC has commenced consultation on the rule change to improve switching to the Better Offer, we recommend that as part of their review, it should consider how to address the confusion being caused when customers are notified that they can save money by switching to the plan that they are already on.

Recommendations

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.

5.3 Consumers use a range of tools when searching and switching, but these tools need improvements

Several submissions to our Energy Market Monitoring consultation paper raised concerns that time-of-use and demand tariffs are highly complex, and tools are not available to help consumers understand and estimate the cost of these plans.[195]

When a customer engages with the market and tries to search and switch retailer (or contract), if a customer has a smart meter installed, they need to consider multiple price components and the times when they use electricity to find the best offer. This significantly increases the complexity of the search and switching process, compared to when the decision was only based on flat-rate offers.

We provide a summary of the different tariffs, price components and pricing periods that are available to customers with a basic meter (Table 5.2) and smart meter (Table 5.3) below.

Table 5.2 Different types of tariffs, including price components and pricing periods, offered to customers with basic meters

Tariff type	Description	Price components	Pricing periods
Flat-rate tariff plan	Flat or single-rate tariff plans apply the same rate per unit of electricity at all times of the day.	Supply charge – c/day Usage charge – c/kWh	No pricing periods. Same rate applies regardless of when electricity is used.

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 in combination with either a flat-rate, time-of-use or demand tariff.	Supply charge – c/day [a] Usage charge – c/kWh	No pricing periods. Same rate applies regardless of when electricity is used.

a. Controlled load tariffs may have a separate supply charge, or a retailer may bundle this supply charge with the supply charge for the offer which the controlled load is bundled with.

Table 5.3 Different types of tariffs, including price components and pricing periods, offered to customers with smart meters

Tariff type	Description	Price components	Pricing periods
Time-of-use tariff plan	Time-of-use tariff plans apply different rates to electricity used at different times of the day. Time-of-use tariff plans retailers (and DNSPs) 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 Peak usage charge – c/kWh Off-peak usage charge – c/kWh Shoulder usage charge – c/kWh	Charges are typically, divided into: • Peak charges - when electricity costs the most, typically in the evenings of weekdays. • Off-peak charges - when electricity costs the least, typically overnight and on weekends. • Shoulder charges – all other times. [a]
Demand tariff	Demand tariffs include a fixed daily supply charge, a charge (that may be a flat-rate or time-of-use charge) 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. Some DNSPs and retailers have different demand charges for the high usage and low usage seasons.	Supply charge – c/day Flat-rate usage charge – c/kWh Peak usage charge – c/kWh Off-peak usage charge – c/kWh Shoulder usage charge – c/kWh Demand charge c/kW/day based on maximum demand	Charges are typically, divided into: • Peak charges - when electricity costs the most, typically in the evenings of weekdays. • Off-peak charges - when electricity costs the least, typically overnight and on weekends. • Shoulder charges – all other times.
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 offers and provide the same amount regardless of when electricity is exported.

Controlled load tariff	Same details for controlled load tariffs as in Table 5.2

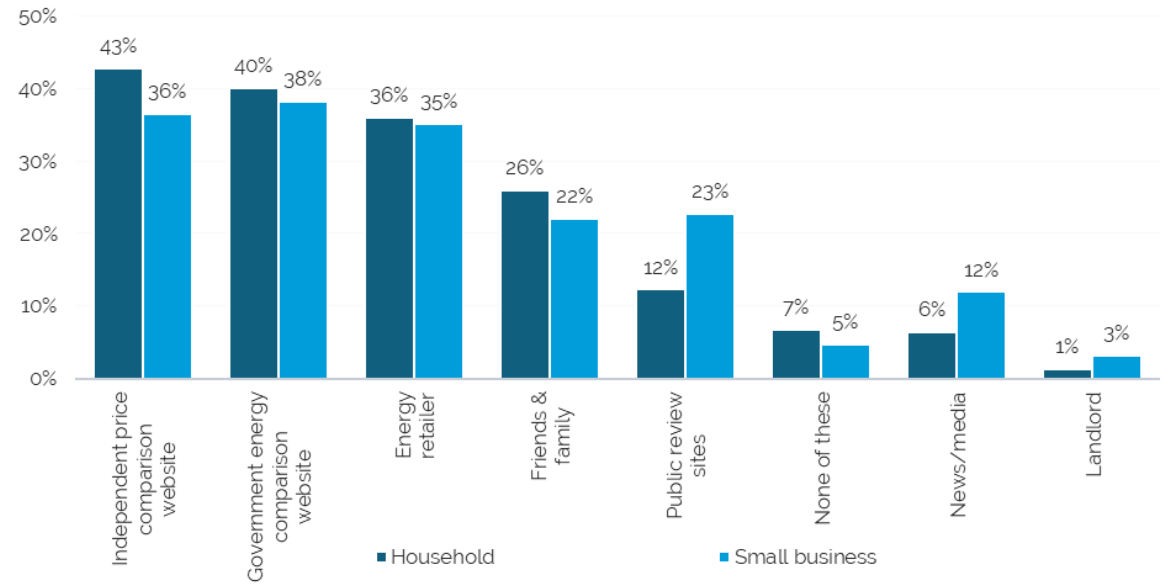
a. In addition to the offers listed above, some retailers also offer 'innovative tariffs' that are structured differently. For example, Amber Electric offers a plan with a usage charge that tracks the wholesale electricity price and users pay a subscription fee to sign up to this service. These tariff structures are not included in the table above.
Notes: Since, 1 July 2024, should charges for time-of-use tariffs have been phased out by the 3 distribution networks in NSW. As a result, these charges are now becoming less common in retail plans.
For demand shoulder, only Essential Energy still include a shoulder period for its opt-in demand and large business demand tariffs.
Controlled load tariffs may have a separate supply charge, or a retailer may bundle this supply charge with the supply charge for the offer which the controlled load is bundled with.
Source: Australian Government, *Energy Made Easy*, accessed 23 October 2024; ACCC, *June 2024 Inquiry Report into the National Electricity Market*, June 2024, accessed 23 October 2024, p 55 – 56

As can be seen by comparing Table 5.2 and Table 5.3, customers with smart meters have a significantly larger number of price points to compare, and they need to consider when electricity is used and the level of peak usage (for demand charges). To effectively do this and find the best offer for their circumstances, customers need more information and better tools to assist them in this process (compared to if they are on a flat-rate tariff plan).

The Energy Consumer Sentiment Survey asked households and small businesses where they go to find information when they consider switching offer or retailer.[196] In June 2024, 43% of households reported they visited an Independent Price Comparison website. This was the most commonly reported option, followed by visiting the Energy Made Easy website (40%) and retailers' websites (35%).[g,197]

For small business customers, the most reported option was seeking information from the Energy Made Easy website (38%), follow by an Independent Price Comparison websites (36%) and then energy retailers' websites (35%) (Figure 5.4).[198]

Figure 5.4 Where NSW consumers go to find information on switching offers or retailer, June 2024



g Respondents could select more than one answer when responding to this question. As a result, the results sum to more than 100%.

Notes: Survey question: Thinking about the last time you considered changing energy companies/switching to a better offer, where did you go to find out information
Number of NSW household respondents: 2024: 401; number of small business respondents (Australia-wide): 506. There was not a sufficient sample of data for small businesses in NSW to report the results. Due to this, the results for small businesses are on an Australia-wide basis.
Respondents were able to choose more than one answer. Responses ordered in descending order by household responses.
Source: IPART analysis of Energy Consumers Australia, *Consumer Sentiment Survey June 2024 – Topline Data*, accessed 24 October 2024.

Given the importance of Price Comparison Websites (both independent price comparison websites and the Energy Made Easy website) to household and small business customers in the search and switching process, we conducted a desktop review of these websites in October 2024. This focused on:

- the number of retailers covered by the price comparison website
- which tariff types were able to be included in the price comparison
- additional functionality, such as the ability to upload an energy bill or the ability to incorporate actual usage data (for a more accurate estimate of the total cost of a bill due to usage at different times).

The result of this analysis is below and summarised in Figure 5.5.

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

The price comparison websites Energy Made Easy and Wattever compared all retailers in NSW (40 retailers), while CanStar compared the majority of retailers. The remaining price comparison websites compared far fewer retailers, ranging between 6 and 16 retailers. The average number of retailers compared across all price comparison websites was 17 retailers.[i]

The types of tariffs able to be compared also varied significantly. While all price comparison websites had the functionality to calculate and compare annual bills for flat-rate tariff plans, only 77% of price comparison websites had the functionality to calculate and compare time-of-use tariff plans.

Further, far fewer price comparison websites had the ability to calculate the total bill for a time-of-use tariff with a controlled load (38% of Price Comparison Websites had this functionality). Only 1 Price Comparison Website had the functionality to calculate a total bill with a demand charge.[j]

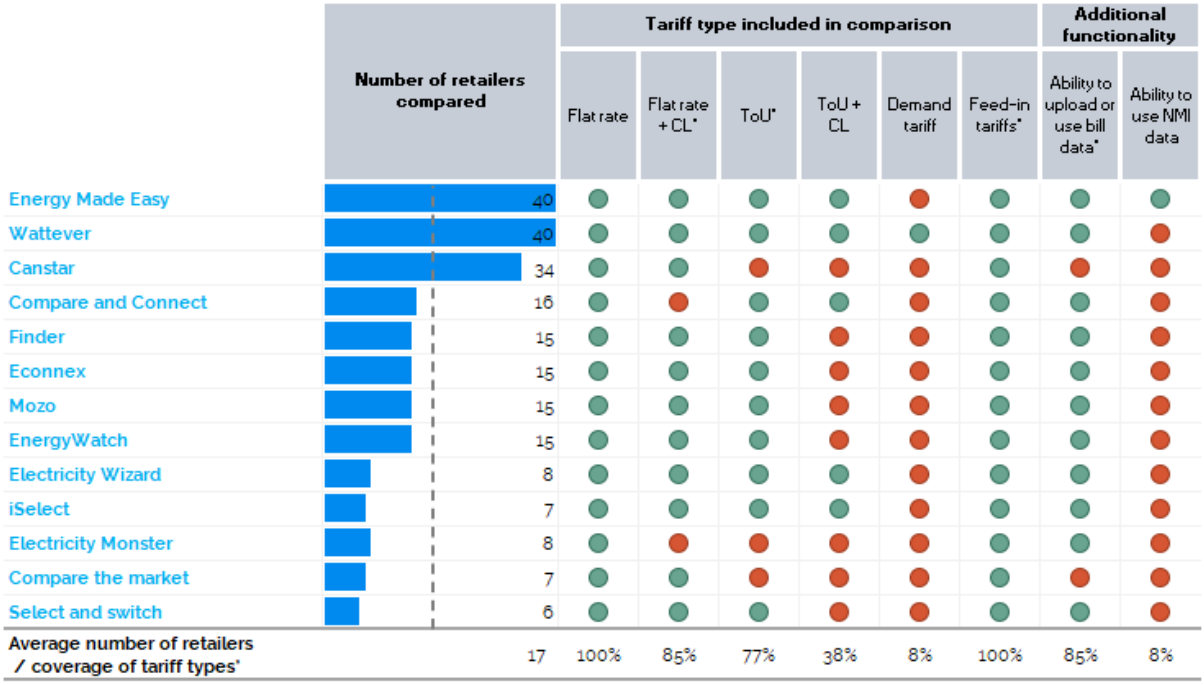
Most price comparison websites provide the option to upload a bill (to scrape the relevant usage data) or manually input data from an energy bill, such as the amount of usage in peak, should and off-peak periods. However, only the Energy Made Easy website had the functionality to connect to the Australian Energy Market Operator (AEMO) and obtain an individual customer's usage data. By using an individual customer's usage data, the Energy Made Easy website can provide a much more accurate estimate of the cost of an offer and the savings that can be made by switching.

[h] We identified the list of price comparison websites to include in our analysis by:
- reviewing the list of price comparison websites included in the ACCC's analysis in *the Residential Electricity Pricing Inquiry*, 2018, p 277
- identifying those price comparison websites that appear in Google search results (in the first 10 pages of results) which have offers available to customers in NSW.

[i] The price comparison websites Finder, Mozo and EnergyWatch use the Econnex comparison platform and as a result compare the same retailers and have the same functionality.

[j] The only price comparison website able to calculate bills with a demand tariff was Wattever. This required the user to input their highest (or maximum) peak usage.

Figure 5.5 Summary of energy price comparison websites' functionality



	Number of retailers compared	Tariff type included in comparison						Additional functionality	
		Flat rate	Flat rate + CL*	ToU*	ToU + CL	Demand tariff	Feed-in tariffs*	Ability to upload or use bill data*	Ability to use NMI data
Energy Made Easy	40	●	●	●	●	●	●	●	●
Wattever	40	●	●	●	●	●	●	●	●
Canstar	34	●	●	●	●	●	●	●	●
Compare and Connect	16	●	●	●	●	●	●	●	●
Finder	15	●	●	●	●	●	●	●	●
Econnex	15	●	●	●	●	●	●	●	●
Mozo	15	●	●	●	●	●	●	●	●
EnergyWatch	15	●	●	●	●	●	●	●	●
Electricity Wizard	8	●	●	●	●	●	●	●	●
iSelect	7	●	●	●	●	●	●	●	●
Electricity Monster	8	●	●	●	●	●	●	●	●
Compare the market	7	●	●	●	●	●	●	●	●
Select and switch	6	●	●	●	●	●	●	●	●
Average number of retailers / coverage of tariff types*	17	100%	85%	77%	38%	8%	100%	85%	8%

Notes: In addition to the price comparison websites listed above, we also considered other comparison websites include Billy Explore, Zemble, Compare Club and Business Electricity Compare. However, these comparison websites did not provide a comparison of results online, but rather collected customer information for a sales consultant to call back 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.
The dotted grey line in the number of retailers column is the average number compared across all price comparison website analysed.
Green circle represents the price comparison website includes the ability to estimate and compare bills for that tariff type based on a customers' usage (inputting the data from a bill or usage data from AEMO).

Source: IPART analysis based on the websites: Energy Made Easy, WATTever, Canstar Blue, Compare and Connect, Finder, Econnex, Mozo, Energy Watch, Electricity Wizard, iSelect, Electricity Monster, Compare the market, Select and switch, websites accessed on 23 and 24 October 2024

5.3.1 Sharing Energy Made Easy functionality with other price comparator websites

We consider Energy Made Easy is the price comparison website with the most advanced functionality. In particular, it can ingest a user's energy usage data from AEMO to provide an accurate estimate of the cost of an offer for a customer.

The current functionality of Energy Made Easy reflects over 12 years of development and a significant amount of Government funding to support its development and ongoing

enhancements.[k] Further, several enhancements to Energy Made Easy to improve its functionality and coverage of tariffs are currently being developed.[l]

We consider the source code for Energy Made Easy should be made public and published on a platform such as Github. This could assist other price comparison websites to improve their functionality and increase the coverage of different types of tariffs.

Further, as new electricity tariffs and services are developed by retailers and incorporated into the Energy Made Easy website, the source code for this new functionality also be published and made available to be incorporated onto other price comparison websites and switching services.

This may also assist with encouraging more price comparison websites to become accredited data recipients under the Consumer Data Right. More information on the Consumer Data Right is provided in Appendix B.

Recommendations

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.

[k] Data is not separately reported by the Australian Energy Regulator on operational or capital expenditure for Energy Made Easy. However, as an example of the funding received:

- the Australian Energy Regulator received $8 million in funding from the Federal Government in 2018 for a major site redevelopment
- in the 2024-25 Budget, it was announced the Australian Energy Regulator would receive $16.6 million over 4 years to help households get onto a better plan by sustaining regulatory activities, upgrading data and digital systems and delivering better outcomes for consumers through the Energy Made Easy website.

Source: Australian Energy Regulator, *Energy Made Easy redevelopment project*, 1 July 2018, accessed 29 October 2024; Australian Government, *Budget Paper Number 2: Budget Measures*, 14 May 2024, p 54

[l] This includes the ability to include demand charges in bills. We have been informed by the AER that it is currently undertaking a business case expected to consider this functionality.

6 Pricing outcomes for customers in NSW

Key findings

- From 1 August 2022 to 1 August 2023, the weighted average, flat-rate, residential customer bill in NSW rose between 31% and 37%, depending on the distribution network. This was significantly higher than the annual increase in the Default Market Offer and the increase in electricity bills estimated using the median market offer from the Energy Made Easy website.
- As at 1 August 2023, over 50% of residential customers in NSW on flat-rate offers were paying estimated annual bills equal to or above the Default Market Offer annual bill.
- Retailers typically recoup their costs over a customer's lifetime. This is done by setting low acquisition offers and subsequently increasing the prices for the customers who have signed up on that offer over the next few years. At the same time, the acquisition offers remain at the lower price. Despite this pricing behaviour, data is only systematically collected for acquisition offers. There is limited information available on the prices charged by retailers to existing customers.

This chapter discusses analysis on the actual cost of electricity for residential and small business customers in NSW.

Chapters 7 and 8 detail trends in the cost of flat-rate and time-of-use tariff plans for residential and small business customers in NSW. This is based on the median market offer published on the Energy Made Easy website.[m] Offers published on the Energy Made Easy website are often referred to as *acquisition prices* (or *advertised prices*). These are the prices available to new customers and those that regularly switch.

However, analysis of data from the Energy Made Easy website does not provide a complete picture of what customers in NSW are actually paying. There are several reasons for this, however one main reason is that many customers are on legacy offers. A legacy offer is an offer that has been withdrawn from the market and is no longer available to new customers. As the offer is not *'generally available,* information on these offers (including prices) is not reported to the AER and is not included on the Energy Made Easy website. Customers on legacy offers tend be those who have not switched offers for some time.[n]

[m] We provide an overview of the Energy Made Easy website data used in our analysis in Box 7.1.

[n] Other reasons we do have a complete picture of what customers in NSW are actually paying include:

- we do not know the actual consumption (or usage) profile of each customer (and use a representative consumption profile (the net system load profile)
- we do not know the number of customers on each plan (which limits our ability to estimate average prices and understand the actual spread of prices paid).

In past years there was not data available to explore the issue of the prices that customers in NSW are actually paying in detail. However, as part of the ACCC's Inquiry into the National Electricity Market, the ACCC has collected data on the actual prices charged to over 60% of residential customers and 50% of small business customers in the National Electricity Market.[199] Using this data, in this chapter we report on:

- the actual prices and annual price changes for customers in NSW
- the proportion of customers in NSW paying prices equal to or above the Default Market Offer

6.1 Annual electricity prices for customers in NSW

To inform the Inquiry into the National Electricity Market, the ACCC collected point-in-time data as at 1 August 2022 and 1 August 2023 on the prices charged by retailers on residential and small business electricity contracts.[200] This included supply charges, usage charges, controlled load charges, solar feed-in tariffs, discounts and GreenPower charges.[201]

Using this pricing data and the annual usage level for each distribution network, specified in the Default Market Offer, the ACCC calculated the estimated annual electricity bill for each customer as at 1 August 2022 and 1 August 2023.[o]

The ACCC estimated the weighted average residential customer bill in NSW was $1,510 as at 1 August 2022 (using the annual usage level specified in the relevant Default Market Offer). This increased by 35% to $2,042 as at 1 August 2023.[p, 202]

The weighted average small business customer bill in NSW was $3,417 as at 1 August 2022 (using the annual usage level specified in the Default Market Offer). This increased 29% to $4,434 as at 1 August 2023.[q,203]

Box 6.1 How we consider discounts in this analysis

Some market offer plans include conditional discounts and/or guaranteed discounts. These discounts can be a fixed dollar amount or a percentage off the total bill (or in some cases a discount off a particular charge or fee).

[o] When calculating the annual cost of electricity, the ACCC excluded solar feed-in tariffs and GreenPower charges.

[p] This weighted average residential customer bill assumes that 100% of conditional discounts were achieved. If no conditional discounts are assumed to be achieved, the weighted average residential customer bill is $1,559 as at 1 August 2022 and $2,088 as at 1 August 2023.

We have reported the weighted average residential customer bill with 100% of conditional discounts achieved as the ACCC reported in their June 2023 Inquiry report that 91% of residential customers and 85% of small business customers achieved their conditional discounts as at 1 July 2022.

Source: ACCC, *Inquiry into the National Electricity Market: June 2023 report*, Appendix E: Data appendix [data set], accessed 15 October 2024.

[q] These figures for the weighted average small business customer bill assume 100% of conditional discounts were achieved. If no conditional discounts are assumed to be achieved, the weighted average small business customer bill is $3,447 as at 1 August 2022 and $4,463 as at 1 August 2023.

Box 6.1 How we consider discounts in this analysis

Conditional discounts – these discounts only apply if a customer meets certain conditions (or requirements). For example, a discount if the customer pays their bill on time or if they pay by direct debt are examples of conditional discounts.

While plans with conditional discounts may appear cheaper than other plans, their cost is contingent on customers meeting the requirements for the discount to apply.

In NSW, around 15% of residential customers and 6% of small business customers had conditional discounts as at 30 September 2022.

Guaranteed (or unconditional) discounts – these are discounts that do not require the customer to meet any conditions. The customer is guaranteed to receive the discount. Guaranteed discounts are essentially lower prices.

In this chapter, we report the estimated annual total bill and distribution of outcomes compared to the Default Market Offer assuming that all conditional discounts are achieved. This is because the large majority (around 91% of residential customers and 85% of small business customers) of small customers in the National Electricity Market met the requirements for conditional discounts as at 1 June 2022. We also include any guaranteed discounts in the total cost of the bill.

Note: for completeness, we also report the estimated annual total bill and distribution of outcomes compared to the Default Market Offer without the achievement of conditional discounts in an accompanying footnote.

Source: ACCC, Inquiry into the National Electricity Market June 2023 report, 2 June 2023, pp 38 – 39, accessed 16 October 2024; ACCC, *Appendix E - Supplementary spreadsheet with billing data and figures - Inquiry into the National Electricity Market - June 2023 report (XLSX 5.31 MB)*, accessed 16 October 2024

6.2 Annual electricity price changes for customers in NSW, compared to the median market offer and the Default Market Offer

In the section below, we report on the change in the annual bill estimated using the:

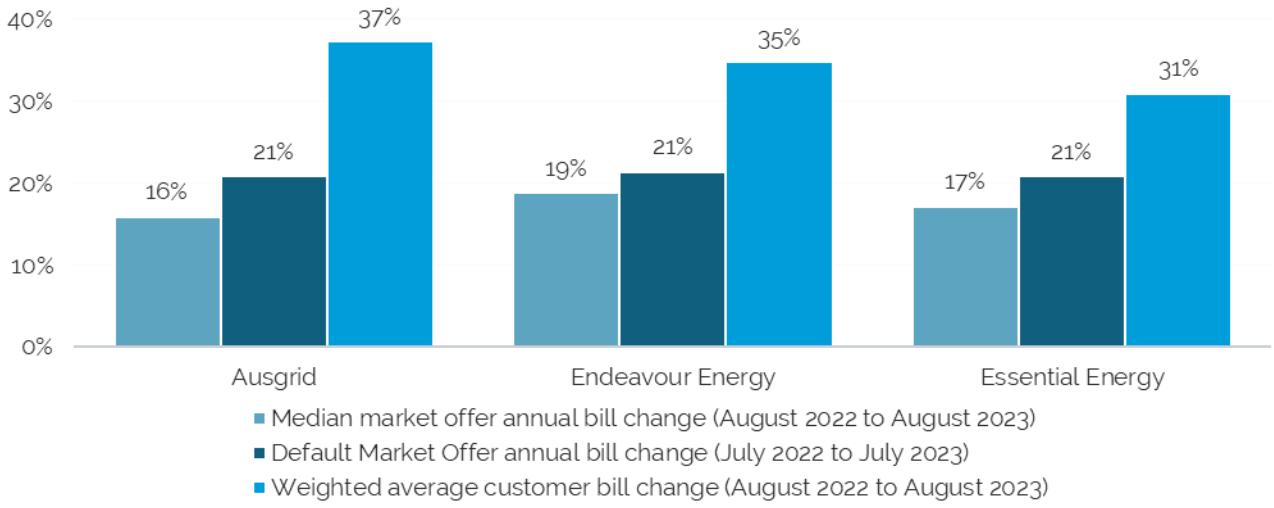
- actual prices paid by customers in NSW (using the data reported by the ACCC)
- the median market offer on the Energy Made Easy website[r]
- the Default Market Offer.

[r] The median annual bill figures and the percentage changes calculated using data from Energy Made Easy are different to those reported in Chapter 7. This is because in this chapter we use the Default Market Offer consumption level for each distribution network in NSW and calculated the annual bill as at August 2022 and August 2023. This allows a more consistent comparison with the data reported by the ACCC.

In Chapter 7, we calculate the median annual bill and price change using a consumption level of 4,215 kWh per year. We use a consistent level of consumption in Chapter 7 to enable a more consistent comparison across distribution networks and for consistency with our price reporting in past years. 4,215 kWh was the modal level of consumption in NSW in 2020 and represented the consumption level of a 2-person household.

Figure 6.1 shows that the estimated annual bill for the median flat-rate electricity offer on the Energy Made Easy website increased between 16% and 19% from August 2022 to August 2023, depending on the distribution network. This was less than the increase in the Default Market Offer, which rose by 21% across each distribution network in NSW. However, the actual weighted average customer bill change estimated by the ACCC was significantly higher. This ranged from 31% to 37%, depending on the distribution network.

Figure 6.1 Change in the median Energy Made Easy annual bill, Default Market Offer annual bill and customer-weighted average bill between 2022 and 2023 for residential customers, nominal, incl. GST



Notes: The median EnergyMadeEasy price change was calculated by estimating the annual bill for flat-rate offers in each distribution network as at 17 August 2022 and 1 August 2023. We used the annual usage (or consumption level) specified in the Default Market Offer for that region.
Default Market Offer prices for 2022–23 apply from 1 July 2022 to 30 June 2023. Default Market Offer prices for 2023–24 apply from 1 July 2023 to 30 June 2024.
The weighted average customer price was measured as at 1 August 2022 and 1 August 2023. The ACCC noted in their report that by 1 August in each year, at least 1 price increase had been observed across all retailers, however retailers may also apply other price increases throughout the year and so the weighted average price change may differ depending on the point in time at which this is measured.
The weighted average customer price change assumes 100% achievement of conditional discounts.

Source: IPART analysis based on: ACCC, *December 2023 Inquiry Report – Appendix C, Supplementary Excel spreadsheet with cost stack data and charts*, December 2023; AER, Default Market Offer prices 2023–24, 25 May 2023, p 6; EnergyMadeEasy data.

The significant increases in the weighted average customer price demonstrates that over 2022 to 2023, retailers increased prices by a materially larger amount for customers on legacy plans compared to acquisition offers.

The submission from the Justice and Equity Centre raised the concern it is a common practice for retailers to rapidly escalate prices once a customer switches to a new plan, often as soon as 3 months after signing up. This submission noted this practice erodes or eliminates the benefits of switching soon after sign-up and discourages consumers from engaging in the market and switching.[204]

The ACCC's December Inquiry report discussed that retailers typically recoup their costs over a customer's lifetime, by setting attractively low acquisition offers and subsequently increasing prices for their existing customer base over time.[205]

As part of this Inquiry report, the ACCC also asked retailers how they price their existing customer base compared to new customers (or acquisition offers). The ACCC reported that a review of responses by retailers indicated that while retailers use the Default Market Offer as a price ceiling for acquisition offers, they do not use it as a ceiling for existing customers.[206]

The accrual of these price increases over time and the fact many consumers have not changed retailer or offer in recent years likely explains why so many customers in NSW are on plans that have annual prices equal to or above the Default Market Offer.

6.3 Distribution of electricity prices in NSW compared to the Default Market Offer

In the section below, we report on the distribution of residential and small business customers in NSW paying a total annual cost less than, equal to, or more than the Default Market Offer in each distribution network.

This comparison is also based on the electricity prices collected by the ACCC as at 1 August 2022 and 1 August 2023, and uses the annual usage levels in the Default Market Offer specified for the relevant distribution network. We provide an overview of what the Default Market Offer is below.

Box 6.2 The Default Market Offer

The Default Market Offer is the maximum price an electricity retailer can charge a standing offer customer each year based a set amount of usage. The Default Market Offer is set annually by the AER for each distribution network.

The Default Market Offer was introduced in 2019 following the ACCC's Retail Electricity Pricing Inquiry. This Inquiry raised concerns that the standing offer contracts:

- were not working as an effective safety net
- were unjustifiably expensive, with retailers having incentives to increase standing offer prices as a basis to advertise artificially high discounts
- penalised customers who had not taken up a market offer, making them a form of a '*loyalty tax*'.

The Default Market Offer is designed to protect standing offer customers from unjustifiably high electricity prices, while allowing retailers to recover the efficient cost of operation (including wholesale costs, network costs, environmental costs and operational costs, including customer acquisition and retention) and earn a reasonable rate of return (the retail allowance).

Box 6.2 The Default Market Offer

In NSW the retail allowance component includes a retail margin as well as an allowance for competition. The competition allows aims to enable retailers with higher-than-average costs (such as new entrants or smaller retailers) to compete in the market and make reasonable profits.

The Default Market Offer does not cap market offer prices. However, it acts as a reference price for these offers and aims to encourage customers to engage in the market. Retailers are required to show how an advertised price for an offer compares to the reference price (the Default Market Offer), expressed as a percentage (for example, *'this offer is 10% less than the reference price'*). Retailers must also state the reference-price comparison in price change notifications to existing customers.

While the Default Market Offer covers flat-rate tariff offers (including those with a controlled load) and time-of-use offers for residential customers, it does not cover most time-of-use offers for small business customers, offers with a demand charge and offers that have an exemption, for example as they have an innovative pricing structure.

Source: Source: AER, *State of the Market Report 2023*, November 2023, p 225; ACCC, *Inquiry into the National Electricity Market*, June 2024, p 66

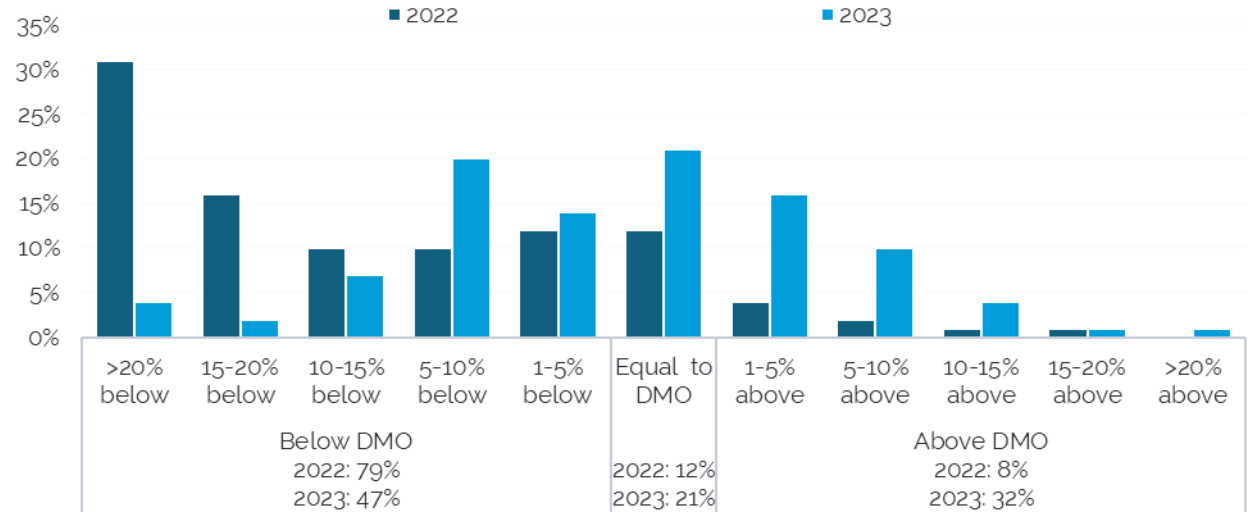
As at 1 August 2022, an estimated 20% of residential customers in NSW were paying prices equal to or above the Default Market Offer for their distribution network. However, an estimated 53% of residential customers in NSW were paying prices equal to or more than the Default Market Offer as at 1 August 2023 (Figure 6.2).[s, 207]

[s] Consistent with the analysis above, this assumes 100% of conditional discounts were achieved.
If no conditional discounts are assumed to be achieved:

- 27% of customers in NSW were estimated to have annual prices equal to or above the DMO as at 1 August 2022
- 61% of customers in NSW were estimated to have annual prices equal to or above the DMO as at 1 August 2023

Source: ACCC, *Appendix C - Supplementary Excel spreadsheet with cost stack data and charts - Inquiry into the National Electricity Market - December 2023 report*, 1 December 2023

Figure 6.2 Proportion of residential customers in NSW on flat-rate tariff plans paying an annual cost below, equal to or above the DMO, 2022 and 2023



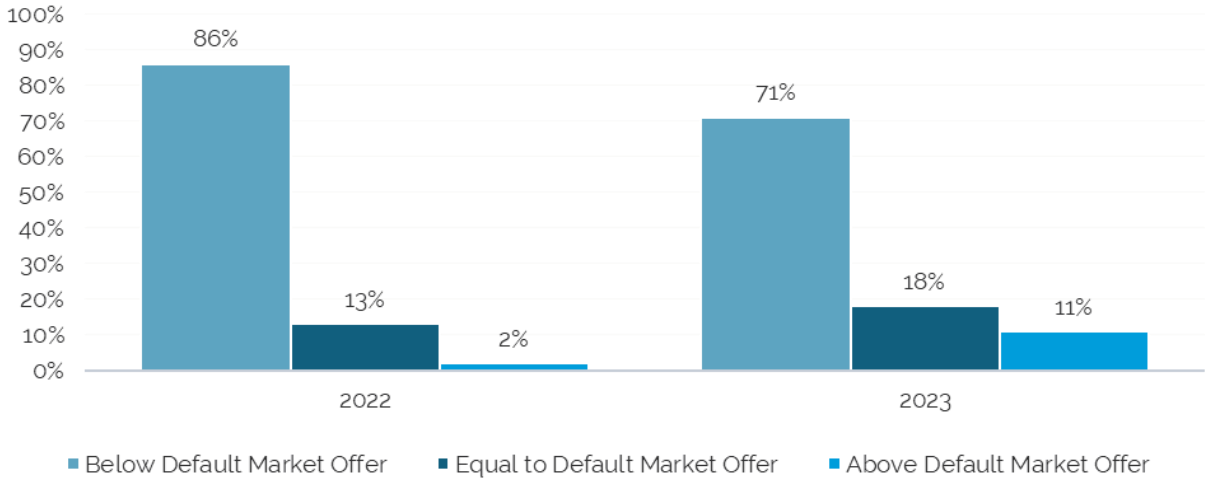
Notes: Data for 2022 is at 1 August 2022 and data for 2023 is at 1 August 2023.
The pricing data as at 1 August 2022 was compared to DMO 4, which spanned from 1 July 2022 to 30 June 2023. The pricing data as at 1 August 2023, was compared to DMO 5, which spanned from 1 July 2023 to 30 June 2024.
Consistent with the analysis above, this assumes 100% of conditional discounts were achieved.

Source: IPART analysis based on ACCC, *Appendix C - Supplementary Excel spreadsheet with cost stack data and charts - Inquiry into the National Electricity Market - December 2023 report*, 1 December 2023

Fewer business customers are paying more than the Default Market offer compared to residential customers.

As at 1 August 2022, an estimated 15% of small business customers in NSW were paying prices equal to or above the Default Market Offer for their distribution network. This increased to 29% of small business customers in NSW paying more than the Default Market Offer as at 1 August 2023 (Figure 6.3).[208]

Figure 6.3 Proportion of small business customers in NSW on flat-rate tariff plans paying an annual cost below, equal to or above the DMO, 2022 and 2023



Notes: Data for 2022 is at 1 August 2022 and data for 2023 is at 1 August 2023.
The pricing data as at 1 August 2022 was compared to DMO 4, which spanned from 1 July 2022 to 30 June 2023. The pricing data as at 1 August 2023, was compared to DMO 5, which spanned from 1 July 2023 to 30 June 2024.
Consistent with the analysis above, this assumes 100% of conditional discounts were achieved.

Source: IPART analysis based on ACCC, *Appendix C - Supplementary Excel spreadsheet with cost stack data and charts - Inquiry into the National Electricity Market - December 2023 report*, 1 December 2023

The distributions shown above, of customers paying an annual cost below, equal to or above the relevant Default Market Offer, includes customers who are on standing offer contracts.

The Default Market Offer is the maximum price that can be charged on standing offer contracts and most retailers price their standing offers at the Default Market Offer level. In NSW around 8% of residential customers and 18% of small business customers are on standing offer contracts.[209] As a result, we would expect a similar proportion to be paying prices equal to the Default Market Offer.

However, the significantly larger proportion of residential customers (and to a lesser extent small business customers) paying prices equal to or above the Default Market Offer is a concerning outcome. This is because the Default Market Offer is meant to protect customers that have not engaged from unjustifiably high prices.

The submission from the Justice and Equity Centre discussed that pricing in the retail market means that the lowest prices accessed by some customers are cross subsidised by higher prices being paid by the majority.[210] Further, the submission by National Seniors Australia discussed there is very limited information to understand the cost impact of different tariff structures on consumers and currently only billing level data is reported by the ACCC at a highly summarised level.[211]

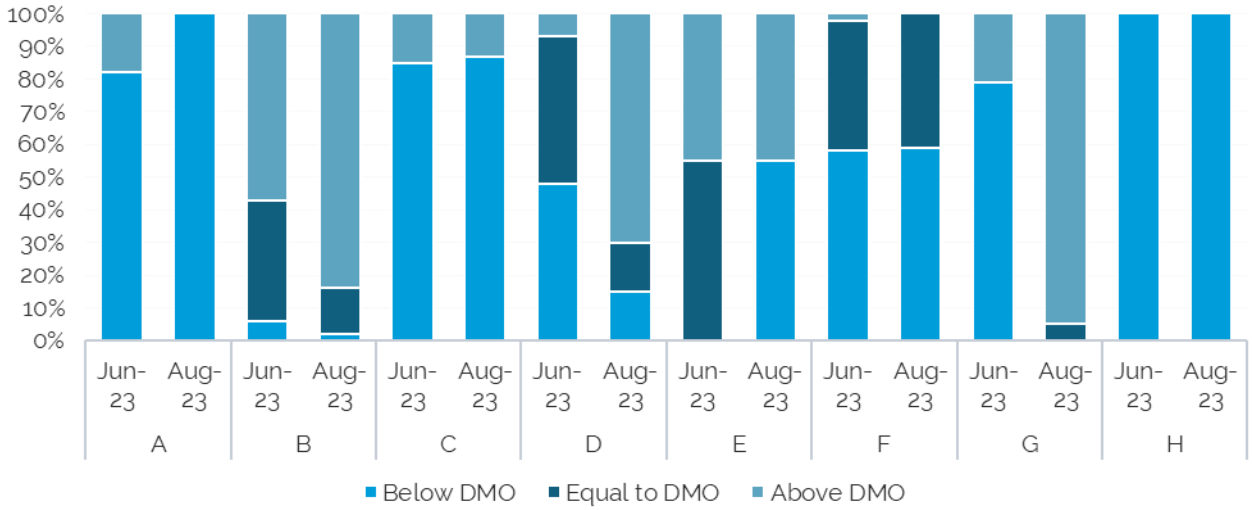
6.4 Distribution of pricing outcomes for customers on time-of-use tariff plans

While the analysis above was based on flat-rate tariff plans, the ACCC also collected data from a sample of retailers on the proportion of residential customers on time-of-use tariff plans paying annual prices below, equal to or above the Default Market Offer. This was based on prices charged as at 30 June 2023 and again at 10 August 2023 and covered retailers offering time-of-use tariff plans in the Ausgrid distribution network.[212]

Figure 6.4 highlights that retailers take materially different approaches to pricing their time-of-use offers; both between them and compared to the Default Market Offer. While some retailers had the majority (or all) customers paying an annual cost lower than the Default Market Offer, other retailers had the majority of time-of-use tariff plan customers paying an estimated annual cost equal to or above the Default Market Offer. This included that some retailers having more than 90% of their time-of-use customers in the Ausgrid network paying an annual cost equal to or more than the Default Market Offer as at 10 August 2023.[t, 213]

[t] This data assumes that conditional discounts are **not** achieved by customers. We note this is different to the assumption made above, however the ACCC only reported this data with the assumption conditional discounts are not achieved.

Figure 6.4 Proportion of residential customers on time-of-use tariffs paying below, equal to, or more than the DMO by retailer, Ausgrid network



Notes: June 2023 data was measured as at 30 June 2023. August 2023 data was measured as at 10 August 2023.
This data assumes that conditional discounts are **not** achieved. This is different to the charts above which assumed that 100% of conditional discounts were achieved.

Source: ACCC, *Appendix C - Supplementary Excel spreadsheet with cost stack data and charts - Inquiry into the National Electricity Market - December 2023 report*, 1 December 2023

6.5 There is limited data available to understand the prices, terms and conditions of existing offers

A range of federal and state-based regulators, including IPART, rely on data from the Energy Made Easy website to report on trends and changes in energy prices and to inform policy decisions.[u] This typically involves analysing and reporting on median offers and the spread of offers available at different points in time.

However, as the analysis above (and that conducted by the ACCC[214]) has highlighted, the actual prices paid by customers in NSW (and the National Electricity Market) differ significantly from the offers listed on Energy Made Easy. In particular, because retailers are only required to provide data to the AER on acquisition offers that are *'generally available'*.[v]

This means once a retailer stops accepting new customers on an offer, they are no longer required to report data for that offer to the AER. This is the case even when a retailer has a large customer base on a plan. This means there is limited ability for regulators to understand, analyse and report on the actual prices charged to a significant cohort of customers.

[u] For example, the Australian Energy Regulator reports on price trends using Energy Made Easy data in the Annual Retail Energy Markets Report, the Queensland Competition Authority uses Energy Made Easy data for reporting on price trends and prices in their South East Queensland retail electricity market monitoring report, the Essential Services Commission of South Australia uses Energy Made Easy data for reporting on price trends and changes in their Energy Retail price offer comparison report, and the ACCC has included analysis of Energy Made Easy data in some of their Inquiry Reports into the National Electricity Market (noting this data has been supplemented by the actual prices charged to customers).

[v] Once provided to the AER, this data is then published on Energy Made Easy.

While the ACCC has shed light on prices actually paid by electricity customers, this data was collected under section 95ZK of the *Competition and Consumer Act 2010.* This limits the ability for the underlying data or granular cuts of this data to be shared with other regulators due to confidentiality considerations. In addition, the ACCC's Inquiry into the National Electricity Market is due to conclude soon, with the final report required in August 2025. As a result, further data on the actual pricing outcomes for customers in the National Electricity Market will not be collected and reported by the ACCC.

We consider this data is essential for regulators to understand, assess and report on actual pricing and customer outcomes for electricity which is an essential service.[w]

Recommendations

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.

We consider retailers should be required to report this information in addition to what is already required under the Retail Pricing Information Guidelines. The practical impact of this requirement is that rather than retailers ceasing to report plan data and information to the AER once an offer is no longer '*publicly available*[x] retailers would continue to report this information for plans as long as there are customers on that plan.

Retailers would still be able to change prices, terms and conditions on an offer at any time, in response to changing market conditions. However, where the prices, terms and/or conditions are changed, the data would be reporting to the AER at the end of the quarter.

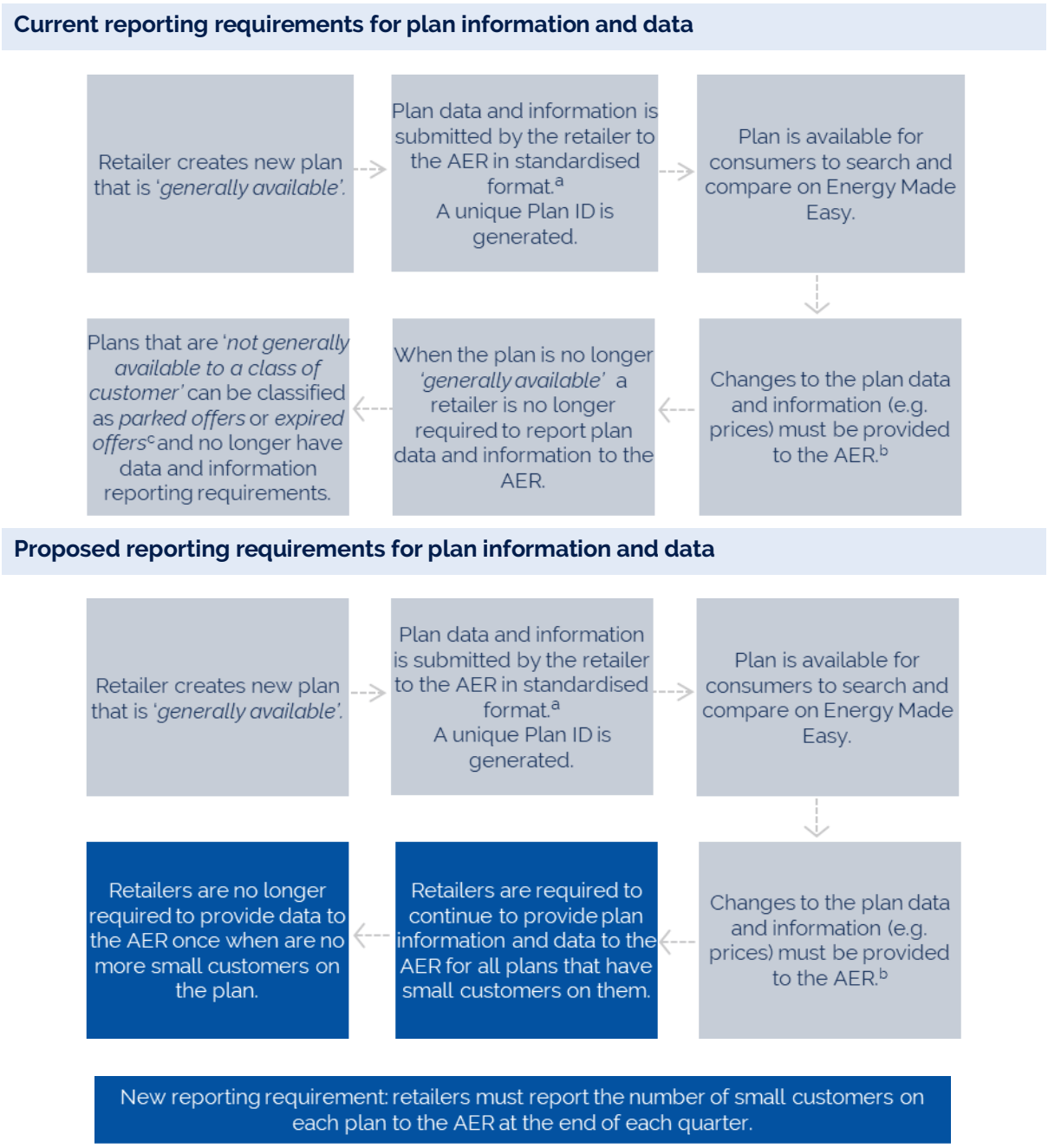
We provide a styles diagram of the existing and proposed reporting requirements in Figure 6.5 below.

[w] The submission from the Justice and Equity Centre also recommended that IPART should collect data on the offers actually available and accessed by customers in NSW.

We consider this proposed reporting to the Australian Energy Regulator would address the point raised by the Justice and Equity Centre, however it would do so in a more efficient and streamlined way that would have a lower regulatory burden (relative to IPART requesting and collecting this data).

[x] Once a plan is *no longer publicly available to a class of customers*, it is classified as a *parked offer* and no longer appears when consumer on Energy Made Easy. Retailers can then choose to continue reporting plan data and information to the Australian Energy Regulator for parked offers or choose not to report data. We understand it is much more common for retailers to stop reporting data.

Figure 6.5 Stylised diagram of the current and proposed reporting requirements for plan information and data



Notes:

a. Data is required to be provided to the AER in the Energy Plan Data Standard format.

b. Parked offers are *'restricted'* plans that are active/available but not visible on the Energy Made Easy website. Expired offers are no longer active/available and not visible on the Energy Made Easy website. Retailers are not currently required to provide updated data and information to the AER on parked offers or expired offers.

c. When new information is provided to the Ausralian Energy Regulator for a plan, the Plan ID number increments by 1, however the Plan ID is still identifiabe.

Existing reporting processes are shown in grey, while new reporting processes or requirements are shown in blue.

This data would allow the AER, and other regulators, to assess and regularly report on (as well as other matters):

- estimates of the actual prices paid by customers in each state and National Electricity Market

- the prices paid by customers compared to the relevant Default Market Offer
- the prices paid by customers for acquisition offers compared to the prices paid by existing customers.

While the recommendation above (**Recommendation 6**) would improve price transparency for regulators, we also consider it is essential that there is additional price transparency for customers. In particular, we consider that the AER should update the functionality of Energy Made Easy so users can receive information on the actual cost of their current offer (even if it is a legacy offer) and the savings that can be made by switching to other offers.

When Energy Made Easy shows the total cost of an electricity plan and calculates how much customers could save from switching, this is **not** based on the current plan or current rates a customer is on. Rather, the calculations are based on the lowest cost plan available from the customers current retailer in the specified postcode.[215]

Due to the pricing practice where prices after often increased after a customer signs up to a plan, the current operation of the Energy Made Easy website (in the paragraph above) means it may materially underestimate the annual cost of a customer's electricity plan and the benefits of switching.

Recommendations

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.

This enhancement to the Energy Made Easy website could be enabled by:

- the AER becoming an Accredited Data Recipient under the Consumer Data Right (and as a result the AER could request that users consent to their retailer sharing data on their current electricity pricing with the AER which could then be used in the Energy Made Easy calculations) or
- **Recommendation 6** being implemented by updates to the Retail Pricing Information Guidelines and the Retail Performance Reporting Guidelines which would also provide the required data to the AER to build this functionality into the Energy Made Easy website.

6.5.1 Concerns regarding regulatory burden

Several retailers raised concerns in submissions regarding regulatory burden.[216] These submissions discussed that a significant amount of data and information is already provided by retailers to a range of regulators and market bodies, including the AER, ACCC and EWON.[217] The submission from Powershop also discussed that regulators often request the same (or similar) data in different ways and ultimately the cost of compliance is passed through to end customers.[218]

We consider these are valid concerns raised by retailers. We consider changes to the Retail Pricing Information Guidelines and the Retail Performance Reporting Guidelines would provide important information to regulators, while minimising the burden of reporting for retailers (as the information is already reported to the AER for generally available offers and is captured in retailers billing systems).

6.6 The Default Market Offer should be reviewed to assess if it continues to protect customers from unjustifiably high prices

We consider the findings in this chapter, and the ACCC's Inquiry into the National Electricity Market, highlight an important consideration for retail electricity prices.

While the Default Market Offer is a mandated price cap for standing offers (protecting standing offer customers from unjustifiably high prices) and facilitates price competition at the point of acquisition (as retailers must compare advertised prices to the reference price), it appears to have a limited effect on the pricing outcomes for a large segment of market offer customers.

We consider this is shown by:

- over 50% of flat-rate market offer customers in NSW in August 2023 were paying an annual cost equal to or more than the Default Market Offer
- several retailers had the majority of residential customers on time-of-use tariff plans paying a total cost equal to or more than the Default Market Offer in August 2023.[y]

A review of the Electricity Retail Code by the Commonwealth Department of Climate Charge, Energy, the Environment and Water (DCCEEW) is scheduled to commence in late 2024.

Recommendations

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.

[y] In some cases, the retailer's entire time-of-use customer base was paying more than the Default Market Offer.

6.7 Changing tariff structures for customers in NSW

The analysis in this chapter focused on the average pricing outcomes for customers in NSW on flat-rate tariff plans.

The National Electricity Rules require network tariffs to become more reflective of the cost involved in serving customers. To date this has generally involved distribution network service providers transferring their customers from a flat-rate network tariff to a time-of-use or demand network tariff when a smart meter is installed.

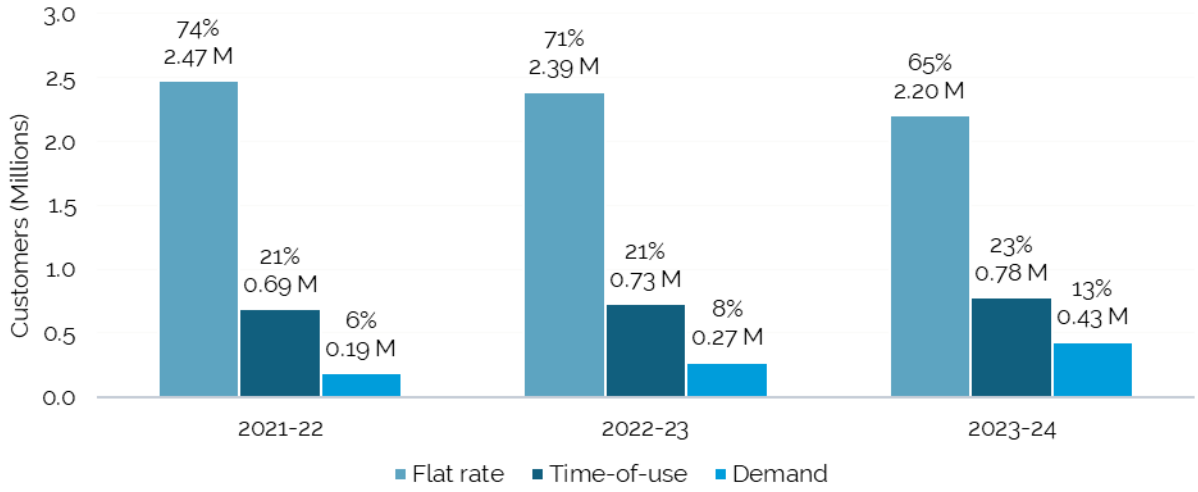
When a customer's network tariff changes, retailers generally also change a customer's retail tariff (to align with the underlying network tariff). This is because it reduces the retailer's risk by guaranteeing the customer pays them enough to cover what the retailer is charged by the distribution network.

As a result of these network tariff changes, as at 30 June 2024 an estimated:

- 65% of residential customers in NSW were on flat-rate network tariffs, 23% were on time-of-use network tariffs and 13% were on demand network tariffs
- 60% of small business customers in NSW were on flat-rate network tariffs, 31% on time-of-use network tariffs and 9% were on demand network tariffs.

The number of residential customers and small business customers on each type of network tariff over 2021–22 to 2023–24 is shown in Figure 6.6 and Figure 6.7 respectively.

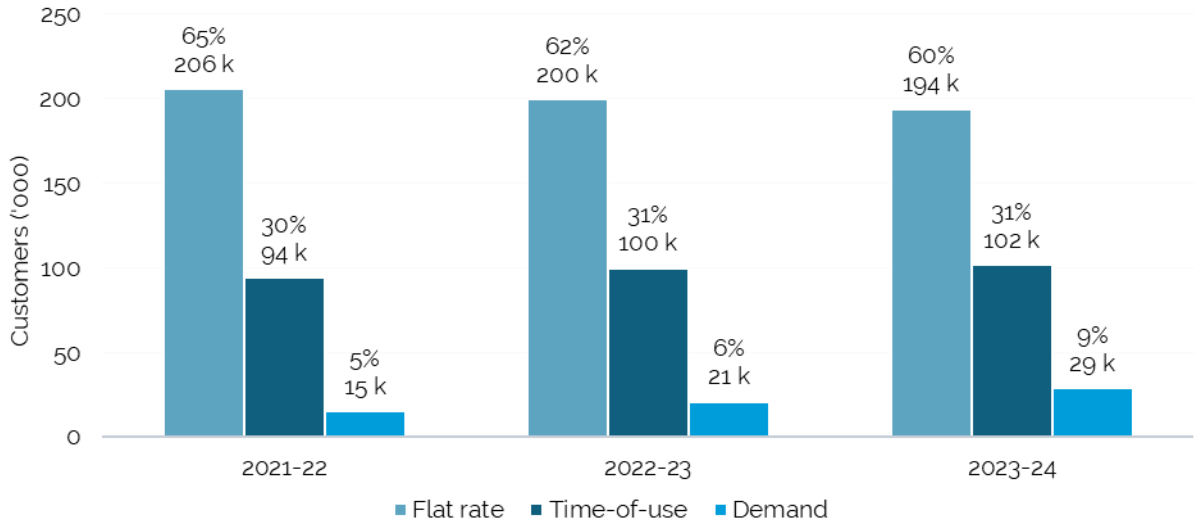
Figure 6.6 Number and percentage of residential customers on flat-rate, time-of-use and demand network tariffs



Note: Controlled Load meters are excluded.

Source: IPART calculations based on *Ausgrid SCS Pricing Model 2023-24*, *Endeavour Energy SCS Pricing Model 2023-24*; *Essential Energy SCS Pricing Model 2023-24*.

Figure 6.7 Number and percentage of small business customers on flat-rate, time-of-use and demand network tariffs



Note: 'Time-of-use' includes network tariff classes with time-varying usage charges, which includes demand tariffs for Ausgrid and Essential Energy. 'Flat rate' includes network tariff classes with flat or block usage charges, which includes demand charges for Endeavour Energy. Controlled Load meters are excluded.

Source: IPART calculations based on *Ausgrid SCS Pricing Model 2023-24*, *Endeavour Energy SCS Pricing Model 2023-24*; *Essential Energy SCS Pricing Model 2023-24*.

As retailers typically change a customer's retail tariff plan, to align with the underlying network tariff, we expect there would be a similar distribution of residential and small business customers on retail plans with flat-rate, time-of-use and demand tariffs as shown in Figure 6.6 and Figure 6.7.

In past years, we have focused the pricing analysis in our Energy Market Monitoring reports on flat-rate tariffs. This was because these tariffs represented the largest segment of the market. However, as move customers are moving to time-of-use and demand tariff plans, the prices on these plans are becoming increasingly important to residential and small business customers in NSW.

As a result, in the following chapters we report on the annuals bills and changes in annual bills for:

- Flat-rate tariff plans (Chapter 7)
- Time-of-use tariff plans (Chapter 8)
- Demand tariff plans (Chapter 9).

7 Flat-rate tariff plans in NSW

Key findings

- The annual cost of flat-rate tariff plans reached their highest level in July and August 2023 (based on the data we have available which starts in 2014). This peak only lasted 2 months before prices started decreasing in September 2023 until late May 2024.
- In 2022–23, the gap between the median market offer and median standing offer narrowed significantly. This was because market offer prices increased rapidly while standing offer prices were capped by the Default Market Offer. This gap has since widened in 2023–24, returning to historically normal levels, with the median market offer price about 11% lower than the median standing offer.
- Residential offers in the lower half of the market became cheaper over 2023–24, while prices in the upper half of the market remained stable.
- Prices vary across the market as well as within the offers available from each retailer. For some retailers, the difference between the cheapest and most expensive plan in the Ausgrid network area (at the same usage level) was over $500 over a year for a residential customer and over $1,000 for a small business customer.

This chapter summarises trends in the price of flat-rate tariff plans for residential and small business customers offered in NSW over the 2023–24 financial year.

Around 65% of households and 60% of small businesses in NSW are on network flat-rate tariffs as at 30 June 2024.[219] Customers on a flat-rate network tariff, will typically also be on a flat-rate retail tariff.

Our analysis of flat-rate tariff plans is based plans that are published on the Australian Government's price comparison website Energy Made Easy. These are prices that are available to new customers or switching customers and are often referred to as *"acquisition offers"*.

This data does not include legacy offers. These are offers which are no longer available to new customers and are not captured in the Energy Made Easy dataset. As a result, this analysis is only reflective of the prices paid by customers who regularly engage and switch offer.

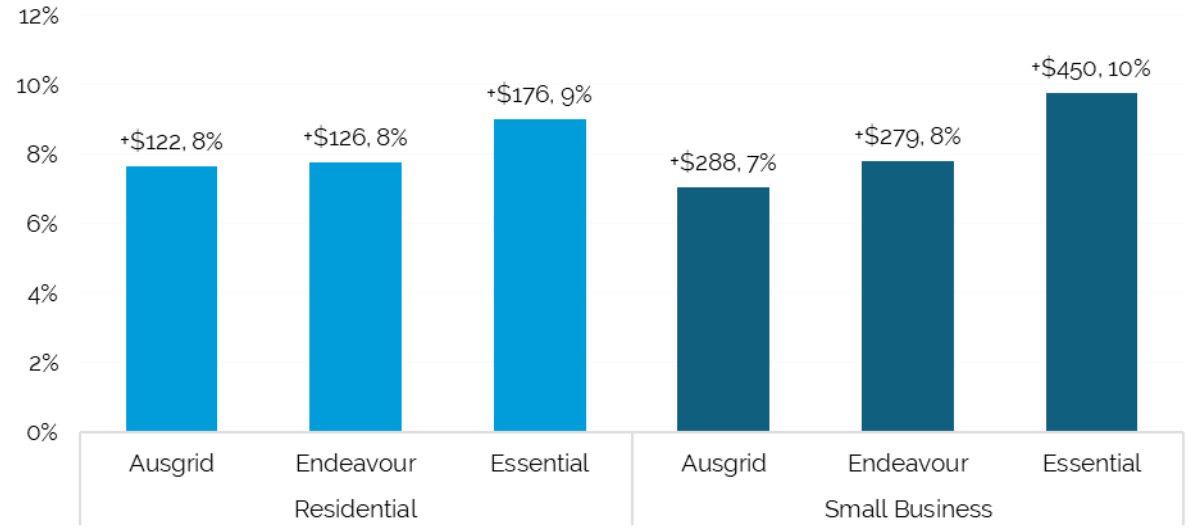
7.1 June 2024 prices are higher than last year

Retail electricity prices, based on the median market offer, for household and small business customers were around 8% higher in June 2024 compared to June 2023 (in nominal terms) (Figure 7.1).

The median market offer increased in all 3 networks, but slightly more in the Essential Energy network where it grew by 9% for residential customers and 10% for small business customers.

As a result of these price increases, a typical household bill increased by $125 in the Ausgrid and Endeavour Energy networks from June 2023 to June 2024, and by $176 in the Essential network. For small business customers, this increase was between $280 and $290 for customers the Ausgrid and Endeavour Energy networks and $450 in the Essential Energy network.

Figure 7.1 Change in median flat-rate market offer by network, June 2023 to June 2024 (including GST, nominal)



Note: Residential bills are calculated assuming a usage of 4,215 kWh per year. Small business bills are calculated using assuming a suage of 10,000 kWh per year.

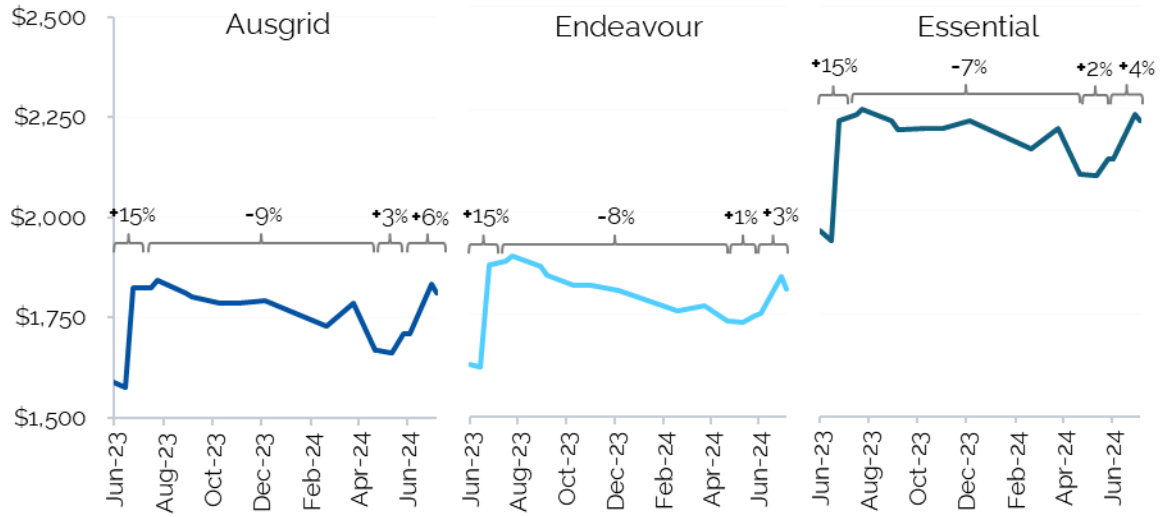
Source: IPART analysis of Energy Made Easy data.

The overall price changes from June 2023 to June 2024 hid the material the price movements that were experienced over this period. In July 2023, there was a 15% increase in the median market offer price (Figure 7.2). This is likely the result of repricing by retailers in response to DMO5, which came into effect on 1 July 2023.[220]

However, following this peak in July 2023, median prices began to decrease and fell between 7% and 9% by May 2024, depending on the distribution network. This price reduction may have been in response to falling wholesale and contract costs at the start of 2023–24 (Chapter 10).

The price decrease in the median offer during the middle of 2023–24 resulted from reduction in offers in the lower half of the market (meaning retailers' cheap offers became cheaper and pulled down the median). On the other hand, prices in the upper half of the market remained relatively unchanged over this period. For example, there were almost no price movements in the 75th percentile market offer over 2023–24.

Figure 7.2 Median market offer bill for residential customers by network (4,215 kWh per year, incl. GST, nominal $)



Note: This figure separates price changes over 2023–24 into 4 time periods: 1 – June 2023 to July 2023, 2 – July 2023 to May 2024, 3 – May 2024 to June 2024, and 4 – June 2024 to July 2024.

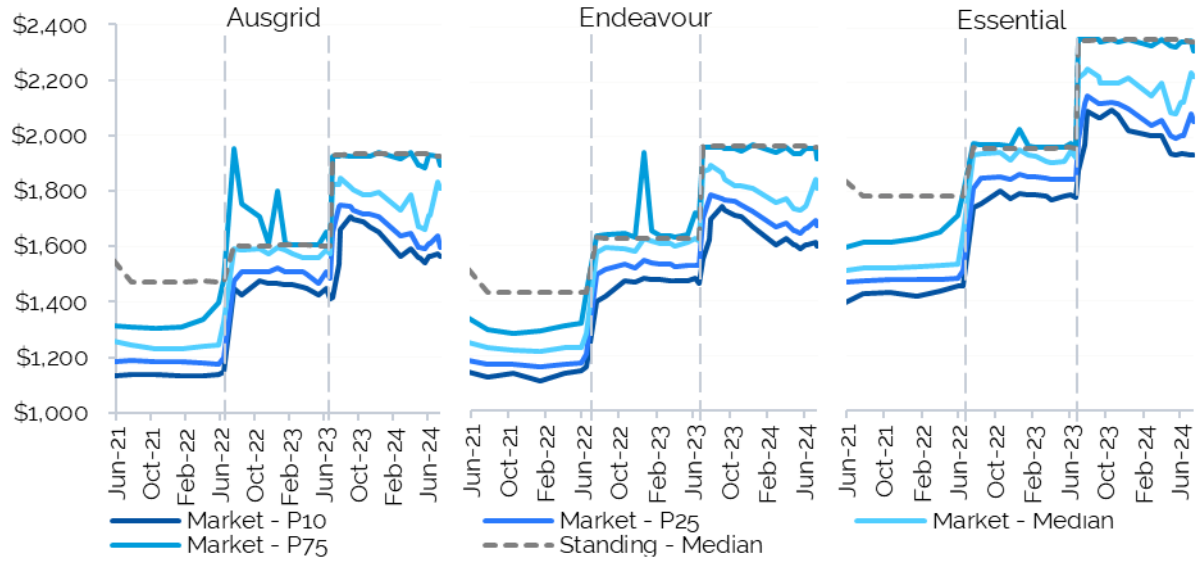
Source: IPART analysis of Energy Made Easy data.

7.2 Offers in the lower half of the market became cheaper over 2023

As discussed above, the median market offer price decreased in the second half of 2023–24. This price decrease resulted from lower offers in the bottom half of the market, meaning retailers' cheap offers became cheaper and pulled down the median (see Oct-23 to Feb-24 in Figure 7.3 below).

On the other hand, prices in the upper half of the market remained relatively unchanged over this period. For example, there were almost no movements in the 75th percentile of market offer prices over 2023–24 (see 'Market – P75' in Figure 7.3). In contrast, the 75th percentile price for the previous year was very volatile, with some market offers exceeding the standing offer when wholesale prices spiked.

Figure 7.3 Distribution of market offers compared to the median standing offer, 2021 to 2024 (4,215 kWh per year) (nominal including GST)

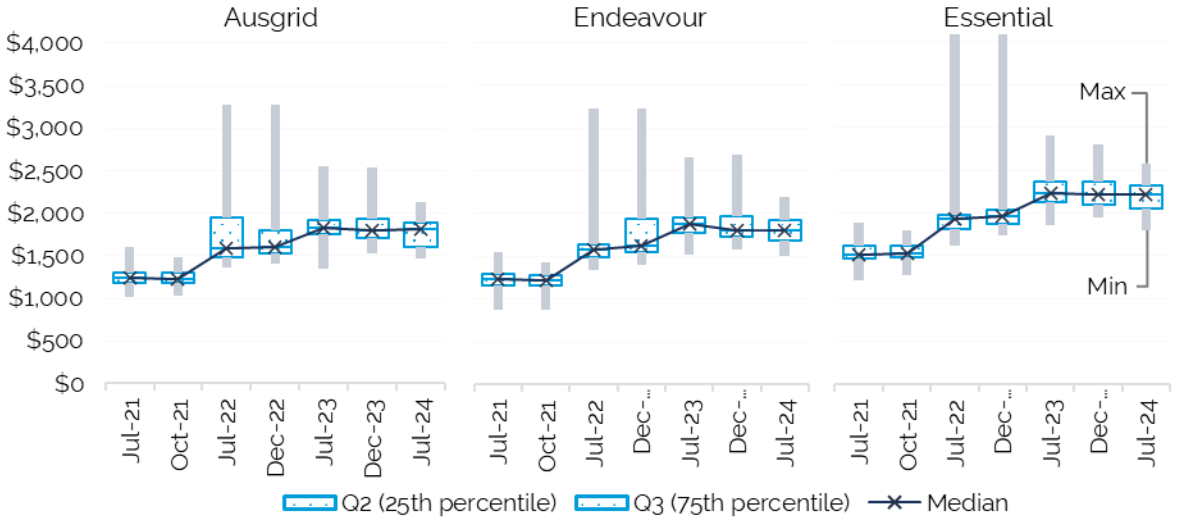


Source: IPART analysis of Energy Made Easy data.

In addition, the price range has contracted in July 2024, with the difference between the minimum and maximum bill decreasing to its smallest range since 2021 (Figure 7.4). At the same time, the number of unique offers that are available to customers has increased compared to 2022–23 when over 12 retailers left the market due to high wholesale prices.[221] A detailed discussion on the number of active retailers is provided in Chapter 3.

However, the spread of market offer prices in 2023–24 still does not indicate a return to pre-2022 price dynamics. As shown in Figure 7.3, before 2022 even the more expensive market offers were cheaper than the standing offer price. In 2023–24, however, the 75th percentile market price was on par with the standing offer price.

Figure 7.4 Distribution of flat-rate market offers since 2021 (4,215 kWh per year, nominal including GST)



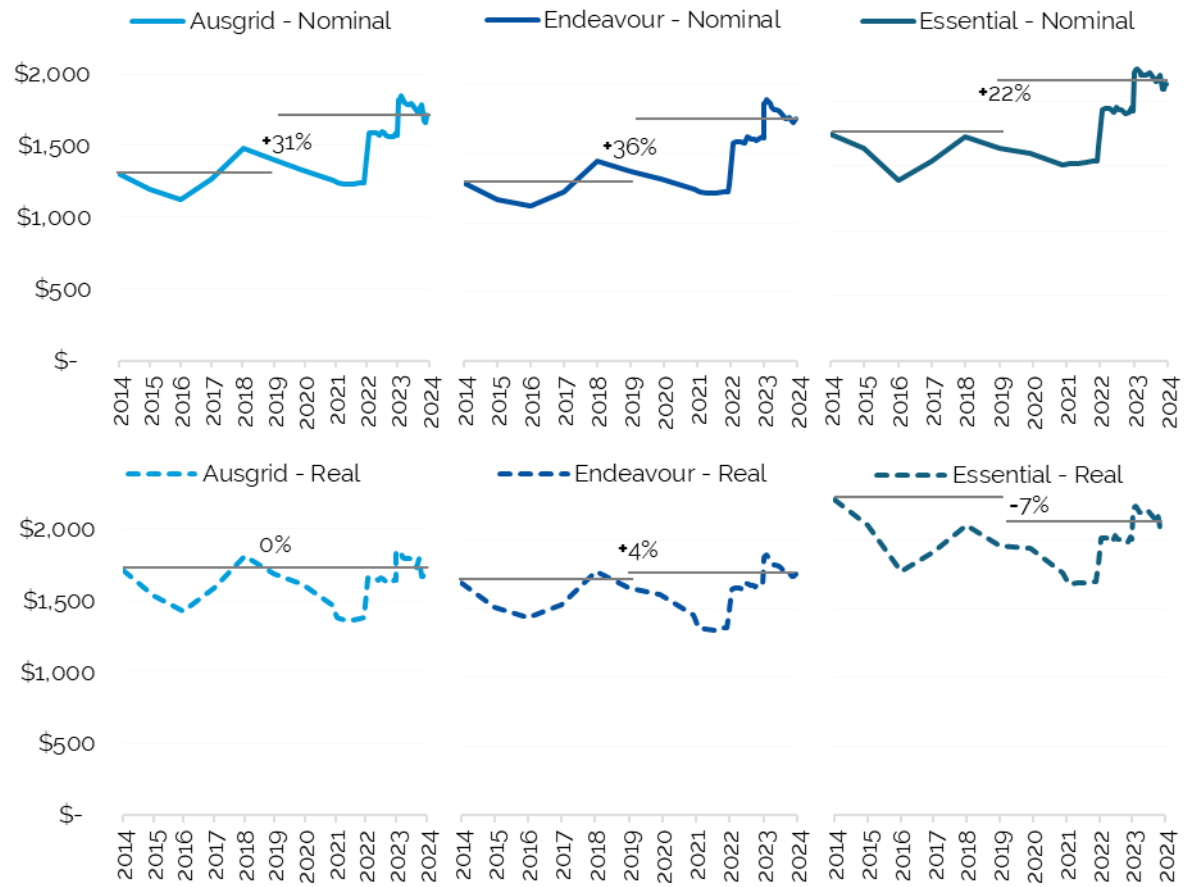
Source: Energy Made Easy data between July 2021 and July 2024.

7.3 Prices in 2024 are higher in real terms compared to when IPART began monitoring markets

In June 2024, the median market offer residential customers on Energy Made Easy for was between 22% and 36% higher in nominal terms than when IPART started monitoring retail electricity market prices in 2014, depending on the distribution network. Further, prices in June 2024 were higher than all previous years except for 2023.

However, the cumulative price change is lower when we observe price changes measured in real terms (that is, adjusted for inflation). In real terms, the median market price for residential customers in the Ausgrid network was around the same in June 2024 compared to June 2014. Prices in the Endeavour Energy network were 4% higher compared to June 2014, while real prices in the Essential Energy network fell 7% (Figure 7.5).

Figure 7.5 Cumulative price change in nominal and real dollars from June 2014 to June 2024 - median annual bill for residential customers on market offers



Note: The grey lines in each plot show the price level in June 2014 and June 2024. The percentage figure in each plot shows the cumulative change between June 2014 and June 2024. The Y-axis starts at $1,000.

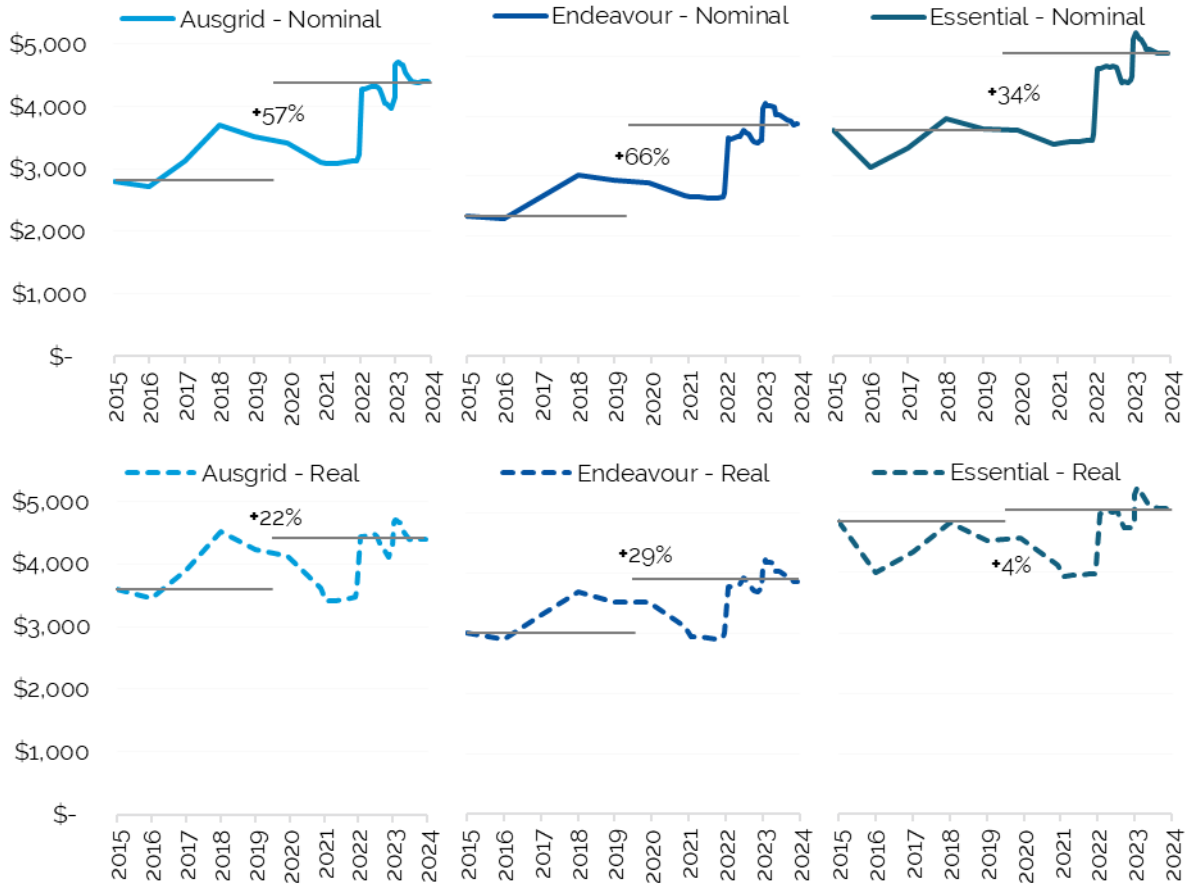
Source: Energy Made Easy data; ABS All Capitals Consumer Price Index.

Compared to other years in the last decade, residential prices in real terms have been higher than June 2024 in 2014, 2018 and 2023. If we compared June 2024 prices to these dates instead of June 2014, then our results would be different and show a decrease in real prices. However, the focus of this analysis is on the relative difference between nominal and real price changes between the same timeframes.

Price increases appeared larger for business customer. However, this is because we measured price growth over a different time period for small business customers (June 2015 to June 2024) than for residential customers (June 2014 to June 2024), due to missing business customer data for June 2014.

Despite slightly different time periods, we observed that for both residential and small business prices, growth in nominal terms was around 30 percentage points higher than growth in real terms (Figure 7.6).

Figure 7.6 Cumulative price change in nominal and real dollars from June 2014 to June 2024 - median annual bill for small business customers on market offers



Note: The grey lines in each plot show the price level in June 2015 and June 2024. The percentage figure in each plot shows the cumulative change between June 2015 and June 2024.

Source: Energy Made Easy data; ABS All Capitals Consumer Price Index.

Between June 2014 and June 2024, growth in the Consumer Price Index (inflation) was greater than wage growth. Therefore, comparing nominal electricity prices to real prices does not necessarily show the full impact that electricity price increases have had on household purchasing power.

As a result, we also adjusted nominal prices to account for increases in wages since 2014 rather than inflation, using the Australian Bureau of Statistics' all-sector Wage Price Index.[222] However, our findings remained broadly consistent. Accounting for wage growth among residential customers, the difference between median market offer prices in June 2014 and June 2024 was 3% and 7% in the Ausgrid and Endeavour Energy networks, and –5% in the Essential Energy network.

As shown in Figure 7.5 and Figure 7.6 above, typical prices in regional areas serviced by Essential Energy are significantly higher than prices in metropolitan areas serviced by Endeavour Energy and Ausgrid (on average 23% higher for both residential and small business prices).

The higher prices in the Essential Energy network mainly reflect the higher costs of distributing electricity. Charges in the Essential Energy network are around 70% higher than the metropolitan networks (for residential customers on flat-rate tariffs), largely because infrastructure in regional areas covers a larger geographical area while servicing a smaller population.

7.4 New offers are more cost reflective than older offers

This section looks at the price difference between new and pre-existing plans on Energy Made Easy.

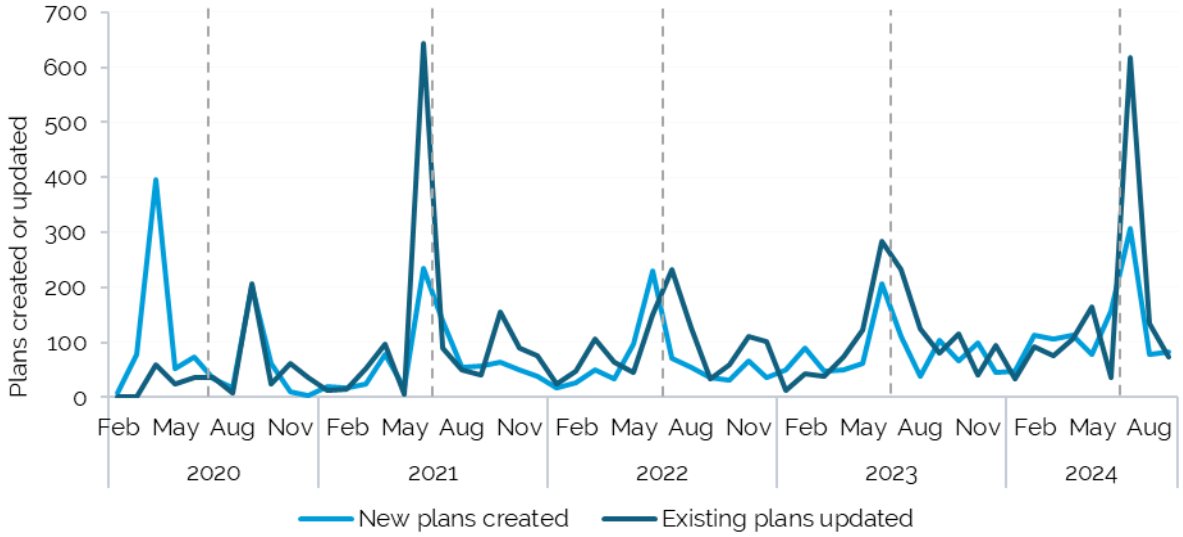
As discussed at the beginning of this chapter, the data we use for our pricing analysis is from Energy Made Easy. All retailers must provide data to Energy Made Easy for plans they are currently offering to most customers.

Subject to the terms of their contracts, retailers can update their market offer prices at any time, and they can also publish new plans on Energy Made Easy at any time.

In Figure 7.7 below, we show how frequently retailers created or updated the prices on existing plans on Energy Made Easy over 2021 to 2024.[a] As can be seen in Figure 7.7, typically retailers update the prices for existing plans around July to August each year to reflect changing network costs and the Default Market Offer determination.

[a] In July 2024, the Hon Chris Bowen, MP, proposed a rule change to the AEMC that would prevent price increases under a retail market contract for a fixed period following commencement of an energy plan. The AEMC is considering the proposed rule change as part of a package of consume related rule change requests.

Figure 7.7 Number of electricity offers created or updated on Energy Made Easy per month

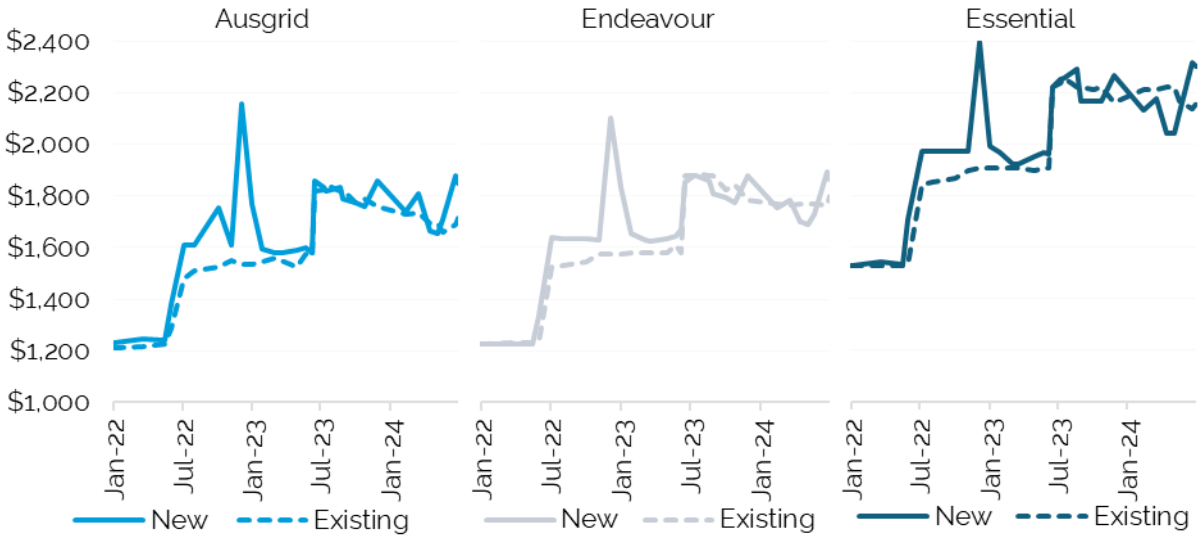


Source: Energy Made Easy data.

New market offers are generally more reflective of current market conditions than pre-existing plans. This is because they are created with the most recent wholesale and hedging contract prices incorporated. As a result, their prices tend to fluctuate more than existing plans (Figure 7.8). New offers also have no customer base tied to them, allowing retailers the flexibility to reflect current market conditions without needing to communicate these changes to existing customers.

In 2022–23 (when wholesale prices peaked), the median price of new plans was higher than the median price of existing plans for almost the entire year. This was no longer the case in 2023–24. Since July 2023, the median price of new plans has been both above and below the median price of existing plans, suggesting that the prolonged price instability of 2022–23 has ended and market conditions are returning to normal.

Figure 7.8 Median market offers for residential customers by network, split by new plans vs existing plans (including GST, nominal $)



Note: This figure shows the annual bill for customers under the median market offer, grouped by new and existing plans. 'New plans' are plans that have been uploaded to Energy Made Easy for the first time and have not been updated by the retailer. 'Existing plans' are plans that have been updated by the retailer at least once.

Source: Energy Made Easy data.

Box 7.1 How we identified new and existing plans in the Energy Made Easy data

To analyse prices for our Energy Market Monitoring report, we download a list of all offers on Energy Made Easy that are generally available to residential and small business customers as at that date. This data has been publicly available through the Australian Government's Consumer Data Right and is available through APIs.[223]

Each offer in Energy Made Easy has a plan ID, which includes a number at the end that increments by 1 each time the details of the plan (for example, the prices) are updated. For example, when a plan is updated, its plan ID may change from 'AGL123MRE**1**' to 'AGL123MRE**2**'.

This enables us to identify which Energy Made Easy plans are new and which plans are existing. As a result, we can compare the prices for new offers and existing offers.

However, this excludes legacy offers. Legacy offers are offers that have been withdrawn from Energy Made Easy, while still retaining active customers. These offers are not required to be put on Energy Made Easy because they are no longer available to new customers. Retailers may continue to increase the price of their legacy offers, however we do not have visibility over this.

7.5 Most retailers offer multiple flat-rate offers with varying prices

In June 2024, around 60% of retailers in the Ausgrid network had more than one flat-rate market offer for residential customers.[b] These plans differ in cost despite incurring the same network costs, offering the same homogenous product, and having similar eligibility requirements.

In June 2024, the largest difference in annual bill between the cheapest and most expensive plan for with the same retailer:

- was just over $500 for a residential customer (Figure 7.9)
- was just over $1,000 for a small business customer (Figure 7.10).

The variation within a retailer's flat-rate tariff offers is mostly driven by differences in the underlying usage charge. This was the case for around 10 of the 14 retailers offering multiple flat-rate offers in June 2024.

In some cases, higher charges may reflect additional service offerings, for example:

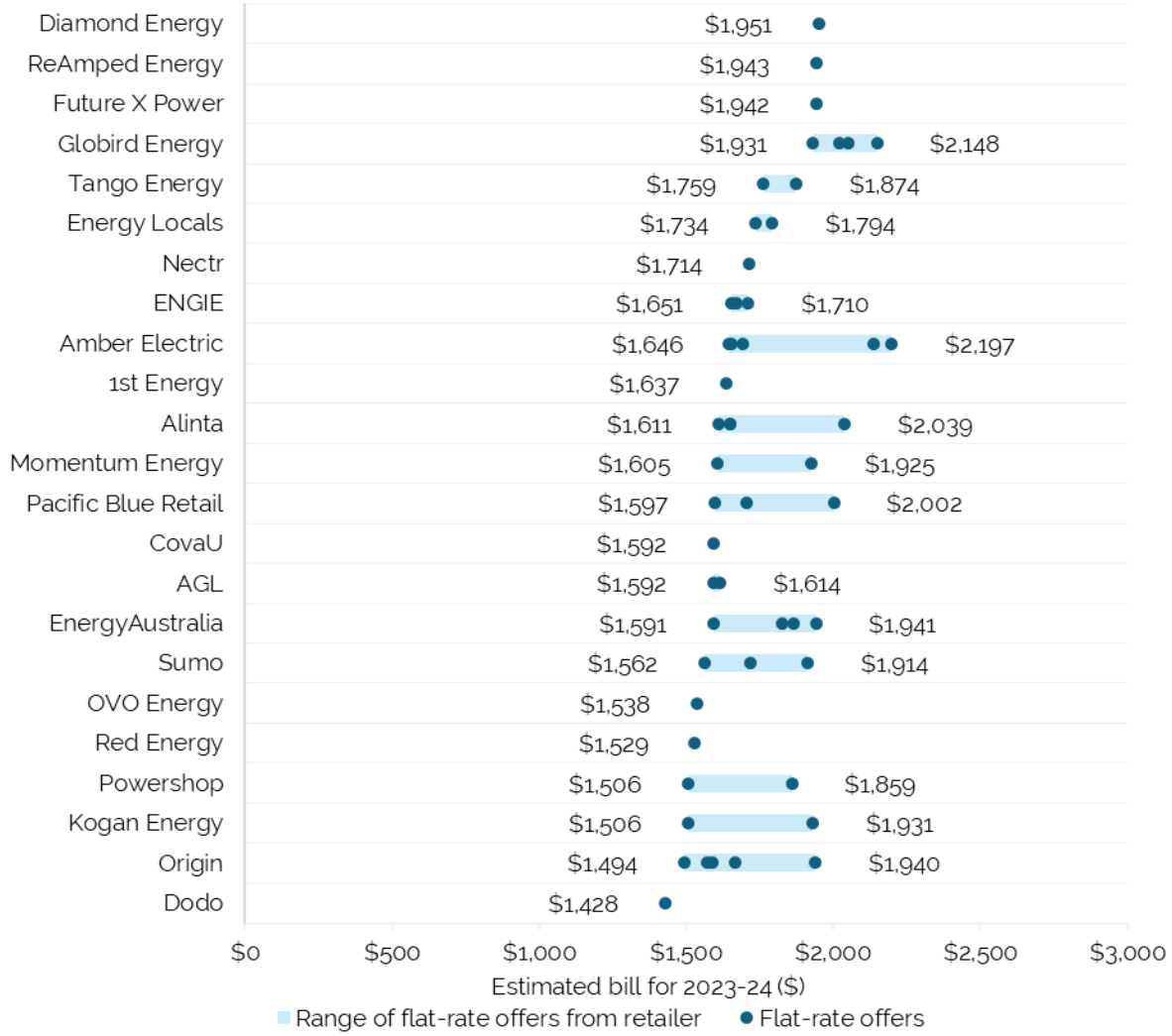
- some offers include a premium usage charge for green energy and incur higher input costs than non-renewable offers
- some offers include greater flexibility, for example additional payment options.

We have also observed some offers with tiered usage charges that increase in price above certain usage levels (e.g. in the Ausgrid network this may be 11 kWh per day, or 3900 kWh per year). These account for around 12% of the flat-rate residential offers available on Energy Made Easy and 18% of the flat-rate small business offers.

In some cases, offers will have the same supply and usage charges, but some may have unconditional discounts, or membership fees, while others do not. This would result in different bills for customers consuming the same level of electricity. Five retailers included unconditional discounts in some (but not all) of their plans.

[b] This does not include offers that have strict eligibility requirements, a controlled load component or demand charges.

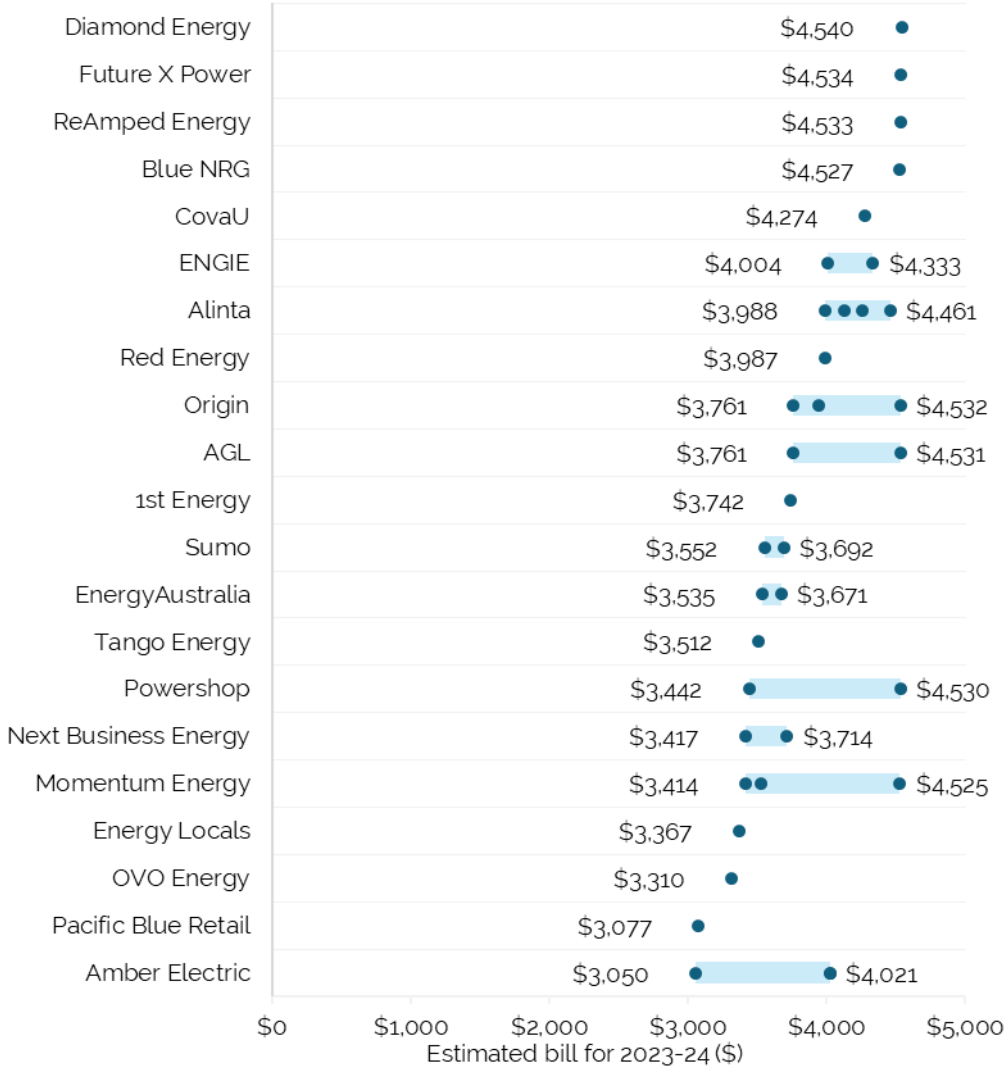
Figure 7.9 Distribution of residential flat-rate market offers by retailer, Ausgrid, as at 11 June 2024 (estimated annual bill with 4,215 kWh, incl. GST and discounts)



Note: This figure includes market offers that are flat-rate. It excludes offers with strict eligibility requirements such as controlled load, solar panels or batteries, a pool, a senior citizen card, or being a member of an organisation. Further, only unconditional discounts are included in bill calculations – these are discounts available to all customers on that offer. This figure also includes membership fees.

Source: Energy Made Easy data as at 11 June 2024.

Figure 7.10 Distribution of small business flat-rate market offers by retailer, Ausgrid, as at 11 June 2024 (estimated annual bill with 10,000 kWh, incl. GST and discounts)



Note: This figure includes market offers that are flat-rate. It excludes offers with strict eligibility requirements such as solar panels or batteries or being a member of a professional organisation. Further, only unconditional discounts are included in bill calculations – these are discounts available to all customers on that offer. This figure also includes membership fees.

Source: Energy Made Easy data as at 11 June 2024.

7.6 Price discrimination and price dispersion

There is an increasing amount of variation in the retail electricity market due to the introduction of new tariff types and structures. We have also observed that prices vary notably between offers within the same tariff type (flat-rate, time-of-use, or demand), both between retailers, and within each retailer's plans.

Stakeholders have raised concerns over this high amount of variation between offers and their prices. For example, EWON highlighted the negative effects of complex information on customers' ability to find better offers,[224] while others emphasised the importance of retaining consumer choice[225] such as by ensuring consumers continue to have the option to select simple, flat-price offers.[226]

Price variation between offers of the same tariff type can be due to genuine differences in the underlying product such as when retailers charge more for green energy. However, price variation can still occur when the underlying products and costs basis are the same. This is the result of **price dispersion** and **price discrimination**:

- **price dispersion** describes when different sellers (retailers) charge different prices for the same product, holding the product's characteristics constant.
- **price discrimination** describes when the same retailer charges different prices to different groups of consumers for the same product, holding the product's characteristics constant.[227]

In its 2017 Retail Electricity Pricing Inquiry, the ACCC found high levels of price dispersion and price discrimination in the electricity market, largely due to the increasing use of conditional and unconditional discounting.[228]

We consider price dispersion and discrimination remain common in the market for flat-rate offers as of 2024, both between and within retailers. For example, within a single retailer, we have noted price differences up to $500 for residential flat-rate offers and $1,000 for small business offers (Section 7.5).

We consider this variation is larger than what is reasonably explained by genuine product differences, such as green-power plans. To assess price dispersion across retailers, we compared each retailer's cheapest flat-rate market offer, as these offers are typically homogenous products. We observed similar price ranges between retailers compared to price ranges within retailers, with a difference of over $500 between the cheapest and most expensive retailer's lowest offer and over $1,500 for small business offers.

We consider there is more price dispersion and discrimination than what is visible from Energy Made Easy prices alone. This is because our analysis excludes legacy offers and conditional discounts. Legacy offers are not listed on Energy Made Easy and may have even higher levels of price dispersion due to their prices not being publicly visible. In addition, conditional discounts further contribute to price dispersion according to the ACCC.[229]

In certain markets, price dispersion and price discrimination can lead to efficient market outcomes that are welfare enhancing.[230] However, when price discrimination and dispersion are resulting from consumer inattention, non-transparent prices or high searching costs (as opposed to customers' willingness to pay) this can lead to inefficient market outcomes and dead weight loss. The Independent Competition and Regulatory Commission (ICRC) found this was likely the case in the electricity market.[231] Further, the ACCC noted that many submissions to its 2017 Retail Electricity Pricing Inquiry supported this position.[232]

Price dispersion has shown to be inefficient in similar markets in other markets, for example in the Baltimore electricity market (USA) in 2022. Analysis from study by the University of California, Berkley indicated that price discrimination based on search frictions led to low-income communities paying systematically higher prices for electricity than high-income communities. This practice affected consumer welfare negatively and increased social inequalities, because wealthier households typically had more resources and access to better information, enabling them to find lower-priced offers.[233]

We consider that efforts to lower search costs may help to reduce the negative impacts of price dispersion and discrimination, especially for customers in vulnerable groups. Consistent with recent research findings, this may be accomplished through promotion of Energy Made Easy or private-sector innovation that enables customers to compare complex pricing structures based on their individual circumstances.[234]

8 Time-of-use tariff plans in NSW

Key findings

- The change in the annual bill for the median time-of-use market offer generally moves in line with changes in the median annual bill for flat-rate market offers. This is consistent across the 3 distribution networks in NSW. However, the total bills for time-of-use offers have significantly more variation than flat-rate offers.
- Time-of-use tariff plans include charges for peak, off-peak and shoulder periods and these charges may also vary by season (Winter or Summer). We found significant variation when customers are charged peak, shoulder and off-peak usage.
- For typical time-of-use customers, switching plans can typically leads to higher savings than usage behaviour (for example, consuming more in off-peak periods). Over 2023–24, time-of-use customers could have saved between $260 and $350 by switching from the median standing offer to one of the cheapest market offers. On the other hand, time-of-use customers could have saved only between $36 and $123 by shifting 50% of their peak usage to off-peak times.

As discussed in Chapter 7, network tariff reassignment is resulting in an increasing number of customers in NSW moving to time-of-use network tariffs, and retailers typically change the customers retail tariff to align with the underlying network tariff. As at 30 June 2024, an estimated 23% of residential customers and 31% of small business customers were on time-of-use network tariffs. We expect a similar number of customers are on time-of-use tariff plans.

To analyse time-of-use price trends, we have used data on time-of-use tariff plans from Energy Made Easy.[a] In addition, when calculating annual bills for customers on time-of-use tariff plans we have used the Default Market Offer daily consumption profile for 2023-24. This provides us with an estimate of how much electricity a typical residential customer would use during each hour of the day.[b]

However, customers will pay more or less than this amount depending on when they use their electricity. For example, a household that uses more electricity in the evening will pay a higher bill than a household using more electricity during the day, even if their overall usage amount is the same.

[a] As discussed in Chapter 1, these offers represent the prices that are available to new or switching customers.

[b] The DMO time-of-use daily usage profile is based on aggregate demand and is normalised to assume a household uses between 10.7 and 13.4 kWh per day, every day, depending on the network area.

8.1 Overview of time-of-use tariffs

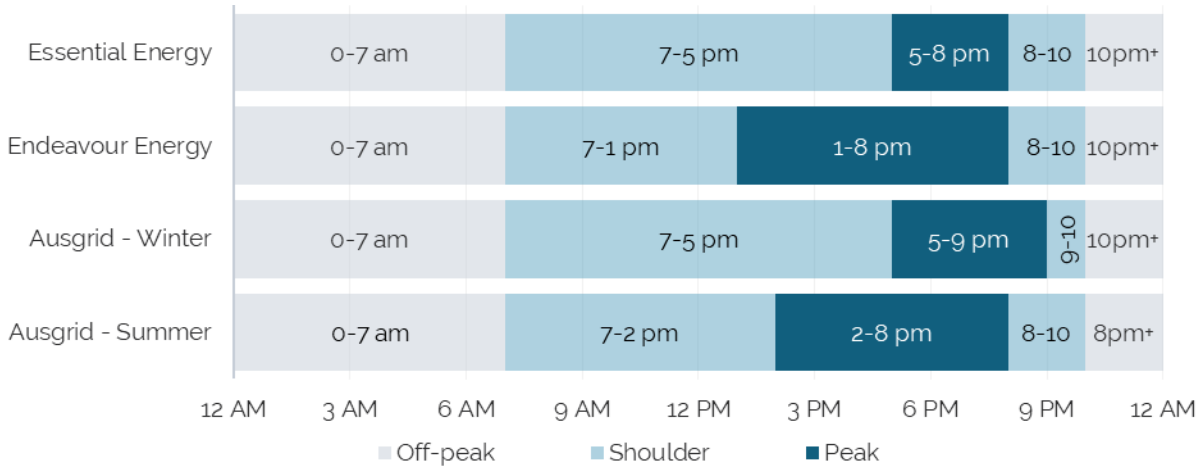
Time-of-use offers are available to customers with interval or smart meters that are capable of recording usage data at least every 30 minutes. Time-of-use offers charge different prices for electricity that is used at different times of the day. Typically, prices are divided into 3 periods. These are:

- **peak** - more expensive usage prices apply, usually during weekday afternoons and evenings
- **shoulder** – less expensive usage prices apply, usually during the middle of the day and late evenings, and during weekends
- **off-peak** – least expensive usage prices apply, usually overnight and early morning, and during the weekends.

The pricing periods differ between distribution network service providers in NSW (Figure 8.1 and Figure 8.2). Time-based network tariffs aim to better reflect the costs of supplying electricity compared to flat-rate tariffs. This is because prices vary to reflect the level of demand on the electricity network at certain times.

These tariffs aim to incentivise customers to use less electricity in expensive peak and shift their usage to the cheaper shoulder and off-peak periods. Over time, this can help reduce network costs, for example, network upgrades may no longer be required or may be delayed if peak use falls or slows in a particular segment of the network.[235]

Figure 8.1 Network time-of-use periods for residential customers in 2023–24

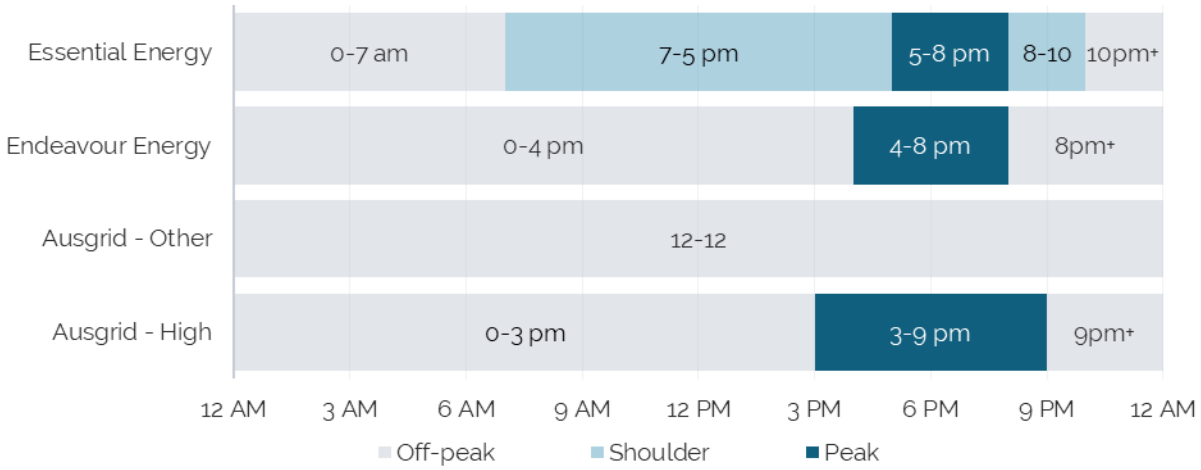


Note: This figure shows the most common 'weekday' charging periods for 2023–24. There are charging periods that are not shown, including for weekends or Ausgrid's network in the shoulder months of April, May, September and October.

Source: Ausgrid, *Tariff Structure Statement 2019*, p 17; Endeavour Energy, *Time of Use Tariffs*; Endeavour Energy, *Network Price List: Network Tariffs 2023–24*, p 20.

Figure 8.1 does not show new time-of-use bands introduced from July 2024 in the Ausgrid and Endeavour Energy distribution networks. These updated time bands are shown in Figure 8.2.

Figure 8.2 Network time-of-use periods for residential customers in 2024-25



Note: This figure shows the most common 'weekday' charging periods for 2024-25.

Source: Ausgrid, *Time of use tariffs*, accessed 14 November 2024; Endeavour Energy, *Network Price List 2024-25*, p 19; Essential Energy, *Time of use tariffs*, accessed 14 November 2024.

8.2 Network tariff and retail tariff time-of-use peak, off-peak and shoulder period alignment

Retailers are able to choose their own time-of-use periods for peak, off-peak, and shoulder times. This may differ from the schedules set by the distribution networks.

The submission from Ausgrid discussed that most retailers have not aligned their retail time-of-use periods to Ausgrid's new network time-of-use periods (which have come into effect over the last few years).[236] The submission explained that while it is not a requirement for a retailers' pricing structure to reflect the underlying network pricing structure, Ausgrid's preference is that retailers reflect the charging windows defined in the network pricing structure when they adopt that tariff structure.[237] This is to ensure the pricing signals from the network around when to use (or not use) electricity is passed onto customers.

Given the issues raised by Ausgrid, we investigated the extent to which the retail time-of-use periods (that residential and small business customers are subject to) align with network time-of-use periods for each distribution network in NSW. Our findings for the Ausgrid network are below.

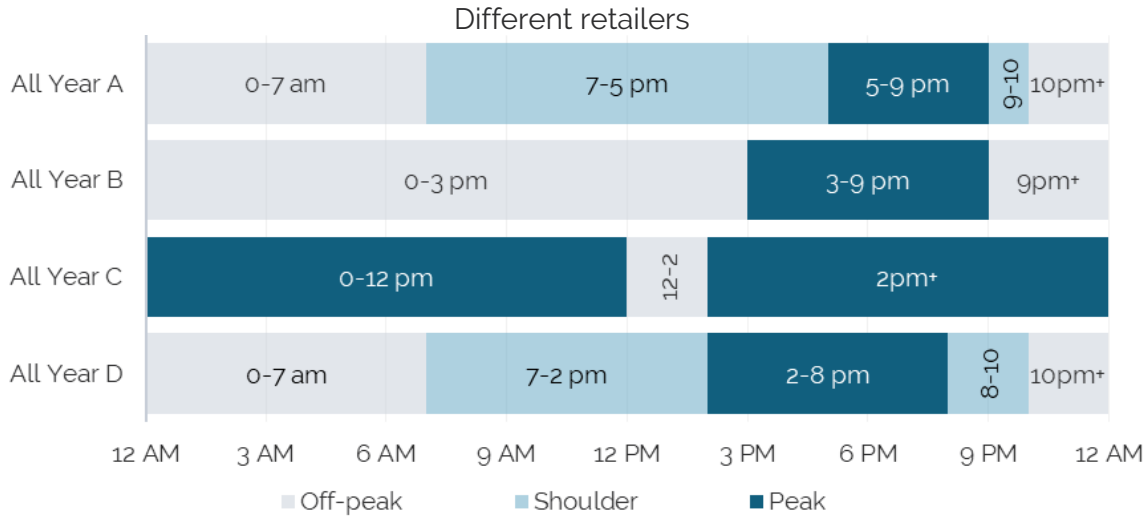
Our analysis of residential plans on Energy Made Easy in June 2024, available to customers in Ausgrid distribution network revealed at least 4 distinct sets of time-of-use windows were applied year-round. Around 40% of retailers that had uniform time-of-use windows, some adopted Ausgrid's winter peak periods, while others chose the summer peak periods.

A small number of retailers had already implemented Ausgrid's new time-of-use structure by early June 2024. This includes peak times from 3 pm to 9 pm and off-peak at all other times during November-March and June-August ('high' usage seasons of Summer and Winer). During April-May and September-October (which were previously shoulder seasons), Ausgrid classifies all hours as off-peak. However, we found that some retailers charge customers a peak charging window year-round, even during April-May and September-October. This approach results in customers being charged peak rates in months where no peak rates should apply.

Additionally, we identified a unique plan offering free off-peak rates during 'lunch hours' from 12 pm to 2 pm, with a flat peak rate from 2 pm to midnight and midnight to 12 pm.

This diversity in time-of-use periods underscores the importance for consumers to carefully review and compare retail electricity plans, as the timing of peak and off-peak rates can impact their energy costs notably.

Figure 8.3 Retailer 'all-year' time-of-use periods for residential customers in 2023–24



Note: This figure includes only retail time-of-use period windows that are offered to Ausgrid residential customers and are the same in all months of the year (non-seasonal plans).

Source: Energy Made Easy data as at 11 June 2024.

8.3 A customer on the median plan will have a similar bill on a time-of-use tariff as they would on a flat-rate tariff

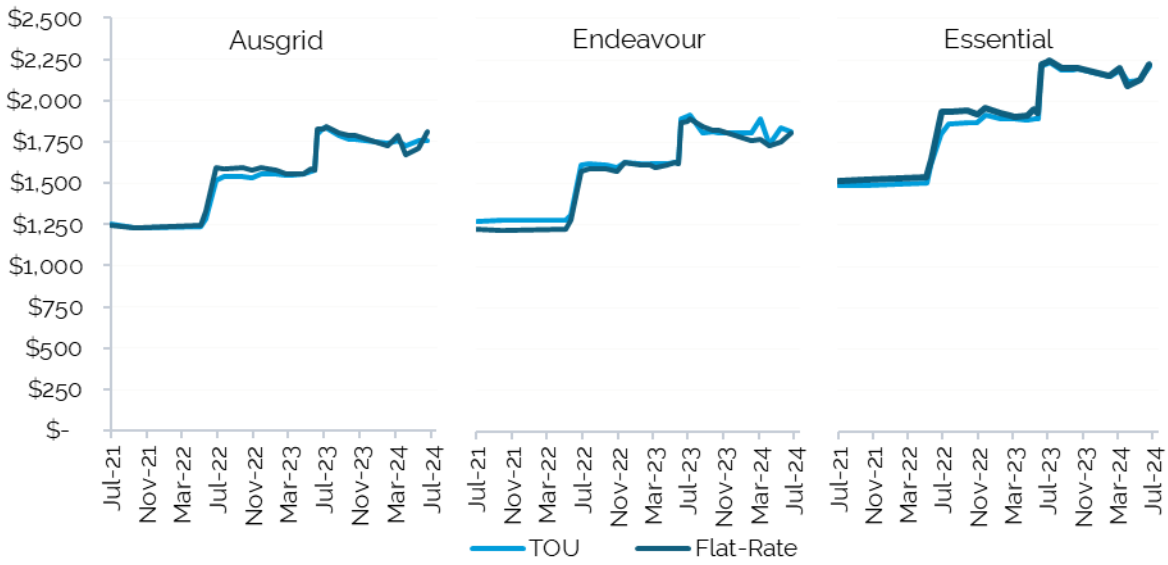
Over the last several years, the price difference between the median time-of-use market offer and the flat-rate market offer has remained relatively narrow. This trend has been consistent across all networks despite short-term fluctuations (see Figure 8.4 - between March and July 2024 in the Endeavour Energy network).

When the median time-of-use offer is calculated using the Default Market Offer daily usage profile, we would expect the median time-of-use offer and median flat-rate offer to result in similar annual bills. This is because the Default Market Offer usage profile is the same as the Net System Load Profile (NSLP) that retailers use as one input when determining their time-of-use and flat-rate prices.[238]

However, this does not necessarily mean that a typical household would pay a similar annual bill under either a time-of-use tariff plan or a flat-rate tariff plan. In practice, household electricity usage patterns differ from one another and often do not consume electricity in line with the Default Market Offer usage profile. This means a household on the median time-of-use market offer could end up paying more or less if they switched to the median flat-rate offer, depending on when they use electricity.

It is therefore important that customers are able to understand their time-of-use rates and periods to make the most of their time-of-use offer. This has been reflected in stakeholder submissions, which discuss that the ability to respond to cost-reflective tariffs depends on consumers having an adequate understanding of tariff structures, and that many consumers are not in a position to understand or manage complex tariffs.[239]

Figure 8.4 Median flat-rate and time-of-use market offer for residential customers by network (4,215 kWh per year, incl. GST, nominal)



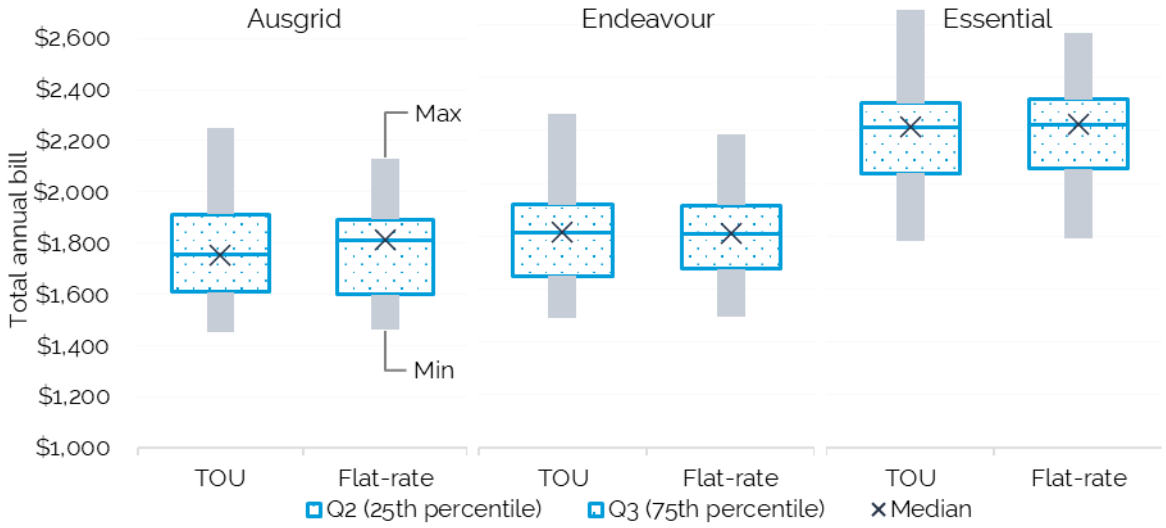
Source: Energy Made Easy Data 2022–24; Default Market Offer 2023–24 TOU Usage Profiles.

The median bill is only one indicator of bill outcomes. To analyse bill outcomes for a wider range of customers, we also compared the price difference between time-of-use and flat-rate market offers at the bottom and top-ends of the market.

Based on a consumption level of 4,215 kWh per year, we observed that the bill difference between time-of-use and flat-rate market offers is narrow across the market, not just at the median offer. This is illustrated by Figure 8.5 below, which compares the distribution of time-of-use and flat-rate market offers published on Energy Made Easy on 15 July 2024.

We also found that across all distribution networks, the maximum time-of-use bill is slightly higher than the maximum flat-rate bill. In July 2024, this difference was between $75 and $120.

Figure 8.5 Distribution of flat-rate and time-of-use market offers for residential customers by network (4,215 kWh per year, incl. GST, nominal) July 2024



Source: Energy Made Easy data as at 15 July 2024.

8.4 The composition of time-of-use charges varies by retail offer

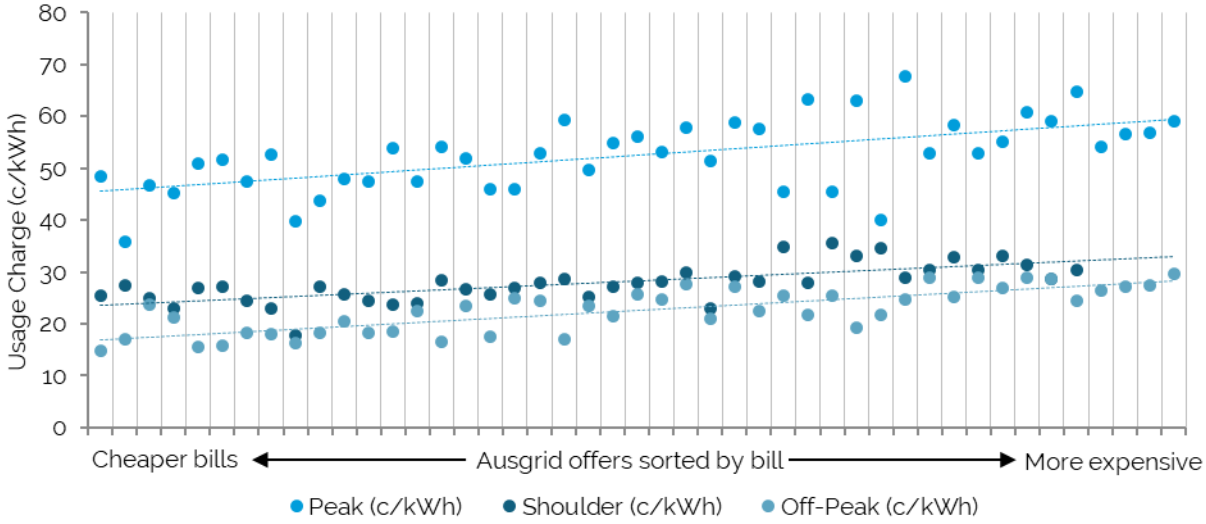
Time-of-use tariff plans include multiple usage charges that apply at different times of the day. These usage charges may be different on weekdays compared to weekends and can vary depending on the time of year. While most time-of-use plans have a single set of usage charges that apply through the whole year (a single 'season'), other offers may have multiple different sets of charges over a year (e.g. under a '4 season' offer).

The difference between a customer's peak and off-peak usage charge varies by retailer and offer. In some offers, the usage charge for peak and off-peak periods is similar, while other offers may offset a very high peak charge with a materially lower off-peak charge.

The composition of an offer's usage charges depends on each retailer's input costs and pricing strategy.[c] This is shown in Figure 8.6, which presents the c/kWh usage charges for all residential time-of-use plans that were available in the Ausgrid network as of 11 June 2024. Broadly, more expensive time-of-use offers are characterised by higher usage charges in all periods, rather than a marked increase in only one usage charge (see the parallel trends in Figure 8.6).

[c] Pricing strategies depend on a range of factors including a retailer's approach for hedging spot prices and risk tolerance, the types of customers it seeks to attract, knowledge of its customers' demand elasticity, and the prices of competitors.

Figure 8.6 Usage charges for each time-of-use offer, Ausgrid, June 2024 (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 actually 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.

Source: Energy Made Easy data as of 11 June 2024.

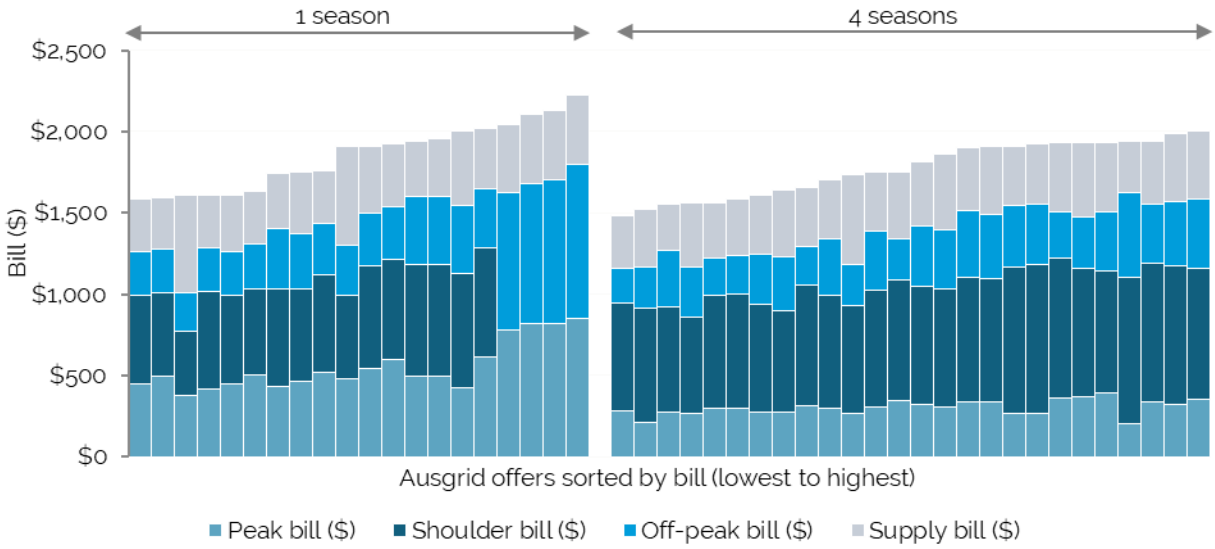
As shown in Figure 8.6 above, peak usage charges are consistently higher than shoulder or off-peak usage charges. However, exactly how these different usage charges affect the total bill depends on when each charge applies and for how long.

For most time-of-use plans, peak usage charges determine a relatively small portion of the total bill (Figure 8.7). This is because peak periods are relatively short, and based on the Default Market Offer usage profile, only a small amount of total usage is charged at the peak rate.

It is shoulder periods that typically make up the biggest part of a time-of-use bill, particularly among seasonal ('4 season') offers in the Ausgrid network area.[d]

[d] Ausgrid removed its shoulder period in July 2024. It now only charges retailers for peak and off-peak periods.

Figure 8.7 Composition of time-of-use bills by usage period (Ausgrid offers in June 2024, incl. GST, no discounts) – split by number of seasons



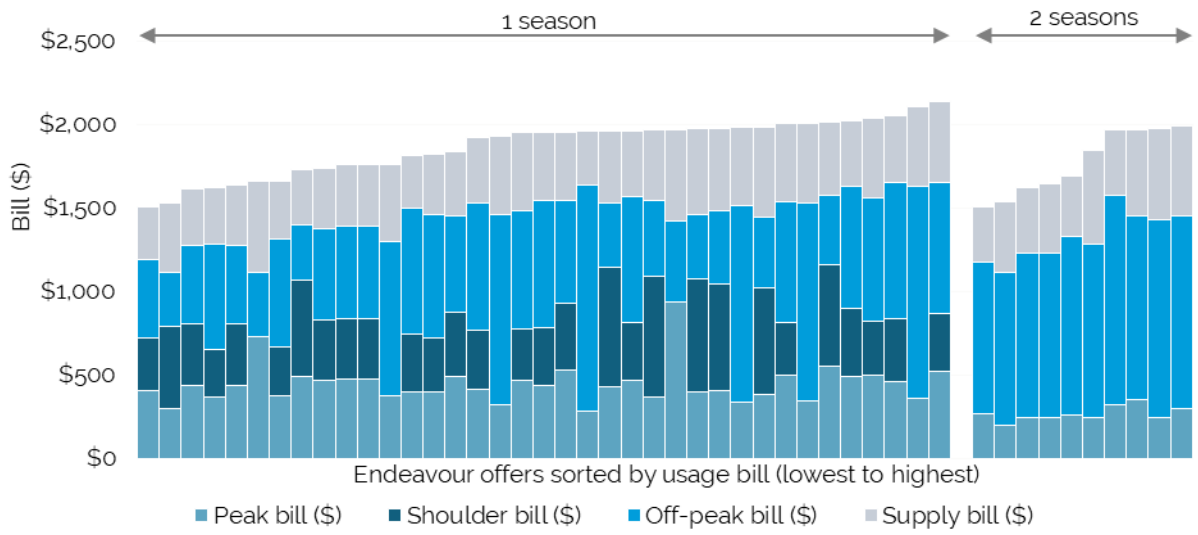
Notes: The number of seasons determines how many sets of peak/shoulder/off-peak charges are in the plan over a year. Further, we have assumed usage is the same for every day of the year. However, actual customer usage will vary by season.

Source: Energy Made Easy data as at June 2024; Default Market Offer daily time-of-use usage profile for 2023–24.

In addition, peak periods make up an even smaller portion of the annual bill in seasonal offers (offers with 2 or 4 seasons) compared to year-round offers (offers with 1 season). Because seasonal offers generally only include peak charges in Summer and Winter, a larger percentage of usage over the year falls in shoulder and off-peak periods (Figure 8.7 and Figure 8.8).

We also observed that in the Ausgrid network, on average bills were slightly higher for single-season offers than for 4-season offers, under the same consumption profile. However, this pattern was not observed in the Endeavour Energy network, where time-of-use offers are either one or 2 seasons.

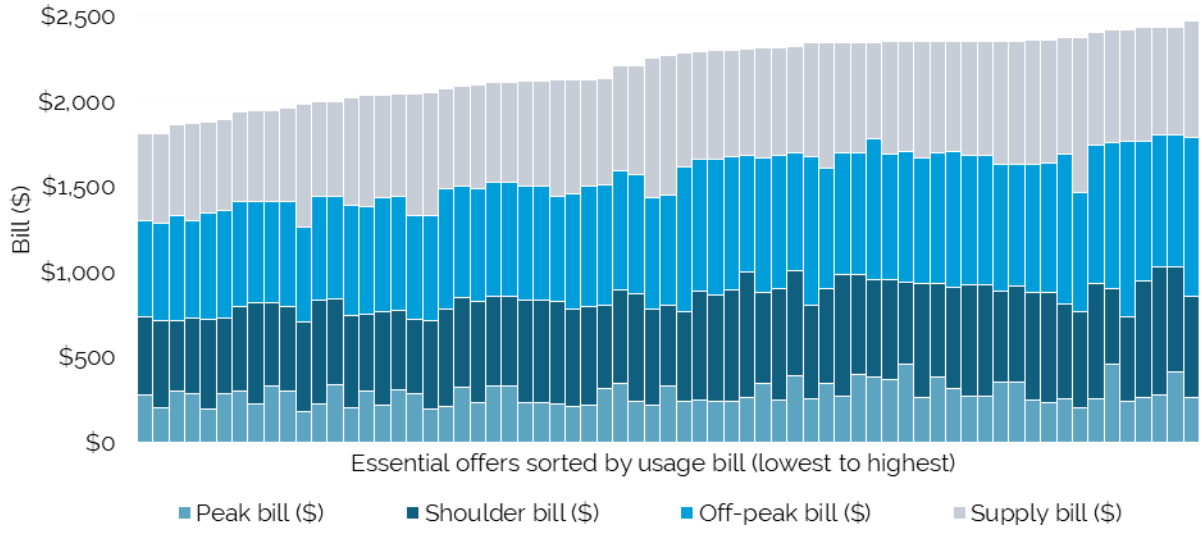
Figure 8.8 Composition of time-of-use bills by usage period (Endeavour Energy offers in June 2024, incl. GST, no discounts) – split by number of seasons



Note: In 2023–24, time-of-use plans in the Endeavour Energy network included either '1 season' – which offer a single set of peak/shoulder/off-peak charges over the year, or '2 seasons', which offers 2 sets of peak/shoulder/off-peak charges throughout the year, depending on the month.

Source: Energy Made Easy data as at June 2024; Default Market Offer daily time-of-use usage profile for 2023–24.

Figure 8.9 Composition of time-of-use bills by usage period (Essential Energy offers in June 2024, incl. GST, no discounts)



Note: Residential time-of-use offers in the Essential Energy area are single-season offers.

Source: Energy Made Easy data as at June 2024; Default Market Offer daily time-of-use usage profile for 2023–24.

8.5 Customers can save by changing offer or shifting usage times

If a typical time-of-use customer switched energy plan in July 2023, they could potentially have saved between $260 and $350 over 2023–24 (around 14% across the state) by switching from the median standing offer to one of the cheapest time-of-use market offers.

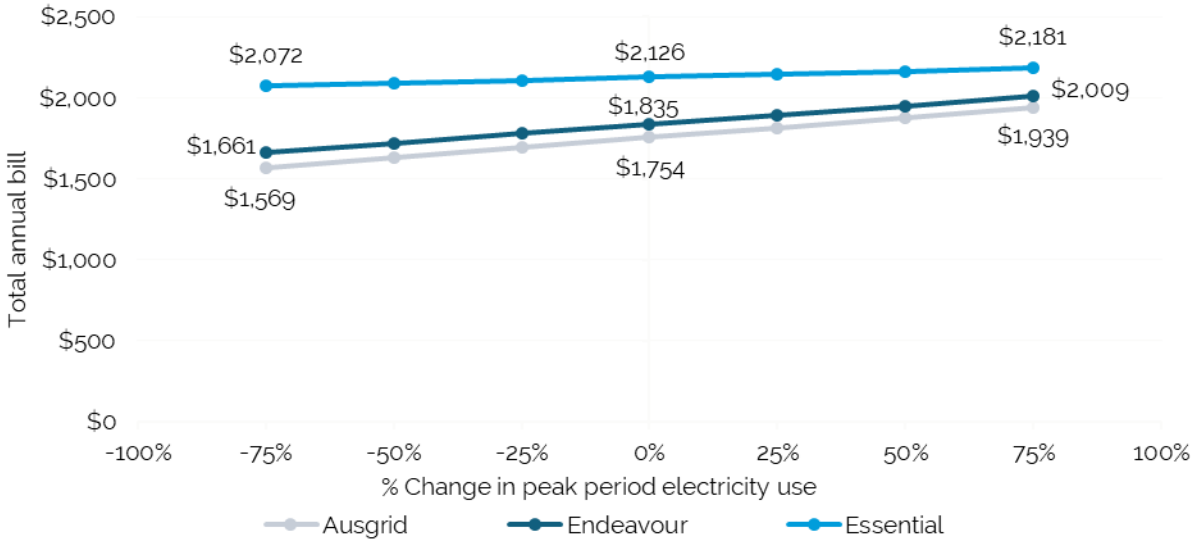
In practice, the exact amount that customers can save by switching to a cheaper offer will depend on their current offer and level, as well as the timing of their usage. Customer switching is discussed further in Chapter 5.

We also considered how much customers on time-of-use tariffs are likely to save if they can change when they use electricity. Figure 8.10 compares bill outcomes for different usage profiles on each network's median time-of-use market offer in June 2024. The overall consumption is the same in each scenario (4,215 kWh), but the times when customers use their electricity are different. It changes peak period usage by 25%, 50% and 75% by shifting that usage into the off-peak period (and vice versa).

As expected, customers who have lower usage during peak periods are likely to face a lower bill compared to those with higher usage during peak periods. If a customer on the median time-of-use offer in the Ausgrid network area can reduce their peak usage by 50% (by shifting this usage to off-peak times), they would be between 2% and 8% better off (between $36 and $123) over a year, depending on the network.

The amount that a customer saves by shifting their usage behaviour will depend on their individual plan and the difference between their peak tariff and off-peak tariff – the higher the difference, the more potential savings. Nonetheless, the potential savings available by changing usage behaviour remains lower than the potential savings available by changing plan altogether.

Figure 8.10 Median annual bill for higher and lower peak consumption (incl. GST, incl. discounts, prices from June 2024)



Source: Energy Made Easy data as at 11 June 2024.

9 Demand tariff plans in NSW

Key findings

- Between 2021–22 and 2023–24, the portion of residential customers in NSW assigned to a network demand tariff grew from 6% to 13%, while the proportion of small businesses grew from 5% to 9%. We expect a similar proportion of residential and small business customers are on demand tariff plans with their retailer.
- We calculated annual bills based on a sample of household and small business customer consumption profiles in the Ausgrid distribution network. We found that customers on demand tariff plans are likely to have annual bills that are, on average, $200 to $300 higher compared to if they were on a flat-rate or time-of-use tariff plans.
- There was typically a materially lower annual bill available under flat-rate tariff plans and a slightly lower bill under time-of-use tariff plans compared to demand tariff plans.
- There is an urgent need for improvements to customer information and online tools to calculate and compare the cost of demand tariff plans. Without this, demand tariffs are unlikely to change customer behaviour (and achieve their intended effect of reducing peak demand) and customers are unlikely to be able to choose the best offer for their circumstances.

In August 2024, we received a letter from the Hon. Penny Sharpe, MLC, Minister for Climate Change, Energy, the Environment and Heritage discussing that energy products and services in NSW are becoming increasingly complex. In response, this letter requested that IPART include specific analysis on demand response programs, virtual power plant services and demand tariffs in this Energy Market Monitoring report.[240]

This chapter presents our analysis on demand tariffs in NSW during the 2023–24 financial year including:

- what demand tariffs and demand charges are
- the estimated annual bills for customers on demand tariff plans and the contribution of demand charges to this annual bill
- whether customers on demand tariffs could be better off on a flat-rate tariff plan or time-of-use tariff plan, given their existing electricity usage.

Our analysis of demand tariffs is based on:

- A sample of household and small business customer consumption profiles received from the AEMC. We provide details of this data in Section 9.3.
- Pricing data on demand tariffs from the Energy Made Easy website.[a]

9.1 What are demand tariffs and demand charges?

Demand tariffs are electricity plans that include a demand charge in addition to other charges, such as a fixed daily supply charge and a flat or variable usage charge.[241] A demand charge is usually calculated based on the highest amount of power drawn from the grid during any 30-minute peak period in a month.[b,242]

Demand charges aim to reduce a customer's maximum power demand at a point in time.[243] Demand is measured in kilowatts (kW), which is different from usage which is calculated in kilowatt-hours (kWh).

Box 9.1 outlines how demand charges are calculated and the difference between power demand (kW) and the total electricity used (kWh) over a period.

Box 9.1 How is demand (kw) different to usage (kWh)?

- **Electricity usage (kWh)** is the total amount of electricity that a customer consumes over a period, measured in kilowatt-hours (kWh). For instance, a typical 3-person household uses around 15 kWh per day or approximately 5,500 kWh a year.
- **Consumption** or **usage charges** are based on this total electricity usage. To calculate a customer's usage component of a bill, the rate (in cents per kilowatt-hour, c/kWh) is multiplied by the total kWh used during a billing period. For time-of-use tariffs, usage charges are calculated separately for each period (such as peak, shoulder and off-peak) and then added together to determine the total usage component of a bill.
- **Electricity demand (kW)** is the amount of electricity used at a specific point in time, measured in kilowatts (kW). It reflects the highest level of power drawn by a customer during a billing period, typically over a 30-minute interval.

[a] As we have discussed elsewhere, the prices for offers on Energy Made Easy are those available to new or switching customers (and are often referred to as *acquisition offer* prices). These prices may differ from those charged by retailers to existing customers. However, data is not available on the prices charged by retailers to existing customers.

[b] 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: June 2023 Report*, 3 June 2024, p 55.

Box 9.1 How is demand (kw) different to usage (kWh)?

- **Demand charges** are based on this peak demand and are intended to account for the strain a customer places on the electricity network during periods of high usage. To calculate a customer's monthly demand charge, the rate (in cents per kilowatt, c/kW) is multiplied by the customer's highest 30-minute demand window in a month, providing a *'daily charge'*. This daily charge is multiplied by the number of days in the month.

For example, consider 2 residential customers that consume 500 kWh of electricity in a month:

- **Customer A** uses electricity steadily throughout the day, avoiding the simultaneous use of multiple high-energy appliances. They might run the dishwasher after the washing machine has finished and use the air conditioner sparingly. This consistent usage results in a lower peak demand.
- **Customer B** uses electricity in concentrated bursts, often running several high-energy appliances at the same time during peak periods. For example, they might simultaneously use the oven, washing machine, and air conditioner in the evening when everyone is home. This leads to a higher peak demand.

While both customers have the same total usage (500 kWh), Customer B has a higher peak demand due to their concurrent use of appliances. On a demand tariff:

- **Customer A** would incur lower demand charges because their maximum power draw at any one time is lower.

  Customer B would face higher demand charges as their peak demand is greater, reflecting the higher strain they place on the network during peak times.

The 3 DNSPs in NSW (Ausgrid, Essential Energy and Endeavour Energy) charge network tariffs to retailers.[244] A network tariff may include a demand charge, in addition to a supply charge and usage charges (as well as other charges).

Retailers have discretion over how they pass network tariff charges, including demand charges, onto customers. For instance, a retailer may choose not to pass on the demand charge component, and instead recover this cost from its supply and usage charges. Alternatively, retailers may pass through as a separate demand charge component, in addition to the supply and usage charges.

A demand tariff plan (or demand tariff) is any retail plan/offer that includes a demand charge. Demand tariff plans may have flat-rate or time-of-use usage charges. Unlike flat-rate and time-of-use plans, there is no Default Market Offer for demand tariff plans. This means the DMO price cap on standing offer contracts and the reference price disclosure for market offer contracts does not apply as a safeguard for demand tariff plans.[245]

Customers can only on a demand tariff plan if they have a smart meter, which records electricity usage in intervals of at least 30 minutes. This precise measurement is necessary for calculating demand charges.

Smart meters are being progressively rolled out across NSW. As at July 2024, around 46% of households had a smart meter.[246] By 2030, 100% of households and small businesses in NSW are forecast to have smart meters.[247]

Table 9.1 provides an example of how a customer's demand charge would be calculated over a year, with each column showing the calculation for a single month, and each row showing a step in the calculation process. On a demand tariff plan, this demand charge component would be charged in addition to the supply and usage charges.

Table 9.1 Example calculation of the demand component of a retail bill for each month, 2023-24

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Peak hours (pm)	*2-8*	*2-8*	*2-8*			*5-9*	*5-9*	*5-9*			*2-8*	*2-8*
Peak demand Highest 30-minute meter reading for the month, selected from weekday peak hours:												
kWh	2.5	2	1.5			1.9	2.5	2.1			2.2	2.6
(kW = kWh x 2) [a]	**5**	**4**	**3**			**3.8**	**5**	**4.2**			**4.4**	**5.2**
Price ($/kW)	**0.35**	**0.35**	**0.35**			**0.30**	**0.30**	**0.30**			**0.35**	**0.35**
Bills:												
Daily bill ($)	1.75	1.4	1.05			1.14	1.5	1.26			1.54	1.82
x days in month	*31*	*29*	*31*	*30*	*31*	*30*	*31*	*31*	*30*	*31*	*30*	*31*
Monthly demand charge ($)	**54.3**	**40.6**	**32.6**	**0**	**0**	**34.2**	**46.5**	**39.1**	**0**	**0**	**46.2**	**56.4**

a. Converting 30-minute kWh readings to kW requires multiplying kWh x 2.

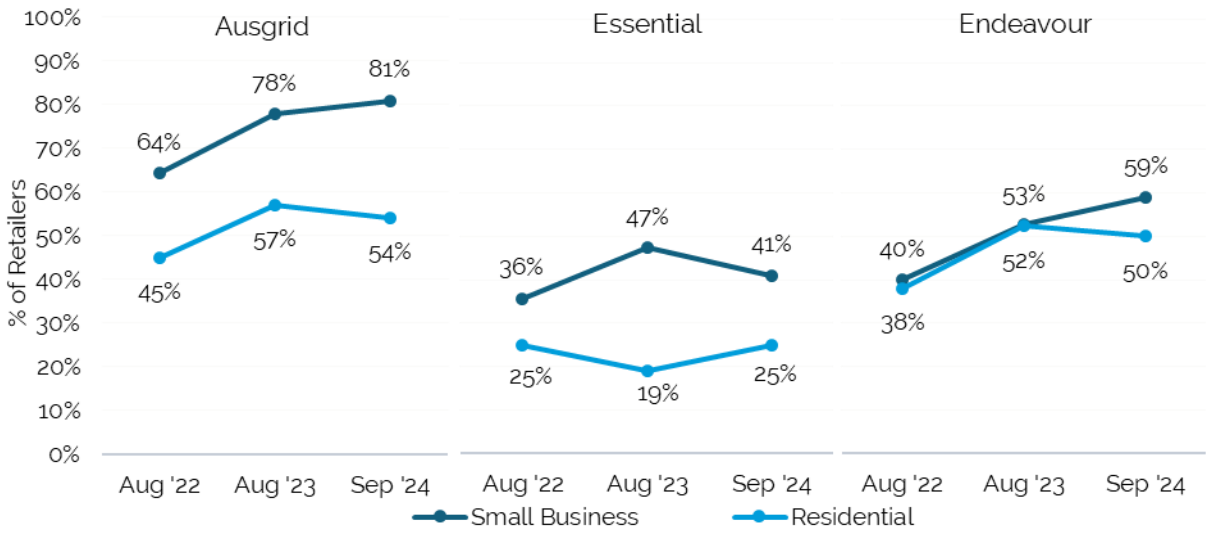
9.2 Demand tariffs are becoming more common

An increasing number of customers are being assigned to a network demand tariff. In NSW, the number of residential and small business customers on network demand tariffs almost doubled between 2021–22 and 2023–24:

- residential customers on network demand tariffs increased from 190,000 to around 430,000, increasing from 6% to 13% of all residential customers (Figure 6.6)
- small business customers on network demand tariffs increased from 15,000 to 29,000, rising from 5% to 9% of small business customers (Figure 6.7).

The proportion of retailers with at least one plan incorporating a demand charge has also increased materially in the Ausgrid and Endeavour Energy networks in recent years. In September 2024, over half of the retailers in the Ausgrid network had at least one residential plan with a demand charge. This was up from 45% in August 2022.[248] Further, 81% of retailers in the Ausgrid network offered at least one small business plan incorporating a demand charge in September 2024, an increase from 64% in August 2022 (Figure 9.1).[249]

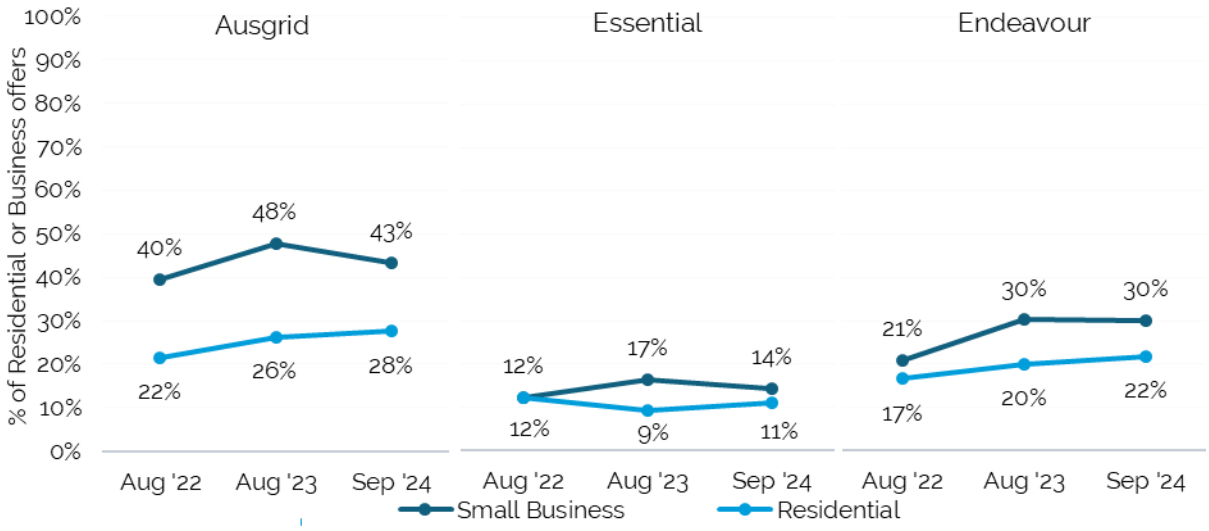
Figure 9.1 Percent of retailers with at least one residential and one small business plan incorporating a demand charge, August 2022 to September 2024



Source: Energy Made Easy data, as at 17 August 2022, 1 August 2023 and 16 September 2024.

Figure 9.2 shows that the proportion of residential plans that include a demand charge has also risen in recent years in the Ausgrid and Endeavour Energy networks, now accounting for up to 28% of all residential plans and over 40% of business plans in the Ausgrid network. However, demand charges remain less common in the Essential Energy network.

Figure 9.2 Percent of market offers on Energy Made Easy that include a demand charge, August 2022 to September 2024



Source: Energy Made Easy data, as at 17 August 2022, 1 August 2023 and 16 September 2024.

9.3 We calculated annual bills for a sample of demand tariff customers

Despite a growing number of residential and small business customers in NSW on demand tariff plans, there has been little analysis on the cost of these plans.[c] A key reason for this is when a customer is on a demand tariff plan, their total annual bill can only be calculated with granular usage data. In particular, usage data for every 30-minute interval over a year is needed.

Our analysis of demand tariffs is based on a sample of around 600 household and 770 small business customer usage profiles in the Ausgrid network.[d] Our methodology for analysing this consumption data is outlined in Box 9.2 below.

Box 9.2 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 2023–24 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 2023–24 financial year.

We used the consumption profile data for 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.

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) as well as plans with solar feed-in tariffs or controlled load options.

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

[c] To date, the most in-depth analysis on demand charges/demand plans has been the ACCC's June 2024 Inquiry into the NEM. This report focused on customer outcomes for customers on demand plans in South East Queensland, where the majority of demand-tariff customers are on introductory demand tariffs.
Source: ACCC, *Inquiry into the National Electricity Market*, June 2024, p 59.

[d] The AEMC provided us with a sample of customer consumption profiles across Ausgrid, Essential Energy and Endeavour Energy, for both solar and non-solar customers. Consumption profiles included customers' 30-minute usage (in kWh) between 1 July 2023 and 30 June 2024.

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 variation of demand charges on demand tariffs in the Ausgrid distribution network[e]
- the composition of annual bills for demand tariff customers and the contribution from the demand charge component
- whether customers are better off on a flat-rate or time-of-use plan compared to demand tariffs (for the sample of consumption profiles).

9.4 Demand charges on offers on Energy Made Easy vary significantly in price

Our analysis of demand tariff plans available to customers in the Ausgrid network found a wide variation in demand charge rates for both residential and small business customers.

As of 16 September 2024, the range of demand charge rates was as follows:

- **Residential customers**: Demand charges ranged from 1 c/kW to around 40 c/kW. Around 50% of residential demand charges were below 20 c/kW.
- **Small business customers**: Demand charges ranged from around 1 c/kW to above 50 c/kW. Approximately 30% of business demand charges were below 20 c/kW.

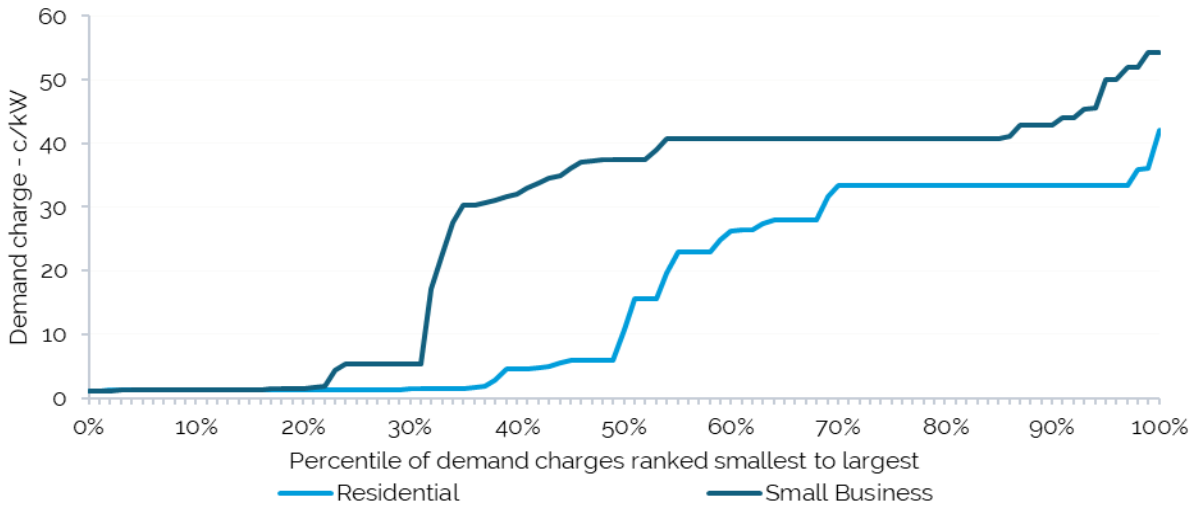
This wide price range can be partly explained by introductory demand charges. Introductory demand tariff plans have a low demand charge for a specified period of time (such as 12 months) before increasing to higher standard demand charge rate.

Typically, introductory demand charges are around 1-2 c/kW for both residential and small business customers. These introductory charges aim to provide customers with an understanding of how demand charges work and the opportunity to adjust their usage patterns before the full effect of demand charges comes into play.[250]

However, we also identified some plans in the Essential Energy and Endeavour Energy networks that label themselves as introductory demand tariff plans without providing introductory pricing. For instance, we found several instances of *"introductory"* demand charges exceeding 10 c/kW and up to 37 c/kW. This suggests that plans marketed as introductory may still carry high demand charges.

[e] We focused our analysis of demand tariffs plans in the Ausgrid distribution network. This is because:
- the Ausgrid distribution network has the largest number of customers on network demand tariffs
- the Ausgrid distribution network has the largest proportion of market offers that include a demand charge
- offers in the Ausgrid distribution network had the most standardised and clear demand charge information (compared to offers available in the Essential Energy or Endeavour Energy networks).

Figure 9.3 Distribution of retail demand charges (c/kW) in the Ausgrid network, by customer type



Note: This figure orders the demand charge rates by percentile in to enable a comparison between the residential and small business rates.

Source: Energy Market Monitoring offers as at 16 September 2024.

The significant range of demand charges and material increase that customers may be subject to when they move from an introductory to a standard demand charge highlights the importance of customers understanding demand charges and how their peak usage can impact this component of their bill.

For instance, a residential customer might sign up to an introductory plan with a demand charge of 1 c/kW, under which their peak usage would have a minimal impact on their bill during a 12-month introductory period. However, if the plan's demand charge increases to 20 c/kW after this period, the customer could face a substantially higher bill, with the demand charge component 20 times higher if they are unaware of the change or are unable to calculate and understand the impact of the change in pricing.

As discussed above, a demand charge depends on both the level of the charge (c/kW) and the maximum amount of power used in peak periods. However, a demand charge is only one component of a customer's demand tariff plan. Customers also pay supply charges (in cents per day) and usage charges (cents per kWh for flat-rate demand tariff plans or cents per kWh which vary depending on peak and off-peak times).

In the section below we report on:

- the impact of different maximum levels of peak demand on demand tariff bill outcomes
- how much demand charges contribute on average to a customer's total demand tariff bill compared to other charges (supply and usage charges).

9.4.1 The impact of peak demand (kW) on the annual bill for demand tariff plans

To explore the impact of different levels of peak demand (kW) on the estimated annual bill for a demand tariff plan, we selected a sample of 8 residential customer consumption profiles from the Ausgrid distribution network with a similar level of total consumption over 2023–24 (this ranged from 4,003 kWh to 4,071 kWh).

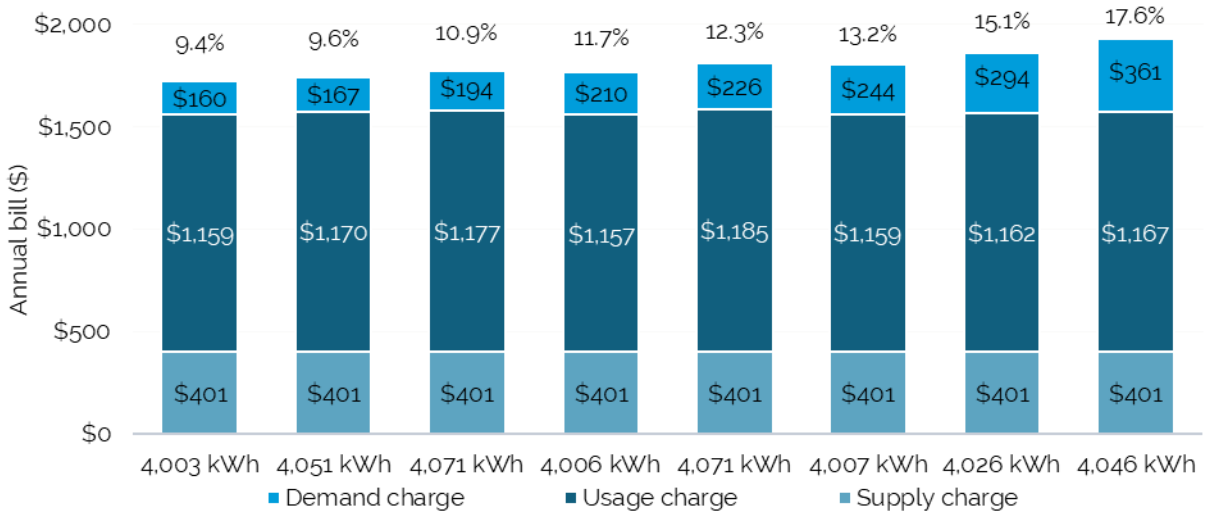
For each consumption profile, we calculated the usage charge, supply charge and demand charge across all demand tariff plans published on Energy Made Easy on 16 September 2024. We then averaged each charge across all demand tariff plans for each consumption profile.

This allows us to estimate the impact of different levels of peak demand on demand charges and estimate the contribution of different charges to a demand tariff bill. The result of this analysis is shown in Figure 9.4.

We found that the average demand charge component showed a difference of around $200 between the customers with the lowest and highest peak demand. This means that for customers with roughly the same overall usage and on the same plans, the demand charge component, on average, ranged from 9% to 18% of the total bill, depending on the peak demand (kW) (Figure 9.4).

For the usage charge component, there was only a small difference (around $28) between the lowest and highest customer. This is due to the small difference in their total annual usage. The supply charge component was consistent for all customers in the analysis, because it is charged based on a fixed daily amount (i.e. it does not vary based on usage patterns).

Figure 9.4 Average annual bill for a sample of households in NSW with a similar annual usage (kWh), based on the average of all market demand tariff plans on Energy Made Easy



Notes: Each column represents an individual customer. The x-axis shows their annual usage (kWh) and the y-axis shows their average bill all market demand tariff plans that were available on Energy Made Easy as of 16 September 2024.
All plans exclude GST, membership fees, and discounts.

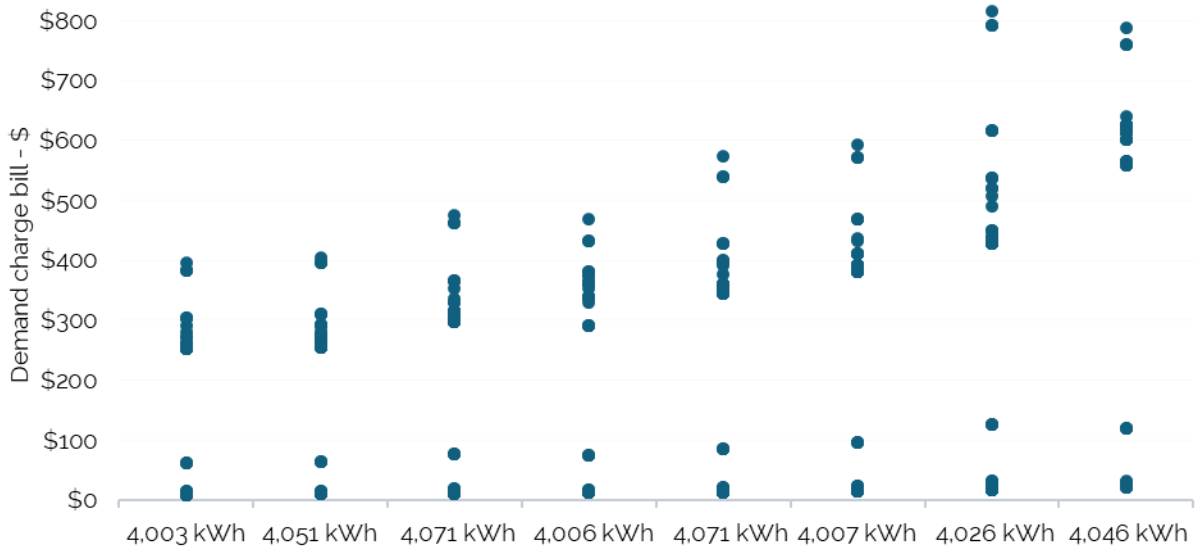
Source: Energy Made Easy data as of 16 September 2024; Ausgrid sample data 2023–24.

For each of the sample consumption profiles in Figure 9.4, we have also analysed the distribution of the demand charges (i.e. only the demand charge component) for all available demand tariff plans on Energy Made Easy. The result of this analysis is shown in Figure 9.5.

For these 8 customers, the demand charge component on each plan varied materially depending on what demand tariff plan the customer was on. Under the cheapest plans (in terms of demand charge component), customers could pay as low as $10 in demand charges over a year. However, under the most expensive plans (in terms of demand charge component), the demand charge bill was almost $400 for the customer with the lowest peak energy demand and over $800 for the customer with the highest peak demand.

Part of this wide range in demand charges may also be due to some retailers applying demand charges for the entire year, while other retailers only apply demand charges in the months Ausgrid includes these charges at the network level (that is, November to March and then June to August).[251]

Figure 9.5 Distribution of demand charge bills for a sample of households in NSW with a similar annual usage (kWh), based on all market demand tariff plans on Energy Made Easy ($)



Notes: Each column of dots represents an individual customer. The x-axis shows their annual usage (kWh) and the y-axis shows their estimated demand charge bill for all available market demand tariff plans that were available on Energy Made Easy as of 16 September 2024.
All values exclude GST, membership fees, and discounts.

Source: Energy Made Easy data as of 16 September 2024; Consumption profile sample data from the AEMC.

9.4.2 Impact of the type of usage charge and total usage on the annual bill for demand tariff plans

The type of usage charge and total electricity consumed (kWh) also impacts the total cost for a demand tariff plan (and consequently the proportion of the total bill attributable to the demand charge).

Demand tariff plans in the Ausgrid network have different types of usage charges. These include:

- **flat-rate usage charges** – these charge the same amount per kWh of electricity used, regardless of the time when it is used.[f]
- **time-of-use usage charges** – these charge different amounts per kWh of electricity, depending on whether the electricity is used in peak, shoulder or off-peak times.[g]

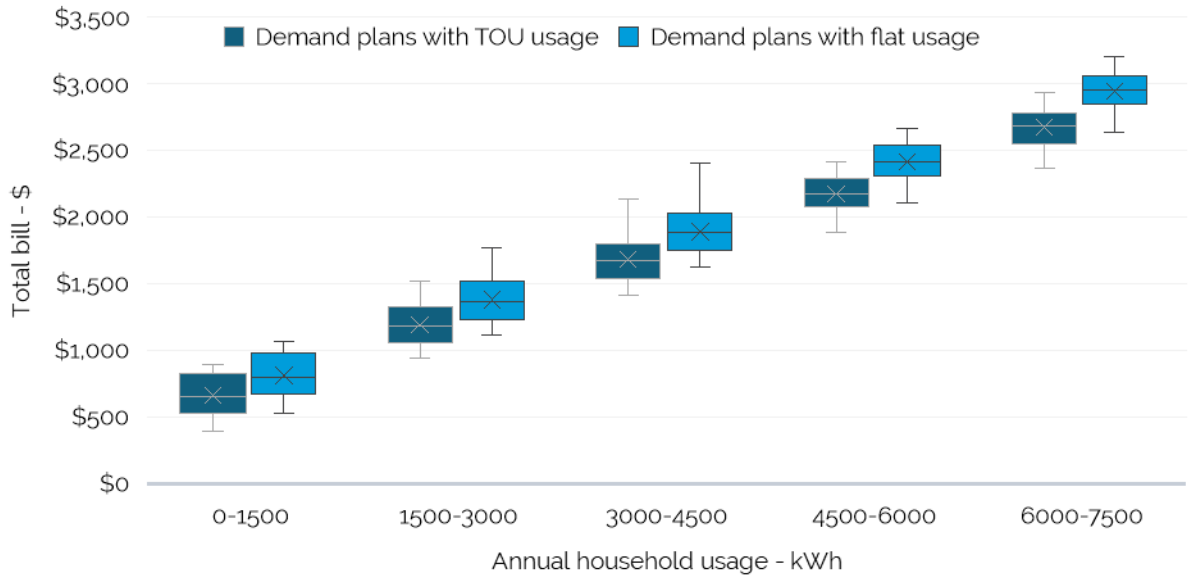
[f] Some plans are classified as 'time-of-use' but still charge flat-rate usage charges (the same usage charge for peak, off-peak and shoulder periods). These are typically 'transitional' time-of-use plans. We have combined these plans into the flat-rate plans category.

[g] In time-of-use plans, the peak time windows for demand charges is often the same time window as the usage charge's peak time window.

To understand the cost of demand tariff plans with different usage charges, we estimated the total annual bill for each demand tariff plan published on Energy Made Easy on 16 September 2024 using the sample of 204 non-solar customer consumption profiles.

We found that demand tariff plans with flat-rate usage charges were typically associated with higher total bills than demand tariff plans with time-of-use usage charges (Figure 9.6).

Figure 9.6 Estimated average annual bill for residential customers on a demand tariff plan, by usage charge type and annual usage (kWh)



Note: This figure shows the average bill for customers on demand tariff plans. These are split by whether the plan has a time-of-use usage charge or a flat-rate usage charge, and by customers' annual usage.
Bills exclude GST and discounts.

Source: Energy Market Monitoring offers as at 16 September 2024; Consumption profile sample data from the AEMC.

9.5 Demand tariffs plans are complex and many customers face challenges in interpreting them

The analysis above demonstrates that demand charges can materially impact a customer's total bill and the total cost of demand tariff plans can vary significantly (even for customers with similar levels of electricity usage).

Several stakeholder submissions raised concerns that household and small business customers in NSW are not in a position to understand or respond to the complex price signals in demand tariff plans, and that there is insufficient information and tools available to assist them.[252]

Several submissions from retailers also raised concerns with the complexity of network demand tariffs. These submissions explained that retailers typically mirror the structure of network tariffs in their retail tariffs to ensure that they can recover network costs. These submissions discussed that under the National Energy Rules, DNSPs are required to ensure network tariffs are not overly complex and can be readily understood by consumers, however their recent customer experience with demand tariff plans demonstrates this has not been achieved.[253]

Further, the submission from AGL discussed that in NSW (as well as the ACT, Queensland, SA and Tasmania), it has largely paused assigning residential customers to different tariff structures following a smart meter installation, due to the complexity of demand tariffs. The pause aims to improve the customer experience of moving to time-of-use tariffs and to decouple the smart meter roll out from tariff reassignment.[254]

9.5.1 More information and better tools are needed to help consumers with understanding and comparing demand tariff plans

The submission from National Seniors Australia discussed that retailers do not provide customers with estimates of peak usage or examples of what appliances would contribute to high peak usage, and that this is needed to understand the size of demand charges and how to shift energy usage in response.[255]

This submission also detailed there are limited tools to assist customers in making decisions on demand tariffs, including that Energy Made Easy does not have the functionality to estimate a bill for a demand charge.[256] The submission stated:

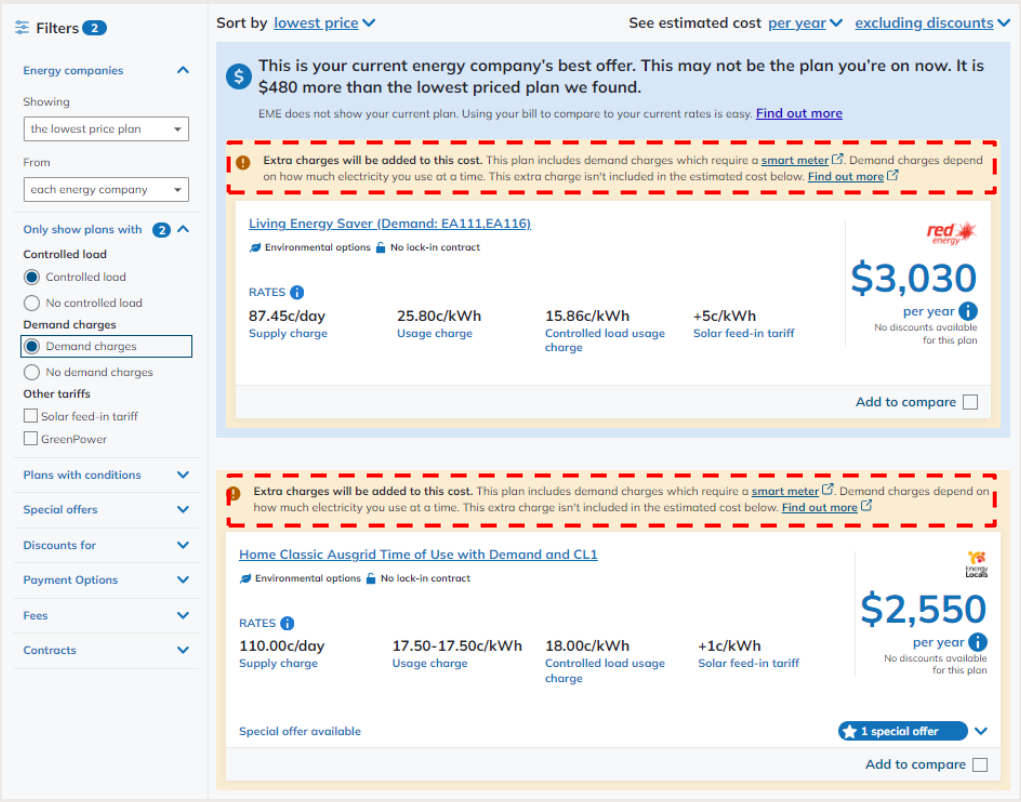
> *EnergyMadeEasy does not properly account for the cost of demand tariffs. If a plan includes a demand charge the website does not include it in the 'estimated cost' of plans. While this calculation would be subject to the underlying assumptions, if the government website cannot compare demand tariffs, how are consumers expected to do this?*[257]

This submission discussed that by excluding demand charge costs from estimates of the total cost of the plan, consumers will be more likely to choose demand tariffs that may not be appropriate for them and could cost more than alternative plans.

EWON submitted that a lack of accessible information on cost-reflective tariffs is a barrier to switching, and a change in network tariff can make it difficult for customers to look for a better offer on websites such as Energy Made Easy.[258] This submission noted that on Energy Made Easy demand tariff plans are not shown by default. The user must explicitly select demand plans, and this filter is not easy to locate. Even when they are shown, the demand charge component is not included in the estimated total bill.[259] We provide an example of this in Box 9.3.

The AER has informed us that it is considering a business case for updates to Energy Made Easy to include bill calculations for demand charges, however it did not provide a timeline for the update to this functionality.

Box 9.3 Example of a demand tariff offer on Energy Made Easy that does not incorporate the demand charge



Source: Energy Made Easy, accessed 31 October 2024

As discussed in Chapter 5, we recently conducted a desktop review of price comparison websites, including the ability to calculate an estimated annual bill for different tariff types. This review found only 1 price comparison website had the functionality to calculate an annual bill for a demand tariff plan.[h]

We consider (as did several submissions) that the lack of tools, including on Energy Made Easy, available to assist customers in understanding the total cost of demand charges and comparing demand tariff plans is a significant issue as customers are being re-assigned to demand tariffs at the network level and subsequently at the retail level.

The NSW Consumer Energy Strategy included an action (Action 23) to:

> *"advocate for urgent improvements to the Energy Made Easy website to include solar export charges, demand tariffs and other new types of tariffs that emerge."*[260]

We strongly support this action and consider it is critical that consumers have tools available to assist them in understanding the costs of different tariff structures and benefits of switching.

[h] WATTever had the functionality to estimate the demand charge component of a customer's electricity bill.

Further, we also consider that the AER should incorporate a new step into the process of approving network tariffs. This step should include consultation with distribution networks and retailers around how any new network tariff will be incorporated into retail tariffs.

The AER should then ensure that the Energy Made Easy website has functionality developed to estimate the cost of the new tariff in the customers total bill before reassignment to the new network tariff occurs.

There are challenges involved in this approach. For example, while the AER approves the structure and pricing of network tariffs, retailers then choose how they pass these tariff structures onto customers. However, to date, in most cases, retailers have mirrored the structure of network tariffs in their retail tariffs. Further, by including consultation with retailers around how they plan to incorporate new network tariffs into their retail tariffs, we consider this challenge can be overcome.

Recommendations

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.

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.

9.6 Concerns around customers being moved onto demand tariffs without their consent

The ongoing rollout of smart meters and tariff assignment policies of the DNSPs in NSW means many customers in NSW are being moved onto network demand tariffs.

As discussed in Chapter 5, when a customer's network tariff is changed, a retailer will typically change the retail tariff to match the network demand tariff.

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.[261]

Several stakeholder submissions raised concerns that households and small businesses are being moved onto demand tariff plans by their retailers without providing their consent and do not understand or cannot respond to the complex price signals in these tariffs.[262] EWON's submission detailed several case studies of customers being placed on a demand tariff plan without providing their consent (or even being aware of it). We have included 2 of these case studies below (Box 9.4).[263]

National Seniors Australia submitted that demand tariff plans are too complicated to have any place in retail electricity offers and should be removed as they are a blunt cost recovery tool that does little to educate customers or change behaviour.[264] Similarly, the Justice and Equity Centre discussed academic research that has found there are certain groups of consumers who may have limited ability to adjust their electricity usage in response to complex tariffs, such as those whose homes have poor thermal capabilities, those with a disability and the elderly.[265] The Justice and Equity Centre considers the findings of the academic research shows consumers should have access to a range of plans, and this should include flat-rate offers.[266]

Box 9.4 EWON case studies of customers in NSW having their tariff changed after a smart meter is installed

Case study 1: Customer experienced a change to a demand tariff after agreeing to a free meter upgrade

A customer agreed to a free meter upgrade by his electricity retailer and was advised that there would be no costs associated with it or any changes to his tariff.

He received a rate rise notification from his retailer and researched transferring to a different retailer. He was advised by a prospective retailer that the tariff type had been changed on the national meter database from a single flat-rate tariff to a demand tariff. He considers that this was without his knowledge or informed consent.

He contacted his electricity retailer and requested that it rectify the error however it declined and advised that he could not go back to a single rate tariff now that the meter had been changed.

The retailer offered to apply a $300 customer service gesture to his account in recognition of the poor customer service that the customer had experienced.

Case study 2: Customer signed up to a flat-rate tariff and later discovered high bills due to demand charges

The customer signed up to the retailer's solar program as he understood it offered a flat-rate of $0.30 per kWh. When the customer checked his account after commencing on the plan, he discovered that the plan included demand charges, and that the retailer's website did not mention this.

The customer reviewed his bills, learning he had been charged $541.60 in demand charges between 18 July 2024 and 31 March 2024.

He contacted his retailer, which advised that during peak periods, the plan includes an additional charge, at a rate of $0.68 per kWh – more than double the flat-rate he had agreed to. His retailer only offered a customer service gesture of $200.

Source: EWON, *Submission to IPART Energy Market Monitoring consultation paper*, September 2024, pp 9-10.

9.6.1 Regulatory developments on consumer protections for changing tariffs

Some of these issues have recently been considered as part of the AEMC's Accelerated Smart Meter Deployment review. In August 2024, the AEMC extended this review and published a directions paper proposing 2 additional consumer safeguards to address issues around consumer consent and the ability to choose a flat-rate tariff. These safeguards are:

- **A new explicit informed consent requirement** - customers would be required to give their explicit informed consent for retailers to change their retail tariff following a smart meter deployment. This right would last for 3 years after the customer receives the smart meter. Further additional information would need to be provided before a customer is moved to a time-of-use or demand tariff after this 3-year period.
- **A mandatory flat tariff option** – designated retailers would be required to make a flat tariff option available to all customers (regardless of the underlying network tariff).[267]

The AEMC will publish the Final Determination detailing the outcome of this review on 28 November 2024.

The NSW Consumer Energy Strategy also includes an action (Action 28) relating to explicit consent and demand tariffs. This action details the NSW Government will work to prohibit retailers from automatically assigning customers to demand tariffs without their explicit informed consent.[268]

Given the strong concerns raised in submissions around the impact of customers being moved (often without providing consent) onto demand tariff plans and customers typically not having the ability to move back to flat-rate tariff plans, we have used the sample of consumption profiles provided by the AEMC to quantify the impact on annual bills. Our analysis on this issue is presented below.

9.7 Demand tariff plans are typically more expensive than flat-rate and time-of-use plans

We analysed whether customers are likely to be better or worse off on demand tariff plans compared to flat-rate plans and time-of-use plans.

To conduct this analysis, we calculated the annual electricity bills of just over 200 residential non-solar customers in the Ausgrid network and just over 250 small business non-solar customers. These customers were on network demand tariffs for the entire 2023–24 financial year.

We did not have data on the retail tariff these customers were paying over this period. However, our understanding (supported by information in submissions) is that most customers on a network demand tariff are on a retail demand tariff plan.

For each consumption profile (that is, for each customer), we estimated the annual bill for most demand tariff plans, flat-rate tariff plans and time-of-use tariff plans published on Energy Made Easy on 16 September 2024.[i]

There are 3 distinct type of demand tariff plans offered on Energy Made Easy with different pricing structures and bills. As a result, we have grouped our analysis into the categories in Table 9.2 below.

Table 9.2 Category of retail plans presented in our analysis

Tariff type	Plan category	Requires a smart meter	Description
Flat rate	Flat-rate plans	No (typically not available if customer has smart meter)	• Plans have a flat rate for the usage charge.
Time of use	Time-of-use plans	Yes	• Plans have variable usage charges for peak, off-peak and shoulder periods and no demand charge component.
	Transitional time-of-use plan	Yes	• Plans available to customers who are on a transitional time-of-use network tariff. • Aim to transition customers from a flat-rate tariff to a time-of-use tariff. • Classified as 'time-of-use' plans but offer a flat usage charge for all periods. • Do not include a demand charge component.
Demand	Demand tariff plan with flat usage charges	Yes	• Plans have a flat-rate usage charge and a demand charge. • Only a small number of retailers offered these plans.
	Transitional demand tariff	Yes	• Plans available to customers who are on a transitional network demand tariff. • Aim to transition customers onto a demand tariff plan. • Have a flat usage charge and a demand charge.
	Demand plan	Yes	• Plans have variable usage charges for peak, off-peak and shoulder periods and a demand charge. • Most common among demand tariff plans.

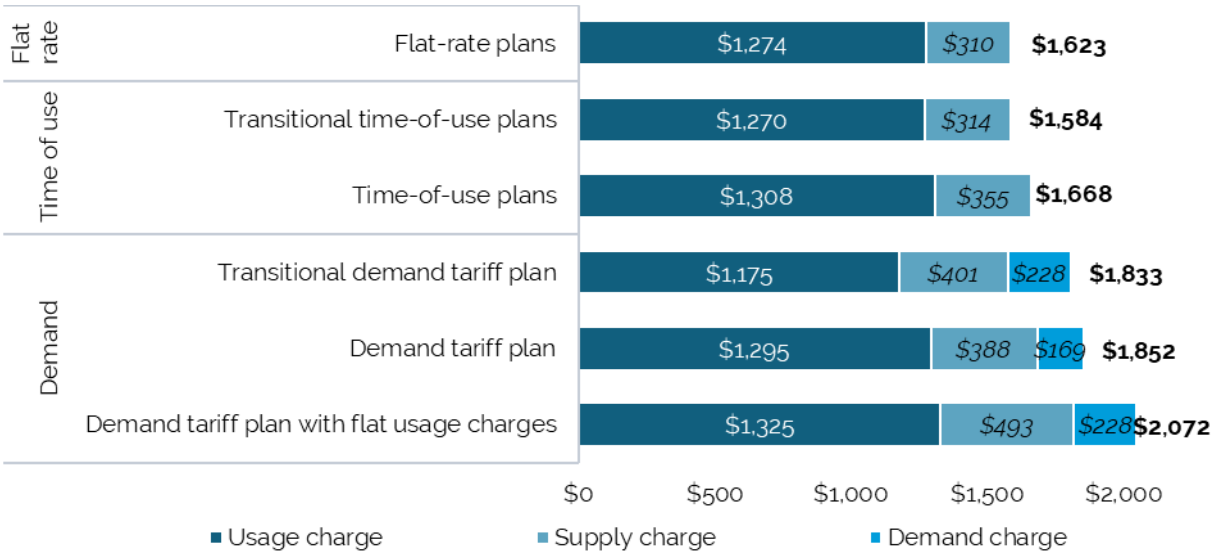
9.7.1 Estimated annual bills for residential customers

We have found that the average and median residential demand tariff plans are more expensive than average and median flat-rate tariff plans and time-of-use tariff plans (Figure 9.7).

This is because the average supply charge and average usage charge are broadly similar under all plan types, however demand tariff plans include the additional demand charge component. On average, for a typical customer using between 4,000 and 4,500 kWh, this demand charge component can increase the total bill by up to several hundred dollars, depending on the type of demand tariff.

[i] This analysis included the large majority of demand tariff and flat-rate plans listed on Energy Made Easy as at 16 September 2024. However, it did not include all plans as we filtered out plans with restrictive eligibility criteria. Our filtering process is described in Box 9.2.

Figure 9.7 Average size of bill components by retail tariff type, Ausgrid residential customers with 4,000 to 4,500 kWh annual usage (excl. GST)



Notes: Figure calculates the average size of individual bill components under different retail tariff types, based on offers downloaded from Energy made Easy in September 2024.
This figure uses a sample of Ausgrid residential customers who used between 4,000 and 4,500 kWh in 2023–24, and whose network tariff classification was 'Demand'.
Excludes GST, discounts and membership fees.

Source: Energy Market Monitoring offers on 16 September 2024; Consumption profile sample data from the AEMC.

More broadly, our analysis found that across the range of offers available, there was a general pattern of flat-rate tariff plans having the lowest median (and average) annual bill, followed closely by time-of-use tariff plans. Demand tariff plans with flat-rate usage charges had the highest median (and average) annual bill cost across all usage levels (Figure 9.8).

The median demand tariff plan bill (and the average demand tariff plan bill) were always materially more expensive than the median flat-rate plan bill (and average flat-rate bill). To a lesser extent, the median and average demand tariff plan bills were also more expensive than the median and average time-of-use plan bills.[j] This trend is consistent for all types of demand tariff plans, including for transitional demand tariff plans and demand tariff plans with flat usage charges, and across all levels of electricity usage.

For every customer in our sample, there was always a materially better outcome available for flat-rate plans and time-of-use plans compared to demand tariff plans (including across each type of demand tariff plan). We found:

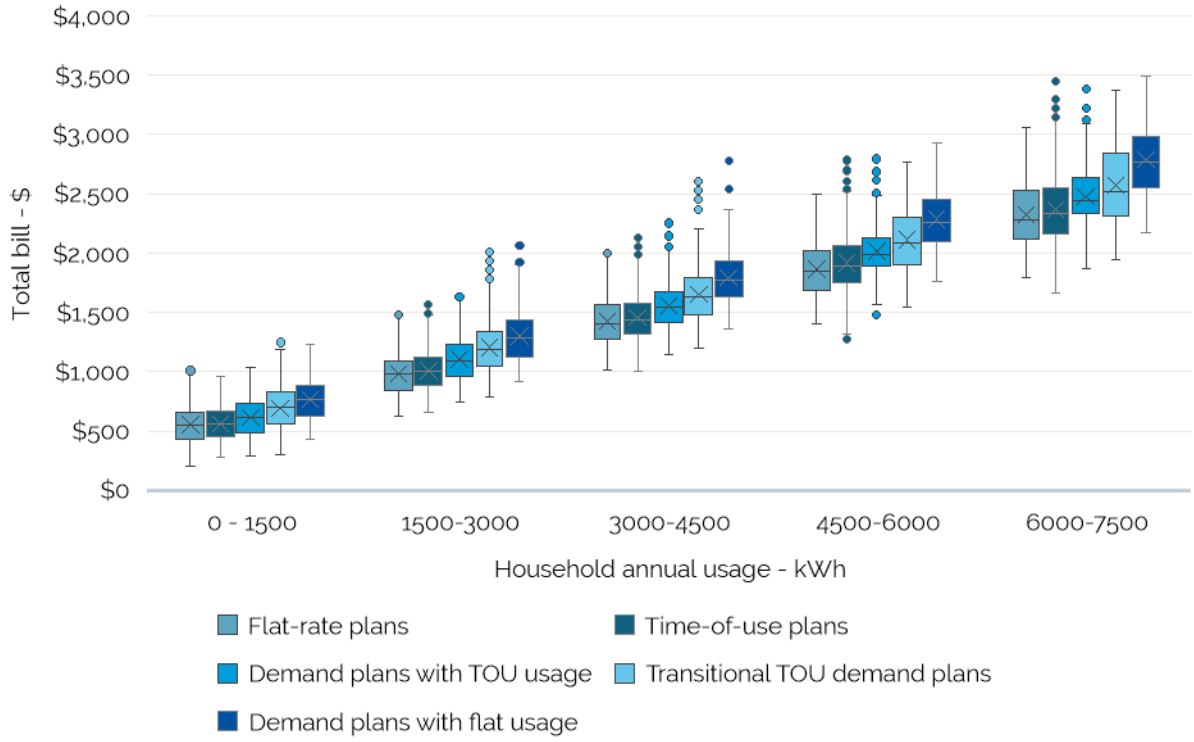
- the cheapest demand tariff plans with flat-rate charges were more expensive than 25% of all flat-rate tariff plans and time-of-tariff use plans
- demand tariff plans with time-of-use or transitional usage charges were still more expensive than between 10% to 20% of flat-rate tariff plans and time-of-use tariff plans.

In addition, we found a high amount of overlap between the range of bill outcomes for time-of-use tariff plans with the range of outcomes for flat-rate tariff plans. However, the range of time-of-use plan bills is marginally higher.

[j] Our sample included residential customers whose total annual consumption in 2023-24 was less than 7,500 kWh.

Customers with smart meters can request a change to their network tariff from a network demand tariff to a network time-of-use tariff (and vice versa). As a result, customers who do not want to remain on a demand tariff plan can be moved to a time-of-use tariff plan.[k]

Figure 9.8 Distribution of residential bills by plan type (traditional flat-rate vs demand plans) and annual usage, Ausgrid 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 Market Monitoring offers as at 16 September 2024; Consumption profile sample data from the AEMC.

9.7.2 Estimated annual bills for small business customers

Based on our sample of small business customer's consumption profiles,[l] we found:

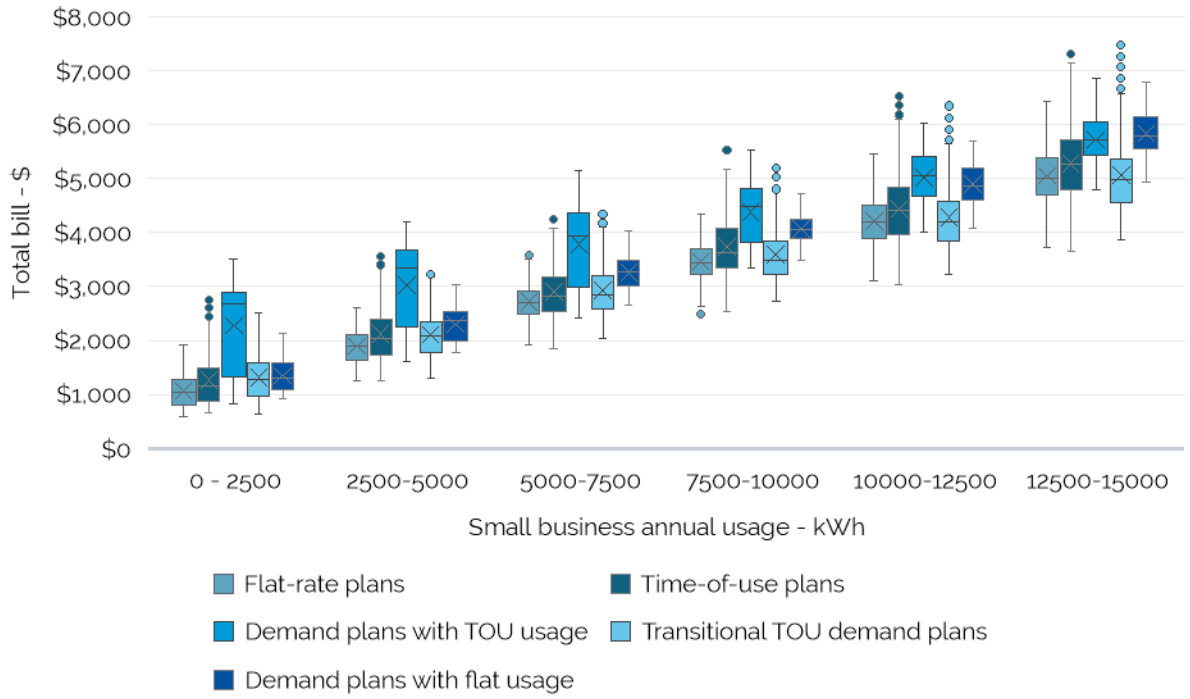
- demand tariff plans with time-of-use usage charges resulted in a higher median (and average) annual bill compared to all other types of plans
- transitional time-of-use demand plans had a similar annual bill range compared to flat-rate tariff plans and time-of-use tariff plans, particularly for small businesses with a consumption level around that used in the Default Market Offer.

[k] Customers may only request a network tariff reassignment once every 12 months.

[l] Our sample included 255 non-solar small business customer's consumption profiles in the Ausgrid distribution network. Each small business customer was assigned to a network demand tariff for the entire 2023-24 financial year.

Based on the sample of consumption profiles we analysed, small business customers were typically better off on either a flat-rate tariff plan or transitional demand tariff plan (Figure 9.9).

Figure 9.9 Distribution of small business bills by plan type (traditional flat-rate vs demand plans) and annual usage, Ausgrid customers ($)



Source: Energy Market Monitoring offers as at 16 September 2024; Consumption profile sample data from the AEMC.

9.8 Retailers are not mirroring the structure of network tariffs in their demand tariffs

When a retail electricity plan includes a demand charge, we would expect the supply and/or usage charges to be lower than those for flat-rate tariff plans or time-of-use tariff plans (non-demand tariff plans). This is because we expect a portion of the network cost would be recovered through the demand charge.

However, as shown in Section 9.7.1 and Figure 9.7, on average, demand tariff plans have similar supply and usage charges to those of flat-rate tariff plans and time-of-use tariff plans. In general, it appears that retailers add the demand charge on top of supply and usage charges without reducing the supply and usage charges. This results in demand tariff plans being, on average, more expensive than non-demand tariff plans.

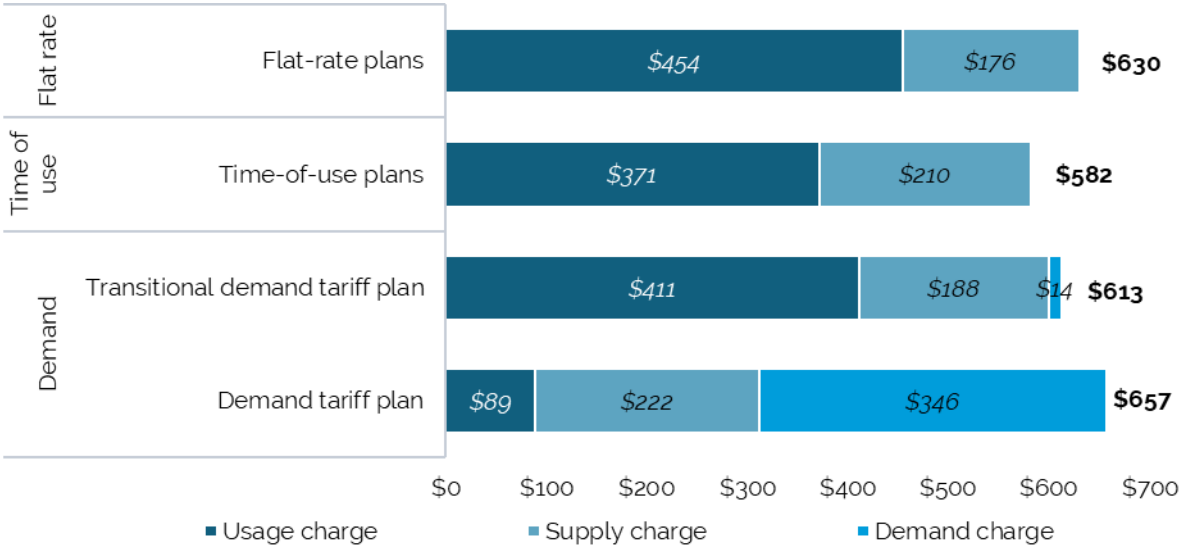
To understand whether this may result from network costs or retail pricing, we calculated network costs using the same sample of customers in Figure 9.7. We used Ausgrid's 4 residential network tariffs:

- Residential flat-rate *closed* – EA010
- Residential time-of-use – EA025
- Residential demand (introductory) – EA111
- Residential demand – EA116.[269]

We found that network usage charges are significantly lower for network demand tariffs compared to network flat-rate or time-of-use tariffs. In addition, a higher portion of the total network cost is recovered through the demand charge. This results in the total network costs of different tariff types being roughly similar, depending on the customer's total usage (Figure 9.10).

Comparing the total retail plan annual bills and annual network costs for our sample of residential customers with an annual usage between 4,000 and 4,500 kWh, we found that, on average, retail demand tariff plans were 14% more expensive than retail flat-rate tariff plans. However, the average demand tariff *network costs* for this sample of customers was only 4% higher than flat-rate network costs.[m]

Figure 9.10 Average network costs by tariff type, based on a sample of Ausgrid residential customers with 4,000 to 4,500 kWh annual usage (excl. GST)



Notes: Figure calculates the average size of network bill components under Ausgrid's 4 residential tariffs.
Figure uses a sample of Ausgrid residential customers who used between 4,000 and 4,500 kWh in 2023–24, and whose network tariff classification was 'Demand'.
Excludes GST, discounts and membership fees.

Source: Consumption profile sample data from the AEMC; Ausgrid's Network Price List 2024–25.

9.9 Customers without consumer energy resources in the Ausgrid network are likely to be worse off on demand tariff plans

A key finding of our analysis is that customers who have a smart meter installed may in effect be locked out of a wide range of flat-rate plans that could have lower electricity bills (based on our sample of consumption profiles).

This may be one factor that has contributed to the reported cases of bill shock where customers are moved from a flat-rate tariff to a demand tariff after the installation of a smart meter, and they experience a significant increase in their bill.[270]

[m] This is consistent with Ausgrid's analysis of the median impact on the network bill when a customer moves from a flat-rate network tariff to a demand network tariff. Ausgrid, *Attachment 8.3: Network bill impacts*, 30 November 2023, p 39.

This appears to still be the case even if the customer was able to adjust their usage to the new pricing structure of the demand tariff (given we only used the consumption profiles of customers on network demand tariffs for the entire 2023–24 financial year).

As discussed above, consumers who use Energy Made Easy to estimate the cost of a demand tariff plan are not shown the demand charge component. As a result, if consumers are making comparisons only using the information shown on Energy Made Easy, then many demand tariff plans would appear to have a similar annual cost to flat-rate or time-of-use tariff plans.

Further, if customers are seeking a flat-rate usage charge but have a smart meter installed, they would be able to choose a demand tariff plan with a flat usage charge. These plans were on average the most expensive and were materially more expensive than flat-rate plans without a demand tariff.

As discussed earlier in this chapter, as part of the AEMC's Accelerated Smart Meter Deployment review, the AEMC has proposed a rule change to ensure that customers with smart meters can still have access to a flat-rate plan. This analysis shows that this would only partially address customers' concerns. Under the proposed rule change, customers on demand plans would still only be limited to switching to a flat-rate *standing* offer.

However, standing flat-rate plans do not offer a materially better outcome compared to demand plans for most customers; this is because the cheapest demand plans have a similar annual bill to standing offer flat-rate plans. This suggests that even with the proposed rule change, customers with smart meters continue to face higher bills relative to what they could achieve with access to flat-rate market offers.

It is important to note that these findings won't apply uniformly to all customers, due to varying individual circumstances. Customers who can effectively manage their peak demand – such as by staggering the use of high-energy appliances – may reduce the higher costs associated with demand charges. Further, this analysis excluded solar customers, who may potentially be better off on plans with demand charges.

9.10 Given their complexity, more analysis is required to demonstrate the benefits of demand tariffs for different types of customers

To date, most of the customers that have had smart meters installed and assigned to demand tariffs have been solar customers. However, the accelerated deployment of smart meters means that all electricity customers in NSW will have a smart meter by 2030. While we expect the uptake of consumer energy resources to continue to increase, many customers will continue to rely on their retailer to provide all of their electricity. In particular, batteries and solar may be less accessible to customers that are renting and/or living in apartments.

Given the complexity of demand tariffs, we consider that further analysis is needed to demonstrate whether the current structure of these tariffs is suitable for the changing mix of customers that will be assigned to them.

Under the National Energy Rules, the network tariffs of a DNSP should reflect the DNSP's efficient costs of providing those services to the retail customer.[271] We support the application of tariff structures that provide customers with effective price signals about when to use electricity, based on the costs of providing it. Price signals will be effective if they are well-understood by customers, or if it enables technology to optimise usage.

If residential and small business customers are able to respond to these price signals and shift their usage to times when electricity is less costly to produce, then the existing assets could be used more efficiently and the overall costs of supplying electricity would be lower than otherwise (that is, if no change in usage patterns occurred).

We consider that the design of the demand charges is likely to be effective for large customers where they have reasonably consistent demand for energy from day to day. Particularly for energy-intensive businesses, demand tariffs can send a strong signal to invest in energy efficient solutions or shifting their high demand activities that will result in a consistent reduction to their maximum demand. However, there are likely to be significant differences in residential and business usage that affect the cost-reflectivity and incentive properties of the proposed demand tariffs.

It may be that residential and small business customers' overall energy use is relatively low at any given point in time, so that any one particular action, or a combination of a few actions, such as vacuum cleaning, or boiling the kettle, can have a large impact on a household's usage at a point in time (i.e. a 30-minute window). This may not be reflective of their general usage patterns. A customer's peak usage may be a one-off (i.e. does not reflect "normal" usage) – but will still set their demand charge for the period (typically a month).

If there is significant variability in a customer's peak demand from day to day, then further work should be done to understand whether there is a strong correlation between the customer's peak demand day and the peak demand day on the network. If there is not a strong correlation, then a time-of-use tariff, which takes into account usage across the whole month in calculating the customer's costs for peak use, may be just as cost-reflective as a demand tariff.

In our view, further work is also required to determine whether demand tariffs are likely to provide a stronger incentive to residential customers to shift demand compared to more simple time-of-use tariffs. For demand tariffs, to reduce the demand component of their bill, a customer would need to reduce their maximum demand on every day of a month. This may not be achievable for many residential customers. Unlike a time-of-use tariff, once a customer has had a "high-demand" day, the demand tariff design does not reward them for shifting behaviour on other days (including the network peak days).

In applying cost-reflective tariffs, DNSPs also need to comply with a range of other pricing principles. As discussed briefly in Section 9.5 above, one of these is that the tariff is able to be understood by retail customers when determining the structure of their network prices. Others relate to the revenue to be recovered, the long run marginal costs of providing the service, and the impact on customers.[272]

As energy usage patterns continue to change through the energy transition, tariff structures will need to continue to adapt to best comply with the different pricing principles. For example, in its most recent pricing proposal in 2023, Ausgrid discussed the need to ensure that prices do not create an unfair burden on customers who have less ability to control their network charges, such as those renting and living in apartments, who may be unable to invest in consumer energy resources.[273] A well-designed demand tariff – particularly one that reflects the network peak - may be an option for customers with consumer energy resources (who purchase less energy) to contribute to the residual costs of funding the network in a way that is more cost-reflective than other mechanisms (for example, applying higher fixed supply charges for these customers).

10 Retailer costs, margins and profits in NSW

Key findings

- The average wholesale price of electricity in NSW declined by 27% in 2023-24, compared to 2022-23. However, this decline was off a record high price level in 2022-23. The wholesale price in NSW in 2023-24 was still materially higher than wholesale price levels before 2020-21. Futures markets show that market participants expect the wholesale price of electricity in NSW is likely to remain elevated in the coming years.
- Network costs increased between 4% and 11% from 2022-23 to 2023-24, depending on the distribution network. Network costs are expected to continue to rise in 2024-25 between 7% and 16% depending on the distribution network. This will likely offset any decrease in wholesale electricity prices that may have flowed through to retail prices from lower wholesale costs in 2023-24.
- We do not consider a detailed review into the retail prices and profit margins in the NSW retail electricity market is warranted at this point in time. This is because the ACCC is currently undertaking an inquiry into prices, profits and margins in the National Electricity Market. The ACCC has power to ensure that any substantial and sustained reduction in the cost of procuring electricity is passed onto small customers and retailer margins have fallen in recent years and do not appear to be elevated.

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

The 2 largest components of a retailers are wholesale electricity costs and network costs. In aggregate, these costs make up over 75% of a typical retailers cost base and changes in these costs can have a material impact on electricity prices and retailer margins.

In this chapter we report on:

- changes in the wholesale cost of electricity over 2023-24
- changes in network costs over 2023-24
- trends in retailer margins in recent years.

10.1 Wholesale electricity costs rose sharply in recent years, but declined in 2023-24

As reported in Chapter 6, residential customers in NSW experienced material increases in their electricity prices (ranging from 31% to 37%, depending on the distribution network) over August 2022 to August 2023.

These increases followed a significant and sustained increase in wholesale electricity prices and contract prices over January 2022 to June 2022. The culminated on 12 and 13 June 2022 in the administered price cap being triggered in NSW (as well as Queensland, Victoria and SA).[a] The rapid rise in wholesale electricity prices was due to a combination of high international prices for coal and gas, an unusually cold start to winter and generator outages.[274]

Box 10.1 How wholesale electricity prices are set and how they impact retail prices

The National Electricity Market consists of a wholesale spot market for selling electricity and a transmission grid for transporting it. Generators make offers to supply quantities of electricity in different price bands for each 5-minute dispatch interval. Scheduled loads and large stores of electricity such as pumped hydro and batteries, also offer into the market.

A separate price is determined for each of the 5 National Electricity Market regions. This includes a separate price for the NSW region. Prices are capped at a maximum of $16,600 per megawatt hour (MWh) in 2023–24. A price floor of –$1,000 per MWh also applies.

AEMO uses forecasting and monitoring tools to track electricity demand, generator bidding and network capability to determine which generators should be dispatched to produce electricity. It repeats this exercise every 5 minutes for each region. AEMO dispatches the cheapest generator bids first then progressively more expensive offers until enough electricity can be produced to meet demand. The highest priced offer needed to cover demand sets the 5-minute price in each region.

Retailers buy power from the wholesale market and package it with network services to sell as a retail product to their customers. Retailers manage the risk of volatile prices in the wholesale market by taking out hedge contracts (derivatives) that lock in a price for electricity they supply to customers (and through other methods such as virtual power plants or demand response contracts).

[a] When an Administered Price Cap is in place, generators can only bid in the spot market up to a price cap and cannot go higher. In June 2022 the limit was $300 per megawatt hour (MWh).

Box 10.1 How wholesale electricity prices are set and how they impact retail prices

When wholesale prices (and contract prices) change, retailers may adjust the prices on their retail plans in response to this, however the degree and timing of this pass through often varies. The ACCC has discussed in some cases it can be several years for the full impact of changes in wholesale prices and contract prices to flow through to a retailer's cost base and customer bills.

Retailers adjust the price of market contracts more frequently than standing offer contracts. This is because retailers can adjust the prices on most market offer contracts (apart from those that have prices agreed for a fixed period) at any time as long as 5 days notification is provided to a customer. Retailers can only adjust the prices on standing offer contracts once every 12 months (which typically in early July each year when updated Default Market Offer prices apply).

Notes: In addition to bidding from generators and scheduled loads, from 2021, consumers (either directly or through aggregators) are also able to bid demand response directly into the wholesale market as a substitute for generation. Electricity generated by rooftop solar systems and used by the consumer is not traded through the National Electricity Market, but it does lower the demand that market generators need to meet generation.

Source: AER, *State of the Energy Market 2024*, November 2024, p 16 - 17; ACCC, *Inquiry into the National Electricity Market*, December 2023, p 43

As a result of the high and sustained increase in the wholesale price of electricity, the average wholesale price doubled from $72 per MWh in 2020-21 to $144 per MWh in 2021-22. Over 2022-23 the wholesale price of electricity remained elevated and averaged $157 per MWh.[275]

In 2023–24, wholesale electricity prices declined in NSW (and across all regions in the National Electricity Market). The weighted average spot price for NSW fell by 27% to $114 per MWh in 2023–24.[276] The AER observed that overall, wholesale prices over 2023-24 fell as a result of lower fuel costs, milder weather conditions, fewer coal supply issues and an increase in wind and solar supply.[277] The lower fuel costs were largely linked to government interventions,[278] which we detail in Box 10.2 below.

Wholesale prices were lowest from June to December 2023, before increasing from February 2024 due to high price events (both within NSW and the National Electricity Market).[279] In May 2024, a combination of unplanned outages at coal plants,[280] high demand and generator rebidding caused wholesale spot prices to surge (Figure 10.1).[281] As a result, the cumulative price threshold was breached again (the first time since June 2022).[282] AEMO suspended the NSW market; a safety net mechanism that triggers administered prices to stabilise wholesale spot prices and reduce financial stress for market participants.[283] Prices began to stabilise in late May and June.

In line with recent years, the average annual wholesale price for 2023–24 reflects a trend where spot prices are relatively low (and often stable) for most of the year, followed by short bursts of volatility and elevated prices (particularly in winter) which drives up the weighted average price for the year. This can be observed in Figure 10.1 where wide plateaus are interspersed with peaks each winter. The AER explained the volatile prices in early 2024 is demonstrating the current tightness in the demand-supply balance as part of the ongoing transition to greater reliance on renewable energy.[284]

While the average wholesale price dropped below the peak levels reached in 2021–22 and 2022–23, it has not yet returned to the levels experienced before 2021-22 (Figure 10.2). NSW was the highest priced region in the National Electricity Market over 2023-24 and NSW experienced the highest or second highest average price across the National Electricity Market in each quarter over 2023-24.[285]

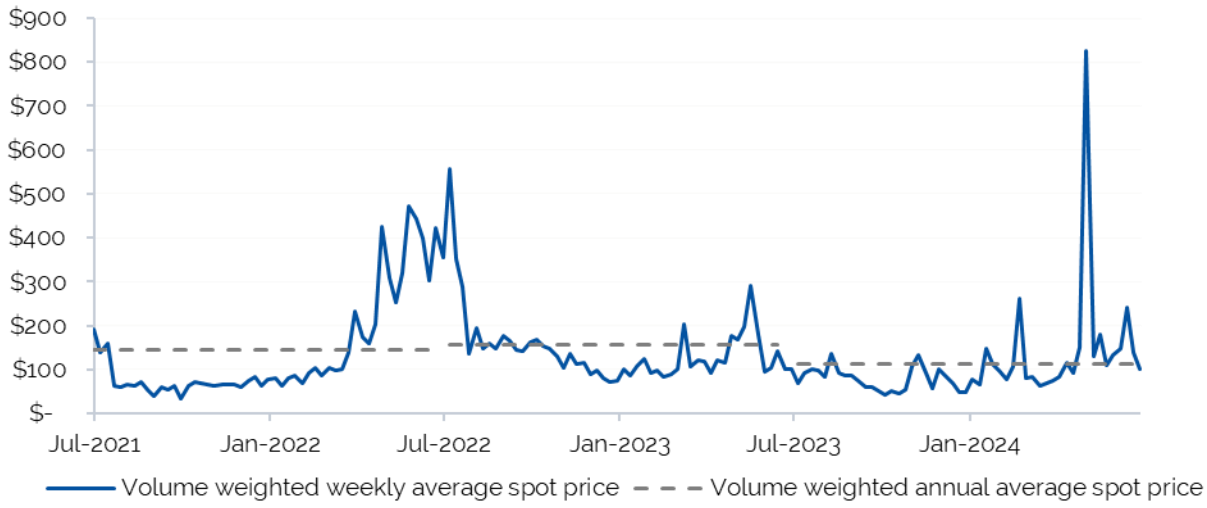
Box 10.2 Government interventions from 2022 to 2024

In late 2022, the Australian Government committed to abating price increases for gas and electricity over the next 18 months. It introduced several interventions in the form of price caps on coal and gas.

The Australian Government set a temporary price cap on coal used for electricity generation, limiting the price to $125 a tonne from December 2022 to June 2024. The Australian Government also capped gas prices at $12 gigajoules (GJ). These price caps incurred notable costs, with the price cap for coal costing the federal and state governments around $884 million. While government interventions help to limit the price of electricity, the costs are still ultimately borne by taxpayers.

Source: NSW Climate and Energy Action, *NSW coal market price emergency*, accessed 5 September 2024.; The Guardian, *NSW budget 2024: the biggest winners and losers*, accessed 5 September 2024.

Figure 10.1 Volume weighted average wholesale electricity spot price by week, and financial year, July 2021 to June 2024 ($/MWh, nominal)



Note: The chart above shows the weekly volume weighted average 30-minute electricity prices in the NSW region of the National Energy Market. The weekly average is weighted against demand for electricity.

Source: AER, *Industry charts: Weekly volume weighted average 30-minute prices - regions*, accessed 14 November 2024; AER, *Industry charts: Annual volume weighted average 30-minute prices - regions*, accessed 14 November 2024

Figure 10.2 Average wholesale electricity spot price by financial year, 2013–14 to 2023–24 ($/MWh, nominal)

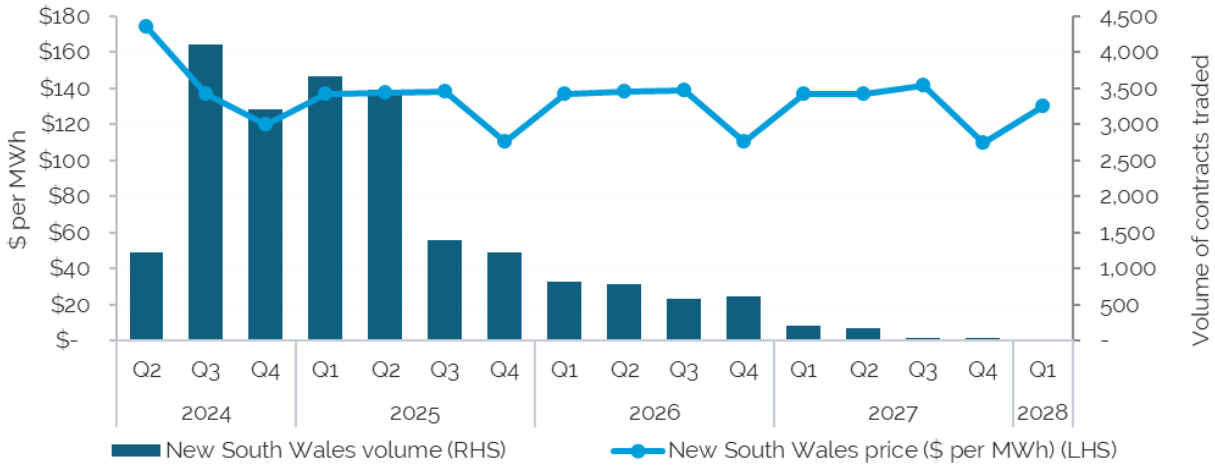
Note: Figure shows the annual volume weighted average 30-minute electricity prices in the NSW region of the National Energy Market. The average is weighted against demand for electricity.

Source: AER, *Industry charts: Annual volume weighted average 30-minute prices - regions*, accessed 14 November 2024

The AER has explained that price volatility is a natural feature of energy markets that can signal to the market that investment in new generation is needed. Currently, the high price volatility in NSW (and the broader National Electricity Market) is signalling additional investment in generation and storage is required, with price volatility having increased dramatically in the last few years.[286] We discuss the increased level of price volatility further in Chapter 3.

Pricing in contract markets shows that market participants expect wholesale electricity prices to expected to remain elevated (relative to the levels prior to 2020-21) in the coming years, with prices for baseload future contracts typically ranging between $120 and $140 for NSW (Figure 10.3).

Figure 10.3 Quarterly base futures prices and volume traded, NSW



Note: This figure shows the prices for base contracts (settled price on 28 June 2024) for each quarter for the next 4 calendar years as well as the volume of each base contract traded in the most recent quarter.

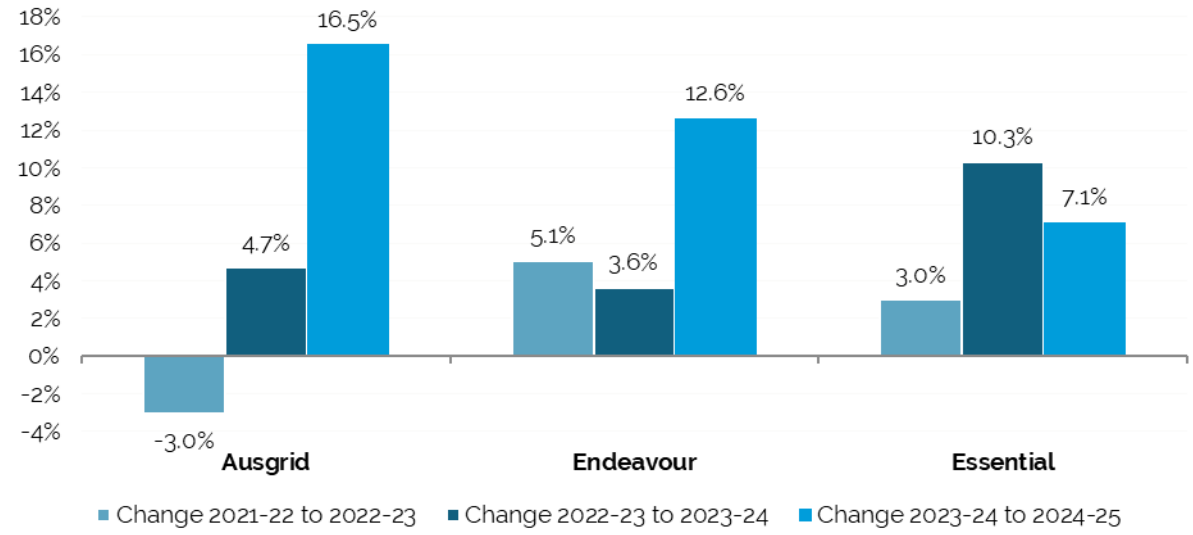
Source: AER, *Industry charts - Quarterly base futures prices and volume traded*, accessed 14 November 2024

10.1.1 Network costs continue to increase each year

While wholesale electricity costs declined fell from 2022-23 to 2023-24, network costs increased, between 3.6% to 10.3% depending on the distribution network. This was due to a range of factors including inflation, network investment and administrative costs associated with the NSW Government's Electricity Infrastructure Scheme.[287]

Network costs are set to continue increasing in the next financial year, as additional renewable, storage and network investments are built.[288] Figure 10.4 shows the change in the annual network costs associated with flat-rate residential customers for 2021-22 to 2024-25. Any reduction in wholesale costs from 2023-24 to 2024-25 is likely to be offset by rising network costs.

Figure 10.4 Change in network charges for residential 'anytime tariff' customers, without a controlled load, 2021-22 to 2024-25 (excluding GST, nominal)



Source: Ausgrid Network Price list, Endeavour Energy Network Price list and Metering Tariffs, Essential Energy Network Price list and Metering Tariffs.

10.2 We do not consider a detailed review of retail prices and profit margins in the NSW retail electricity market is required at this point in time

Under Section 234A(4)(g) of the National Energy Retail Law (NSW), we are required to report on whether there is a need for a detailed review of retail prices and profit margins in the NSW retail electricity and gas markets.[289]

We do not consider a detailed review of the retail prices and profits margins in the NSW retail electricity market is warranted at this point in time. This is because:

- the ACCC is currently undertaking an Inquiry prices, profits and margins in the National Electricity Market, which covers small customers in the NSW retail electricity market
- the ACCC has power under Part XICA of the Competition and Consumer Act to ensure that any substantial and sustained reduction in the cost of procuring electricity is passed onto small customers
- margins (measured by EBITDA per customer) for retailers for the supply of electricity to small customers in NSW have declined (in real terms) in recent years and do not appear to be elevated.

We provide further detail on each of these matters below.

10.3 Margins for retailers supplying electricity to small customers in NSW

As part of the ACCC's Inquiry into the National Electricity Market, the ACCC has collected data on the cost and retail margin for the supply of electricity to residential and small business customers in NSW.

The data that is currently available covers up to the 2022–23 financial year. The ACCC's December 2024 Inquiry report will include updated data on the cost stack and retail margin data for the 2023–24 financial year.

Box 10.3 What is included in each component of a retailers cost stack

A retailer's total cost stack comprises a number of components. These include

- **Network costs** – these are the costs charged by network operators to retailers for the transmission and distribution of electricity (for the use of the 'poles and wires' to transport electricity) and metering
- **Wholesale costs** – these are the costs of purchasing electricity from the wholesale spot market (or costs of generation for vertically integrated retailers owning generation assets), and of managing price exposure
- **Environmental costs** – the costs involved in complying with environmental (green) schemes, both state and national. This includes contributions to the NSW Climate Change Fund (which are recovered through network charges.
- **Retail and other costs** – the costs of running a retail business, such as billing, customer service, marketing and compliance.
- **Retail margin** – what a retailer earns after accounting for the above costs, 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 reflects a level of return for the risks faced by retailers in the market. A retailer's EBITDA does not include the retailer's earnings from other parts of the supply chain, such as electricity generation.

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

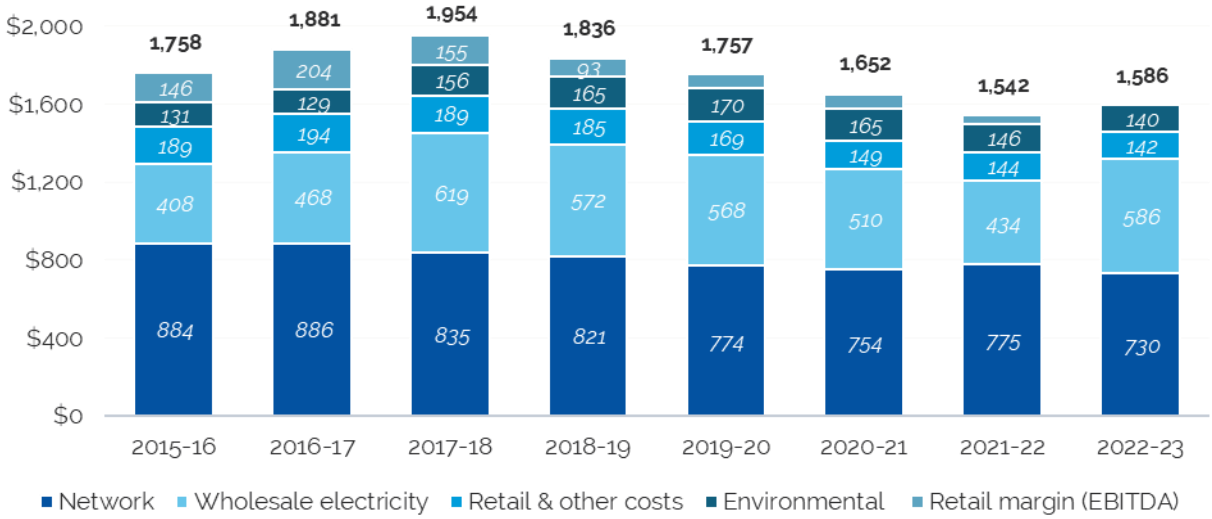
As can be seen in Figure 10.5 below, by 2022–23, the cost of supplying electricity to residential customers in NSW has declined (in real terms) after reaching a peak since 2017–18.[290]

This has primarily been driven by a reduction in network costs (which have fallen by $105 per customer in real terms during this period) and to a smaller extent a reduction in wholesale electricity costs which have fallen by $33 per customer over 2017-18 to 2022-23 and environmental costs which have fallen by $16 per customer over this period (in real terms).[291]

Further, retail margins have also decreased consistently since reaching a peak of $204 per customer in 2015–16. The retail margin per customer in NSW was -$12 in 2022–23.[292]

The ACCC reported the decline in the retail margin per customer in NSW was primarily caused by a substantial EBITDA loss by Origin Energy, attributed to higher coal costs increasing the cost of generation at the Eraring coal-fired power plant (which increased its wholesale costs) and a revaluation of Eraring's useful life that resulted in an accelerated depreciation of this asset. The ACCC reported that absent Origin Energy's NSW data, the average retail margin per residential customer would have increased substantially.[293]

Figure 10.5 NSW residential customers cost stack, per customer, real $2022–23, excluding GST



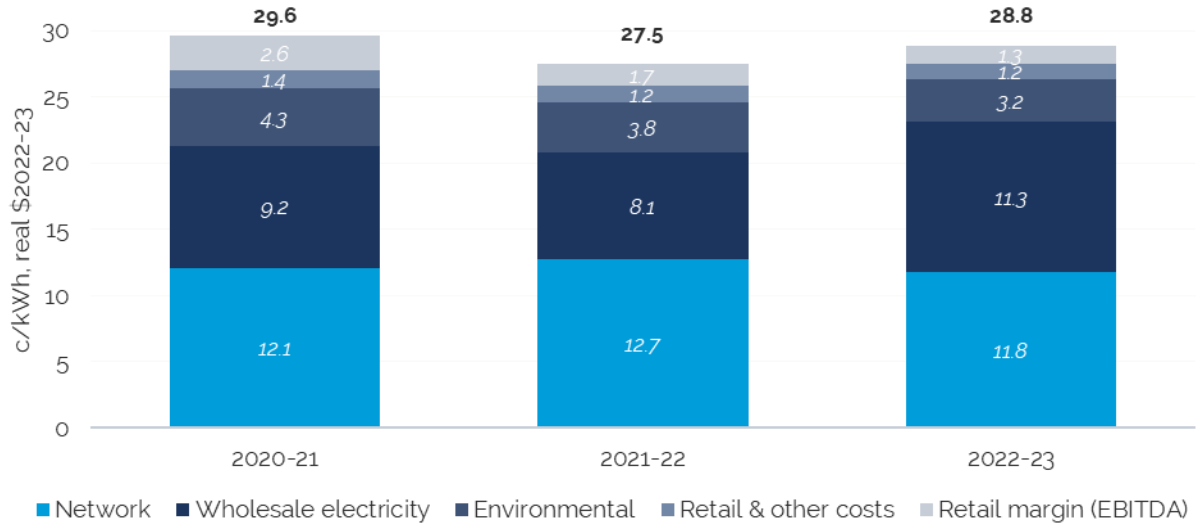
Source: ACCC, *Appendix C - Supplementary Excel spreadsheet with cost stack data and charts - Inquiry into the National Electricity Market - December 2023 report (XLSM 2.61 MB)*, December 2023

While data is not available on retailer costs and margins in NSW for 2023-24, the AER's Default Market Offer provides an indication of the direction and likely change in the cost stack of retailers for 2023-24 (Default Market Offer 5) and 2024-25 (Default Market Offer 6).

A shorter time series of data is available on the cost and margins for supplying small business customers in NSW.[b] As can be seen in Figure 10.6 below, the cost of supplying electricity to small business customers has decreased marginally since 2020–21 and retailer margins have also declined since then. However, as with residential customers, the size of the retailer margin has been influenced by the EBITDA loss from Origin Energy.

[b] Cost and margin data for small business customers in NSW is also report in c/kWh of electricity supplied, rather than in dollars per customer (which is how this data is reported for residential customers.

Figure 10.6 NSW Small Business Customer cost stack, per customer, real $2022–23, c/kWh, excluding GST



Source: ACCC, *Appendix C - Supplementary Excel spreadsheet with cost stack data and charts - Inquiry into the National Electricity Market - December 2023 report (XLSM 2.61 MB)*, December 2023

The ACCC noted in their December 2023 National Electricity Market Inquiry that alongside declining retail margins and retail costs over the longer-term, market concentration has also declined, and the number of active retailers has increased. The ACCC discussed that while these measures demonstrate positive signs for competition in retail electricity, recent results show these indicators of improving competitive pressure and pressure on margins appear to be plateauing.[294]

10.4 The ACCC's Electricity Market Monitoring Inquiry 2018 to 2025

On 20 August 2018, the Treasurer directed the ACCC to hold a public inquiry into the prices, profits and margins in the supply of electricity in the National Electricity Market.[295] The Terms of Reference require the ACCC to publish a report every 6 months until the end of the Inquiry period on 31 August 2025.[296]

Under this inquiry the ACCC is required to monitor and consider the following matters relevant to retailer pricing and profitability (in addition to other matters):

- electricity prices faced by customers in the National Electricity Market, including both the level and the spread of price offers
- analysing how wholesale prices are influencing retail prices and whether any wholesale cost savings are being passed through to retail customers
- the profits being made by electricity generators and retailers and the factors that have contributed to these
- contract market liquidity, including assessing whether vertically integrated electricity suppliers are restricting competition and new entry.[297]

To date, the ACCC has published 11 Inquiry Reports into the National Electricity Market. The remaining 2 reports will be published in December 2024 and August 2025.[298]

10.5 Part XICA of the Competition and Consumer Act 2010 – Prohibited conduct in the Energy Market

In June 2020, Part XICA was inserted into the *Competition and Consumer Act 2010*. This amendment prohibits conduct that, if engaged in by certain participants in electricity markets, can be detrimental to competition or to consumer welfare.[299]

Part XICA covers both NEM regions (including NSW) and non-NEM regions and sets out 3 types of prohibited market conduct in relation to retail prices, the electricity financial contract market and the wholesale electricity market.[300]

Regarding retail prices, this prohibition requires electricity retailers to make reasonable adjustments to the prices of their offers to reflect sustained and substantial reductions in their underlying cost of procuring electricity.

Part XICA is currently due to sunset on 1 January 2026, after the ACCC's Inquiry into the National Electricity Market concludes.[301]

11 Consumer energy resources, demand response and virtual power plants

Key findings

- NSW continues to have a strong uptake of consumer energy resources, particularly rooftop solar. There was close to 1 million rooftop systems installed by August 2024, with a total capacity of 6.6 GWh. Battery storage installations are also increasing as costs fall, improving the ability of consumers to store and manage their own electricity.
- Demand response programs have the potential to provide material benefits to consumers and the grid, however there is limited information on household and small business participation in these programs in NSW.
- Virtual power plants have the potential to enhance grid stability and reduce electricity costs for participating customers. However, the adoption of virtual power plants in NSW has been slower than expected due to factors such as lack of awareness and a lack of clarity in the benefits from joining virtual power plants.
- The virtual power plant market is still in the early stages of development and data from trials in recent years indicates virtual power plants are generally not yet profitable.
- We have been asked to report on demand response programs and virtual power plant services from 2025 in our Market Monitoring report. We will consult in 2025 on what information we should report on and what data and information we can use to support this new role.

Consumer energy resources, and in particular rooftop solar and batteries, are playing an increasingly important role in the operation of the National Electricity market, and the NSW retail electricity market. These resources enable individual consumers and group of consumers to generate or store their own electricity, export electricity to the grid and actively manage their own consumption.

Smart meters are essential to consumers obtaining the benefits from consumer energy resources.[302] Smart meters record electricity usage and export data in 5 or 30-minutes intervals. Smart meters combined with consumer energy resources have enabled DNSPs, retailers and other third-parties (such as aggregators) to:

- develop new tariffs, such as time-of-use and demand tariffs, that aim to price electricity more efficiently based on when it is consumed
- offer new products and services, including demand response programs and virtual power plants, that allow consumers to share in the benefit from reducing or shifting their consumption during certain times (or undertaking other behaviour).

Consumer uptake of these new tariffs and services is expected to continue as smart meters are progressively rolled out, the cost of consumer energy resources continues to decline and as technology (including smart applies) continue to evolve.

While these new plans and products can offer benefits to some customers, they also increase the complexity of electricity products and services. As discussed in Chapter 10, they can also increase the bills for customers without consumer energy resources.

In August 2024, we received a letter from the Hon. Penny Sharpe requesting that we include analysis in this report on demand response programs and virtual power plants in NSW and how they affect the performance and competitiveness of the NSW retail electricity market.[303]

This chapter details:

- IPART's ongoing role for demand response programs and virtual power plants in NSW
- the growth (and forecast growth) of consumer energy resources in NSW
- what demand response programs and how consumers in NSW can benefit from them
- what virtual power plants are, what virtual power plants are on offer in NSW and what consumers should consider when choosing a virtual power plant.

11.1 IPART's new role reporting on virtual power plants and demand response programs in NSW

The NSW Government's Consumer Energy Strategy (NSW CES) was released in September 2024. The strategy highlights the important role that virtual power plants and demand response programs will play in the energy supply chain in NSW. However, it also recognises the increasing complexity that can result from these services.[304]

As a result, the Consumer Energy Strategy included an Action (Action 24) that the NSW Government will require IPART to report on demand response programs and virtual power plant services in NSW in the annual Energy Market Monitoring report, starting from 2025.[305] The purpose of this new reporting requirement is to:

- provide independent advice to households and small businesses on the different energy retail offerings on the market, and the potential benefits to customers to help them make more informed decisions
- assist the NSW Government to determine if new consumer protections are required to ensure that customers receive the expected benefits from participating in these programs and promote new energy saving services to customers.[306]

In this report, we have included information on demand response programs and virtual power plants in NSW, based on information in submissions and from publicly available data.

We will consult with stakeholders in 2025 on how we will undertake this new function, what data we should report on and the information we may need to request from retailers, distribution network service providers or other aggregators.

11.2 The growth of consumer energy resources in NSW

NSW has experienced strong growth in rooftop solar installations since 2010 and more recently rising growth in the installation of battery storage systems and electric vehicles.

Below we report on the growth consumer energy resources in NSW including:

- rooftop solar installations and capacity
- battery storage system installations (when it is installed as part of rooftop solar system)
- electric vehicles sales.

11.2.1 Solar PV installations in NSW

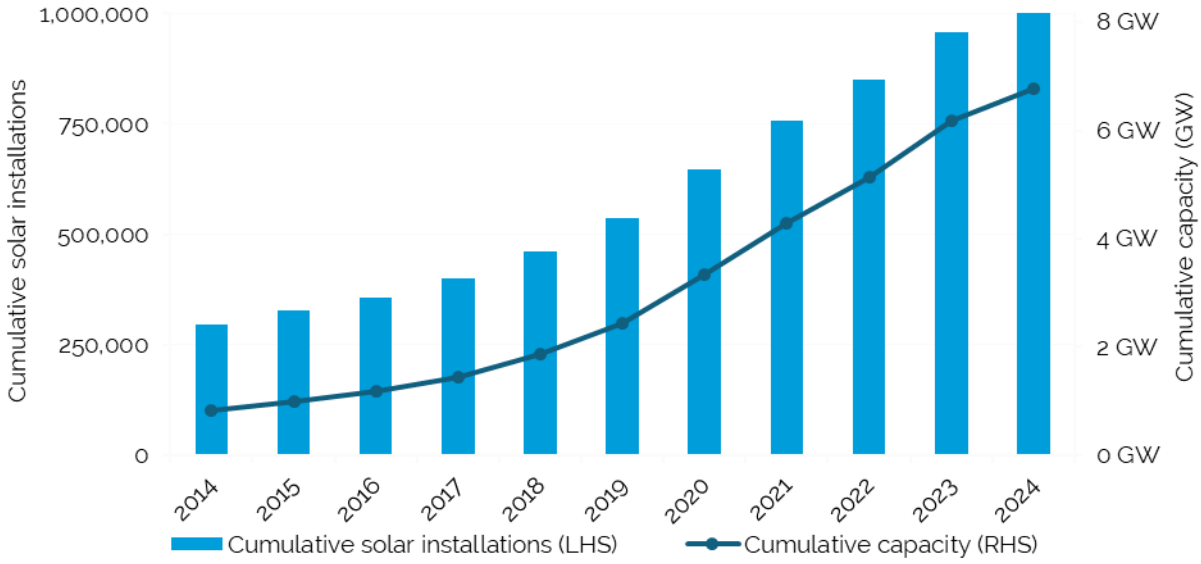
By installing solar panels, consumers can save on their electricity bills in 2 ways:

- the largest savings come from consuming the electricity generated directly, rather than purchasing electricity from their retailer
- consumers can also earn money for the unused electricity they export back into the grid for other customers to use.[307]

Unless solar panels are connected to a battery storage system, the energy cannot be stored for later consumption or for exporting at different times (such as peak periods).

Figure 11.1 shows that the number of solar PV installations and average capacity of solar systems installed each year has steadily increased as solar PV technology has become more efficient and affordable.[308] By August 2024, there had been around 1 million installations of rooftop solar in NSW, with a cumulative capacity of almost 6.8 GW.

Figure 11.1 Cumulative total installations of small-scale solar panel systems and capacity (GW) in NSW, 2001 to 2024 – residential and small business

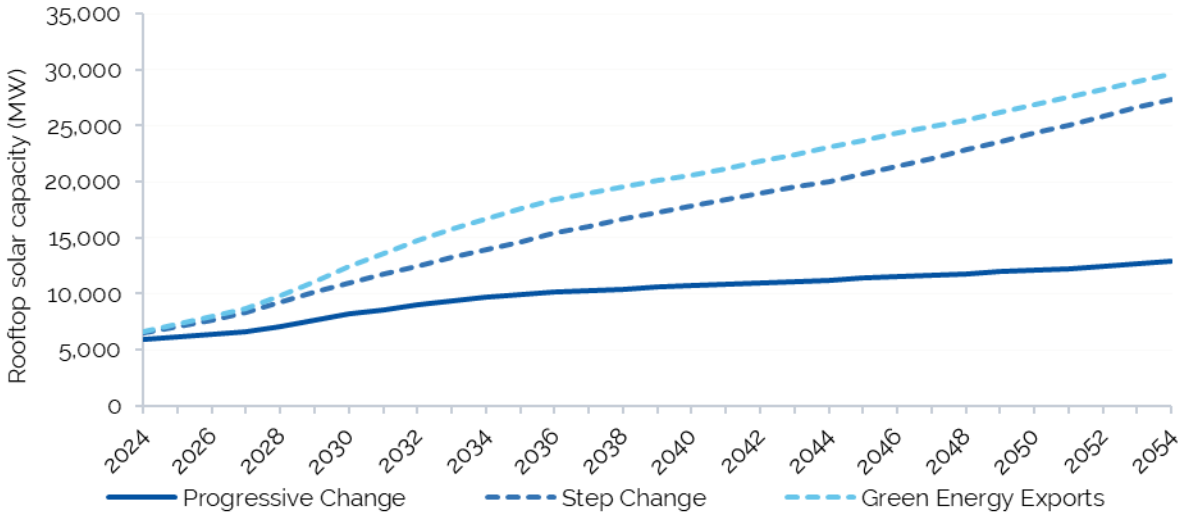


Note: Data available from March 2001 to August 2024. Figure includes both residential and small business installations and capacity. This data represents all systems that have had small-scale technology certificates created against them. The data includes new installations, upgrades to existing systems and stand-alone (off-grid) systems.

Source: Clean Energy Regulator, *Small-scale installation postcode data*, updated September 2024.

AEMO forecasts that NSW rooftop solar capacity will grow to between 8 GW and 12.5 GW by 2030, depending on the forecasting scenario (Figure 11.2). This projected growth is needed to support the State's energy transition contribute to meeting the NSW Net Zero Plan, which aims to achieve a 35% emissions reduction in NSW by 2030 compared to 2005 levels.[309]

Figure 11.2 AEMO forecast of NSW rooftop solar capacity (MW), 2024 to 2054, residential and small business



Note: Capacity values (MW) represent the installed capacity at the end of the financial year (as at 30 June).
Source: Rooftop PV forecasts based on CSIRO and Green Energy Markets (GEM) trajectories that were developed for AEMO in 2022.

AEMO collaborates with CSIRO and Green Energy markets to model 3 scenarios for rooftop PV adoption. These scenarios form the basis of AEMO's Integrated System Plan (ISP) and include:

1. **Progressive Change Scenario**: This scenario envisions a gradual transition towards renewable energy, aiming for a 43% reduction in emissions by 2030 and achieving net-zero emissions by 2050. It anticipates moderate growth in rooftop PV installations, reflecting steady policy support and technological advancements.
2. **Step Change Scenario**: Representing a more accelerated shift, the Step Change scenario forecasts rapid adoption of renewable technologies, including rooftop PV, driven by stronger policy interventions and societal commitment to addressing climate change.
3. **Green Energy Exports Scenario**: This scenario focuses on Australia's potential as a major exporter of green energy. It projects significant expansion in renewable energy capacity, including substantial growth in rooftop PV installations, to meet both domestic needs and international demand for clean energy.[310]

11.2.2 Small-scale storage in NSW

As the shift to renewable energy sources continues, both small scale and large-scale battery storage systems will play an increasingly important role to address the intermittency of wind and solar.[311]

Battery storage systems allow consumers to store surplus energy from rooftop solar system (or to charge these storage systems during off-peak periods) to then draw on when it is needed. This is playing an important role in reducing their demand for electricity from the grid during peak times. Community batteries or other distribution-connected batteries can also provide storage close to sources of rooftop solar generation.[312]

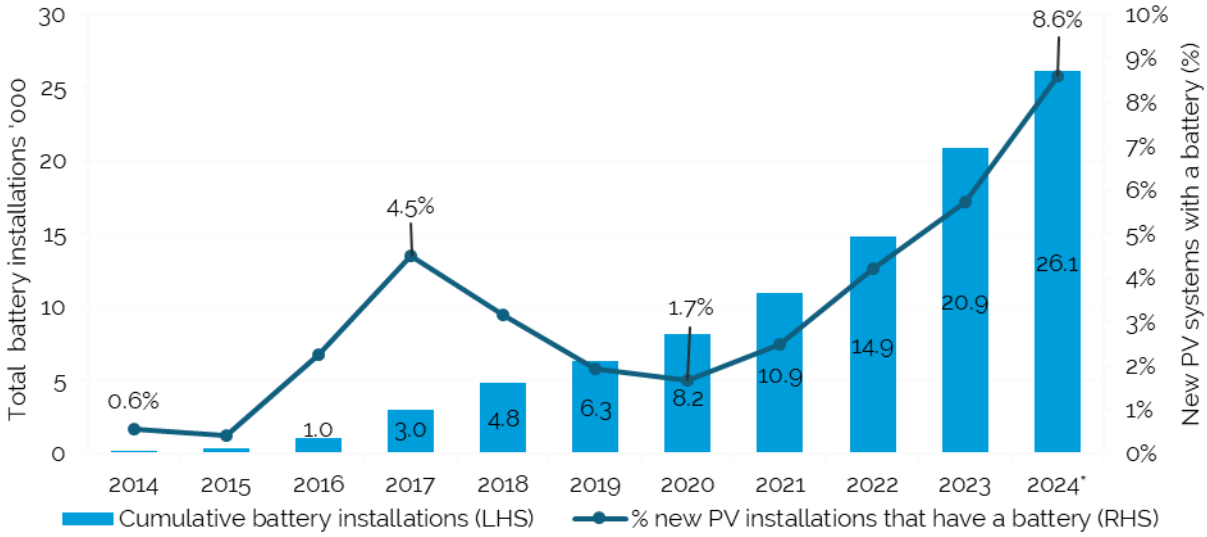
However, the extent of storage uptake and the significance of its future role in meeting peak demand in NSW is uncertain. This will likely depend on extent to which technological improvements can reduce the costs of batteries and evolving consumer attitudes.

There are far fewer small-scale battery installations in NSW compared to solar PV systems. As of 2022, only about 1.6% of households with a rooftop solar system also had a battery installed.[313] This is not surprising as recent modelling by the AEMC found battery installation may only become economics for households with solar already installed from around 2025.

Recent years have shown evidence of accelerated battery installations. Figure 11.3 indicates that:

- since 2014, more than 25,000 battery systems have been installed alongside rooftop solar systems, with over half of these installations happening in the last 3 years
- an increasing percentage of new solar systems are being installed with batteries, raising the overall proportion of households and small businesses that have both a solar system and a battery.

Figure 11.3 Cumulative total battery installations in NSW, 2014 to 2024, residential and small business



Notes: 2024 data covers up to 31 October 2024 and is based on voluntarily disclosed data for batteries that were installed at the same time as the solar PV system.
The collection of grid-connected installations with disclosed battery data commenced in September 2014.
'New PV systems with a battery (%)" is the percentage of new rooftop solar installations in each year that were installed concurrently with a battery. Excludes batteries not installed at the same time as the solar system (these are making up an increasingly large share of battery installations.
Source: Clean Energy Regulator, *Small-scale installation postcode data*, data as at 30 September 2024.

The AEMC's modelling found the benefits of owing a battery are increasing (due to rising peak period prices and the introduction of export charges for solar), while the cost of batteries are falling. This has resulted in a reduction in battery payback periods (the time it typically takes for the total savings from a battery to recover the upfront cost of the battery).

The AEMC estimated that average payback periods will fall around 10.1 years in 2022 to around 7.5 years in 2025. Importantly, the estimated payback period by 2025 (7.5 years) will be lower than the average life of a battery (9.8 years).[314]

Electric vehicle uptake will also have a significant impact on electricity supply and demand in NSW (and the NEM). While charging batteries of electric vehicles will likely generate significant demand for electricity from the grid, electric vehicle batteries may also supply electricity back to the grid at times of high demand as technology continues to evolve.

Electric vehicle (EV) uptake in Australia (and NSW) has been slower than in other developed countries but has started to accelerate since around 2021 as a result of falling costs and expanding charging infrastructure.[315]

In 2021, an estimated 2% of light weight vehicle sales in NSW were electricity vehicles, however this increased to an estimated 9% of light vehicle sales by the end of 2023.[316]

With the increasing uptake of rooftop solar and small-scale storage systems in NSW, a growing number of households and small businesses are on (or looking to switch to) electricity plans that enable them to take advantage of their solar generation or battery systems.

These may include plans that offer a solar feed-in tariff that pays customers to export excess electricity to the grid during certain times like in the evening,[317] or plans that offer dynamic prices which change throughout the day depending on the latest wholesale electricity price.[318] Energy Made Easy has the functionality to incorporate solar export credits into a customer's estimated bill, when the customer has solar panels and provides their National Meter Identifier. As a result, customers can see how solar feed-in credits impact their total bill.

11.3 Flexible demand

NSW (and more broadly Australia) is transitioning to a net zero energy system in which electricity will be sourced primarily from renewable generation sources including solar and wind. As the supply of energy becomes dominated by solar and wind, increasing the flexibility of demand to match or quickly adjust to fill in the gaps from renewable energy will become increasingly important.[319]

Flexible demand (or demand flexibility) is the capability to vary customer demand in response to generation, network or market signals.[320] Demand flexibility can be implemented in real time in response to market signals, network constraints or generation shortfalls (price-responsive) or scheduled in advance at times of known electricity supply abundance (scheduled).

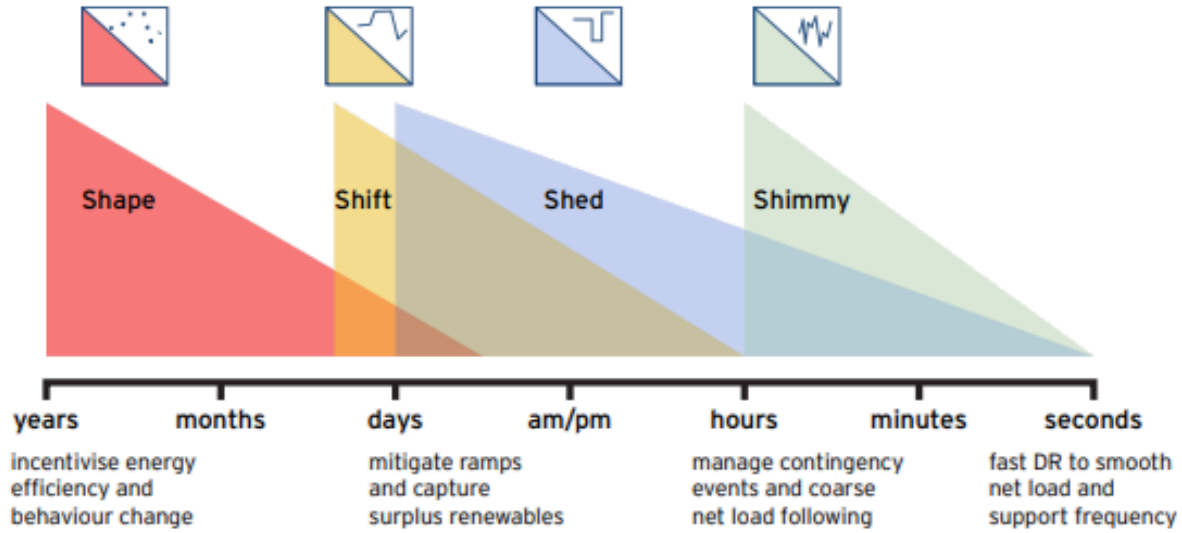
There are several types of flexible demand, which can be categorised by how quickly demand is able to respond to these generation, network or market signals.

Types of flexible demand include:

- **Shaping demand (shape) or shifting demand (shift)** – this involves 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 there is surplus solar generation.
- **Shedding demand (shed)** – this involves 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)** – this involves very rapid changes in demand to manage frequency. This is typically over millisecond to second timeframes. For example, battery charging or discharging.[321]

These different types of demand flexibility are shown in Figure 11.4 below, which also shows the speed of the demand response on the horizontal axis.

Figure 11.4 Types of flexible demand



Source: University of Technology Sydney, *Flexible demand - the current state of play in Australia*, May 2024, p 7

A 2022 study by NERA Economic Consulting, commissioned for ARENA, found that flexible demand could achieve savings in generation and storage costs in the NEM that range from $3 billion to $18 billion, depending on the scenario modelled.[a]

This study also found that the largest savings across each scenario modelled were from matching residential hot water heating with solar generation, electric vehicle smart charging and greater flexibility in residential air-conditioning and commercial heating, ventilation and air conditioning.[322]

Demand response programs and virtual power plants are 2 types of flexible demand. We provide details on each of these below.

[a] These scenarios included a base case (which is the current state of the world), high EV uptake, high electrification, high CER uptake and high hydrogen uptake).
The study did not include estimated network benefits.
Source: NERA, *Value Loading Flexibility in the NEM*, commissioned by AREANA, 2022

11.4 What are demand response programs?

Demand response programs are one type of flexible demand that residential and small business customers can participate in.

Demand response is the voluntary reduction or shift of electricity use by customers, which can help to keep a power grid stable by balancing its supply and demand of electricity.

When many households and small businesses make small adjustments to their demand during peak times, it can lead to significant benefits for the wholesale market and the grid. Customers in NSW can participate in demand response programs run by retailers, DNSPs or third-party service providers (Table 11.1).

The most common type of demand response programs offer consumers financial incentives to reduce electricity consumption at certain times of the day or when the receive an alert from the retailer or DNSP. Two retailers included details of their demand response programs in their submissions. We summarise these in Box 11.1 below.

Box 11.1 Examples of demand response programs included in submissions

- **AGL Peak Rewards programs** – this program allows customers to participate in a 1 to 3-hour peak event where customers can earn credit if they reduce home energy use. AGL notifies each participant (via SMS) of how much they will need to lower their energy use by (their reduction target in kWh). This target is based on the customers' past energy usage in similar weather conditions. If the customer meets the target, they receive up to $5 bill credit for each 1 hour event or $10 bill credit for each 2 or 3-hour event.

  AGL's submission noted it has 160,000 members in this program which has delivered a 481 MWh reduction in peak energy usage and $2.2 million in customer rewards.

- **Origin Spike** – manual demand response program. Origin notifies (via email or SMS) about an upcoming peak period (SpikeHour) and customer opt-in if they wish to participate. Several days' notice is typically given. If customer reduce energy during the specified period (SpikeHour), compared to their previous 10 day average usage they earn a Spike currency *'Watts'*. This can be redeemed for cash or gift cards from participating retailers.

Source: Origin, *Submission to the Energy Market Monitoring Consultation Paper*, September 2024, p 3; AGL, *Submission to the Energy Market Monitoring Consultation Paper*, September 2024, p 2

Demand response programs are more commonly used in the USA, Japan, New Zealand and the UK. In some States in America, demand response is used to meet over 10% of peak demand for electricity, while over 16% of peak demand in New Zealand is met through demand response.[323]

Currently, there is limited information on household and small business participation in demand response schemes. This includes little information on:

- the number of customers in NSW who participate in demand response schemes
- the total capacity of these schemes
- the value of benefits to consumers, retailer or aggregators for participation.[b]

We will consult in 2025 on how we can best report on demand response programs in NSW and what data we will need to do this.

11.5 Virtual power plants

11.5.1 What are virtual power plants?

Virtual power plants are networks of energy resources that work together to deliver services traditionally performed by conventional power plants.[324] In NSW, virtual power plants focus on coordinating rooftop solar and battery storage systems.

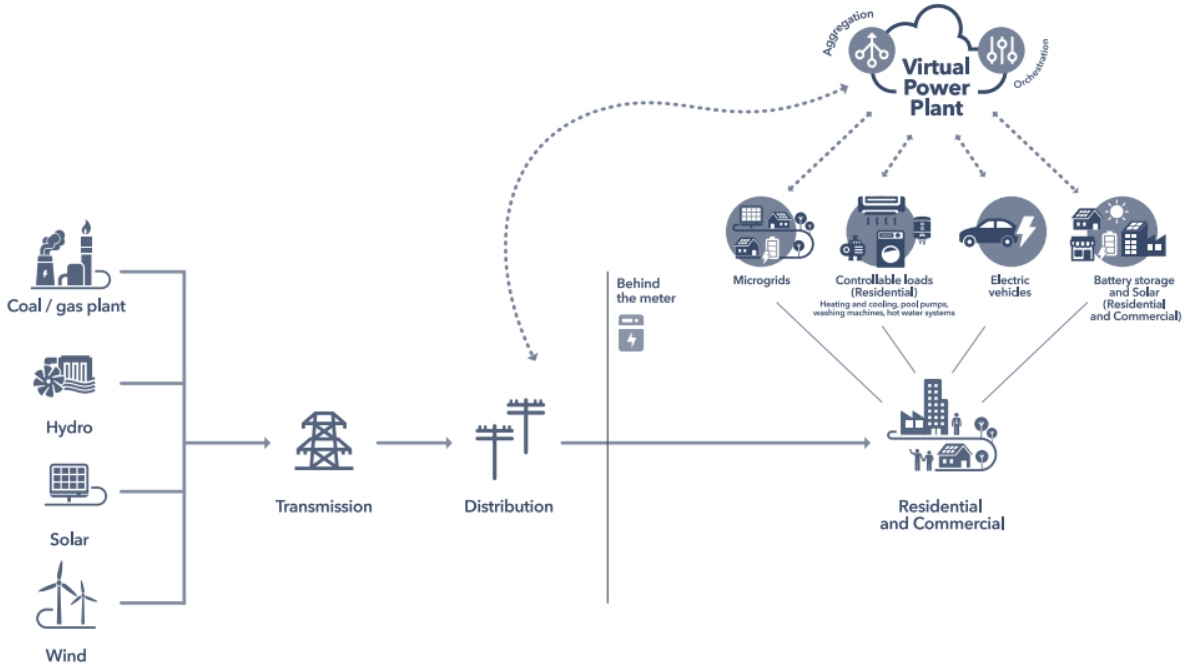
Virtual power plants are managed by a central operator or 'aggregator'. Aggregators contract with consumers for access to their energy resources under certain conditions (for example, when wholesale prices are high) or for a maximum number of times per year.[c, 325] Aggregators then use software to coordinate the resources in the virtual power plant and manage when energy is consumed, stored and exported to the grid.[326]

Figure 11.5 shows an example of a virtual power plant where the aggregator coordinates a range of energy resources owned by residential and commercial customers. The energy that is generated and stored through the consumer energy resources can be supplied to other customers in the virtual power plant or exported back to the grid. Batteries in virtual power plants can also be coordinated to respond to price signals in the wholesale and frequency control ancillary services markets.[327]

[b] While there is some reporting in the annual reports of retailers on demand response programs, this reporting is usually aggregated across regions in the National Electricity Market and across different customer types (for example, small customers and commercial and industrial).

[c] Some virtual power plants also have a requirement for unrestricted access; however these are less common.

Figure 11.5 Example of a virtual power plant coordinating consumer energy resources



Source: AEMO, *AEMO NEM Virtual Power Plant Demonstrations: Knowledge Sharing Report #4*, September 2021, p 17.

11.5.2 What are the potential benefits of virtual power plants?

Potential benefits for the electricity system

Virtual power plants have the potential to provide a range of benefits to the energy supply chain.

Virtual power plants can benefit the electricity grid by reducing maximum demand. They are able to respond to changes to supply and demand on the electricity grid almost instantly, by drawing extra power from batteries to smooth out fluctuations. This makes it possible for virtual power plants to help keep the grid stable and there is the potential for fewer disruptions and a more reliable electricity supply in period of high demand.[328]

Further, better integration of consumer energy resource (including through virtual power plants) in the National Electricity Market could lead to more efficient network and wholesale market services. This would reduce the overall cost of providing reliable electricity to consumers.[329]

The AEMC has published a draft rule to better integrate consumer energy resources into the National Electricity Market by allowing aggregated consumer energy resources (such as virtual power plants) to be scheduled and dispatchable.[330] Modelling by the AEMC predicts that, if the rule is approved, cost savings of up to $2 billion between 2025 and 2050 could be achieved.[331]

AEMO has also estimated that if consumer batteries are coordinated effectively in the National Electricity Market, it would have the potential to help lower costs by offsetting the need for an additional $4.1 billion in grid-scale investment.[332]

Potential cost savings for virtual power plant customers

By accessing the capacity of virtual power plants, retailers can avoid paying higher prices for electricity they would otherwise need to purchase on the spot market. This is particularly beneficial to retailers in periods of high price volatility or if they are underhedged. This could result in lower bills for virtual power plant customers if these cost savings are passed through.

We analysed the virtual power plant offerings in NSW in August to October 2024. Across the offers available, we identified 4 different ways that consumers could potentially benefit and be rewarded for participating in a virtual power plant. These are:

- **Credits and upfront payments** – some virtual power plants offer customers monthly credits on their electricity bill, ranging from $15 to $40[333] or sign-up bonuses which ranged from $100 to $500.[334] These were the most common type of benefits across the virtual power plants on offer in NSW.
- **Feed-in tariffs** – some virtual power plants offer customers higher feed-in tariffs than standard electricity plans, ranging from 55 cents per kWh in addition to standard feed-in tariffs, up to $19 per kWh in some circumstances (Table 11.1).
- **Discounts on battery and solar systems** – some virtual power plant providers also sell solar and battery systems. These providers typically offered discounts on solar and battery systems, if the customer joins the virtual power plant. These discounts ranged from $1,000 to $4,950,[335] however customers may be locked into the virtual power plant for a specified period of time (for example, 3 to 7 years).
- **Profit sharing agreements** – a small number of providers offered profit sharing agreements. For example, Discover Energy, has a profit-sharing arrangement with its customers where the customer receives 50% to 80% of the profit[d] on the energy that they export back to the grid, depending on whether they initiate the trade or Discover Energy does.[336]

In the cases of discounts, upfront payments and credits and guaranteed monthly credits the virtual power plant provider takes on the risk of insufficient financial returns. In the case of higher feed-in-tariffs and credits when their battery is discharged, customers are taking on the risk that they will not recoup the upfront costs associated with joining the virtual power plant program.

[d] The profit is calculated based on the wholesale electricity market price at the time the trade occurred.

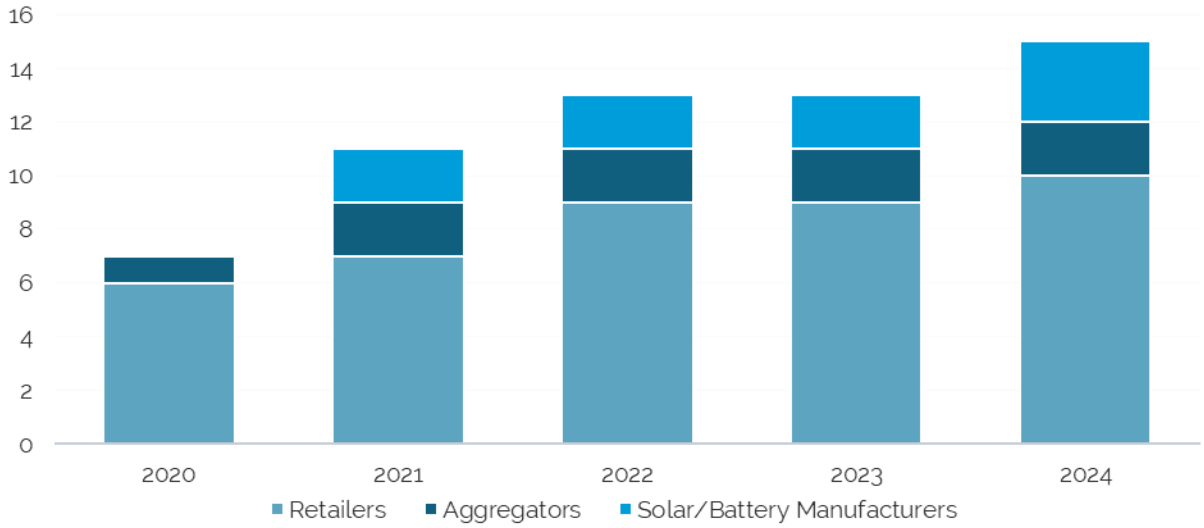
11.5.3 What virtual power plant programs are on offer in NSW?

We conducted desktop research in August to October 2024 and identified 18 virtual power plant programs on offer in NSW from 15 different virtual power plant providers. The virtual power plant providers include:

- the big 3 retailers in NSW (Origin, AGL and EnergyAustralia)
- a range of smaller retailers, including Amber, Diamond Energy, Discover Energy, Engie, Nectr and Powershop
- aggregators including Reposit and Sonnen
- solar and battery manufacturers including Tesla, Shinehub and Solar hub.

Figure 11.6 shows how these different providers have changed over time. Since 2020, at least 14 virtual power plant providers entered NSW and 6 have left. There are 5 virtual power plant providers that have had offerings in the market continually since 2020. These are Engie (previously trading as Simply Energy), AGL, EnergyAustralia, Sonnen and Discover Energy.[337]

Figure 11.6 Number of virtual power plant providers in NSW



Sources: AEMC, *Retail Energy Competition Review 2020 VPP offers available*, 2020, accessed 27 September 2024; Sunwiz, Australian Battery Market Report 2024, pp 34-43; Sunwiz, Australian Battery Market Report 2023, pp 34-41; Sunwiz, Australian Battery Market Report 2022, pp 36-42; and IPART research and analysis.

In Table 11.1 below, we provide a summary of the 18 virtual power plant offerings in NSW we identified. These virtual power plants varied significantly across eligibility, features and incentives. These differences likely indicate that providers are targeting different market segments.

Table 11.1 Virtual power plant programs offered in NSW

Virtual power plant	Solar/battery discount	Sign up bonus	Other incentives/charges	Feed-in-tariff	Batteries approved for use
ActewAGL Battery saver plan	-	-	• 50% discount on supply charge for 12 months	• 10 cents/kWh for the first 10 kWh per day • 6 cents/kWh thereafter	• Tesla Powerwall 2, SolarEdge/LG Chem HV system
AGL virtual power plant	• Up to $1,000	• $1,00 (for customers with an existing battery)	• $45 quarterly bill credits	• Same as electricity plan	• Tesla Powerwall 2 or 3, SolarEdge Energy Bank or Home Battery, LG Home Battery
Amber Smartshift	-	-	• $22/month in Amber subscription charges • Earnings depend on the energy market and personal energy set-up and usage	• Up to $19/kWh	• Tesla Powerwall 2, SolarEdge, LG Chem, Alpha ESS, Hive, BYD HVM or HVS, Sungrow, Sigenergy, Redback, Ambrion, Deye, eCactus, Empower, Energizer, Eveready, GivEnergy, GoodWe, Growatt, Huawei, RedX, Pylontech, SAJ, Solax,
Diamond Energy WATTBANK VPP	-	-	• $250-$450 per year in credits • $68 establishment fee	• 30 cents/kWh for exports between 6 pm and 8 am	• Goodwe, LG, Sungrow, Growatt, Fronius, Alpha ESS
Discover Energy	-	-	• Profit sharing scheme	• Same as electricity plan	• Huawei, Sungrow, Alpha ESS, SolarEdge, Growatt, Goodwe, Qhome, GE
EnergyAustralia PowerResponse Virtual Power Plant Program	-	-	• $0 battery and solar system (for customers on Solar Home Bundle) • $15 monthly credit • Fixed electricity rates for 7 years (for customers on Solar Home Bundle)	• Same as electricity plan • No feed-in-tariff for customers on Solar Home Bundle	• Tesla Powerwall 2, Alpha ESS, Redback Smart Hybrid, LG Chem
Engie VPP	-	• $300	• $20 monthly credit	• Same as electricity plan	• Tesla Powerwall 2
LAVO Life by Diamond Energy	-	-	• Monthly electricity subscriptions ($99 for 400 kWh or $199 for 800 kWh)	• 25 cents/kWh	• LAVO Solar-PV battery system
Nectr BEE Super FiT		• $100		• Same as electricity plan	• Tesla, Sungrow, Alpha ESS, Q Cells

Virtual power plant	Solar/battery discount	Sign up bonus	Other incentives/charges	Feed-in-tariff	Batteries approved for use
Nectr BEEyond			• Quarterly electricity memberships	• Same as electricity plan	• Tesla, Sungrow, Alpha ESS, Q Cells
Nectr Plan BEE		• $100	• $20 monthly credit	• Same as electricity plan	• Tesla, Sungrow, Alpha ESS, Q Cells
NRN VPP by Diamond Energy	-	-	• Daily charge of $2.90-$6.60 • 10% discount on grid electricity usage charge	• Same as electricity plan	• NRN Solar-PV battery system
Origin Loop	• $1500 or $3000 for Tesla Powerwalls	• $200 for customers with an existing battery	• $0 upfront costs for solar and battery system (customers make monthly repayments)	• $1/kWh plus standard feed-in-tariff from electricity plan for customers with existing batteries	• Tesla Powerwall, Sungrow, LG, Alpha ESS
Powershop			• Up to $40/month in credits	• 30 cents/kWh for the first 3.28 kWh per day • 18 cents/kWh for the next 3.28 kWh per day • 9 cents/kWh thereafter	• Alpha ESS, Ambrion, eCactus, Empower, LG Redback, Energiser, Hive, Sungrow, Tesla Powerwall, Eveready, EVO Power, GivEnergy, GoodWe, Growatt, Huawei, PureDrive, Plyontech, Redx, Sigenergy, SolaX
Reposit no bill	-	-	• No electricity bill for 7 years • Includes solar panel, battery and Reposit controller and installation	• No feed-in-tariff	• Unknown
Shinehub	-	-	-	• 55 cents/kWh during VPP events in addition to standard feed-in-tariff from electricity plan	• Hinen
Solarhub	• $4,950 discount on Tesla Powerwall 2 system	-	• Electricity costs 28% less than the reference price	• 17 cents/kWh for the first 10 kWh per day for 12 months	• SunPower, Tesla Powerwall, Emphase IQ
Tesla Energy Plan		• $100 for existing Powerwall owners • $1,000 for new Powerwall owners	• $220 in credits per year per Powerwall	• 30 cents/kWh between 2 pm and 8 pm	• Tesla Powerwall

Sources: ActewAGL, Battery Saver Plan, accessed 11 October 2024; AGL, Share power with our Virtual Power Plant, accessed 11 October 2024; Amber, Solar and Battery, accessed 11 October 2024; Diamond Energy, Wattbank VPP, accessed 24 November 2024; Diamond Energy, Integrating Generators and Load, accessed 25 November 2023; Discover Energy, Discover VPP, accessed 11 October 2024; EnergyAustralia,

PowerResponse Virtual Power Plant Residential Customer Demand Response Agreement, accessed 24 September 2024, p 4; EnergyAustralia, Solar Home Bundle, accessed 24 September 2024; Engie, Join our Virtual Power Plant with your home battery, accessed 25 November 2024; Nectr, Nectr BEEyond Plan Product Disclosure Statement, p 2;; Diamond Energy, NRN, accessed 26 November 2024; Origin, Solar & Batteries, accessed 24 September 2024; Origin, Contract terms – virtual power plant, accessed 24 September 2024; Powershop, Powershop Virtual Power Plant, accessed 11 October 2024; Reposit, Reposit no bill, accessed 24 September 2024; Shinehub, The future of Australia's renewable energy starts with you, accessed 11 October 2024; Solar Hub, Smart Distributed Batteries Project, accessed 11 October 2024; Tesla, Tesla Energy Plan, accessed 11 October 2024.

11.5.4 Virtual power plants do not appear profitable in their current state

The submission by EnergyAustralia detailed the virtual power plant market is still in the early stages of development.[338] Further, the AEMO virtual power plant trials to date have been universally unprofitable, and it is likely that virtual power plants currently operate with very thin margins.[339]

Potential for virtual power plant providers

However, virtual power plants have the potential to generate revenue in a variety of ways. We detail these in Table 11.2.

Table 11.2 Revenue sources for virtual power plant providers

Revenue source	How the revenue is generated
Frequency Control Ancillary Services revenue	• Virtual power plants are able to participate and bid in the Frequency Control Ancillary Services (FCAS) market. FCAS provide a fast injection of energy, or fast reduction of energy, to manage supply and demand.[340] • Virtual power plants are then paid by AEMO participating in the FCAS market. – During a South Australian trial, Simply Energy earnt $482,000 in FCAS revenue. This is estimated to be $25.31 per customer per year in battery use.[a]
Wholesale price arbitrage	• Through their access to participant's batteries virtual power plant providers can charge participants' batteries when the wholesale electricity price is low, or even negative. • Providers may then export electricity from the batteries back to the grid when the wholesale electricity prices are high, for a profit. – In AEMO's virtual power plant trials, the virtual power plant providers did not export electricity back to the grid for prices of less than $300/MWh.[341] – During a trial in South Australia, Simply Energy (now trading as Engie), collected $93,000 in wholesale arbitrage ($115 per year per Tesla Powerwall).[342]
Customer revenue	• Virtual power plant providers that are also retailers may generate variable revenue by making a retail margin on the retail tariffs that they charge their customers. • Virtual power plant providers may also generate fixed up front revenue by selling solar and battery systems to customers at a profit.
Margins on solar and battery sales	• Virtual power plant providers might enter into a relationship or partnership with a specific solar or battery manufacturer. • Depending on the terms of the agreement, the virtual power plant provider might exclusively sell the manufacturer's systems in return for a margin of the profit on the sales that it makes.
Margins on financing solar and battery packages	• Some virtual power plant providers sell buy now pay later solar and battery packages where customers pay $0 upfront and pay off the system over the term of the virtual power plant program contract. • These providers may make a margin on the systems if the total repayments made by customers exceed what they would have paid, had they paid upfront.

Source: Gabrielle Kuiper, *What is the State of Virtual Power Plants in Australia? From Thin Margins to a Future of VPP-tailers*, March 2022, pp 23-24.

The AEMC has released a draft rule which would allow virtual power plants to compete directly with large-scale generators in the energy market by being able to be scheduled and dispatched in the NEM.

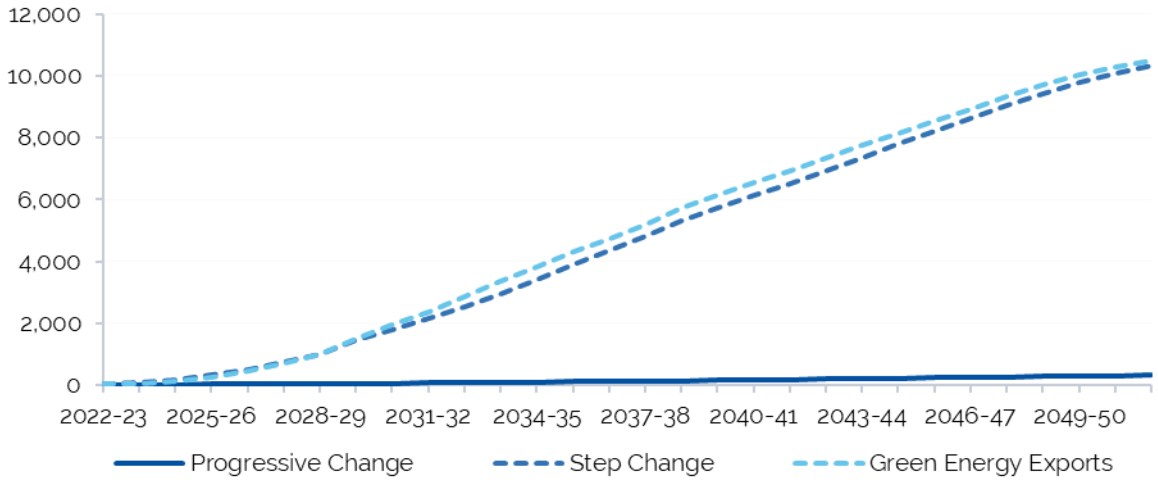
[a] The total revenue is likely to have been higher if a greater dispatch effectiveness was achieved. During the project only 61% of the fleet met the requested dispatch signal due to technical constraints.

The draft rule includes allowing virtual power plants to bid into the market, set spot prices, receive and follow dispatch instructions and access markets that require scheduling (e.g. regulation frequency control ancillary services).[343] If approved, the rule would come into force on 5 November 2026 and provide additional revenue streams for virtual power plant providers.

11.5.5 Estimated uptake of aggregated energy storage capacity in NSW

In its Integrated System Plan, AEMO found that the step change scenario, which fulfills Australia's emission reduction commitments in a growing economy, is the most likely scenario with a 43% likelihood.[b, 344] Under this scenario, the amount of energy generated by virtual power plants will increase to 1,796 MW by 2030 and 10,061 MW by 2050.

Figure 11.7 Aggregated energy storage capacity for NSW under the ISP scenarios (MW)



Note: The Integrated System Plan (ISP) scenarios are explained in section 11.2.1.

Source: AEMO, 2023 IASR Assumptions Workbook, accessed 4 October 2024; and IPART Analysis.

11.5.6 The uptake of virtual power plants in Australia has been slower than expected

To date there has been low household uptake of virtual power plants across Australia (and in NSW). One estimate by solar consulting firm Sunwiz is that only 14% of home batteries in Australia are participating in a virtual power plant, with no significant increase between 2022 and 2023.[345] As a result, uptake remains below where it needs to be to make a reliable contribution to the electricity grid.[346]

[b] The Progressive Change scenario reflects slower economic growth and energy investment with economic and international factors placing industrial demands at greater risk and slower decarbonisation action beyond current commitments and has a 42% likelihood. The Green Energy Export scenario sees a very strong industrial decarbonisation and low-emission energy exports and has a 15% likelihood.

When AEMO announced its virtual power plant demonstrations project in 2019, it predicted that there could be up to MW of virtual power plants by 2022.[347] In 2021, at the end of the demonstrations, there was just 31 MW enrolled in the NEM (28 MW of which was in South Australia), constituting a 3% market share of the FCAS market.[348]

According to AEMO, the current capacity of consumer energy resources in the NEM is just 200 MW. This is predicted to rise to 3,700 MW by 2030 and 37,000 MW by 2050, at which point it will make up 66% of the NEM's storage capacity. This predicted capacity includes virtual power plants as well as other aggregated consumer energy resources such as rooftop solar and home batteries.[349]

11.5.7 Household perceptions of virtual power plants are likely to be a contributing factor towards the slower than expected uptake

2023 study on Australian household perceptions of virtual power plants

A 2023 academic study examined the social factors behind this gap between industry promise and the very low household uptake of virtual power plants in Australia. The study was conducted by holding focus groups and interviews with 47 individuals from across Australia who had not participated in a virtual power plant.[350] The study found that a customer's willingness to participate in a virtual power plant is most strongly affected by their motivations for purchasing solar and battery systems.[351]

Households in the study without consumer energy resources showed greater openness to participation in a virtual power plant and as a result were more likely to become early adopters. This is because the financial incentives of participating in a virtual power plant program is more attractive to those that have not already purchased solar and battery systems.[352]

On the other hand, households that have already purchased solar systems often aspire to go "off-grid" while they see batteries as a step towards achieving energy independence, joining a virtual power plant is contrary to this goal.[353] As a result, this study found the early adopters of solar and batteries may not necessarily be the early adopters of virtual power plants (and visa-versa).

This study also found that a lack of information or understanding of virtual power plants is currently a significant barrier to participation.[354] Another barrier is a lack of understanding about the financial impact of participating in a virtual power plant and a suspicion that in the absence of transparency customers may be taken advantage of.[355] This is because consumers particularly value transparency regarding information about what participation will cost them financially and in forfeited benefits of battery ownership. Customers want certainty that they will be better off overall by participating in a virtual power plant.[356]

Project Edge consumer insights

Project EDGE was a multi-year project undertaken by AEMO in collaboration with AusNet Services and Mondo to understand, test and demonstrate how distributed energy resources integration could work in the NEM.[357] As part of the project, Deakin University completed a multi-year series of customer insight studies. Deakin found that:

- 29% of customers believed aggregators benefitted more from virtual power plant participation compared to households[358]
- 11% of customers believed that households benefit more than aggregators[359]
- 30% of customers in Project Edge were unsure what financial impact their virtual power plant participation had on their energy bills[360]
- 24% of customers said that they trust providers to use their consumer energy resources[361]
- Customers could see little benefit in joining a virtual power plant over simply adopting CER
- Consumers who self-rated themselves as early adopters with respect to new energy technologies were most interested in adopting CER and joining a virtual power plant.

This lack of knowledge and understanding has been echoed in the complaints made to EWON.

Trends in complaints to EWON about virtual power plants

EWON told us that the key complaint trends related to virtual power plants include:

- lack of knowledge about the operation of virtual power plants
- customers complaining that they cannot determine if they are benefiting from their participation
- complaints about unclear/complex terms and conditions in retail energy contracts that include virtual power plant participation
- unclear/misleading marketing by energy retailers relating to the sale of battery storage systems bundled together with retail energy contracts
- a lack of explicit informed consent for customer participating in virtual power plants.[362c]

This overall lack of trust, understanding and transparency is not helped by the fact that it is very difficult for consumers to try and compare a wide variety of virtual power plant offerings to find the best deal for them. It is already difficult for households without solar and batteries to compare electricity offers, and unlike electricity offers, virtual power plant programs are not listed on Energy Made Easy. Even if they were, the Energy Made Easy website is limited to authorised retailers and so aggregators and solar and battery manufacturers would not be compelled to share their data.

[c] Trends in complaints made to EWON about virtual power plants and other consumer energy resources are discussed further in section 12.4.1 of this report.

12 Affordability, hardship and complaints

Key findings

- Consumers in NSW are more concerned about their ability to pay their electricity bill compared to last year. Nearly 60% of consumers in NSW are also concerned that electricity will become unaffordable over the next 3 years.
- The number of customers in hardship programs increased by 41% between March 2023 and March 2024. A key driver of this was fewer customers leaving hardship programs compared to previous years.
- In 2022–23, less than 60% of households received the energy rebates that they were eligible for.
- The number of electricity-related complaints to EWON increased by 66% in 2023–24.

In this chapter we report on trends in the number of customers on hardship and payment plans, disconnection rates, the use of rebates and assistance, and electricity complaints. However, as raised in the submission by the Justice and Equity Centre, these trends and data points do not tell the full story in relation to energy affordability, hardship, disconnection and complaints.

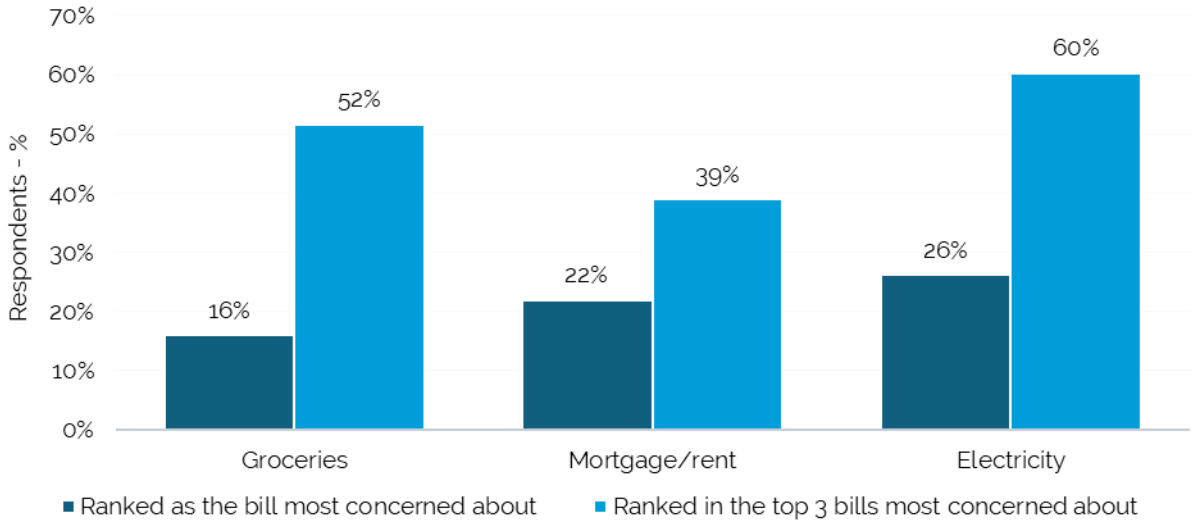
Research by the Justice and Equity Centre has highlighted that in some cases households go without electricity (under consume) to lower their energy bills, they go without other essentials, such as food, so they can pay an electricity bill on time, or they shift the impact elsewhere using credit (e.g. such as Buy Now Pay Later or credit card).[363]

As a result, we supplement our analysis in this chapter with findings from the consumer research by the Justice and Equity Centre and Energy Consumers Australia. This provides deeper insight into the consumers impacted by the rising cost of electricity and the extend of the impact.

12.1 Electricity is the bill NSW households are most concerned about paying

The Energy Consumer Sentiment Survey asked residential customers about which bills they are most concerned about paying. The survey found residential customers are most concerned about paying their electricity bill in 2024, despite generally spending more on other household bills. 26% of households in NSW ranked their electricity bill as the bill they are most concerned about paying followed by mortgage/rent (22%) and groceries (16%) (1).[364]

Figure 12.1 Bills that residential customers in NSW are most concerned about



Source: Energy Consumers Australia, *Sentiment Survey June 2024 data pack*, accessed 7 August 2024; and IPART analysis

As shown by Figure 12.1, for the average household in NSW, mortgage/rent and groceries are notably more expensive over the course of each quarter, compared to electricity. This suggests that customer's heightened concern about their electricity bills may be due to variability in electricity bills, difficultly in understanding electricity pricing and the potential for bill shock.

In a separate question, 47% of residential customers in NSW responded that they have recently received an energy bill that was much larger than expected, and 65% responded that energy bills put a lot of pressure on their household finances.[365]

Table 12.1 Average household bills in NSW

Household bill	Average quarterly payment/cost per household
Mortgage	$14,454[a]
Groceries	$3,684[b]
Electricity	$428[c]

Notes: Based on the average loan in NSW in June 2024 of $780,028 with a 6.28% interest rate and a term of 30 years.
Based on the turn-over of grocery stores in June 2024 and the number of households in NSW.
Based on the median market offer for the Ausgrid region in June 2024.

Source: Energy Made Easy Data; IPART Analysis; Reserve Bank of Australia, Lender's Interest Rates, accessed 13 August 2024; ABS, Lending indicators, June 2024, Lending indicators - Average loan sizes for owner-occupier dwellings by state, 2 August 2024, Retail Trade in Australia – Table 13 Retail turnover by state by industry subgroup, 31 July 2024, 2021 Census All persons Quick Stats, accessed 13 August 2024.

The Consumer Sentiment Survey also asked residential customers about their concerns about energy affordability in the coming years. Of the respondents from NSW:

- 56% reported they are concerned that in the next 3 years electricity and gas will become unaffordable for them
- 75% reported they are concerned that in the next 3 years electricity and gas will become unaffordable for some Australians
- 66% reported that they think that electricity will become more expensive as a result of the transition to renewable energy.[366]

12.1.1 Regional households spend a higher percentage of their income on electricity bills

Energy affordability is a larger a concern for regional households who on average spend 4% of their disposable income on electricity, compared to 3% for households in the Greater Sydney area. As shown by Table 12.2, this difference is driven by both lower median incomes and higher median electricity bills outside of Greater Sydney.

Many households outside of Greater Sydney are serviced by Essential Energy and tend to have higher electricity bills. The higher bills reflect the higher costs in the Essential Energy distribution network compared to the Ausgrid and Endeavour Energy networks. These higher costs are due to the significantly larger network area covered, and the smaller customer base from which Essential Energy can recover its costs.[a]

Table 12.2 Electricity bill as percentage of income – regional vs metro areas

	Median individual annual post-tax income	Median individual electricity bill	Electricity bill as % of individual income
Greater Sydney	$57,217	$1,754	3.1%
Rest of NSW	$50,405	$2,126	4.2%

Note: 'Greater Sydney' represents the median Ausgrid electricity bill (excludes Endeavour Energy).

Source: ABS, *Employee Earnings*, August 2023, Table 2; Moneysmart, *Income tax calculator*, accessed 10 October 2024; Energy Made Easy Data; and IPART Analysis.

12.1.2 Electricity is one of the largest overhead expenses for a third of small businesses

The Energy Consumer Sentiment Survey asked small businesses how large an expense electricity bills are for their business. In June 2024, 34% small businesses in NSW responded that their electricity bill is one of their biggest overhead expenses.[367]

As shown by Figure 12.2, the number of small businesses in NSW reporting that their electricity bill is one of their largest overheads has remained relatively stable over the past 3 years. However, over this period there has also been an increase in the number of small businesses reporting that their electricity bill is a minor expense in the scheme of things. This may reflect other costs such as labour, compliance costs and access to finance and interest have risen by a larger amount and were more concerning costs for small businesses in NSW at the time of the survey.[b]

[a] The Essential Energy network spans approximately 737,000 square kilometres, compared to Ausgrid and Endeavour Energy which cover 22,275 and 24,800 square kilometres respectively.

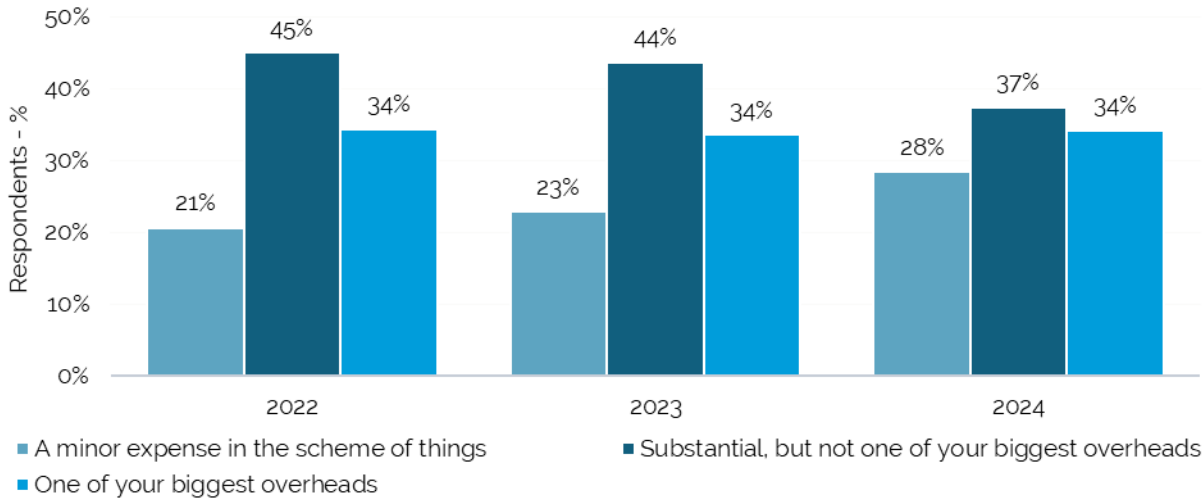
[b] Other surveys of small businesses in 2024 have highlighted similar concerns.

For example, the NSW Small Business Commissioner *Small Business Momentum Survey* found the *"cost of business inputs"*, *"cash flow and/or working capital"* and *"red tape"* were the three largest areas of concern reported by small businesses in NSW in August 2024, followed then by *"predicted retail electricity and gas price changes."*

Similarly, the Australian Chamber of Commerce and Industry 2024 Small Business Conditions Survey reported the greatest expenses for small businesses are related to "*skills/worker shortages"*, *"government regulation"*, *a lack of profitability"* and *"supply chain issues"*.

Source: NSW Small Business Commissioner, *Small Business Momentum Survey*, Augst 2024, p 4; Australian Chamber of Commerce and Industry, *2024 Small Business Conditions Survey*, p 10, accessed 8 October 2024

Figure 12.2 NSW small business' concern about their electricity bill



Source: Energy Consumers Australia, *Sentiment Survey June 2021 data pack*, accessed 7 August 2024; Energy Consumers Australia, *Sentiment Survey June 2022 data pack*, accessed 7 August 2024; Energy Consumers Australia, *Sentiment Survey June 2023 data pack*, accessed 7 August 2024; Energy Consumers Australia, *Sentiment Survey June 2024 data pack*, accessed 7 August 2024; and IPART analysis.

12.2 Hardship and payment plans

Hardship programs are assistance schemes designed to protect customers from disconnection and help manage outstanding payments.[368] Examples of hardship programs include flexible payment plans, payment extensions, debt and payment assistance, and protection from disconnection. All energy retailers in NSW are required to have programs in place to help customers facing financial hardship.[369]

To apply for a hardship program, customers need to contact their electricity retailer. The retailer will then assess the customer's application against the eligibility criteria for their hardship program.

Customers whose retailer is unable to help or if are not happy with their retailer's response can contact the Energy and Water Ombudsman of NSW for free independent advice about their situation and their retailer's response, or to lodge a complaint.[370]

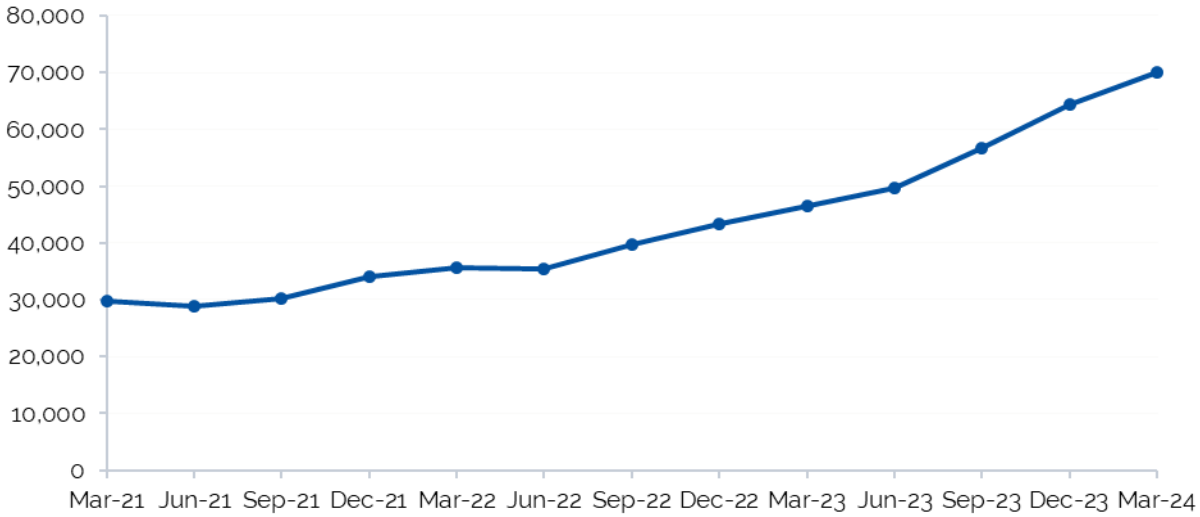
12.2.1 The number of NSW customers in hardship programs has grown significantly

The number of electricity customers in NSW accessing hardship programs has nearly doubled in recent years (Figure 12.3).

As of March 2024, there were 70,000 customers in NSW on hardship programs (2% of all electricity customers in NSW). This is a substantial increase of around 23,000 customers (or 50%) compared to March 2023 and an increase of 97% (around 34,000 customers) compared to March 2022.

Further, between March 2023 and March 2024 the number of electricity customers in NSW on a hardship program for more than 2 years nearly tripled, from 2,436 to 7,268. This highlights that customers on hardship programs are continuing to face difficulties with their electricity bills and have not been able to leave the hardship programs as quickly as in previous years.

Figure 12.3 Number of electricity customers in NSW on hardship programs



Note: Data for the June quarter of 2024 is not yet available.

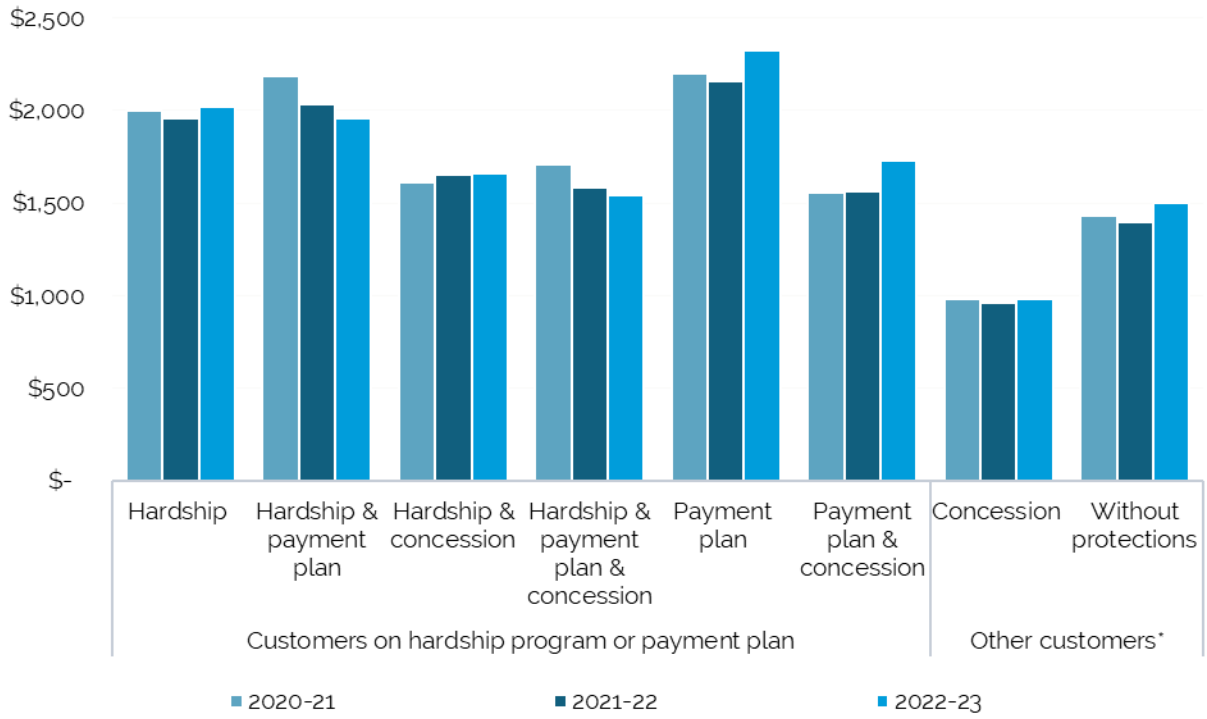
Source: AER, *Schedule 4 quarter 3 2023–24 retail performance data*, accessed 29 July 2024.; AER, *Schedule 4 quarter 4 2022–23 retail performance data*, accessed 12 August 2024; *Schedule 4 quarter 4 2021–22 retail performance data*, accessed 12 August 2024; AER, *Schedule 4 quarter 4 2020–21 retail performance data*, accessed 12 August 2024; and AER, *Schedule 4 quarter 4 2019–20 retail performance data*, accessed 30 September 2024.

12.2.2 NSW customers on hardship programs continue to pay higher median bills

In NSW, payment plan and financial hardship customers have higher median electricity bills compared to the other customer groups. For the quarter ending 30 September 2023, the median annual bill was $2,325 for payment plan customers and $2,018 for hardship customers (Figure 12,4). This is 55% and 35% higher than residential customers without protections.[371]

The median bill for customers with a concession (aside from customers with payment plan and a concession) increased by 2% in the same period. The general decrease in bills for concession customers is likely due to higher levels of concessions received by customers in this quarter, due to the introduction of the Energy Bill Relief Fund from 31 July 2024, which concession customers were eligible for.[372] This $125 rebate would have reduced the quarterly bills for eligible customers who received the rebate in the quarter ending 30 September 2023 and may have lowered the median bills. This $125 rebate would have reduced the quarterly bills for eligible customers who received the rebate in the quarter ending 30 September 2023 and may have lowered the median bills.

Figure 12.4 Median annual bill paid by residential customers in NSW by hardship program status



Note: 'Other customers' means customers who are not on a hardship program or payment plan.
Source: ACCC, *Inquiry into the National Electricity Market Appendix: E – Supplementary spreadsheet with billing data and figures*, June 2024.

Customers in NSW on hardship programs or payment plans also have higher median usage levels compared to customers without protections. This could be driven by a variety factors, such as having less energy efficient homes, additional electricity requirements (for example, to address health issues) or the local climate. In addition, customers on hardship programs and/or payment plans have less access to rooftop solar. As of July 2023, the uptake of rooftop solar was 14% for customers on a hardship programs and/or payment plans, compared to 22% for all households in NSW.[373]

12.2.3 Proposed rule change to assist hardship customers

The AEMC has received a package of 7 consumer-related rule change requests from the Hon. Chris Bowen, MP. This package included a proposed rule change *Assisting Hardship Customers* which aims to enable hardship customers to receive better price outcomes.[374] The AEMC has not initiated the rule change request and will publish a consultation paper as part of the process (Appendix D).[375]

The proposed rule change highlights that consumers experiencing hardship and vulnerability face additional barriers when engaging in the energy market, including limited time, language or literacy barriers, reduced mental bandwidth due to stress and other pressures.[376]

The Better Bills Guideline Version 2 requires retailers to regularly assess whether customers could be on a better offer, and if one is available, to publish this on the customer's bill.[377] Where a better offer is identified, the onus is on consumers to move themselves onto the better offer.

Under the National Energy Retail Law, retailers are prevented from moving customers to a new plan without their explicit informed consent. The proposed rule would require retailers to provide a credit on the bill of hardship customers. This credit would be calculated as the difference between the full amount of their bill and what they would have been charged under a better offer, as determined under the AER's Better Bills Guideline.

IPART supports this proposed rule change. Hardship consumers can face significant barriers to switching and as a result may remain on less affordable plans. This is ultimately shown in the materially higher prices paid by customers on hardship plans (Figure 12.4). This in turn makes it more difficult for them to tackle their debts and ultimately leave hardship programs.

12.3 Rebates and assistance measures are available but are not accessed by many eligible customers

The NSW Government offers a range of rebates and financial assistance programs to households. These rebate schemes are shown in Table 12.3 Service NSW also operates an in-person service as part of its Savings Finder program that provides customers with help accessing savings and rebates, specific to their circumstances.[378]

Table 12.3 NSW Government rebates available

Rebate scheme	Description	Maximum rebate value per year
Low Income Household Rebate	Helps eligible concession card holders cover the costs of their electricity bills.	$350
NSW Gas Rebate	Helps eligible concession card holders cover the costs of their natural gas or bottled Liquified Petroleum Gas (LPG) bottle bills.	$110
Family Energy Rebate	Helps families with dependent children cover the costs of their electricity bills.	Up to $250
Life Support Rebate	Helps customers who needs, or have someone living with them who needs, to use approved energy-intensive life-support equipment at home to cover the costs of their electricity bills.	Up to $1,638 (varies depending on equipment type[a]
Medical Energy Rebate	Helps eligible concession cardholders who are not able to self-regulate their body temperature in extreme environmental temperatures	$350
Seniors Energy Rebate	Helps eligible self-funded retirees to cover the costs of their electricity bills.	$250
Energy Accounts Payment Assistance (EAPA)	Helps people experiencing difficulty paying their energy bill because of a short-term financial hardship, crisis, or emergency to cover the costs of their electricity bills.	$400[b]
Energy Bill Relief Fund	Helps eligible households with the cost of their electricity bill in 2024–25.c	Up to $300

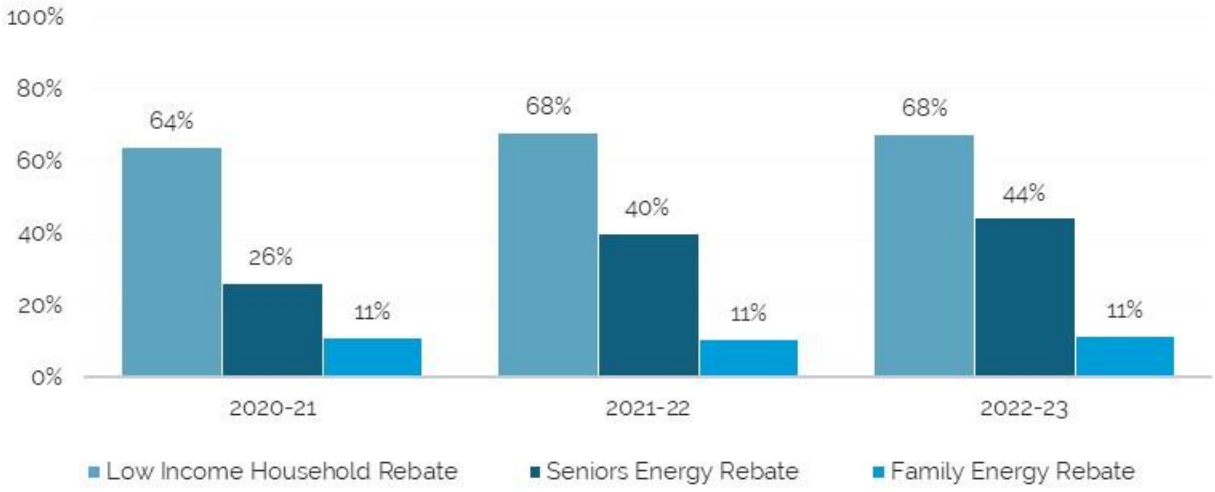
Notes: A daily rate is provided per equipment type used in household. It ranges from daily rate of $0.11 (excluding GST) for external heart pump to $3.68/day for phototherapy equipment and certain ventilators. Depends on individual assessment.
Source: NSW Government, Find an energy rebate, accessed June 2024; and Service NSW, Apply for the household National Energy Bill Relief payment, accessed August 2024.

While there are a range of rebates available to households in NSW, data from the NSW Social Programs for Energy Code suggests that most rebate programs are underutilised.

Overall, just under half of the households in NSW that were eligible for an energy rebate in 2022–23 received one. As shown by Figure 12.5, the Family Energy Rebate had a much lower participation rate in 2023-24 (11%) for eligible customers compared to the Low-Income Household Rebate (68%) and the Seniors Energy Rebate (44%).

Since 2020, the number of eligible households receiving the Low-Income Household Rebate and the Seniors Energy Rebate has increased by 4 and 18 percentage points respectively. However, the number of eligible households receiving the Family Energy Rebate has remained stable at 11% for the past 4 years.

Figure 12.5 Estimated participation in selected NSW Government energy rebate programs



Note: Data was not available for the Family Energy Rebate Life Support Rebate, Medical Energy Rebate, and EAPA program.
Source: NSW Government, *NSW Social Programs FY2017-23 trends analysis*, accessed 3 October 2024, table 2.

The Justice and Equity Centre submitted that there are significant issues regarding lack of awareness of, and access to, rebates, as well as major gaps in eligibility. It gave the example that rebates are more targeted at older people, who are more likely than younger people to own their own home outright, and to live in households with smaller numbers of people, which makes managing energy usage easier.[379]

The NSW Consumer Energy Strategy includes an action (Action 16) to conduct a review of NSW energy rebates to streamline existing rebates, improve the customer experience and ensure support reaches customers who need it most.[380]

We consider the findings in this chapter highlight the importance of this review of the NSW energy rebate system and many customers who are eligible are not accessing the rebates and there are some reported cases that even customers have applied for a rebate, in some cases it is not applied to their bill.

12.3.1 Proposed rule change to assist concession customers

On 12 August 2024, the AEMC received a package of 7 consumer related rule change requests from the Hon. Chris Bowen, Minister for Climate Change and Energy, as Chair of the Energy and Climate Change Ministerial Council (ECMC). This included a proposed rule change *"Improving the application of concessions to bills"*. The AEMC has not initiated the rule change request and will publish a consultation paper as part of the process.[381]

The proposed rule change includes an obligation on retailers to proactively seek information from any new and existing customers on their eligibility for energy concessions or rebates. This obligation would prompt retailers to identify consumers who are eligible for concessions but may not be receiving them.[382]

It also includes an obligation requiring information transfer between retailers when a customer switches retailers. This transfer of information would be required to include a field identifying the NMI as being associated with a retail contract with an active concession. This would provide retailers a way of checking if a customer with ongoing concession eligibility is in receipt of that concession.[383]

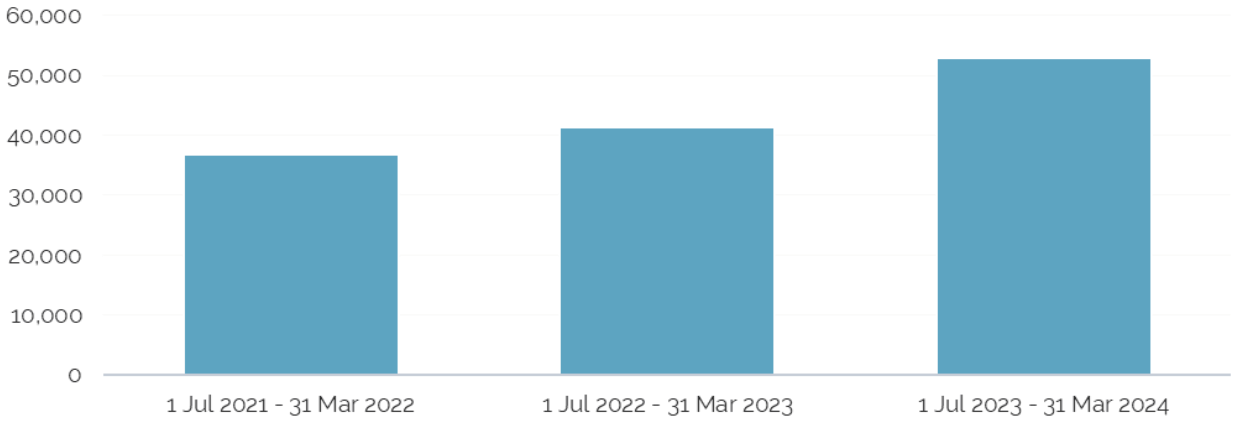
The proposed rule change has the potential to increase the uptake of concessions for those that are unaware that they are eligible for a concession, and to assist customers in retaining their concession when they move retailers.

12.4 Customer complaints in NSW have increased in NSW

Customers in NSW that have an issue with their electricity service are encouraged in the first instance to lodge a complaint with their retailer.

Complaints to retailers from July 2023 to March 2024 were higher than in recent years. The increase in complaints may have been driven by higher electricity prices for 2023–24 (compared to a year earlier), with many customers experiencing price increases from 1 July.

Figure 12.6 Complaints made by households to energy retailers in NSW July to March



Note: The latest data available is for 31 March 2024. As a result, to enable a consistent reporting period, we have reported data from 1 July to 31 March for each period.
Sources: Source: AER, *Schedule 3 quarter 4 2023–24 retail performance data*, accessed 29 July 2024.; AER, *Schedule 3 quarter 4 2022–23 retail performance data*, accessed 12 August 2024; *Schedule 3 quarter 4 2021–22 retail performance data*, accessed 12 August 2024.

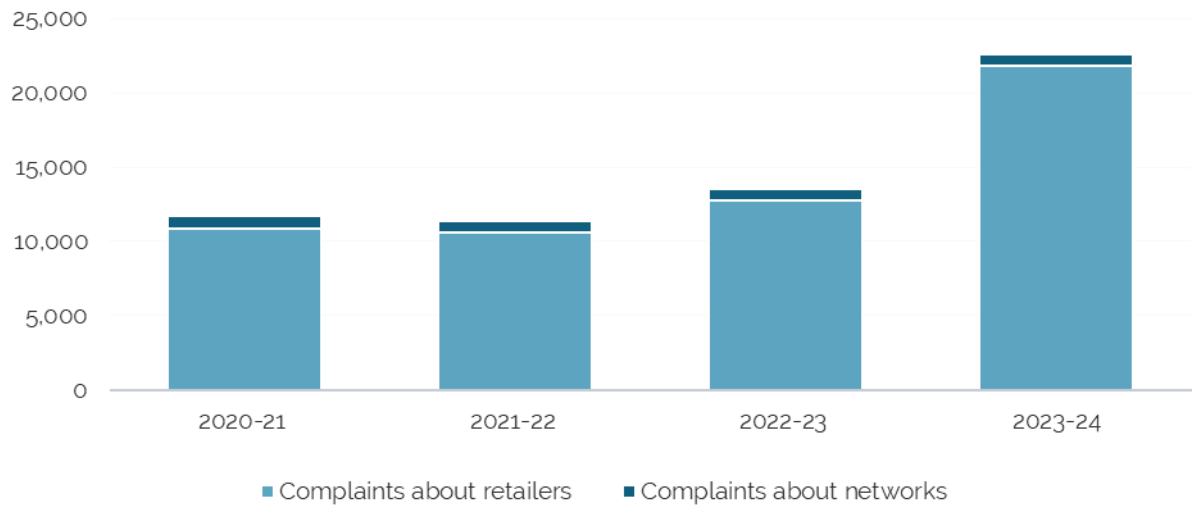
If customers are unable to resolve their issue with the retailer, or they are not happy with their retailer's response, customers can make a complaint to the EWON.

In 2021–22 and 2022–23, the number of electricity complaints to EWON remained relatively stable. However, there was a material increase (60%) in the number of complaints received by EWON from April to June 2023 and July to September 2023, consistent with the increasing number of complaints to retailers. Since September 2024, the number of complaints received each quarter has continued to remain elevated.

Over the year, complaints increased by 66% in 2023–24 compared to 2022–23. In total, there were 22,891 complaints in 2023-24, compared with 13,800 and 11,610 in the previous 2 years.[384] 95% of complaints in 2023–24 were related to electricity retailers.[c]

The top cause of complaints to EWON in 2023–24 was high bills, making up 10,299 of the total complaints for energy and water. There was a substantial increase (59%) of these types of complaints in 2023–24 compared to the previous year. This may be due to higher electricity prices for 2023–24 (compared to a year earlier), the ongoing cost of living crisis, and changing tariff structures.

Figure 12.7 Number of complaints to EWON



Source: EWON, *EWON Insights*, accessed 13 August 2024.

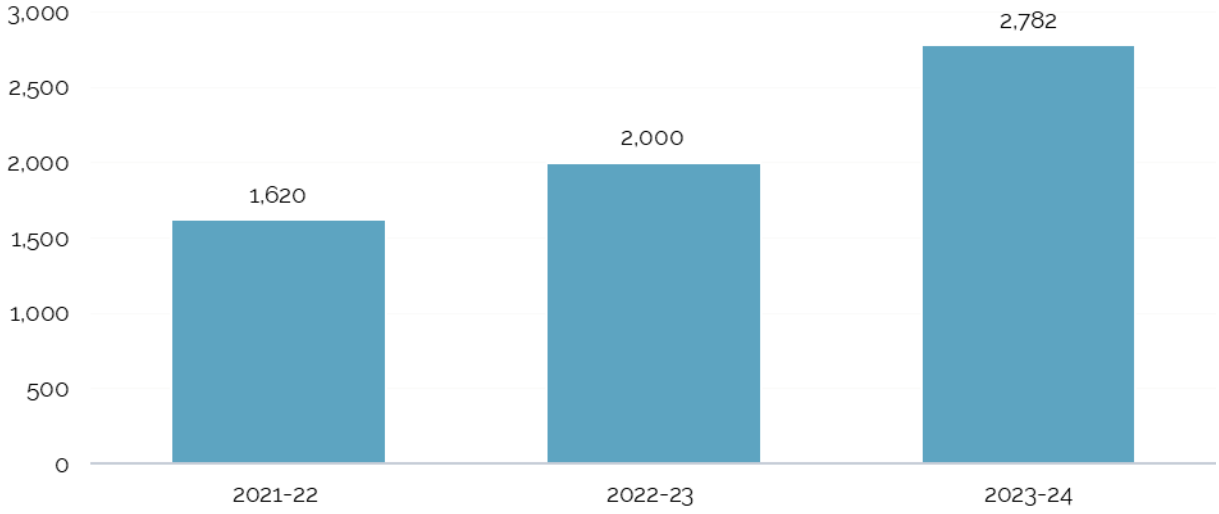
12.4.1 Consumer Energy Resource complaints have also increased

EWON also reports on the number of electricity complaints that it receives that are related to consumer energy resources.

In 2023–24, EWON received 2,782 complaints related to consumer energy resources. This is 39% higher than the previous financial year and the highest number of complaints since EWON began publishing consumer energy resources complaints data in 2021–22 (Figure 12.8).

[c] Network complaints are complaints related to Distributed Network Providers (DNSPs). There were 729 network complaints in 2023-24. This is a similar number of complaints compared to previous years.

Figure 12.8 Consumer energy resource complaints to EWON



Source: EWON, *EWON Insights*, accessed 2 October 2024.

EWON expects that complaints related to consumer energy resources will continue to grow as an increasing number of customer engage with consumer energy resources during the transition towards net zero, and the roll out of smart meters accelerates.[385] According to EWON, the complaints it receives about consumer energy resources are often about the conduct of the companies that have sold and installed the customer's system, or about the promises made by solar retailers.[386]

EWON's submission discussed that around 3 quarters of the consumer energy resources-related complaints it receives 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, because they are not authorised retailers.[387] Further, some energy retailers structure their business so that energy and consumer energy resource services are provided by different legal entities.

This means that EWON cannot always address a customer's complaint that involves the sale of consumer energy resource devices and the services behind the meter – even if these services have been provided together with retail services under a single energy brand.[388] As a result, many complaints about consumer energy resources are outside of EWON's jurisdiction and are not reflected in this data.

The NSW Consumer Energy Strategy includes a commitment to begin public consultation to expand EWON's jurisdiction to new energy services providers, such as virtual power plants and demand response services in 2025.[389] 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 consumer energy resources, regardless of who provides the services or the legal structure of the entity involved in the sale or installation.

A Glossary

Term	Definition
Acquisition offers	Electricity plans or offers that retailers advertise to attract new customers, often featuring competitive rates or special incentives.
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Baseload generation	Generation that runs continuously throughout the year and operates at stable output levels.
Clearing participant	An entity authorised to participate in the clearing and settlement processes of the National Electricity Market, handling the financial transactions associated with electricity trading.
Concession customers	Customers who receive rebates or assistance under the NSW Social Programs for Energy Code.
Concessions	Financial assistance provided to eligible customers (for example, pensioners, low-income households) to help reduce their energy bills, often in the form of rebates or discounts.
Consumer Data Right	Online system that allows consumers to share data that is collected about them, when they buy or use a specific good or service with accredited third parties
Consumer Energy Resources (CER)	Customer-owned energy assets such as rooftop solar panels, battery storage systems, and electric vehicles that can generate, store, or manage energy consumption.
Default Market Offer (DMO)	A maximum price that retailers can charge electricity customers on default contracts, known as standing offer contracts.
Default Offer	The Default Offer is the Default Market Offer in NSW, SA and South-East Queensland. In Victoria, the default offer is the Victorian Default Offer (VDO).
Demand response	Voluntary reduction or shift of electricity use by customers, which can help to keep a power grid stable, by balancing its supply and demand of electricity.
Demand tariff	Applies a fixed daily supply charge, a charge that may be a flat-rate or time-of-use charge, and a demand charge.
Disconnection	The process of disconnecting a customer's electricity or gas supply due to non-payment of bills or breaches of the service agreement, following the required regulatory procedures.
Distribution Network Service Provider (DNSP)	Companies responsible for operating and maintaining the electricity distribution network that delivers electricity from the transmission system to customers (e.g., Ausgrid, Endeavour Energy, Essential Energy in NSW).
EBITDA	Earnings before interest, tax, depreciation, and amortisation
Energy & Water Ombudsman NSW (EWON)	An independent body that handles complaints and disputes between customers and electricity, gas, and water providers in New South Wales.
Energy debt	The amount of money owed by a customer to their energy retailer for unpaid electricity or gas bills.
Energy Made Easy	Australian Government's energy price comparison website
Flat-rate tariff	Applies the same rate per unit of electricity at all times of the day.
Frequency control ancillary services (FCAS)	Services used by the Australian Energy Market Operator (AEMO) to maintain the frequency of the electricity system within safe operating limits, ensuring stability and reliability of the power grid.
Future contract	Agreement to buy or sell a commodity at a set price and time in the future.
Gen-tailer	An energy company that both generates electricity and retails it to consumers, combining generation and retail operations.
Hardship customers	Customers who are participating in a retailer's hardship program.

Term	Definition
Hardship program	A program offered by energy retailers to assist customers experiencing financial hardship, providing support such as flexible payment options, payment plans, advice on energy efficiency, and referrals to government concessions or financial counselling services.
Hedge	Investment used to reduce the potential loss in other investments because its price tends to move in the opposite direction.
Herfindahl-Hirschman Index (HHI)	Measure of market concentration. Calculated by summing together the squared market shares of each supplier in a market, at a point in time. Index can range from close to zero (highly competitive market - large number of retailers each holding small market shares) to 10,000 (monopolistic market with a single supplier).
Horizontal merger	Merger of businesses that operate in the same industry.
kWh	Kilowatt hour is the total amount of electricity that a household consumes over a period
Market offer	Offer that retailers advertise to attract customers.
Median	Middle number in a data set.
National Energy Retail Law (NSW) 2012 (NERL)	Legislation that governs the sale and supply of energy to consumers in participating Australian states and territories, including NSW.
Net System Load Profile (NSLP)	Converts meter readings into energy consumption.
Network tariff	Recovers revenue to build, operate and maintain the poles and wires that are used to transport electricity.
NMI	National Metering Identifier. A unique number for the electricity connection at each address.
Off-peak period	Less expensive usage prices apply, usually during the middle of the day and late evenings, and during weekends.
Open source	Code that is freely available.
Over-the-Counter (OTC) market	Participants trade directly without a central exchange or third party.
Payment plan	An arrangement between a customer and their energy retailer to pay off their energy bills in instalments over an agreed period, often due to financial difficulties or to manage bill payments more effectively.
Payment plan customers	Customers who have an arrangement with their retailer to pay in instalments due to experiencing financial difficulties.
Peak period	More expensive usage prices apply, usually during weekday afternoons and evenings.
Retail tariff	Used by energy retailers to bill their customers, and includes the retailer's costs (e.g. flat-rate tariff, time-of-use tariff, demand tariff).
Shoulder period	Least expensive usage prices apply, usually overnight and early morning, and during the weekends.
Small customers	In NSW, small customers are defined as those that use less than 100 MWh of electricity per annum.
Smart meter	Measures how much and when energy is used, and sends this information to energy retailers daily.
Source code	Group of instructions written in a computer programming language.
Spot price	Current price of an asset for immediate delivery and settlement.
Standing offer	Offer for a customer when they do not engage and choose a market offer.
Supply charge	A charge for grid connection, metering, administration, etc.
Time-of-use tariff	Applies different rates to electricity used at different times of the day.
Wholesale price	Cost of energy for the retailer.
Vertical integration	Where a retailer purchases energy generation assets, or a generator purchases retail assets.
Virtual Power Plant (VPP)	A network of decentralised, small-scale energy resources (such as solar panels, batteries, and demand response capabilities) that are aggregated and managed centrally to operate like a single large power plant, providing power and ancillary services to the grid.

Term	Definition
Vulnerability	In the energy context, a state where customers may be at risk of experiencing financial hardship or difficulty accessing essential energy services due to factors such as low income, health issues, age, disability, or other circumstances.

B Consumer Data Right for the energy sector

The Consumer Data Right is an online system that allows consumers to share data that is collected about them when they buy or use a specific good or service with accredited third parties.[390]

The Consumer Data Right was extended to the energy sector in the second half of 2022. It aims to empower consumers to more easily share their data to get a better deal on a range of energy products and services.[391]

In the energy sector, retailers that operate through the National Electricity Market and have more than 10,000 customers are required to participate in the Consumer Data Right, while smaller retailers can voluntarily participate.[392]

Under the Consumer Data Right there are 3 key roles:

- **Data holders** – these are the *'givers'* of data in the Consumer Data Right system. The Consumer Data Right designation for the energy sector puts obligations on retailers and AEMO to fulfil data requests as primary (retailers) and secondary (AEMO) data holders.

  Data holders are required to share a consumer's data with the nominated Accredited Data Recipient when the consumer directs them to and the specified format.[393]
- **Accredited data recipients** – these are the *'receivers'* of data in the CDR ecosystem. These are the providers of services who receive a consumer's data after the consumer has provided their consent. The providers are then able to use the data for the purpose the consumer has consented to, such as a price comparison. To become an accredited data recipient, an entity must be accredited by the ACCC and meet strict IT and responsible person requirements.[394]
- **CDR representative** – Accredited data recipients can also have Consumer Data Right representatives operating under them. These are unaccredited entity's that are able to receive data through the Consumer Data Right system, where the Consumer Data Right representative has a contract in place with an Accredited Data Recipient. The Accredited data recipient is liable for all actions (including breaches) of a Consumer Data Right representative.[395]

Two types of data can be shared through the Consumer Data Right for energy. These are summarised in Table B.1 below.

Table B.1 Types of data available through the Consumer Data Right for energy

	Product reference data	Customer data
What types of data are included and who can access	For each energy product a Data Holder (energy retailer) has available, they must provide Product Reference Data through an Application Programming Interface (API). Anyone can access the product reference data (it does not require API authentication). This data is very similar to what is displayed on Energy Made Easy (general information about acquisition offer energy products).	Data a retailer has collected or generated by providing energy services to a customer. Only Accredited Data Recipients can access the Customer Data (it required API authentication).

	Product reference data	Customer data
What is included	• Eligibility criteria • Tariffs on acquisition offers - supply charges, usage charges, demand charges • Usage periods • Conditional discounts • Terms and conditions	• Customer address • Meter type • National Meter Identifier standing fields (meter type, location and network tariff) • Usage data • Tariffs for that customer – supply charges, usage charges, demand charges • Energy Account data, including balances • Energy invoice data • Distributed Energy Resource data

Source: Consumer Data Standards, *Energy APIs*, accessed 8 November 2024.

As of 4 November 2024, there were:

- 20 retailers designated as Consumer Data Right data holders
- 2 Accredited Data Recipients with services primarily related to energy[a]
- 15 Data representatives with services primarily related to energy, however of these, only a very limited number appear to offer services related to price comparison or switching services for energy.[b,396]

Despite CDR system being in place for the energy sector for 2 years, there is still limited usage in the energy sector, including by price comparison and switching services.

A recent review into the Consumer Data Right discussed that Accredited Data Recipients have reported ongoing problems with data quality, customer usability and system responsiveness that they view as hindering their products' adoption and success.[397] Further, these issues were also seen as limiting other entities from becoming Accredited Data Recipients (or data representatives) and developing Consumer Data Right products and services.[c] However, the ACCC is undertaking ongoing work to improve data quality in the Consumer Data Right.[398]

[a] These 2 accredited data recipients were Hive Empire Ptd Ltd (which owns and operates the Finder.com.au price comparison website) and Solar analytics.

[b] We identified one CDR representative that was providing energy price comparison services. This was CIMET Sales Pty Ltd, whose Accredited Data Recipient is CIMIT Sales Ptd Ltd. CIMET Sales Pty Ltd provides white label comparison platforms and services for websites that enables the comparison of energy products (as well as other products including credit cards and broadband). CIMIT Sales Pty Ltd provides the underlying platform that are white labelled by Finder, Econnex, Mozo and EnergyWatch.

[c] This review also discussed that while Accredited Data Recipients face compliance costs, as becoming an Accredited Data Recipient is voluntary, bearing these costs is essentially a commercial decision.

However, we consider the relatively low uptake suggests the reported ongoing problems with the consumer data right, continue to outweigh the benefits from joining.

C About this report

C.1 IPART's evolving role in the retail electricity and gas markets in NSW

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.[399] 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.[400]

In 2002, the NSW Government opened the retail electricity and gas markets to competition, allowing the entry of new retailers.[401] 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.[402]

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.[403]

Retail price regulation in NSW was removed in July 2014 for electricity and in July 2017 for gas.[404] This occurred as the AEMC found that retail competition was sufficiently developed, such that retail price regulation was no longer necessary.[405]

Following the removal of retail price regulation, IPART has been required under the *National Retail Energy Law (NSW)* 2012 to monitor the performance of and competition in the retail electricity and gas markets in NSW.[406]

We do this role through our annual Energy Market Monitoring reports.[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 C.1 below.

However, the removal of retail price regulation was short lived. In 2019, following recommendations in the ACCC's *Retail Electricity Price Inquiry,*[407] the Australian Government re-introduced price regulation for standing offer contracts through the Default Market Offer.[408]

The Default Market Offer sets the maximum price sets that can be charged on standing offer contracts in New South Wales, South Australia and Southeast Queensland and is updated annually by the AER.[b]

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 to advertise electricity prices with reference to the Default Market Offer. The ACCC enforces compliance with the Electricity Retail Code.[409]

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[a] 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.
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. We provide an overview of the Default Market Offer in Box 10.2.

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 sustain and substantial reductions in the underlying costs of procuring electricity. Part XICA of the Competition and Consumer Act is due to sunset on 1 January 2026 after the ACCC's Inquiry into the National Electricity Market concludes.[410]

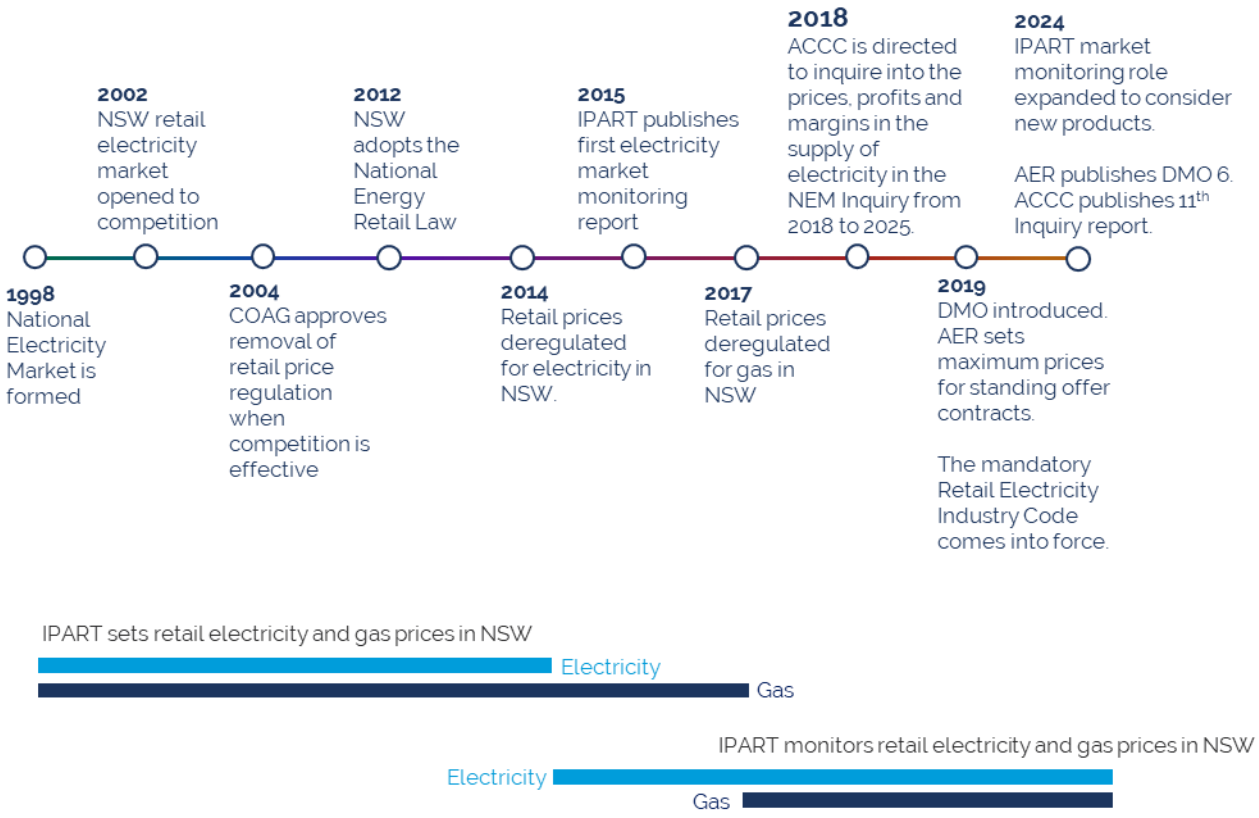
The Commonwealth Treasurer is required to establish a review of the effectiveness of the provisions in Part XICA of the Competition and Consumer Act within 4 years of its commencement. This review is expected to commence in late 2024.[411]

The matters we are required to report on in our Energy Market Monitoring have also been expanded this year. We received a letter from the Hon. Penny Sharpe, MLC, Minister for Climate Change, Energy, the Environment and Heritage in August 2024. This letter discussed that energy products and services in NSW are becoming increasingly complex and requested that IPART include specific analysis on demand response programs, virtual power plant services and demand tariffs.[412]

Further, as discussed above, the NSW Consumer Energy Strategy also included an Action for the NSW Government to introduce require IPART to report on demand response and virtual power plant services of retailers in the annual energy retail market monitor report from 2025.[413]

The evolution of IPART's role in setting and monitoring electricity prices in NSW and other regulator roles in price is shown in Figure C.1 below.

Figure C.1 Timeline of price regulation in NSW and IPART's evolving role



C.2 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 C.1). Further, as discussed above, the Hon. Penny Sharpe, MLC, requested that we include specific analysis on demand response programs, virtual power plant services and demand tariffs in this report.

The matters we are required (or have been requested) to report on and where we do this are shown in Table C.1.

Table C.1 Matters we are required to report on and where we do this

Matters we are required (or have been requested to) to report on:	Chapter in this report
Participation of small customers in the market, and if the Market Monitor thinks it appropriate, particular groups of small customers	We report on participation of small customers (including engagement and switching) in: • **Chapter 4:** Customer engagement, switching and satisfaction • **Chapter 5:** Challenges in searching and switching to a better deal
Price of electricity or gas for small customers in regional areas	We report on the pricing differences between the metropolitan (Ausgrid, Endeavour Energy distribution networks) and regional areas (Essential Energy distribution in: • **Chapter 6:** Pricing outcomes for customers in NSW • **Chapter 7:** Flat-rate tariffs
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, concentration and barriers to entry
The extend to which retailers are competing to attract and retain small customers	We report on the nature and dynamics of competition, including the extent of retailer competition in: • **Chapter 3:** Market structure, concentration and barriers to entry
Whether price movements and price and product diversity in the market are consistent with a competitive market	We report on prices movements and product diversity in: • **Chapter 6:** Pricing outcomes for customers in NSW • **Chapter 7:** Flat-rate tariffs • **Chapter 8:** Time-of-use tariffs • **Chapter 9:** Demand tariffs
If the Market Monitor is of the opinion it is required, steps necessary to improve the competitiveness of each market	We make recommendations in: • **Chapter 3:** Market structure, concentration and barriers to entry • **Chapter 5:** Challenges in searching and switching to a better deal • **Chapter 6:** Pricing outcomes for customers in NSW • **Chapter 9:** Demand tariffs
Whether there is a need for a detailed review of retail prices and profit margins in each market	We consider whether there is a need for a detailed review in: • **Chapter 10:** Retailer costs, margins and profits
New retail offerings and complex products and services: demand tariffs, demand response and virtual power plants	• **Chapter 9:** Demand tariffs • **Chapter 11:** Consumer energy resources, demand response and virtual power plants.

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 12.

C.3 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.[414]

In preparing this report and assessing the performance of and competition in retail electricity and gas market in NSW, we have primarily relied on:

- information in public submissions made by stakeholders to the Energy Market Monitoring Consultation Paper we published in August 2024
- electricity and gas pricing data is provided to the AER for the operation of the Energy Made Easy energy price comparison website
- electricity consumption profile data provided by the AEMC for a sample of customers in the Ausgrid distribution network
- publicly available reports and datasets on the retail energy market published by other regulators, including the AER and ACCC.

D Proposed rule changes and reviews impacting the NSW retail electricity market

The AEMC is in the process of undertaking 2 reviews that are particularly important to the NSW Retail Electricity Market. These are the:

- Accelerated Smart Meter Deployment review
- Review of Electricity Pricing for a consumer driven future.

Further, the Hon Chris Bowen, MP, has recently proposed 7 consumer-focused rule changes to the AEMC that aim to improve pricing transparency, customer outcomes and assist customers experiencing vulnerability when engaging with energy markets. These proposed rule changes are being consulted on by the AEMC.

These reviews and proposed rule changes (if implemented) could have important implications on customer outcomes and competition in the NSW retail electricity market. Further, several of these proposed rule changes are also relevant to the recommendations we have made in this report. As a result, we provide a summary of these reviews and proposed rule changes below.

D.1.1 AEMC Accelerated Smart Meter Deployment review

Over 2022–23, the AEMC conducted a review of the regulatory framework for metering services. This review recommended a 100% uptake of smart meters by 2030 across the National Electricity Market (which includes NSW).

Following the final report, the AEMC published its A*ccelerating smart meter deployment* draft rule in April 2024, to promote the fast, efficient, and effective deployment of smart meters.[c]

In response to the draft rule, stakeholders raised strong concerns about consumer protections and retail tariffs being changed after a smart meter is installed. These stakeholders called for the AEMC to strengthen customer safeguards in the proposed rule change.

In August 2024 the AEMC published a draft directions paper with 2 additional safeguards and extended consultation for the review. These are:

- a draft rule requiring a customer's designated retailer to offer them a flat-rate tariff (through a standing offer contract), even if they have an underlying network tariff that is a time-of-use or demand tariff. Jurisdictions (including NSW) would need to opt in to the rule by applying it through a local instrument for it to take effect.[415]
- a 3-year 'explicit and informed consent period' after a customer gets a smart meter, during which their retailer cannot change their retail tariff without consent. After the 3-year period, retailers can move customers to a new tariff without their consent, however they must provide customers with:
  - 30 business days' notice

[c] The rule change was requested by Intellihub, SA Power Networks and Alinta Energy.

- an estimate of what their historical bill would have been under the new retail tariff
- information on how to understand, monitor and manage electricity usage[416]
- the consent period would not be made available to customers who already have smart meters. Customers would only be able to take advantage of the period again if they changed retailer.

The AEMC has stated that, if approved, the rule changes could lead to higher retail prices for flat-rate tariff customers. This is because when a customer does not give their explicit informed consent to change their retail tariff, their retailer may face a network tariff and retail tariff mismatch for up to 3 years and this may need to be recovered through a risk premium built into the retail flat rate to the tariff structure.

The AEMC has noted retailers may choose to spread the increase in costs across their customer base or to specifically raise price levels for customers with a smart meter who choose to remain on their existing (likely flat) tariff over their 3-year explicit informed consent period.[417]

A decision on the proposed rule changes will be published on 28 November 2024.

D.1.2 AEMC review Electricity pricing for a consumer-driven future

On 25 July 2024, the AEMC initiated a review into the role of electricity pricing, products, and services in supporting the diverse needs of customer and the consumer energy resources necessary for the energy transition.[418]

The AEMC have discussed this review will consider how network and retail interact and how they can operate together to better facilitate the design and offering of electricity products and services for consumers.[419]

The priority areas of focus for the review include:

- market arrangements that provide for consumer choice between a range of appropriate pricing structures, products and services that suit their needs and preferences
- the role of distribution networks in enabling the right incentives, products and services for consumers, and the efficient cost and pricing outcomes that result
- the role of retailers and energy service providers in effectively packaging and pricing electricity products and services to match consumer preferences.[420]

The Consultation Paper for this review details the current arrangements governing electricity pricing were developed at a time when electricity flowed in one direction, and consumers' energy use was largely inflexible. This is being challenged by the scale of consumer energy resource adoption, which is driving multi-directional flows of energy and enabling increasingly flexible energy use by customers.[421]

The Consultation Paper also highlights there is a disconnect in the way prices are communicated to customers and while network pricing is subject to economic regulation, retail prices are determined largely by market competition and these prices components are not necessarily designed with the same objective in mind.[422]

The AEMC have detailed this review will take a future-focused approach and will not seek to optimise the current frameworks at the margin or patch existing issues.[423]

The Final Terms of Reference and Consultation Paper for this review were published on 7 November 2024.

D.1.3 Rule change proposals to the AEMC by the Hon. Chris Bowen, Minister for Climate Change and Energy

On 12 August 2024, the AEMC received a package of rule change requests from the Hon. Chris Bowen, Minister for Climate Change and Energy as Chair of the Energy and Climate Ministerial Council. The rule changes seek to amend the National Energy Retail Rules.[424]

These rule changes were developed in response to research by the ACCC in their Inquiry into the National Energy Market and research by Energy Consumers Australia that found several aspects of the regulatory framework could be strengthened to better serve the interests of electricity customers.[425] The AEMC has not commenced consultation on the proposed rule changes.

We consider that several of these rule changes, if implemented, could address certain issues raised by stakeholders. In particular, the concerns raised by the Justice and Equity Centre around unilateral price increases in energy plans soon after a customer signs up, conditional discounts imposing a high cost on a small segment of the market, and other barriers to switching. However, they may not be the first-best solutions to the issues raised.

Table D.1 Rule changes proposed by the Hon. Chris Bowen

Proposed rule change	Description	Why it was proposed
Ensuring energy plan benefits last the length of the contract	Any benefits provided under a contract (such as discounts or other offers) extend for the duration of the contract. Aims to remove a penalty for consumers not actively engaging with the retail energy market (however this proposal does not limit the ability of retailers to change underlying prices).	For many consumers, choosing an energy provider and plan is a '*set and forget*' task. Retailers compete at the point of acquisition, including through discounts and rebates, but are not incentivised in an ongoing way to keep prices competitive for existing customers. This has contributed to consumers who do not regularly experiencing higher prices, including many paying more than the Default Market Offer.
Preventing price increases for a fixed period under market retail contracts	The proposed rule change would require that any increase to tariffs or charges payable by the customer under a retail market contract cannot be made for a specified fixed period following commencement of an energy plan. Further consultation is proposed to determine the fixed period.	The ACCC has found that consumers who do not regularly engage in the market face higher prices (a *'loyalty tax'*). There is no easy way for customers to know when and by how much their energy price will increase. The ACCC has observed instances of retailers engaging in discount advertising to induce customers to sign up and in some instances passing through large price increases shortly after. This increases switching costs for consumers attempting to remain on competitive acquisition offers, reduces the forward transparency of prices.
Improving the ability to switch to a better offer	The Better Bills Guideline currently requires retailers to include a *'better offer'* statement on the front page of consumer bills. This explains whether the retailer offers a better deal and summary instructions on how to switch plans.	ACCC analysis has found barriers to consumer engagement prevent them from switching to a better offer and around 79% of small customers could be on cheaper deals. The transaction costs currently inherent in switching offers, even within the same energy provider, represent a market failure; the process of a customer achieving the most appropriate offering for them – involving both price discovery and the transaction – is not efficient.

Proposed rule change	Description	Why it was proposed
	This rule change proposes amending the National Energy Retail Rules to introduce an obligation on retailers to provide a streamlined process for consumers to switch to the better offer presented.	
Removing fees and charges	This rule change proposes to remove the following fees and charges for small customers: • account establishment fees • special meter read fees • early termination fees • paper bill fees • credit card and late payment fees (except for the application of reasonable cost reflective amounts).	Retailers are allowed to charge a range of fees including establishment fees, special meter read fees, payment fees and early termination fees. These are not easily visible to consumers and are not likely considered when consumers choose a contract. Under the National Energy Retail Rule, all fees must be reasonable and represent only the cost directly incurred by the retailer.
Removing unreasonable conditional discounts	This rule change proposes to remove the grandfathering arrangement in the AEMC's Final Determination (*Regulating conditional discounting, Part 4.5.4*) to ensure that any conditional discounts are limited to reasonable costs.	Some retailers offer high priced energy plans, with large discounts that only apply if a customer meets certain conditions (e.g. pay-on-time or direct debit discounts). These are known as 'conditional discounts'. If consumers do not meet these conditions, they may be subject to large costs in the form of high underlying energy prices. On 1 July 2020 the AEMC implemented a rule change which limits conditional discounts to the 'reasonable costs' a retailer is likely to incur when payment conditions are not met. However, this only applied to new contracts entered into after 1 July 2020.
Improving the application of concessions to bills	An obligation could be placed on retailers to proactively seek information from any new (and on the rule taking effect, existing) consumers on their eligibility for energy concessions or rebates. Additionally, a new obligation could be introduced requiring information transfer between retailers when a consumer switches retailers.	The National Energy Retail Rules require energy retailers to provide hardship customers and other residential customers experiencing payment difficulties with information about the availability of government funded energy charge rebate, concession or relief schemes. However, the onus to act to ensure a rebate is applied to a bill is on the consumer. The AER's Game Changer Report found information and capability gaps make it hard for many customers to get the rebates and assistance the need and recommended upgrades in the energy sector to automate the application of rebates and concessions to eligible customer bills.
Assisting hardship customers	The Better Bills Guideline requires retailers to include a *'better offer'* statement on the front page of consumer bills, explaining whether the retailer offers a better deal and summary instructions on how to switch plans. This rule change requires retailers to provide a credit on the bill of hardship customers. This credit would be calculated as the difference between the full amount of a customer bill and what the customer would have been charged under the *deemed better offer.*	Consumers experiencing vulnerability or hardship face many barriers when engaging in the energy market, including language barriers, lack of time, lack of understanding of the market and other information asymmetries. This may prevent them getting the best offer available to them. This rule change aims to implement the AER's Game Changer Report recommendation that the Better Bills Guideline should be leveraged to support hardship customers by requiring retailers to automatically move hardship customers onto a deemed better offer.

Sources: Hon. Chris Bowen, MP, Minister for Climate Change and Energy, *Rule change proposal: Ensuring energy plan benefits last the length of the contract, Rule change proposal: Preventing price increases for a fixed period under market retail contracts, Rule change proposal: Improving the ability to switch to a better offer, Rule change proposal: Removing fees and charges, Rule change proposal: Removing unreasonable conditional discounts, Rule change proposal: Improving the application of concessions to bills*, 12 August 2024, accessed 3 October 2024.

E Recommendations from IPART's previous Energy Market Monitoring reports

In Table E.1 below, we list the recommendations that have been made in IPART's electricity market monitoring reports over the past 5 years. 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 E.1 Recommendations made in IPART's Energy Market Monitoring reports, 2017–18 to 2022–23

Report	Recommendation	Response to recommendation
Monitoring the NSW retail energy markets 2022-23	**Recommendation 1** The AER is continuing to improve the operation of Energy Made Easy as a switching service. As part of this improvement, Energy Made Easy should disclose upfront key conditions and restrictions on offers so that customers can make informed decisions.	The AER has enhanced Energy Made Easy to provide detailed plan information documents that outline essential terms, conditions and any restrictions associated with energy offers. In June 2024, the AER also wrote to retailers to provide guidance on how retailers should convey metering requirements for plans on Energy Made Easy.[426]
Monitoring the NSW retail energy markets 2021-22	**Recommendation 1** The NSW Government should provide energy customers with clear, independent information about innovative energy retail offers that involve: • new technologies, such as solar panels, batteries, electric vehicles, smart home devices • service bundling, including where energy services, technology and equipment are bundled with non-energy services • demand response schemes. This information should aim to assist customers to understand new innovative energy services and products, enable customers to make the best choice for their circumstances, and promote sustainable use. This can build on the work already undertaken by the NSW Government including providing information on energy services and technologies, and Service NSW advice for customers about accessing rebates and support.	The NSW Consumer Energy Strategy aims to provide more information on energy technologies and services, including making energy saving technologies more accessible.[427] Energy Made Easy was revamped in 2023 to make it easier for users to access information on various energy plans, including comparing plans involving new technologies and services.[428]
	Recommendation 2 The long-term work underway to transform Energy Made Easy into a switching service would ensure all offers live on Energy Made Easy are made available to customers (subject to published terms and conditions). However, the AER should also investigate short-term options to address this issue. This is important to support customers to be active in the market at a time of rising prices and pressure on energy bills.	The National Energy Retail Rules were updated to require retailers to inform customers if a better offer is available. A proposed change to rule 25A would require retailers to provide a streamlined process for consumers to switch to the better offer as presented on the customer's bill.[429] There have been no specific changes to Energy Made Easy to make it a switching service.

Report	Recommendation	Response to recommendation
	Recommendation 3 As part of its ongoing work to upgrade Energy Made Easy under the Towards Energy Equity strategy, the AER should improve Energy Made Easy data accessibility for all customers. People need better access to their own energy data uploaded to Energy Made Easy, and the energy offer information that Energy Made Easy provides, through a range of interface options.	The Consumer Data Right (CDR) was extended to the Energy sector from November 2022, enabling customers to securely share their energy data with accredited third parties.[430] The CDR also improved access to energy offer information in tabulated form through its API. However, this remains a single interface option that is inherently non user-friendly.
	Recommendation 4 The NSW Government should consider options to promote awareness of current government initiatives and support programs for all customers to reduce their energy costs, transition to more sustainable energy use, and access rebates. Priority should be given to those customers experiencing vulnerability.	Some awareness efforts have been implemented, such as: • updates to the **Service NSW website** to provide comprehensive information on energy rebates and assistance programs.[431] • **Savings Finder Tool**: Service NSW offers the Savings Finder tool to help individuals identify rebates and vouchers they may be eligible for, including for energy savings.[432]
Monitoring the NSW retail energy markets 2020-21	No recommendations were made in this report.	N/A
Monitoring the NSW retail energy markets 2019-20	**Recommendation 1** To support retail market stability, the NSW Government, through the COAG Energy Council, should amend the National Electricity Retail Rules to: • allow the retailer of last resort to prepare a lower price market retail offer for small customers, and • reduce the impact of increased cash flow and/or credit support requirements including greater ability for the AER to appoint multiple ROLRs if appropriate. This can be achieved through an amending the Act to amend the National Electricity Retail Law along with a set of Minister initiated Rules.	In February 2021 the AEMC published a final report of its review of the ROLR scheme, which proposed targeted recommendations to enhance its effectiveness.[433] In August 2024, DCCEEW released a consultation paper and draft amendments aimed at strengthening the ROLR scheme. The proposed changes focus on improving system resilience and managing financial risks associated with retailer failures.[434]
	Recommendation 2 The NSW Government continue to work with relevant national bodies to ensure that all customers, including those receiving supply from an embedded network, have consistent pricing protections. This may, for example, involve pricing protections aligned with the DMO.	The NSW Government released its 'NSW Embedded Network Action Plan', aimed at addressing consumer protection gaps in embedded networks.[435] In 2024, the NSW Government amended the *Residential (Land Lease) Communities Act 2013,* providing interim protections for embedded network customers including capping electricity prices in embedded network at the level of the median market offer.[436]
	Recommendation 3 Energy assistance measures should be designed so all eligible NSW energy customers are able to access them, including customers receiving supply through an embedded network. The NSW Government should continue to pursue changes to ensure all customers can access EAPA vouchers, regardless of their connection type, and aim for this to be in place by 1 July 2022.	The Energy Accounts Payment Assistance (EAPA) scheme was expanded to include customers in embedded networks.

Report	Recommendation	Response to recommendation
		As of August 2024, certain embedded network providers such as Origin and Arc Energy Group have opted in to deliver EAPA vouchers to their customers.[437]
	Recommendation 4 All NSW energy customers should have access to complaints handling processes and external dispute resolution that are independent, binding and free of charge (i.e. EWON). Specifically, the NSW Government, through DPIE, should consider appropriate ways to engage with exempt sellers to ensure that their customers have access to external dispute resolution. This should involve engagement and advocacy with national bodies including the AER concerning registration arrangements for exempt sellers, as well as measures directed at compliance and enforcement.	The AER updated its Retail Exempt Selling Guideline in July 2022, which mandated that exempt sellers inform their customers about available dispute resolution options, including access to energy ombudsman schemes.[438]
	Recommendation 5 People considering buying or renting properties in NSW should have access to better information about embedded networks and common hot water systems. As a first step, existing information sources should be updated including material about buying/renting a property on the Department of Fair Trading's website, or publishing FAQs.	The NSW Fair Trading website was updated to include some information on embedded networks and electricity pricing in residential communities.
	Recommendation 6 The Department of Planning, Industry and Environment take steps to facilitate better data sharing of de-identified bill data for this energy market monitoring role. This will enhance effective monitoring of retail electricity and gas markets, whilst limiting regulatory burden from data collection.	There has been no significant implementation, and data sharing remains limited.
Monitoring the NSW retail energy markets 2018-19	**Recommendation 1** Energy Made Easy and NSW Energy Switch should allow customers to input interval meter data to make more accurate estimates of customers' bills under different offers. This should be ready for the launch of the Consumer Data Right* on 1 July 2020.	Partial implementation through Consumer Data Right (CDR) initiatives, however low uptake from third-party price comparison websites. Energy Made Easy enables customers to input their NMI and use their usage data from AEMO to estimate bills.
	Recommendation 2 The NSW Government publish information on the distribution of consumption and bills for customers that have used NSW Energy Switch. This should be broken down by network area, market vs standing offer and financial year.	No implementation identified.
	Recommendation 3 That the NSW Government remove the requirement for IPART to monitor and report annually on the retail electricity market in NSW. Where required, the NSW Government can request IPART to review or investigate NSW–specific energy matters.	No implementation identified. IPART remains the designated market Monitor for the NSW electricity and gas markets.[439]

Report	Recommendation	Response to recommendation
Monitoring the NSW retail energy markets 2017-18	**Recommendation 1** The NSW Government submit a new transitional rule change to the AEMC to prohibit retailers from engaging in retention and win-back activities for 6 months following a switch. The proposed rule should be in place for a fixed transitional period (for example, 3 years) while competition continues to develop.	In January 2022, the AEMC received a rule change request from ReAmped Energy to prevent retailers making retention offers to switching customers. However, as of November 2024 the AEMC has not yet initiated this rule change request.[440] .

F 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 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.

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