



Monitoring NSW energy
retail markets 2021-22

Final Report

November 2022

Energy >>



Tribunal Members

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The Independent Pricing and Regulatory Tribunal (IPART)

We make the people of NSW better off through independent decisions and advice. IPART's independence is underpinned by an Act of Parliament. Further information on IPART can be obtained from [IPART's website](#).

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.

Executive Summary

IPART is required to report annually on the performance and competitiveness of the retail energy markets. Our report this year is occurring in the context of unprecedented events in wholesale energy markets, and an accelerating transformation of the energy sector. This transformation includes coal-fired power generators announcing early closures and renewable energy sources continuing to grow. This report provides our findings on how competition has developed to date, and the new opportunities that will arise from the energy market transformation. This report is focused on retail electricity, with some key insights included on retail gas markets. Detailed findings on competition in retail gas are covered in a separate Information Paper.

Recent high energy costs have driven declining indicators of retail competition

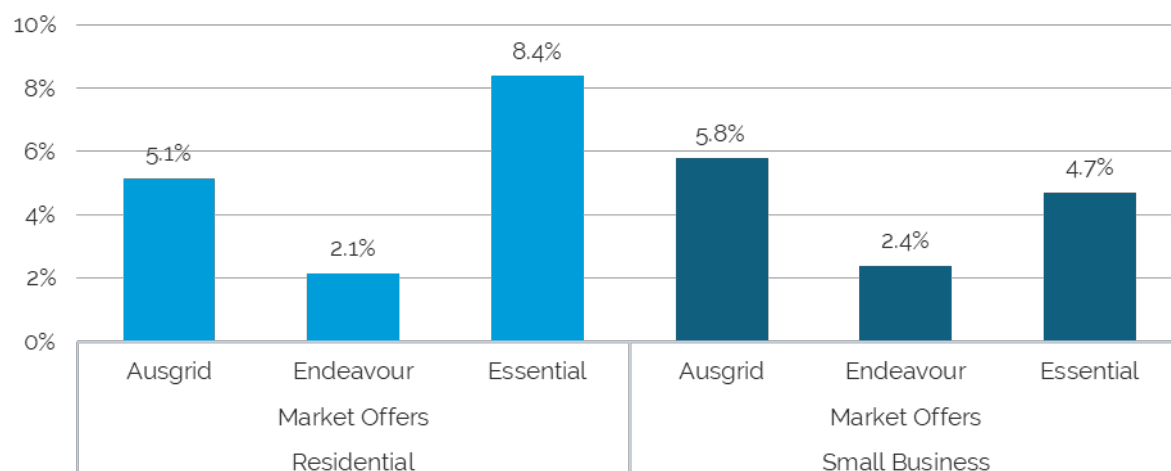
For the first time since deregulation, there are fewer retailers in the market than the previous year. The number of retailers^a making new offers to customers fell from 40 to 35 in 2021-22, and then to 27 in August 2022 (Table 1). One retailer left the market during the April to June 2022 quarter, and another 4 exited since July 2022. At least 3 other retailers encouraged their customers to switch retailers before 1 July, and 11 stopped taking on new customers at some point in the year.

There are also fewer offers in the market at the time of our analysis (August 2022), likely linked to the high costs of new customers to the retailer, and the inability in current market conditions to offer as wide a variety of products.

Prices have generally risen over 2021-22, but the steepest increases have occurred since June 2022 (Figure 1). This is a reversal of the trend of falling prices in previous years. As Figure 2 shows, price increases for the 2021-22 year occurred only in the final months of the year.

^a The number of retailers in the market is defined as the number of retailers in a specified month that are providing offers. In the Energy Made Easy documentation, a published offer is defined as a "generally available plan that is active/available and visible on the website". There are other retailers supplying customers but were not offering contracts to new customers in June 2022. A full list of retailers in the market is provided at Appendix A.

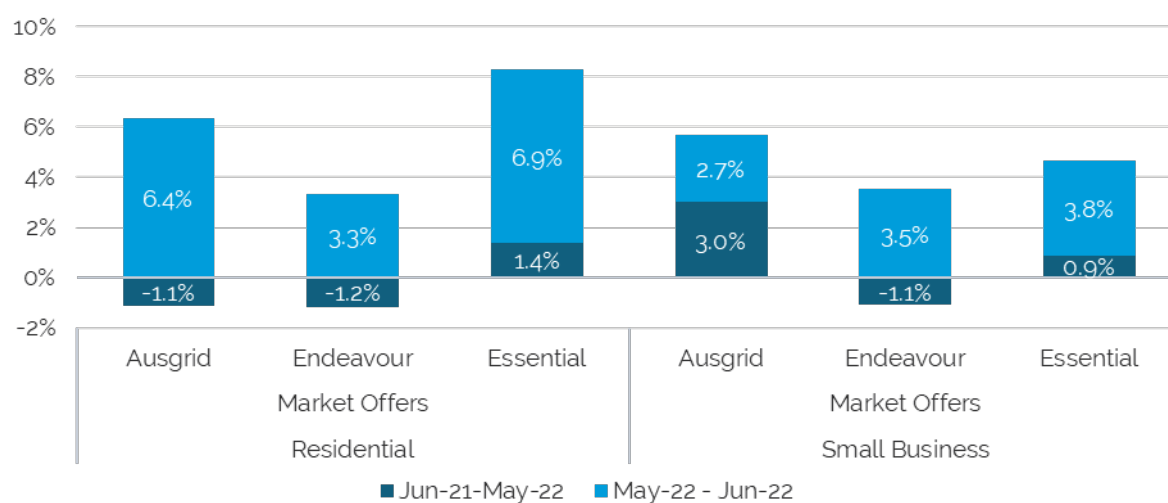
Figure 1 Change in median market offer prices for residential and small business electricity by network area, June 2021 to June 2022



a. Based on 4,215 kWh of residential and 20 MWh of business electricity purchased, including GST, nominal.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Figure 2 Change in median market offer prices for residential and small business electricity by network area, June 2021 to May 2022, and May 2022 to June 2022



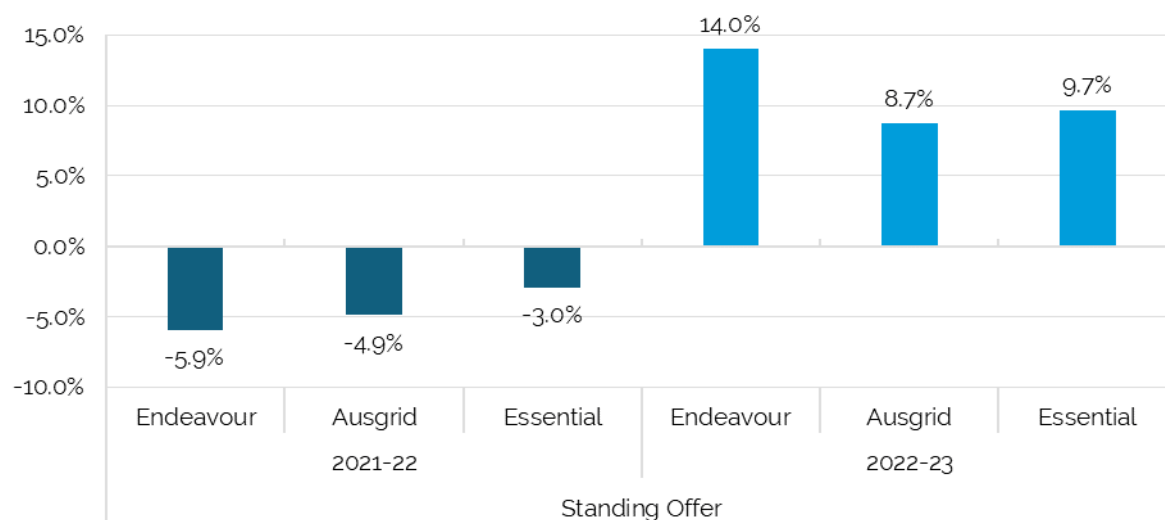
a. Based on 4,215 kWh of residential and 20 MWh of business electricity purchased, including GST, nominal.

b. Jun 21 – May 22 is calculated as the percentage change in the median offer price from June 2021 to May 2022. May 22 – Jun 22 is calculated as the percentage change in the median offer price from May 2022 to June 2022. This is intended to demonstrate relative prices changes at different points in the year. Light blue and dark blue figures cannot be added to measure offer price changes from June 2021 to June 2022.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Standing offer prices, which are capped by the default market offer (DMO) set by the AER (Australian Energy Regulator), initially fell for residential customers by between 3% and around 6% (depending on the network) when they were reset in July 2021 (Figure 3). However, they rose substantially at the July 2022 reset by between around 9% and 14%. Only about 10% of residential, and about 18% of small business customers are on standing offers (Figure 4.2).

Figure 3 Change from previous year in median standing offers for residential electricity by network area



a. Based on 4,215 kWh of residential electricity purchased, including GST, nominal.

b. 2021-22 refers to the period between June 2021 and June 2022. 2022-23 refers to the period between June 2022 and August 2022.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Over the longer term, standing offers for residential customers are slightly lower in real terms (as at June 2022) compared to when prices were deregulated. This is partly because the DMO is only set once per year and did not incorporate the full extent of rises in wholesale costs occurring at the end of 2021-22. Standing offers in 2022-23, which did incorporate some of those cost increases, are now higher than in 2013-14.

Market offers for residential customers have increased in all areas except the Essential network, but this is entirely attributable to price rises in one month of the year (June). Data on customer bills suggests a small to moderate decrease in the bills customers actually paid, but this data does not cover the last quarter of 2022 where prices rose. This will be an important indicator to monitor in the 2022-23 report given that energy prices are likely to rise in the next year, while a range of other factors are increasing the cost of living and putting pressure on customers' ability to pay for energy. Early data from the AER suggests customer hardship is worsening, even prior to the price rises in the last quarter of 2021-22.

In response to higher prices and the behaviour of some retailers, customers may be increasingly switching to, or back to, larger retailers in a 'flight to safety' in a market under stress. Although the annualised switching rate is similar to previous years (around 19%) there is a notable spike in switching in June 2022.

Table 1 Indicators of competition

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Market structure							
Number of retailers	22	22	23	25	33	40	June: 35 August: 27
Market share of small retailers	10%	12%	14%	17%	18%	19%	21%
Customer engagement							
% of customers on market offers	69%	74%	78%	83%	87%	88%	89%
Customer switching rates	16%	17%	19%	21%	18%	19%	19%

Source: Analysis based on data from AER, [Retail energy market performance update for Quarter 3, 2021-22](#); June 2022.

Fewer retailers and reduced offer diversity coupled with higher offer prices are typically seen as indicators of poorer competition in the market. However, this does not necessarily mean that competition is ineffective or failing consumers when considered within a broader context:

- The number of retailers in the market in June 2022 was still higher than at any time from 2015-16 to 2019-20. Given the severity of recent wholesale price shocks (which are external to the retail market), this could be seen as a sign of resilience. Not all markets have demonstrated such resilience.
 - For example, recent wholesale price shocks in the United Kingdom have seen a 50% reduction in the number of retailers over the year to December 2021¹, affecting millions of customers and driving up costs for consumers.²
 - However, if 2022-23 continues to see smaller retailers leaving the market, this may be a sign that the current volatile wholesale cost environment is not suitable for smaller retailers. Over the medium term this may have implications for competition. Market entries and exits over the coming years, may be an indicator of how the competitive market deals with the risks of the wholesale energy market.
- While 2021-22 saw moderate price rises over the year, the vast majority of the price increases happened after June 2022 in response to a large wholesale price spike.

Customers can still benefit from shopping around despite similarly priced market and standing offers

Recent offer prices in July and August 2022 show the difference between median market and median standing offers has dropped dramatically (see Figure 4 below). These are now closer together in price than at any other time since IPART began its market monitoring role. Our review of offers in the market shows that the median market discount off the residential standing offer has dropped from around 15% in May to less than 2% in August.

While there is still benefit for customers to shop around for a better deal, that benefit is likely to be smaller than at any other time since deregulation of retail electricity. For customers on market offers who have not shopped around recently, there may still be a better deal in the market if their original discounts have expired or if their current offer prices have been increased.^b Further, although the spread of offers has narrowed, there are still offers available that may represent a better deal for customers.

The energy market is currently undergoing a period of volatility characterised by unprecedented wholesale prices and market intervention

The final few months of 2021-22 saw unprecedented outcomes for wholesale gas markets and wholesale electricity markets in NSW, and more broadly across eastern Australia. These outcomes included:

- 01 Average wholesale gas spot prices of \$28.40/GJ across eastern Australia for Q4 2021-22 compared with \$8.20/GJ during the same period the previous year (Q4 2020-21).
- 02 Due to these high wholesale gas spot prices, and a Retailer of Last Resort event, the wholesale gas market in NSW was placed under an administered price cap of \$40/GJ from 24 May 2022 to 7 June 2022.
- 03 Average wholesale electricity spot prices of \$264/MWh across the National Electricity Market (NEM) for Q4 2021-22, compared with \$85/MWh during the same period the previous year (Q4 2020-21).
- 04 The frequency of spot prices above \$300/MWh was 26% in Q4 2021-22, compared with 1% in Q2 2020-21.
- 05 Due to the prolonged period of high prices, New South Wales (along with South Australia and Victoria) was placed under an administered price cap of \$300/MWh on 13 June 2022.
- 06 The application of the administered price cap coincided with reductions in the volume of generation offered into the market. The Australian Energy Market Operator (AEMO) intervened by directing generators to make generation capacity available for dispatch, and by cancelling outages.
- 07 Despite taking these actions, AEMO concluded that its automated systems and processes became impossible to manage, and so the wholesale spot market was suspended from 15 June 2022 to 24 June 2022.
- 08 As spot prices for gas and electricity increased from around March 2022, forward prices for gas and electricity were also increasing.

^b Noting that some market offers are now above the DMO. See section 4.6.

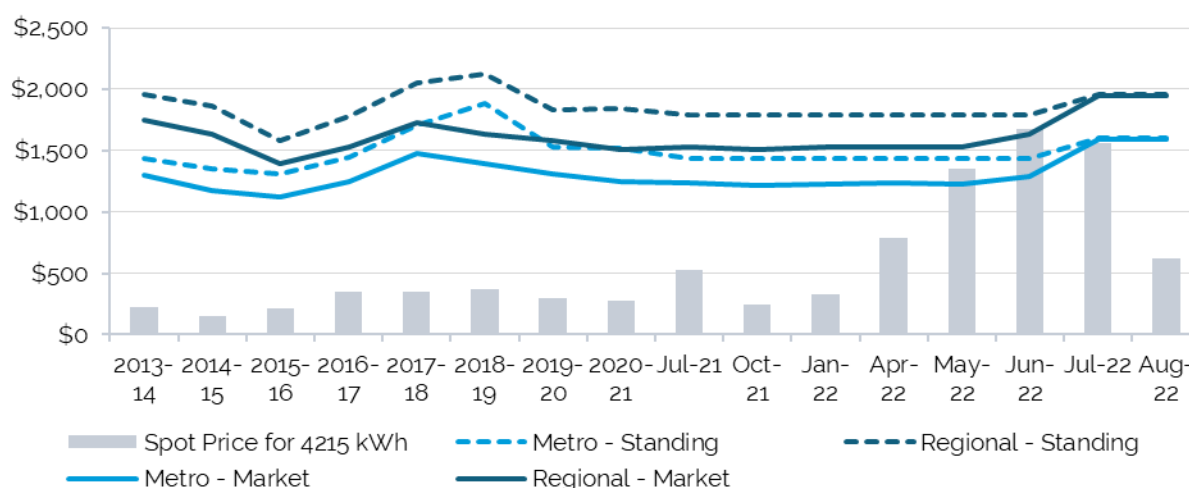
This unprecedented series of events in east coast energy markets was driven by a number of factors, including:

- The war in Ukraine, which has created an international gas shortage and consequently high international gas prices. This has resulted in a higher domestic price consistent with high international prices,
- Coal-fired generation outages.
- Elevated levels of gas-fired generation.
- Fuel supply issues.
- An unusually cold start to winter in June.

The retail impacts of this energy market 'crisis' only emerged towards the end of the 2021-22 year, with most impacts likely to be felt in 2022-23

Electricity and gas retailers are generally 'hedged' against volatile gas and electricity spot prices. For retailers that are 'hedged', the increase in gas and electricity spot prices does not necessarily increase their costs. This is likely one of the key reasons that retail gas and electricity prices did not increase markedly over Q4 2021-22 and stayed at levels similar to other years since deregulation. However, there is evidence towards the end of the 2021-22 year, and in July and August 2022, that these wholesale market impacts are filtering through to retail offers.

Figure 4 Annual residential electricity bills for median offers by offer type and region in NSW compared to spot price



a. Annual electricity bills based on 4,215 kWh of residential electricity purchased, including GST, nominal

b. Spot price based on average wholesale electricity price in each period for 4,215 kWh of electricity

c. Regional refers to median of all offers in the Essential Energy network. Metro refers to the median of all offers in the Ausgrid and Endeavour Energy networks.

Source: IPART analysis of data from [Energy Made Easy](#), wholesale electricity price data from AEMO. Accessed May-August 2022 respectively.

Figure 4 shows a number of key impacts emerging in retail electricity offers from June to August 2022, including that:

- Median market offer prices rose sharply. The median market offer price in July 2022 is higher than at any other time since IPART began monitoring the market. Standing offers also rose in July 2022, noting that standing offers are set based on the AER's determination of the DMO which is only updated once a year.
- From May to July 2022, the retailer cost of purchasing energy on the spot market exceeds the total customer bill. That is, the spot market cost of just the electricity needed for a typical residential customer (4,215 kWh) exceeds the entire bill that customer would pay the retailer (including the other components of the retail bill; network costs, environmental costs, and retail costs and margins). Although most prudent retailers would not face this cost because they typically hedge most of their load, this gives an indication of the high costs retailers would have faced for any unhedged components of their load, for example contracts that have rolled over or unexpected new load. Under these conditions retailers may face pressure to reduce intake of new customers because they come at a net cost to the retailer.³ As Chapter 3 explores further, a number of retailers withdrew all offers in the market in 2021-22 and stopped taking on new customers.

In the longer term, higher spot prices are likely to increase the cost of hedging instruments. As these hedging instruments become more expensive, retailers' costs will increase. While not directly relevant to this report on outcomes during 2021-22, the increase in the cost of hedging instruments is likely to have material consequences for retail market outcomes in 2022-23. There are other costs that are yet to be passed through to customers, such as the costs of compensation to generators due to AEMO's market interventions listed above.^c The full amount of compensation for generators during the period of market suspension is currently being finalised by AEMO pending an independent expert determination. The claims for compensation by generators for the period of the administered price is cap will be progressively assessed and determined by the AEMC.^d

^c See section 4.1.3 for more detail.

^d AEMO 2022, [June 2022 NEM Events: Compensation Update \(15 August 2022\)](#).

Findings

1.	Retailers are still competing for customers, but key indicators of competition are now in decline:	51
	<ul style="list-style-type: none"> – There are now 27 retailers in the market (35 at the end of 2021-22), which represents the first year-on-year reduction in the number of retailers since deregulation. However, this is still more than twice the number of retailers in 2013-14 when we first started monitoring the market. – Retailers compete for customers on price, but substantially less so than in previous years as high wholesale prices dramatically reduce the discount retailers are able to provide relative to the standing offer. The lowest offers in the market in June 2022 are only around 11% lower than the highest market offers. – Retailers are still offering service innovation, aligned with the imperative to avoid high wholesale costs and leverage value from distributed energy resources and demand flexibility. 	
2.	Customers continue to engage in the market in 2021-22:	58
	<ul style="list-style-type: none"> – Switching rates decreased slightly from 19% to 18.7%, but are still consistent with switching rates over previous years. – The proportion of residential customers on market offers is similar to previous years - at 90%, and 82% for business customers (up from 81%). 	
3.	Some evidence suggests that not all live offers on Energy Made Easy are made available to customers. This can undermine consumer trust in the service as an accurate information source and present another barrier to customer switching.	58
4.	Reported satisfaction with electricity retail services over 2021-22 decreased slightly.	60
5.	The number of electricity-related complaints to EWON in 2021-22 was lower compared to previous years.	60
6.	The market concentration reduced slightly in 2021-22, but this likely reflects the timeframe of available data which does not capture Q4 2021-22 and should be revisited when new data is available. The combined market share of the Big 3 retailers was down slightly on last year. In 2022-22:	64
	<ul style="list-style-type: none"> – 79% of customers are supplied by the Big 3. – 95% of customers are supplied by 10 retailers. The remaining 5% of the market is shared between 25 retailers. 	
7.	Market offer prices were mostly flat over most of 2021-22, however prices increased in May and June:	79
	<ul style="list-style-type: none"> – The median market offer for residential and business customers rose by between 2% to 8% in nominal terms from June 2021 to June 2022. – The median market offer for residential and business customers rose by between 19% and 34% in nominal terms between June and August 2022. 	
8.	The median standing offer fell moderately following the 1 July 2021 reset of the DMO, but rose substantially following the 1 July 2022 reset by around 9% to 25%.	79
9.	Price changes broadly reflected the underlying changes in costs in 2021-22 – wholesale prices specifically. A detailed review of prices and profit margins is not required.	79
10.	As at June 2022, market prices in all networks were lower in real terms than they were in 2013-14 when retail electricity prices were deregulated in NSW. However, because of the subsequent price increases, as at August 2022, market prices were	

	3% higher in real terms than they were in 2013-14 in the Ausgrid and Endeavour networks.	79
11.	Typical customers will only be better off under time-of-use offers if they can effectively shift their consumption out of peak periods. Median single rate market offers in the Ausgrid network were lower than time-of-use offers except for customers with a low proportion of their usage during the peak.	85
12.	Bills remained flat in the first half of 2021-22. On average across the three networks areas, bills for rebate customers on standing offers increased by less than 1% and bills for rebate customers on market offers decreased by less than half of 1%.	99
13.	Multiple factors such as rising inflation, extreme weather events and ongoing COVID-19 impacts have put pressure on customers' capacity to pay for energy. Even prior to price rises in Q4 2021-22, there have been increases since June 2021 in numbers of customers: <ul style="list-style-type: none"> – in energy debt (around 4% increase) – on payment plans (around 6% increase) – in hardship programs (around 24% increase for residential customers). 	99
14.	Standing offers remained lower than historic peaks around 2018-19 in all networks. In the Ausgrid and Endeavour networks standing offers in 2021-22 were similar to 2013-14 when retail electricity was deregulated, but were lower in the Essential network, noting that the standing offer does not account for the full extent of recent wholesale market price volatility.	105
15.	Standing offers rose materially on 1 July 2022 to reflect higher wholesale energy costs and higher than in 2013-14 in all networks. Some retailers have now set their lowest market offers above the standing offer.	106
16.	The DMO functioned effectively as a reference price that caps standing offers in 2021-22, however early developments in 2022-23 suggest it will need to be closely observed next year to ensure it provides enough headroom for retailers to enable competition.	106

Recommendations

- | | | |
|----|--|----|
| 1. | <p>The NSW Government should provide energy customers with clear, independent information about innovative energy retail offers that involve:</p> <ul style="list-style-type: none"> – 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. <p>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.</p> | 43 |
| 2. | <p>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.</p> | 58 |
| 3. | <p>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.</p> | 58 |
| 4. | <p>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.</p> | 99 |

Contents

Executive Summary

Chapter 1

Introduction and what we heard from stakeholders **15**

- 1.1 What is the purpose of competition? 16
- 1.2 What do we report on? 18
- 1.3 Purpose of our report 19
- 1.4 Report timetable 20
- 1.5 What we have heard from stakeholders 20

Chapter 2

Key context for this report **23**

- 2.1 Unprecedented events in wholesale energy markets 24
- 2.2 Forward market data suggests high wholesale prices will continue 27
- 2.3 The retail impacts of high wholesale prices will increase in 2022-23 29
- 2.4 The mix of energy generation in the market is transitioning to meet the changing needs of customers 33

Chapter 3

How retailers are competing **44**

- 3.1 For the first time since deregulation, there are fewer retailers in the market than the previous year 45
- 3.2 Some retailers still compete on price, but there is substantially less price variation in the market 47
- 3.3 There are fewer offers available in the market 48
- 3.4 The current context of high energy costs may pose both challenges and a strong incentive for retailer innovation in the market 49

Chapter 4

How customers are responding **52**

- 4.1 Increasing levels of customer engagement 53
- 4.2 Consumer sentiment and confidence has decreased slightly on some measures 58

Chapter 5

How the market structure is changing **61**

- 5.1 Wholesale market volatility in 2021-22 affected retail market competition 62
- 5.2 Barriers to expanding market share 65

Chapter 6

Prices in the market **67**

- 6.1 Overview of price trends 68
- 6.2 Prices have risen modestly from 2020-21 to 2021-22 and strongly over early 2022-23 70
- 6.3 Prices in some networks are now higher than when IPART began monitoring markets in 2013-14 77

Chapter 7	
Time-of-use prices	80
7.1 A typical customer is better off on a single-rate offer	82
7.2 Small savings are available if customers can halve their peak usage	83
7.3 Time-of-use offers have higher fixed charges	85
Chapter 8	
Customer outcomes	86
8.1 Bills remained flat in the first half of 2021-22	88
8.2 Bills by socio-economic indices	90
8.3 Hardship and payment plan customers have higher bills	92
8.4 Customer hardship has worsened	95
8.5 Rebates and assistance measures are available but may be underutilised	96
Chapter 9	
Impact of the default market offer	100
9.1 The DMO appears to be functioning appropriately as a reference price in 2021-22	101
Chapter 10	
Prices for customers in embedded networks	107
10.1 Consumer protection issues for customers in embedded networks are currently under review in NSW	108
10.2 Price outcomes for embedded network customers	110
Appendix A	
List of retailers in the market	115
Appendix B	
Median market offers and tariffs	118
Appendix C	
Range of offers in each network area	121
Glossary	

Chapter 1 »

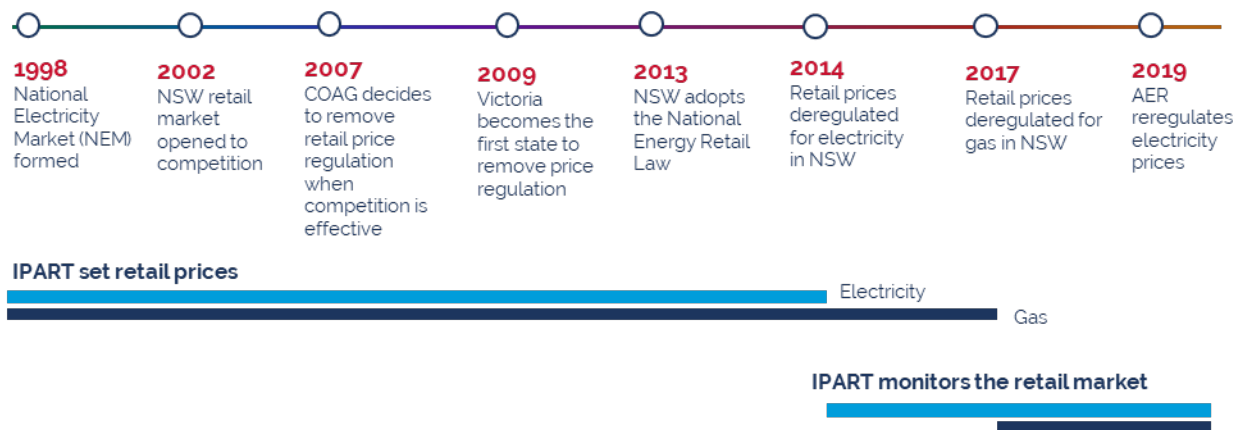
Introduction and what we
heard from stakeholders

01

The NSW Government opened the electricity and gas retail markets to competition in 2002.⁴ Prior to this, there was a single government-owned supplier in each network area, that provided both distribution and retailing services.

While competition was developing, IPART continued to set retail prices for the incumbent suppliers. Retail price regulation was removed from July 2014 for electricity,⁵ when the AEMC found that competition was sufficiently developed,⁶ and July 2017 for gas.⁷ IPART has since been required to monitor competition in these markets.⁸

Figure 1.1 Timeline of IPART's role setting and monitoring retail energy prices



While competition should deliver better outcomes for customers, increasing underlying costs can still lead to higher prices. For example, in the period since competition was first introduced, the regulated network costs more than doubled between 2008 and 2014, leading to higher retail prices.^a

More recently, wholesale costs have been volatile as the generation mix has started to change. Unprecedented wholesale price peaks for both electricity and gas occurred at the end of 2021-22, as discussed in more detail in Chapter 2. The focus of ongoing energy market reforms is on ensuring sufficient investment in new generation and storage, that these power sources are responsive to fluctuations in demand and supply throughout the day, and that they can provide the system strength and voltage required.

1.1 What is the purpose of competition?

Competition was introduced into energy retail markets to provide value for customers in the longer term. Without competition, there are limited incentives for businesses to become more efficient over time.

In a competitive market, businesses need to find new ways of doing things to gain customers – either by becoming more efficient to reduce prices, or by offering a better product or service. If a business increases its prices above what it costs to supply the service (including a reasonable profit), then they will be outcompeted and lose customers.

^a Based on the networks' price lists for residential customers on an anytime tariff.

1.1.1 Market driven cost reductions should outweigh the costs to competition

There are some costs to competition. For example, businesses need to spend money on marketing to attract customers. In the energy market, systems needed to be set up to transfer customers from one retailer to another. However, these costs should be outweighed by the continual pressure on retailers to reduce their key cost drivers. This means buying wholesale energy efficiently to avoid exposure to high price spikes or finding new ways to drive down these costs – like rewarding customers to reduce energy usage when wholesale prices are high, or selling electricity from household batteries back into the market at these times. This report follows a period of volatility in wholesale energy markets that has seen unprecedented price peaks that will impact retailers in the market, and ultimately, customers.

1.1.2 Pricing differences can accelerate competition

As retailers compete with each other, a range of prices will emerge in the market. This reflects the variation in service and product offerings, and the different price strategies retailers use to recover their costs.

A common strategy has been for retailers to charge higher prices to customers who are less price sensitive and less willing or able to switch retailers – recovering more of their costs from these customers. This has been referred to as 'loyalty tax'. Many people consider that this pricing strategy is unfair and inappropriate for an essential service where there has traditionally been little product differentiation.

Differences between prices provide an incentive for customers to shop around because they can make savings. As retailers attempt to outcompete each other for these customers, they should become more efficient and the quality of services and products should improve. Our recommendations in previous reports have focused on measures that would help customers engage effectively and regularly in the market to ensure they can access the best price. This may be more important than ever now as the energy market transitions to a renewable fuel mix and retailers develop new and innovative offers that leverage value available from distributed energy resources and flexible consumer demand. These offers can be complex and inherently more difficult to understand, and ensuring customers are sufficiently informed and empowered to make the best decision for them may be more challenging.

In 2019-20, the Australian Energy Regulator re-introduced a cap on the prices that retailers can charge.⁹ This is called the "default market offer" or DMO.¹⁰ This was intended to balance the objectives of protecting customers on standing offers from very high prices, and providing an incentive for customers and retailers to engage in the market to drive better outcomes over the longer term. Since the DMO was implemented, the gap between the highest and lowest prices has narrowed (as discussed in Appendix C).

¹⁰ The DMO is a maximum bill for standing offers for a given level of consumption. Retailers must structure their prices so that they do not exceed the DMO at that level of consumption.

1.1.3 Competitive markets should result in relatively lower prices in the long run

Although retailers constantly face competitive pressure to either lower their prices or develop new and better products, this does not mean that price rises will not occur in competitive markets. Even efficient, competitive retailers must respond to external cost pressures they can't control (though we would expect retailers may have different ways of responding). In electricity markets, this can include the network costs faced by retailers, or increases in the cost of energy itself (discussed in Chapter 2).

Where retail energy markets are faced with externally driven shocks, the way the market responds is not necessarily a benchmark of competition. Even in a market where competition is deemed to be delivering good outcomes for customers including low prices and choice under average conditions, fluctuations in price, are still expected when conditions change. However, over the long run, we would expect competition to deliver lower prices and more choice on average compared to a situation without competition, where retailers face no incentive to adapt to consumer preferences for lower prices or innovative products.

1.1.4 Strong protections are required for customers experiencing vulnerability

Energy is different from other products because it is an essential service. Therefore, strong customer protections are needed to ensure that customers are able to connect with a retailer, and to provide customers in financial difficulties with different options for paying their bills to stay connected.

In addition to the Australian Consumer Law, which applies to all businesses, energy retailers must comply with the National Energy Retail Law and Rules. These provide energy-specific consumer protections and more detailed provisions regulating the rights and obligations of retailers and consumers in retailer energy markets.

In any market, there will continue to be customers experiencing vulnerability even with additional protections. Governments provide targeted assistance to these customers through the social welfare system.

1.2 What do we report on?

Our market monitoring role is set out in the [National Energy Retail Law \(NSW\)](#).¹⁰ We must consider:

- the extent to which retailers are competing to attract and retain small customers (Chapter 3)
- the participation of small customers in each market (Chapter 4)
- any barriers to entry to or exit from, or expansion, in each market (Chapter 5)
- whether price movements and price and product diversity in each market are consistent with a competitive market (Chapters 3 and 6)
- prices of electricity for small customers in regional areas (Chapter 6).

We will consider these factors in combination to assess whether competition is protecting customers in NSW.

We must also report on:

- whether there are any actions needed to improve the competitiveness of the market, if we are of the opinion that it is required (discussed in Chapter 2).
- whether a detailed review of retail prices and profit margins in each market is required (discussed in Chapter 6).

We can also report on any other relevant matter. As part of our report, we have considered:

- The impact on retail energy markets of the recent 'energy crisis' of very high wholesale energy prices for both electricity and gas (Chapter 2 and 3)
- Key updates on the energy market transition and key reforms, both in NSW and nationally, and what this means for retail competition and climate change (Chapter 2)
- Ongoing impacts on customers and retailers of:
 - COVID-19 (Chapter 8)
 - the default market offer (Chapter 9)
- Pricing for customers in embedded networks (Chapter 10)

This report is focused on small retail electricity customers, with some key insights included on retail gas markets. Detailed findings on competition in retail gas are covered in a separate Information Paper.

Each year we must report on the performance and competitiveness of the NSW energy retail markets

Our role is set out in section 234A of the National Energy Retail Law (NSW)

We are limited in the information we can consider

1.3 Purpose of our report

For almost 10 years, the retail markets in most states have been regulated under the same National Energy Retail Rules. They are regulated and monitored by cross-jurisdictional bodies, including the ACCC and the AER (Table 1.1). Given this broader oversight of the markets, our report is focused on the available information and price trends most relevant to NSW.

The legislation limits the information we can consider in our 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, and those standing offer prices.¹¹

Our report uses the most up-to-date information available at the time of analysis, which included public information available as at August 2022.

In addition to our annual market monitoring reports, the legislation also provides for the Minister to ask IPART to undertake special reviews in connection with the energy market. For these reviews, we are not limited in the information that we can consider.¹² We have not been asked to conduct a special review this year.

Table 1.1 Ongoing energy retail market monitoring reviews

Regulator	Scope of the review	Fuel	Role commenced	Reporting
IPART	Competition and performance – NSW	Electricity and gas	2014-15 for electricity, 2017-18 for gas	Final Report in November each year
EWON	Customer complaints	Electricity and gas	2016	Quarterly
AEMC	Competition – NEM	Electricity and gas	2014	June each year. The AEMC did not release a report in 2021 or 2022.
AEMC	Price trends – NEM	Electricity only	2011	December each year
AER	State of the market – NEM	Electricity and gas	2007	July each year
AER	Annual retail markets report – NEM	Electricity and gas	2013	November each year
ACCC	Prices, profits and margins for retail and wholesale sectors, cost changes and drivers, and barriers to entry – NEM	Electricity only	2019	Every six months until 2025.

1.4 Report timetable

We commenced preparing this report in July this year and have met with several energy consumer stakeholders and retailers. We also considered submissions to this report provided by stakeholders and incorporated updated information since our Draft Report.

Figure 1.2 Report timeline



1.5 What we have heard from stakeholders

Our key stakeholders for this review include:

- energy market participants, including customers and retailers, and organisations advocating on their behalf (such as the Public Interest Advocacy Centre (PIAC))
- NSW Government agencies with an interest in NSW-specific analysis of energy markets
- energy market regulators.

We received 4 submissions to our Draft Report, which provided additional information for us to consider in our analysis and commentary on the key themes of this review.

Customer hardship and vulnerability

PIAC has emphasised in its submission that the current context of rising energy prices (and other economic stressors like rising cost of living) creates a serious challenge for customers experiencing vulnerability. PIAC noted a number of issues including that¹³:

- Consumer outcomes and experiences should be a focus of market monitoring.
- Vulnerable customers typically pay more in their energy bills.
- Disconnection threats and disconnection only add to stress experienced by already vulnerable people.
- Average debt has risen and is likely a symptom of the widening gap between people who can afford distributed energy resources and energy efficient homes and those who cannot.
- Highly accessible buy now, pay later credit products may be having the effect of masking debt or vulnerability issues in the customer base and exacerbating energy debt and hardship.
- Some vulnerable people cut back energy use by foregoing hot water and heating in winter. This issue is exacerbated by thermally underperforming housing that is hot in summer and cold in winter. Some also forgo other essentials like groceries to pay for energy costs.
- There is some evidence suggesting that disadvantaged households are not currently receiving rebates they may be eligible for due to a range of barriers to accessing available rebates. PIAC commented that rebate eligibility is also narrow and rebate design should be reconsidered to deliver better assistance to those who need it.

PIAC also commented that many customers facing vulnerability are often burdened with additional costs associated with the way they pay their bills. PIAC noted that research it has conducted with the Australian Communications Consumer Action Network found that "many lower income consumers pay more for their energy bills, not because of higher consumption, but because of the way they pay or because they do not have the cash flow to pay on time."¹⁴

The AER has also highlighted in its submission that it is also important to better equip energy businesses to identify and support customers experiencing vulnerability and to do so early. This is complex for business or Government due to the diverse nature of vulnerability. The AER notes that energy businesses cannot control many of the factors that contribute to vulnerability, but they shoulder the costs of managing it for the entire supply chain. The AER is seeking to identify reform opportunities with the energy sector in its recently released [Towards Energy Equity strategy](#).¹⁵

In response to this feedback from stakeholders, and as more data has become publicly available, we have added a new chapter (Chapter 8), which includes:

- analysis of actual customer bills in Chapter 8 to complement our analysis of listed offer prices on Energy Made Easy
- further analysis of rebates and affordability outcomes, including analysis of hardship and payment plan customer outcomes

- key insights and updates from the AER's recently released [Towards Energy Equity strategy](#)
- a new recommendation that the NSW Government consider options to promote awareness of rebates and energy efficiency opportunities, to help ensure those needing assistance are accessing rebates.

We agree that issues PIAC has highlighted around the underconsumption of energy and other essentials are important. We are looking at what public information might be available on these issues for our next market monitoring report. We will also consider fees, charges and discounts. In acknowledgment of the harm they can cause small consumers, pay-on-time discounts have now been capped by the AEMC.¹⁶ However, there is still a wide range of fees, charges beyond the supply and usage charge and other discounts that can have a material impact on customer bills.

Equity of access to consumer benefits of the energy market transition to renewables

PIAC has also noted in its submission that customers experiencing vulnerability, those in hardship and those on lower incomes are at risk of exclusion from the benefits of the energy market transition. This is because they are least likely to be able to access, or afford, key technologies such as energy efficient appliances, solar, or batteries.

We agree this is a risk, especially with the energy market transition accelerating in the context of rising cost of living. We discuss this issue further in Chapter 8.

Issues accessing offers on Energy Made Easy

PIAC raised a number of concerns about the usability of Energy Made Easy and retailer conduct in relation to offers published on the Energy Made Easy website. Its submission provides some evidence that:

- retailers do not always honour offers that appear to be available on Energy Made Easy
- retailers do not always adhere to rules requiring them to make best efforts to support eligible customers into hardship programs or onto rebates they are eligible for
- disadvantaged households can face multiple, prohibitive barriers to negotiating with a retailer to switch to a better energy plan they find on Energy Made Easy.

We discuss these issues further in Chapter 4 and have made some new recommendations that should assist with some Energy Made Easy-related challenges.

Embedded networks

PIAC has highlighted a range of consumer protection concerns for customers in embedded networks. Embedded network customers cannot access price competition and may not be protected by the DMO (among a range of other issues).

We also received one submission from an individual expressing the frustration of being locked into a long-term energy contract where they cannot choose their retailer.

These are well documented issues and are currently the subject of a NSW parliamentary inquiry. We discuss outcomes for embedded network customers further in Chapter 10.

Chapter 2 »

Key context for this report

02

This report is focused on market and customer outcomes in retail electricity and gas markets in NSW over the 2021-22 year. However, these outcomes can be strongly influenced by events in wholesale markets for electricity and gas. Energy retailers procure the energy their customers need from wholesale markets. In electricity markets:

- A retailer is required to pay for all the electricity its customers use in the wholesale spot market at the prevailing spot price, which changes every 5 minutes.
- A retailer can manage its exposure to volatile spot prices by:
 - owning electricity generation, in which case the spot price the retailer receives for its electricity generation offsets the spot price the retailer pays for its customers' electricity consumption.
 - entering into a long-term agreement to purchase electricity at a fixed price from a generator (commonly known as a Power Purchase Agreement), which means the retailer will face the fixed contract price rather than the volatile spot price.
 - entering into short-term financial hedging contracts (such as those traded on the ASX), which mean that the retailer will face the fixed contract prices rather than the volatile spot price. These are monthly and quarterly hedging contracts, that generally trade for 2 to 3 years in advance of the month or quarter.

In gas markets, a retailer can:

- purchase gas through one or more of the wholesale spot markets that operate in eastern Australia, at prevailing spot prices that generally change every day.
- purchase gas at a fixed price through a short-term or long-term agreement with a gas supplier or gas trader (commonly known as a Gas Supply Agreement).
- enter into short-term financial hedging contracts (such as those traded on the ASX), which mean that the retailer will face the fixed contract prices rather than the volatile spot price. These contracts are used less commonly in gas markets than in electricity markets.

The costs of procuring energy from the wholesale market make up a substantial proportion of overall costs that retailers must ultimately recover from end customers (about 36% for residential electricity customers in 2021-22¹⁷ and about 27% for residential gas customers in 2017¹⁸ - the last year for which data is reported). Therefore, sustained cost increases in wholesale energy can have material consequences for retail markets.

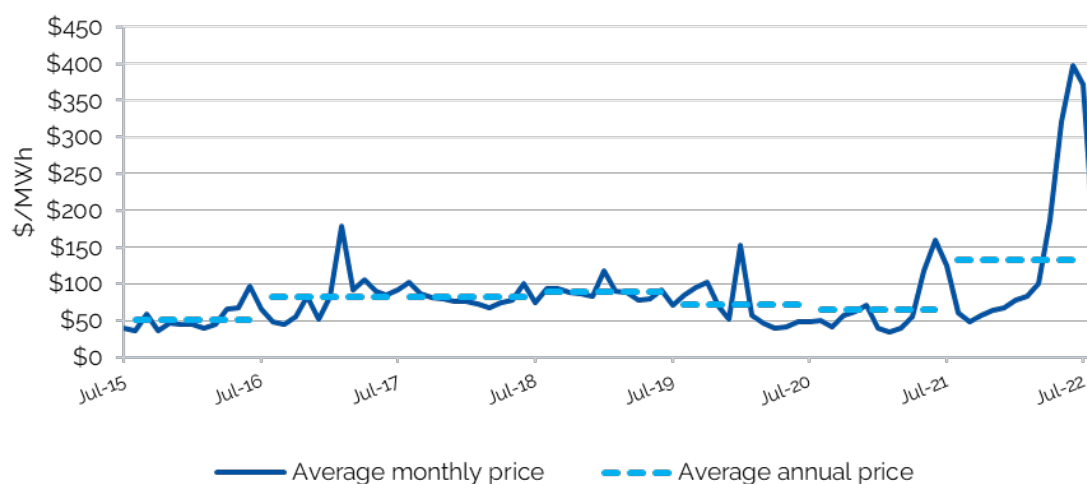
2.1 Unprecedented events in wholesale energy markets

Wholesale energy markets have recently undergone a period of substantial volatility. The final few months of 2021-22 saw unprecedented outcomes for wholesale gas markets and wholesale electricity markets in NSW and across eastern Australia. These outcomes received substantial media coverage, often dubbed an 'energy crisis'^a and included:

^a See, for example, ABC, 2022. [Is our energy supply in crisis? What's the National Electricity Market? Can it be fixed?](#)

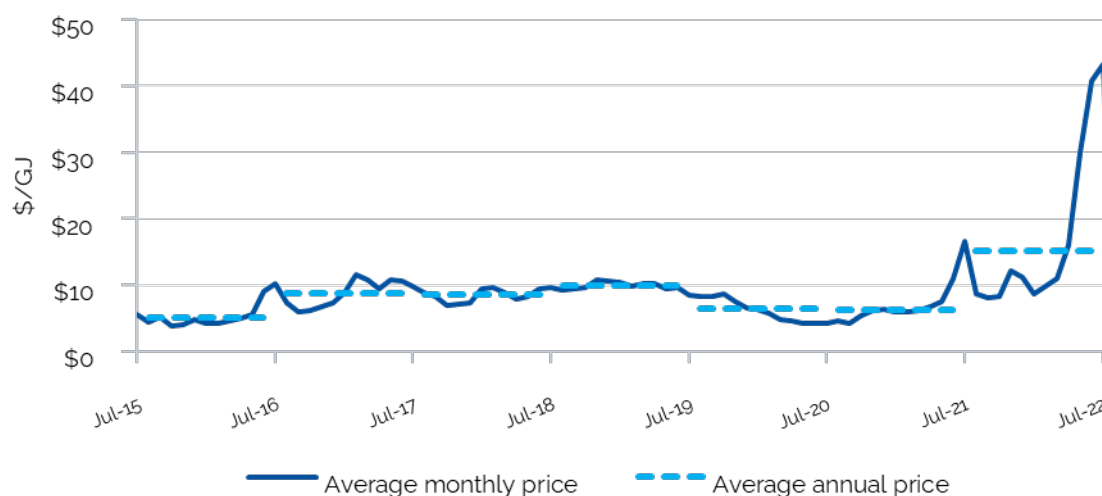
1. Average wholesale gas spot prices of \$28.40/GJ across eastern Australia for Q4 2021-22, compared with \$8.20/GJ during the same period the previous year (Q4 2020-21).¹⁹ Wholesale gas spot prices for NSW are shown in Figure 2.2.
2. Due to these high wholesale gas spot prices, and the failure of a retailer (triggering a 'Retailer of Last Resort' event), the wholesale gas market in NSW was placed under an administered price cap of \$40/GJ from 24 May 2022 to 7 June 2022.²⁰
3. Average wholesale electricity spot prices of \$264/MWh across the National Electricity Market (NEM) for Q4 2021-22, compared with \$85/MWh during the same period the previous year (Q2 2020-21).²¹ Wholesale electricity spot prices for NSW are shown in Figure 2.1.
4. The frequency of spot prices above \$300/MWh was 26% in Q4 2021-22, compared with 1% in Q4 2020-21.²²
5. Due to the prolonged period of high prices, New South Wales (along with South Australia and Victoria) was placed under an administered price cap of \$300/MWh on 13 June 2022.²³
6. The application of the administered price cap coincided with reductions in the volume of generation offered into the market. The AEMO intervened by directing generators to make generation capacity available for dispatch, and by cancelling outages.²⁴
7. Despite taking these actions, AEMO concluded that its automated systems and processes became impossible to manage, and so the wholesale spot market was suspended from 15 June 2022 to 24 June 2022.²⁵
8. As spot prices for gas and electricity increased from around March 2022, forward prices for gas and electricity were also increasing.

Figure 2.1 Historical electricity spot prices in NSW (\$nominal)



Source: IPART analysis of AEMO [NEMWEB](#) data

Figure 2.2 Historical domestic gas spot prices in NSW (\$nominal)



Source: IPART analysis of AEMO [STTM data](#)

2.1.1 Increasing fuel prices combined with temporary factors drove a sudden spike in wholesale prices

In its most recent quarterly report on wholesale electricity and gas markets, the AER investigated the causes of the high prices and market instability that occurred during the final few months of 2021-22.

The AER notes that key drivers of market outcomes were higher international prices for LNG and coal, which affect domestic gas and coal prices.²⁶ These international fuel prices increased from late 2021, and this increase in prices accelerated during 2022, driven by the war in Ukraine.

However, the effects of these higher fuel costs were exacerbated during Q4 2021-22 by an 'energy squeeze' that was caused by a number of co-incident factors occurring within a short period, specifically:²⁷

- issues with domestic fuel supply, which reduced supply from some generators;
- plant outages;
- lower than expected wind and solar output; and
- an early start to winter, resulting in increased demand for gas and electricity.

The AER notes that the confluence of these events resulted in a significant increase in the typical prices at which electricity and gas were offered into the market. That is, rather than the higher gas and electricity prices being driven by a small number of price spikes, the higher gas and electricity prices were driven by systematically higher prices.²⁸

The AER's analysis of futures market prices indicates that these high prices in Q4 2021-22 were largely unexpected by the market, even as recently as the start of 2022, but that higher prices are now expected to persist.²⁹

2.2 Forward market data suggests high wholesale prices will continue

2.2.1 High spot prices for gas and electricity

Both wholesale gas spot prices and wholesale electricity prices increased during Q4 2021-22 in NSW (see Figure 2.1 and Figure 2.2), and more broadly across eastern Australia.

Wholesale gas prices have been increasing globally since late 2021, with domestic gas prices seeing similar increases beginning in March 2022.³⁰ The ACCC concluded that these increases in domestic gas prices were driven in part by:³¹

- high international prices for coal and gas, partly due to the war in Ukraine which has created an international gas shortage. This has resulted in an increase to the domestic price to compete with high international prices,
- coal-fired generation outages (increasing demand for gas by gas-powered generators),
- an unusually cold start to winter in June.

Wholesale electricity spot prices in NSW also began to increase in March 2022 (see Figure 2.1). AEMO has concluded that these higher prices were driven by multiple factors, "including high international commodity prices, coal-fired generation outages, elevated levels of gas-fired generation, fuel supply issues, and many east coast cities experiencing their coldest start to June in decades".³²

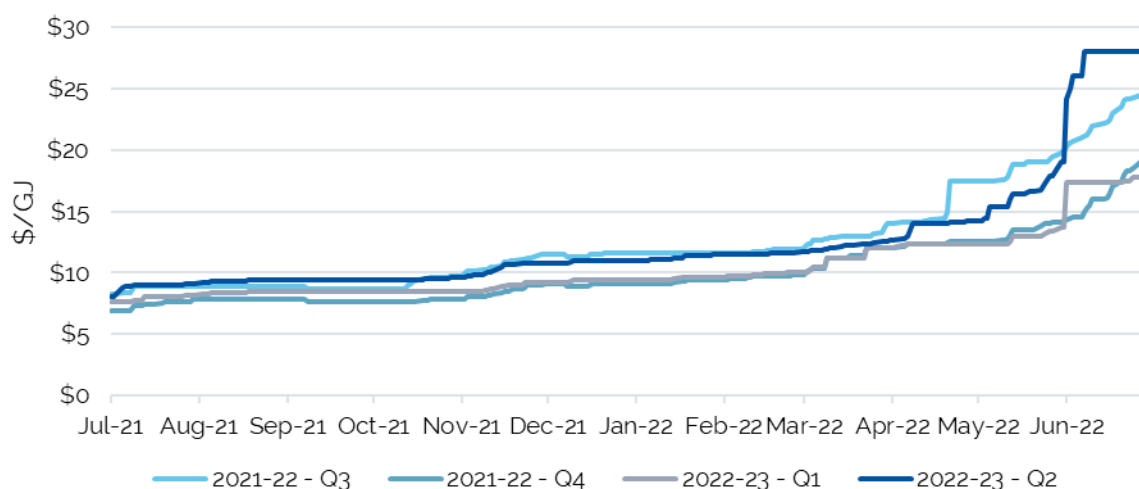
2.2.2 High contract prices for gas and electricity

Financial contracts for managing exposure to volatile gas and electricity spot prices are traded on ASXEnergy:

- Quarterly electricity futures contracts for NSW are commonly used by retailers to 'lock in' the cost of wholesale electricity.
- Quarterly gas futures contracts for NSW are not traded on ASXEnergy, but quarterly gas futures contracts for Victoria are traded on ASXEnergy and can be used as an indication of future gas prices in NSW (given that gas prices across eastern Australia are generally strongly related).

Figure 2.3 shows the daily price of gas futures contracts for Victoria for each quarter of 2022-23 since 1 July 2021. These contracts have traded for a number of years. The prices of these contracts have increased substantially since March 2022, coinciding with the period over which gas spot prices increased. The prices at which these contracts were trading on 30 June 2022 is between 2.3 and 3.5 times the price at which they were trading on 1 July 2021.

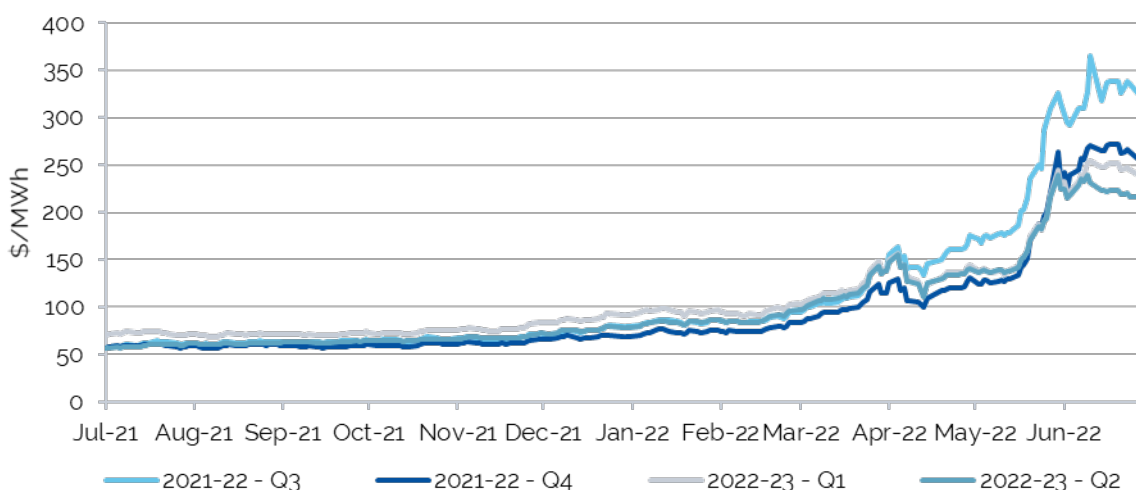
Figure 2.3 Victorian gas futures contracts for 2022-23



Source: ASXEnergy

Figure 2.4 shows the price of electricity futures contracts for NSW for each quarter of 2022-23. Prices of these contracts have increased substantially since March 2022, coinciding with the period over which electricity spot prices increased. The prices at which these contracts were trading on 30 June 2022 is between 3.5 and 6 times the price at which they were trading on 1 July 2021.

Figure 2.4 New South Wales electricity futures contracts for 2022-23



Source: ASXEnergy

These increases in gas and electricity futures prices, combined with spot prices that are likely to remain at elevated levels, are expected to result in material increases in retail gas and electricity prices during 2022-23.

2.2.3 Cost of administered price cap and market suspension

Another factor that may result in higher retail electricity prices for 2022-23 is that certain costs arise as a result of AEMO directions to generators, including:

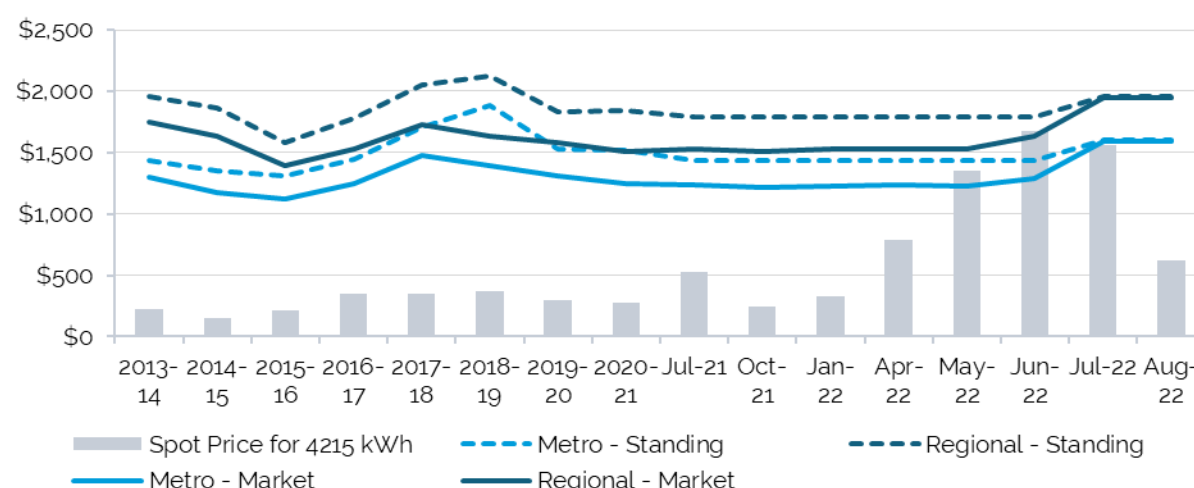
- generators must be compensated when they are required to operate at times when their costs exceeded the administered price cap,
- generators must be compensated when they are required to operate at times when their costs exceeded prices during the market suspension.

These additional costs are expected to be recovered from retailers during 2022-23.³³

2.3 The retail impacts of high wholesale prices will increase in 2022-23

Electricity and gas retailers are generally 'hedged' against volatile gas and electricity spot prices. For instance, gas retailers will generally procure much of their wholesale gas through gas supply agreements of one or more years, which will provide pricing certainty. Similarly, electricity retailers will generally procure wholesale electricity through power purchase agreements of one or more years, or will enter into financial hedging arrangements that provide pricing certainty. For retailers that are 'hedged', the increase in gas and electricity spot prices does not necessarily increase their costs. This is likely one of the key reasons that retail gas and electricity prices did not increase markedly over Q4 2021-22 and stayed at levels similar to other years since deregulation. However, there is evidence towards the end of the 2021-22 year, and since the end of 2021-22, that these wholesale market impacts are filtering through to retail offers.

Figure 2.5 Annual residential electricity bills for median offers by offer type and region in NSW compared to spot price



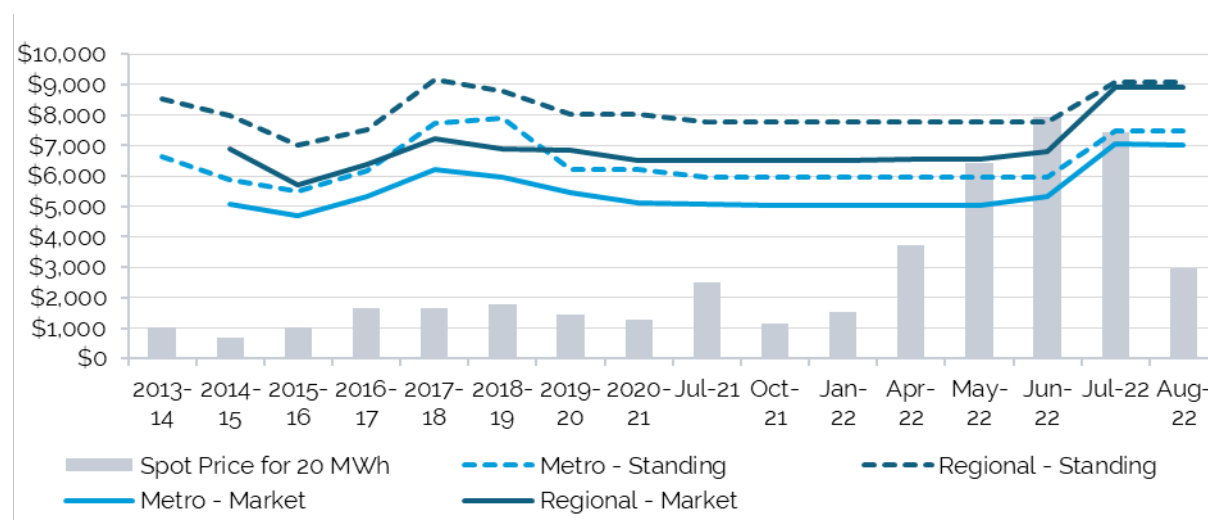
a. Annual electricity bills based on 4,215 kWh of residential electricity purchased, including GST, nominal.

b. Spot price based on average wholesale electricity price in each period for 4,215 kWh of electricity

c. Regional refers to median of all offers in the Essential Energy network. Metro refers to the median of all offers in the Ausgrid and Endeavour Energy networks.

Source: IPART analysis of data from [Energy Made Easy](#), wholesale electricity price data from AEMO. Accessed May-August 2022 respectively.

Figure 2.6 Annual business electricity bills for median offers by offer type and region in NSW, compared to spot price



a. Annual electricity bills based on 20 MWh kWh of business electricity purchased, including GST, nominal

b. Spot price based on average wholesale electricity price in each period for 20 MWh of electricity

c. Regional refers to median of all offers in the Essential Energy network. Metro refers to the median of all offers in the Ausgrid and Endeavour Energy networks.

Source: IPART analysis of data from [Energy Made Easy](#), wholesale electricity price data from AEMO. Accessed May-August 2022 respectively.

Figure 2.5 and Figure 2.6 show the median electricity standing offer over time, compared with the cost of purchasing electricity on the spot market (for residential and business customers respectively, that is, 4,215 kWh and 20 MWh). This comparison shows a number of key impacts emerging in retail electricity offers in June, July and August 2022, including that:

- Median market offer prices rose sharply. The median price in July 2022 is higher than at any other time since IPART began monitoring the market.
- For May, June, and July 2022, the retailer cost of purchasing energy on the spot market exceeds the total customer bill for that consumption (4,215 kWh for retail customers, 20 MWh for business customers). Although retailers would not face this cost in reality because they typically hedge most of their load, this gives an indication of the high costs retailers would have faced for any unhedged components of their load, for example contracts that have rolled over or unexpected new load. As a result, several retailers stopped taking on new customers, at least until they could reset their rates. This is evident in their withdrawal of retail offers in the market in 2021-22 (see Chapter 3 for more detail). Whereas other retailers limited new sign-ups to households with rooftop solar and/or a battery to avoid customers imposing a net cost to the retailer.³⁴

In the longer-term, higher spot prices are likely to increase the cost of hedging instruments. As these hedging instruments become more expensive, retailers' costs will increase. While not directly relevant to this report on outcomes during 2021-22, the increase in the cost of hedging instruments is likely to have material consequences for retail market outcomes in 2022-23. A number of other costs are also yet to be passed through to customers, such as the costs of AEMO's market interventions.^b The full amount that will be passed on is currently unknown, but would add to costs and prices that are already rising. AEMO has published the provisional amounts of compensation for Reliability and Emergency Reserve Trader (RERT) payments, directions and suspension pricing, which is \$79.72m in total for NSW.³⁵ AEMO state that there is the potential for additional compensation for directions and suspension pricing which is yet to be finalised pending AEMO and independent expert determination, as well as claims for administered pricing compensation that are to be assessed and determined by the AEMC.³⁶

2.3.1 Sudden high wholesale prices have driven exits from the market and withdrawal of offers

The high and unexpectedly sudden wholesale price rises resulted in 3 retailers exiting the market during the April to June 2022 quarter. Under the "Retailer of Last Resort" provisions in the National Energy Retail Law and National Gas Rules (see Box 2.1), AEMO suspended the rights of Pooled Energy, Weston Energy^c and Enova Energy from acquiring electricity and gas from wholesale markets, which affected customers in NSW, QLD, ACT and SA.³⁷ As shown in Figure 2.7 the Retailer of Last Resort events are clustered around the time when spot prices started increasing. The last Retailer of Last Resort notice before 2022 was on 3 May 2019.

^b See section 4.1.3 for more detail.

^c Weston Energy is not included in our overlay of electricity spot prices and Retailer of Last Resort events because they did not serve small customers in NSW.

Figure 2.7 Electricity spot prices in NSW from July 2021, with Retailer of Last Resort events (\$nominal)



Source: IPART analysis of [AEMO NEMWEB](#) data and AER authorisation revocations for [Pooled Energy](#), [Enova Energy](#), [Power Club](#), [Mojo Power East](#), and [Social Energy](#)

Box 2.1 Retailer of Last Resort framework in NSW

The National Energy Retail Law (NERL) sets out a mechanism to be followed in the event of the failure of an electricity or gas retailer, to ensure the orderly transfer of the retail customers of that failed retailer, to a new retailer, without disruption of supply. This mechanism is known as the Retailer of Last Resort scheme.

Under the Retailer of Last Resort scheme, once the scheme is triggered the customers of the failed retailer are immediately allocated to one or more other retailers who perform the role of Retailer of Last Resort. The retailers who perform the role of Retailer of Last Resort in NSW are AGL Energy, EnergyAustralia and Origin Energy, for both electricity and gas. Transferred customers are placed on the standard retail contract of these retailers which is capped by the DMO.

Source: AEMC, [Review of the Retailer of Last Resort Scheme](#), Final Report, 25 February 2021, AER Register of Retailer of Last Resorts.

Consumer protections ensured these customers stayed connected and were automatically transferred to alternative retailers. The maximum these new retailers can charge their transferred customers is the DMO set by the AER, and customers are entitled to switch to another retailer of their choice thereafter.³⁸ From initial stakeholder consultation, it seems that the customer experience of a Retailer of Last Resort event is typically fairly smooth, and there is no disruption to service as customers transition to a new retailer.³⁹ Also, customers of small and perhaps more specialised retailers that can be liable to fail tend to be those most able to shop around and find a better deal following a Retailer of Last Resort event.⁴⁰

Stakeholders suggested that the main issue for customers experiencing a Retailer of Last Resort event is the potential bill shock they may face once they move to a larger retailer on the standing offer.⁴¹ Even once the customer shops around, market offers may now be substantially more than what they were previously paying (see Chapter 6 for more detail on this).

These Retailer of Last Resort events continue to occur in the 2022-23 financial year. Since 1 July 2022, the AER has revoked the registration of 4 electricity retailers – Power Club, Mojo Power East, Social Energy and Elysian Energy.⁴² It can be difficult for other retailers to take on unexpected new customers in the current market because of the cost of servicing unhedged load.⁴³

Many retailers also urged their customers to consider switching providers amid this energy crisis. Although they remained in business, ReAmped Energy, Discover Energy and Electricity in a Box, among others, encouraged their customers to switch or else face significant increases in their retail prices.⁴⁴

2.4 The mix of energy generation in the market is transitioning to meet the changing needs of customers

Over time, retail competition should help drive the right mix of generation in the wholesale market, as retailers compete to serve their customers' demand at the lowest possible cost. However, for a number of reasons there has been reduced investment in the wholesale market over the past decade. There is also additional short-term uncertainty in the market as both retailers and wholesalers respond and adapt to the recent period of unprecedented prices for energy. Over the medium term, the shifting mix of generation will fundamentally change how the energy system operates.

Various expert market bodies have been undertaking significant work in reforming electricity and gas markets so that they are able to meet the changing needs of the system and customers. The NSW Government has also established an Electricity Infrastructure Roadmap to modernise the NSW electricity system as it replaces its ageing coal fired power stations with renewable generation.⁴⁵

We provide a high-level overview of a number of key developments in the energy market transition and related reforms below.

2.4.1 Accelerating coal fired generation exits will speed the transition to an alternative fuel mix

The energy transition continues apace with coal plant closures and exit dates brought forward.

The closure of Unit 3 at Liddell Power Station took place on 1 April 2022.⁴⁶ This is the first of four units at Liddell scheduled to close by April 2023, in what is another step towards the end of Australia's coal fleet. Many coal plant operators expedited the scheduled closure date of their coal plants in the 2021-22 financial year, which is indicative of strong decarbonisation trends and unfavourable market conditions for coal plants predicted in the long-term.

In February 2022, Origin Energy announced it will bring forward the retirement date of Eraring Power Station by seven years to August 2025⁴⁷ and AGL Energy similarly brought forward the closure dates of Loy Yang A and Bayswater Power Stations by several years each.⁴⁸ To compensate for these withdrawals, the companies are planning to build a mix of new renewable generation, including large-scale batteries that make use of existing transmission infrastructure.⁴⁹

These announcements have nonetheless raised reliability concerns, particularly as the commissioning of Snowy Hydro 2.0 was delayed beyond 2025.⁵⁰ Eraring is Australia's largest coal-fired power plant. Its closure announcement prompted the (then) Federal Minister for Energy and Emissions Reduction to submit a rule change request to the AEMC. The proposal is seeking to amend the notice period for closure arrangements from a minimum of 3.5 years to 5 years to allow more time to build replacement generation.⁵¹ The AEMC is yet to commence stakeholder consultation on this proposed rule change.

Other key market developments include:

- AGL Energy's proposal to split into two separate retail entities was blocked in May 2022 by a group of active shareholders.⁵² AGL Energy remains as one company.
- The Energy Corporation of NSW (EnergyCo) is leading the planning and delivery of the state's Renewable Energy Zones (REZs) as part of the NSW Electricity Infrastructure Roadmap.⁵³ Five REZs were announced⁵⁴ and the tender process has commenced to assign project developers to each one.⁵⁵
- AEMO released its 2022 Integrated System Plan (ISP) in June 2022. The ISP is published every two years and sets out the roadmap for the National Electricity Market to achieve net zero emissions by 2050.⁵⁶ Under its most likely scenario, AEMO expects 60% of coal capacity to retire by 2030 and for electricity usage from the grid to almost double by 2050. AEMO has also identified five transmission projects that are necessary to connect greater renewable generation with demand centres. Four of these projects affect NSW. These include HumeLink, VNI West, Sydney Ring and the New England REZ Transmission Link.
- In June 2022, the new Federal Government increased Australia's emissions reductions target to 43% below 2005 levels by 2030.⁵⁷ Under its Rewiring the Nation policy, it will seek to increase the share of renewables in the NEM to 82% by 2030.⁵⁸ It also promises to invest over \$20 billion in the electricity grid, along with solar banks and community batteries for household solar. It will also seek to tighten the Safeguard Mechanism, which currently sets the baseline emissions level for large industrial facilities.⁵⁹

2.4.2 Renewable gas offers are on the horizon

'Renewable gas' refers to the substitution of natural gas, a fossil fuel, with other combustible gases that are made from renewable resources. This can include biomethane made from waste matter, or hydrogen which can be made without carbon emissions if it is produced through electrolysis with renewable electricity (known as 'green' hydrogen). In the case of biogas, or biomethane, the source material offsets the carbon emissions from burning the gas, while hydrogen burning does not release carbon at all.

Retail offers for renewable gases such as hydrogen and biomethane are not yet available to residential and small business customers. However, gas distribution network businesses are conducting demonstration projects to test the delivery of biomethane and hydrogen blended at low levels with standard natural gas. This is a step towards higher blend ratios using less and less natural gas over time. Only several hundred homes in selected areas are currently receiving these low-level gas blends. If successful, these projects are expected to scale up in the coming years to achieve renewable gas targets of 10% by 2030 and 100% by 2040 to 2050.⁶⁰

Examples of gas blending trials include:

- Jemena's Western Sydney Green Gas Project. This involves converting solar and wind power into hydrogen gas via electrolysis, which is then stored and blended with natural gas to power 250 homes and a hydrogen vehicle refuelling station.⁶¹
- The Malabar Biomethane Project. Jemena has partnered with Sydney Water to generate biomethane at the Malabar Wastewater Treatment Plant in south Sydney. Biomethane is created by processing raw biogas, which is produced as part of ordinary wastewater treatment processes at the plant. This biomethane would then displace natural gas (i.e. methane) that would otherwise be produced from natural gas fields. Once construction is completed in Q1 2022-23, biomethane will be injected into the gas network directly as it meets the same specification standards as natural gas.⁶²
- Australian Gas Networks' (AGN) Hydrogen Park SA (HyP SA). AGN is currently supplying over 700 homes in Mitchell Park, SA with natural gas blended with 5% hydrogen gas through its networks. While residents are notified of this change, this does not affect their gas appliances or the prices they pay to their energy retailer.⁶³

The University of Adelaide is also leading an investigation into potential design and implementation options for a national Renewable Gas Target (RGT). A RGT would seek to achieve similar aims in the gas sector as the existing Renewable Energy Target has achieved in the electricity sector. The research outcomes are expected in December 2022 and will provide an evidence base for potential policy interventions.⁶⁴

The NSW Government has also outlined a clear position in support of the growth of green hydrogen production. Under the Government's Hydrogen Strategy, the Renewable Fuel Scheme establishes incentives to expand green hydrogen production in NSW to 67,000 tonnes (or 8 million gigajoules) by 2030.⁶⁵ The scheme is set to begin in 2024.

2.4.3 Gas offset programs offer gas customers a carbon neutral option

While renewable gas retail offers may still be some time away, gas offsets are available to customers through energy retailers' carbon neutral programs. This means that the greenhouse gas emissions (GHG) associated with customers' gas usage are offset (or negated) by investments in a range of climate action projects accredited under Climate Active. These projects can involve any activity that reduces, removes or captures emissions from the atmosphere, such as energy efficiency measures, revegetation or carbon capture.⁶⁶

Examples of retailers' current offset programs include:

- EnergyAustralia's Go Neutral product, which customers can opt into at no extra cost. This program sources offset units from a range of projects across Australia and internationally. If customers elect this option, EnergyAustralia calculates the amount of carbon dioxide emitted due to their electricity and gas bill usage. They then purchase carbon offsets to negate equivalent amount of emissions in the atmosphere.⁶⁷
- Powershop Australia's carbon neutral accreditation for both electricity and gas. Powershop, as a whole business, has been certified under the Australian Government's Climate Active Carbon Neutral Standard since 2014. This means that customers do not need to opt-in to any offset program, since all of the GHG emissions arising from their customers' energy use are offset at no extra cost.⁶⁸

As customers increasingly seek to address their impact on climate change, we expect growing uptake of retail offers that are able to offset the impacts of energy consumption. This is especially important for consumers who may not have access to other options to reduce their total carbon footprint, such as solar panels. It is therefore important that offset markets are working effectively to deliver carbon reduction projects and support nature-positive investment into the future. The Commonwealth Government is currently undertaking an independent review of Australian Carbon Credit Units (ACCU) to ensure that going forward, the Australian carbon market has the integrity to deliver the intended environmental outcomes consumers want.⁶⁹

2.4.4 The AEMC has implemented reforms to reduce barriers to integrating distributed energy resources, demand response initiatives, and other areas of innovation

The AEMC has implemented new rule changes and issued its final determination on a number of reforms in the wholesale electricity market in the 2021-2022 financial year. Together they promote a more flexible and competitive grid that allows for greater customer participation and bi-directional flows of energy between producers and consumers. This applies to both the wholesale and retail electricity markets.

Some of the key rule changes and determinations include:

- The implementation of five-minute settlement (5MS) periods on 1 October 2021. This five-minute settlement rule change aligns the financial settlement process that previously operated at thirty-minute intervals, with the operational dispatch process. This aims to provide more efficient market signals for electricity generation and investment in capacity.⁷⁰
- The Global Settlement (GS) framework commenced on 1 October 2021, with the full set of changes commencing on 1 May 2022.⁷¹ This framework improves the way in which unaccounted for energy is distributed across all retailers, made possible by advances in metering technology.

- The Wholesale Demand Response (WDR) mechanism, which took effect on 24 October 2021. This rule change incentivises energy users to alter their energy use in a way that improves grid stability and reduces system costs.⁷² Retail customers can engage directly with demand response service providers (DRSP) to effectively bid demand response capabilities at a larger scale. This innovation has prompted a number of demand response pilot programs and services offered by electricity retailers in the form of Virtual Power Plants (VPP).^d
- The AEMC's final determination on access, pricing and incentive arrangements for distributed energy resources (DER), issued in August 2021.⁷³ This reform seeks to encourage greater uptake of small-scale solar and batteries by imposing obligations on distribution businesses to ensure they can integrate and support distributed energy resources. It took effect on 1 July 2022 and will introduce new safeguards for customers that export energy to the grid, including minimum feed-in-tariffs. It will also require distribution companies to extend their expenditure plans to include infrastructure that will help accommodate more distributed energy resources in the grid.
- The final rule determination on the integration of energy storage systems in the NEM, issued by the AEMC in December 2021.⁷⁴ This involves the creation of a new participant category - the Integrated Resource Provider (IRP), encompassing all participants engaged in bi-direction energy flows. This will simplify the registration process for all participants, particularly as new storage and hybrid facilities enter the NEM. It also offers a technology-neutral position to remove barriers to entry for innovative business models that allow for two-way energy flows and greater customer participation. The first two changes will take effect on 31 March 2023, while the IRP category will only be available from June 2024.⁷⁵

2.4.5 Gaps are emerging in consumer protection frameworks for new products and services

Another focus area for future market monitoring reports concerns reporting and disclosure obligations, consumer protection settings, and dispute resolution mechanisms that apply to new products and services in the retail market. The Energy and Water Ombudsman NSW (EWON) highlighted several emerging gaps where consumer protection frameworks may not sufficiently cover new retail offerings.^e These are set out below.

Plans that bundle energy and demand management services (including technology), with non-energy products like telecommunications.

- These contracts can be highly complex and involve multiple third-party providers who are not subject to the existing AER consumer protection framework. It also makes these products inherently more difficult to understand. This makes it harder to ensure customers are equipped to make informed decisions, and harder to ensure customers get the most out of the product they've chosen. This can lead to higher costs for all involved when disputes arise.

^d See [EnergyAustralia](#) and [Nectr](#)' VPP programs.

^e EWON has also published case studies and other information about these concerns. See for example EWON, May 2022. [Dispute resolution in the evolving energy market](#)

- Bundled products that involve equipment (e.g. solar panels and batteries) tend to lock customers in for long periods (7-10 years) so that the higher upfront costs are recovered by the retailer over time. In concert with the inclusion of non-energy products, this can make switching providers impractical. This means greater potential risk for customers if they are not given sufficient information about the offer beforehand, and over the longer term, may have implications for the effectiveness of competition in the market because customers are less able to switch. Better information is therefore needed to help consumers compare alternative products, both among innovative options, and between innovative and traditional options. Greater clarification of dispute resolution mechanisms that seek to resolve customer complaints associated with these bundled products is also needed.

Distributed energy resources and demand management services, including electric vehicles and virtual power plants

- EWON received a small but growing number of complaints concerning virtual power plants in the last financial year. Several retailers have commented that products like these are very challenging to explain to customers, and industry participants are aware of the need for greater education and communication about them.⁷⁶
- Rules around customer information and consent for retailers' control of smart devices should be reviewed, including to clarify what happens after demand management contracts expire.

The Consumer Data Right (Energy Sector) Designation 2020 comes into effect from November 2022. This may improve customers' visibility of energy deals across retailers, however the complexities of different new retail offers and bundled packages may limit its usefulness for comparison purposes. It also will not regulate data services and home energy management services on offer, or ensure better information is available to help customers choose between complex offers (though improved access to data could contribute to this outcome).

New retail products and services that integrate new technologies such as solar, home batteries, electric vehicles, smart device control, and bundling energy and non-energy products are poised to expand beyond what is currently a relatively small pool of highly engaged energy customers. The expansion is likely to be driven by retailers seeking to manage high wholesale costs and supply uncertainty, and customers seeking to avoid high prices.

It is critical that our regulatory frameworks adapt to account for the new issues in this market ahead of widespread adoption of these new products. Adequate disclosure and reporting obligations are also needed to provide regulators with the data required for good visibility over market, retailer, and customer outcomes from these new offer types.

Given this, our findings in this report underscore the importance of the AER's ongoing [Review of consumer protections for future energy services](#). This review is currently considering the issues noted above, and the AER in its submission to our Draft Report has indicated its concurrent view that these kinds of new and innovative retail offers will soon be more widespread, and that the current consumer protection framework is not fit for purpose to manage inherent risks with these new offerings.⁷⁷ Their review will analyse the key emerging risks to consumers, and the likelihood and materiality of these risks. The review's [Options Paper](#) has put three different reform approaches to stakeholders for consideration, with the intention that reform should help 'future-proof' our consumer protection frameworks as energy technologies, systems and behaviours rapidly evolve. The review is also considering how our current information provision frameworks must adapt in order to ensure an informed and empowered customer base that can make the right choice for their circumstances.

The AER is currently scheduled to deliver final recommendations from this review by April 2023. However, following final recommendations (and subject to the nature of these recommendations), any changes to the National Energy Retail Law will likely require a substantial period of time to be implemented. This is because they are likely to require both Commonwealth and state government consideration and agreement.

Therefore, we recommend that the NSW Government should take on the role of providing high-quality, up-to-date, simple and unbiased information to the public about retail energy offers involving:

- 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.

The information made available should reflect the current state of the market and should aim to educate and inform customers about how these new offers work and how customers can equip themselves to choose between them in their own best interest. We consider that the complexity of these new retail offers creates a specific need for clear public information from a trusted source free of commercial interest. This information should build on existing work in this area by the NSW Government, which already provides information on energy services and technologies.^f It could also build on information resources recently released by Energy Consumers Australia (ECA). ECA have recently developed a [public information portal](#) to help explain renewable energy technologies to the public and support further engagement with these technologies. This work could be extended to include a specific focus on navigating retail offers. The AER has submitted its view that this is a valuable role for the NSW Government to adopt as a way to help consumers engage with the market while their [Review of consumer protections for future energy services](#) is ongoing and until longer term reforms can be implemented.⁷⁸

^f For example, see [The NSW Government's Energy Saver website for households and individuals](#).

This role could potentially be undertaken by Service NSW, where there is already a convenient and trusted public facing digital architecture in place in the Service NSW app and an existing in-person assistance service that can help customers with their bills. Alternatively, the role could potentially be undertaken by the NSW Office of Energy and Climate Change (OECC), which already specialises in retail energy issues. The NSW Government already provides the public with a range of information on energy offers on its [energy saver website](#) – this could be extended to specifically cover innovative retail offers, with reference to the helpful information already provided by ECA.

2.4.6 Innovation around electric vehicles is progressing, but uptake may be hindered by economic and supply chain issues

The electrification of the transport sector is creating new opportunities for retail customers. Market reforms that increasingly allow for a two-sided energy market are encouraging electricity retailers to offer innovative services and tariffs to owners of electric vehicles (EVs).

Emerging retail service and pricing initiatives are centred around the charging and discharging capabilities of EV batteries. These include Vehicle-to-Home (V2H) and Vehicle-to-Grid (V2G) services that enable EV owners to supply electricity to their home or the grid using the energy stored in their EV battery. Most electric vehicles and chargers currently do not have V2H/V2G capabilities, meaning investment and innovation is needed to harness the potential storage capacity of an electrified vehicle fleet.

Many of these initiatives are still in their trial phase. Examples include:

- The Realising Electric Vehicle-to-Grid Services (REVS) project, led by ActewAGL and supported by ARENA. This involves paying EV owners to inject power from their EV batteries into the grid during times of grid instability to prevent blackouts.⁷⁹
- Discover Energy's Smart vehicle2grid (V2G) program, which enables customers to use their EV car battery for their home as emergency backup, and to provide energy to the grid during periods of high demand. Customers access these services as an EV VPP member and are rewarded with a feed in tariff of 25c/kWh of energy supplied to the grid.⁸⁰
- Origin Energy's EV Smart Charging Trial, which captured data on EV charging patterns to inform tariff design and electricity system impacts. The trial observed that incentives influenced vehicle charging behaviour, where credits to participants' energy bills rewarded participants who charged their EV during specific periods. This helped divert energy use from peak periods, and in some cases demonstrated participant willingness to relinquish control of their chargers for incentives.⁸¹
- Retailers are also offering tariffs that encourage customers to charge their electric vehicles during off-peak hours to avoid potential congestion impacts of charging during peak periods. Together these initiatives seek to reduce peak demand, stabilise the grid by providing ancillary services, and capture arbitrage opportunities between high- and low-price periods.⁸²

Despite these developments, feedback from retailers has indicated that there may be material economic barriers to greater uptake of electric vehicles for customers. Several retailers highlighted that we have not seen the same drop in price for battery technology as we have seen for solar PV, and this is likely to persist as an impediment to broader and faster uptake of electric vehicles and household batteries. This is in spite of strong customer demand, where customers have been waiting years for their purchased EV to arrive due to supply chain constraints around the world, but especially linked to materials required for batteries.

2.4.7 Retailers' innovation around electric vehicles aligns with broader policy support

Moves by retailers to encourage EV uptake and integration with the grid are receiving policy support at all levels. Policy initiatives that seek to strengthen the prospects for low-emissions vehicles and supporting infrastructure include:

- The Federal Government's [Future Fuels and Vehicles Strategy](#), instituted in November 2021. This has been progressed under the new Federal Government, which has now legislated a range of discounts and exemptions from import tariffs for electric vehicles.⁸³
- The Energy Security Board's distributed energy resources implementation plan, which was endorsed by National Cabinet in October 2021.⁸⁴ 'Horizon One' of the plan focuses on addressing barriers to customer reward for distributed energy resources and flexible energy use.
- The NSW Government's Electric Vehicle Strategy, implemented on 1 September 2021. The NSW Government is providing rebates and removing stamp duty for some EV purchases and is supporting this with grants for fast charging stations across the state.⁸⁵
- The launch of the Energy Innovation Toolkit in August 2022, which is an online regulatory tool provided jointly by the AER, AEMO, AEMC, ARENA and the ESC of Victoria. These agencies recognise that the complexity of market rules and overlapping frameworks serve as a barrier to innovation. Proponents of new business models can use this to navigate the relevant regulatory frameworks and seek regulatory relief for innovative trials that may not have otherwise been possible.⁸⁶

2.4.8 The NSW Peak Demand Reduction Scheme was established in the 2021-22 year and will be administered by IPART

The NSW Government established its Peak Demand Reduction Scheme (PDRS) in September 2021. The scheme is designed to reduce peak electricity demand and associated system costs in NSW.⁸⁷ The PDRS builds on the existing NSW Energy Savings Scheme (ESS) activities by allowing households and businesses to earn certificates for a dependable reduction of electricity consumption during peak times. This can be achieved through an accredited service provider using a range of different technologies, including air conditioners, pool pumps and refrigerators. While some participants have been able to create certificates since 1 April 2022, scheme liability is set to begin on 1 November 2022, meaning shortfall penalties will apply to participants who fail to meet their certificate targets.⁸⁸

2.4.9 Smart metering challenges identified in previous reports appear to persist

Last year, we provided detail on a range of challenges with smart meter uptake that have led to a slower overall adoption of smart meters than expected. Around 25% of NSW customers have smart meters as of July 2021⁸⁹, and their full potential benefits remain largely unrealised for energy users and the grid. This is also a handbrake on the overall transition of the grid to a more renewable energy mix with more solar generation and battery storage.

Customers require smart meters⁹ to access many of the innovative offers provided by retailers, as they need up-to-date information about their electricity usage.^h These are generally included as part of the costs of the retailers' plans.

A traditional meter, that is manually read every quarter would not be able to meet such needs. For example:

- Solar customers are required to have a smart meter to frequently digitally measure the two-way solar imports and exports, such as 30-minute intervals.
- Energy management apps also require smart meters to monitor live energy usage to better understand consumption levels throughout different periods of the day. They also help customers understand and manage their bills.

In its submission to IPART's Draft Report, PIAC asked us to examine the reasons why the market-led smart meter roll out has been slow, and what options exist for the NSW Government to help NSW consumers access smart meters sooner, with a particular focus on customers facing vulnerability.⁹⁰

Stakeholders indicate that adoption of smart meters remains limited. Retailers point to high installation costs and poor coordination between electricity retailers and metering providers as an ongoing barrier to uptake.⁹¹ The NSW Government has estimated costs of between \$100-\$300 for smart meters and another \$100-\$300 per annum per customer for associated services.⁹² It also found a lack of publicly available data that allows customers to compare smart meter costs across different providers. This is further complicated by the different approaches that retailers use to recover smart meters costs from end customers.

In its ongoing review of the Regulatory Framework for Metering Services⁹³, the AEMC's Draft Report identified several issues with the current metering framework that have slowed the smart meter rollout and led to poor customer outcomes:

- Industry cooperation has been a significant barrier, driven by misaligned incentives of market participants, together with the complexity of the framework. The current regulatory settings mean that the benefits of widespread uptake of smart meters are divided between retailers, metering coordinators and DNSPs, but the responsibility for the deployment is only on the retailer.

⁹ A smart meter is a device that digitally measures your energy use. A smart meter measures when and how much electricity is used at your premises. It sends this information back to your energy retailer remotely, without your meter needing to be manually read by a meter reader.

^h For example, solar panels must be paired with a smart meter that can support two-way electricity flows. Many retailers will arrange for a smart meter to be installed for free or as part of your contract if the current meter is not a smart meter.

- Inefficiencies in the process have led to higher customer metering unit costs. Ombudsmen and AER complaints data highlight several implementation issues such as systematic installation delays.
- The installation of smart meters in the NEM has mainly been driven by consumers' requests to install solar PV systems or by new connections. Retailer-initiated smart meter programs have been minimal in most jurisdictions. Where smart meters have been installed, the scope of services offered to consumers has been narrow. Some consumers do not see enough direct benefits to justify requesting a smart meter.

The AEMC recommends adopting an industry-developed plan using a legacy meter retirement approach. Under this approach, DNSPs would work with retailers, metering parties and governments to develop a plan to retire their legacy meters in order to support the universal uptake of smart meters by 2030. Research commissioned for the Draft Report found primary net benefits of an accelerated rollout by 2030 in NSW of around \$143 million, driven by:

- "reduced costs for routine meter reading and special reads
- the reduction in meter installation costs due to the scale economies of undertaking the rollout geographically
- the ability to de-energise and re-energise the premise remotely (though this feature may not be authorised in all jurisdictions)."⁹⁴

Another concern was the unequal rollout of smart meters among socio-economic groups. In most jurisdictions, customers are responsible for undertaking remediation to provide a site capable of accepting metering upgrades. Customers in vulnerable or low-income circumstances may face more significant risks of missing out on upgrades due to site defect issues. The AEMC suggests that governments are likely to be better placed than the regulatory frameworks to help support customers needing site remediation.

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.

Chapter 3 »

How retailers are competing

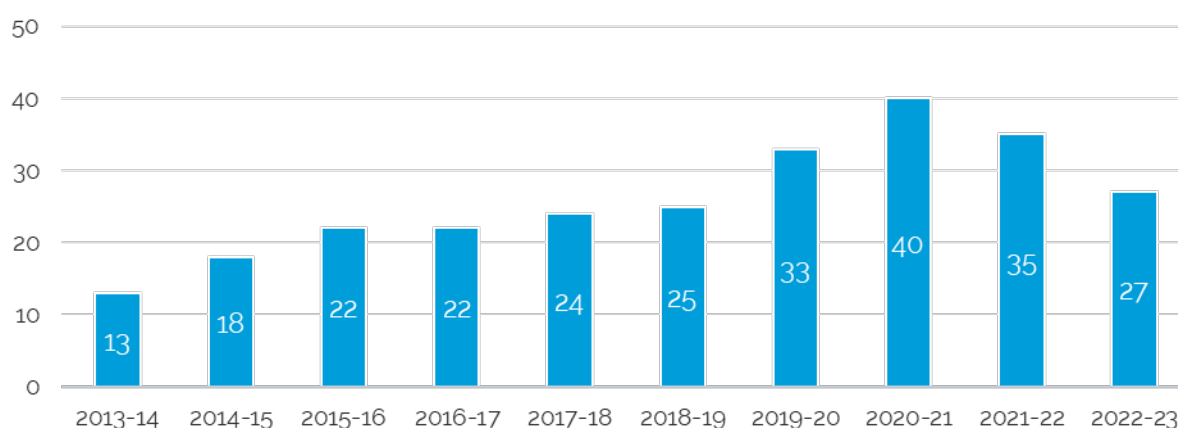
03

This chapter discusses the different ways that retailers competed in the electricity market in 2021-22. We have provided additional information about competition in retail gas in our Information Paper. Typically, retailers compete on price, the diversity of service offerings (including by developing new kinds of offers), and other non-price factors (for example, customer service).

3.1 For the first time since deregulation, there are fewer retailers in the market than the previous year

Prior to 2021-22, every year since 2013-14 has seen an increase in the number of active retailers in the market. In 2021-22, the number of retailers in the market^a fell for the first time, from 40 to 35, and then to 27 in August 2022 (see Figure 3.1).

Figure 3.1 Number of retailers in the NSW electricity market (as at August 2022)



Source: IPART analysis of Energy Made Easy data, accessed August 2022.

In 2021-22, the drop in retailers was driven by one retailer failing (Pooled Energy) (triggering a Retailer of Last Resort event in the NEM) and 5 instances of retailers providing no offers to the public on Energy Made Easy but keeping their existing customer base. One retailer entered the market during this period (Circular Energy). At least 3 other retailers encouraged their customers to switch retailers before 1 July and 11 stopped taking on new customers at some point in the year.^b

^b The number of retailers in the market is defined as the number of retailers in a specified month that are providing offers. In the Energy Made Easy documentation, a published offer is defined as a "generally available plan that is active/available and visible on the website". There are other retailers supplying customers not offering contracts to new customers in June 2022. A full list of retailers in the market is provided at Appendix A.

2022-23 has already seen another 4 Retailer of Last Resort events (as at August 2022). The further decrease from 35 retailers to 27 between June and August was driven by the exits of Enova Energy (July), Power Club (August), Mojo East Power (August) and Social Energy (August). In addition, 6 retailers who were providing offers in June were no longer providing offers in August. There were 2 instances where retailers were not providing offers in June but returned to providing offers in August (Nectr and Electricity in a Box). See Figure 2.7 for a timeline of Retailer of Last Resort events. A full list of retailers, the areas and customer types they service, and the types of offers available are provided in Appendix A.

As Chapter 2 notes, these exits appear to be driven by high wholesale electricity prices. The historically high and concentrated number of Retailer of Last Resort events suggest that operating a retail business in NSW at the moment is challenging.^c It also suggests the current environment may mean businesses face lower than normal competitive pressure from the threat of new entry into the market, given that entry into the market appears less likely given high wholesale energy costs. However, this does not mean businesses do not face any pressure to become more efficient or improve their service offerings. The current wholesale environment is likely to motivate retailers to find efficiencies in the business, or develop or expand new retail offerings that help them avoid high wholesale costs (for example, options that reward demand shifting from peak to off-peak). These benefits can be shared with customers as an incentive. In a high-cost environment, the ability to adapt through innovation is likely to give businesses a competitive advantage.

The number of retailers in the market today is still higher than at any time from 2013-14 to 2019-20. Given the severity of recent wholesale price shocks (which are external to the retail market), this could be seen as a sign of resilience. Not all markets have demonstrated such resilience – for example, recent wholesale price shocks in the United Kingdom have seen an almost 50% reduction in the number of electricity or dual fuel retailers over the year to December 2021⁹⁵, affecting millions of customers and driving up costs for consumers.⁹⁶ However, this conclusion should be taken as preliminary only, and we will closely watch it for next year's market monitoring report. If 2022-23 continues to see retailers leaving the market, this may be a sign that the current wholesale cost environment is simply untenable for smaller retailers. Though our analysis above covers a period up to and including August 2022, there has been one further Retailer of Last Resort event since our Draft Report (Elysian Energy in September).⁹⁷ Over the medium term, ongoing retailer exits could have material impacts on competition in the market. The number of market competitors and the threat of entry are both factors that influence the competitive pressure on retailers to either improve pricing or improve their offerings over time. It will be important to monitor market entry and exit closely over the coming years, especially given the risk that the current wholesale energy market deters potential new market entrants in the near term.

Ultimately, it is not in the short or long-term interests of customers if large numbers of retailers with material collective market share exit over a short timeframe. This is especially the case when the impact of additional customers on Retailer of Last Resorts could be substantial given current wholesale prices – this would then force remaining retailers to further raise prices.

^c As we explore in Chapter 7, this may in part be due to the operation of the DMO, which acts as a 'soft cap' on prices but does not provide retailers with a sufficient allowance to account for the high wholesale prices that have occurred recently.

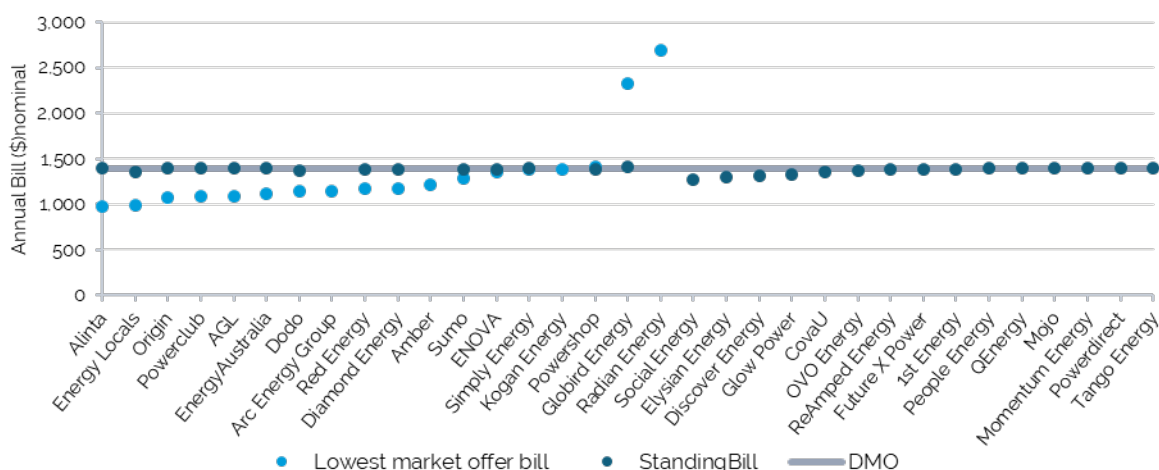
3.2 Some retailers still compete on price, but there is substantially less price variation in the market

High wholesale energy costs have put significant pressure on retailers' ability to offer discounts off the standing offer (which is capped by the DMO) to customers who shop around. A key retail market outcome of high wholesale prices (explored further in Chapter 6) has been that standing and market offers are now quite similar, more similar than at any other time since deregulation (see Figure 3.2). Importantly, the DMO to apply from 1 July 2022 was set well before the recent spike in wholesale electricity prices and so, unlike market offers, standing offers lag current market conditions. This is one driver of price convergence between market and standing offers.

Some retailers are still competing to offer customers lower prices. However, the spread of offer prices has reduced dramatically in 2021-22 (as indicated for the Ausgrid network in Figure 3.2). The lowest prices in the market in June 2022 were only around 11% lower than the highest prices in Ausgrid and Endeavour networks, and 10% in the Essential network.^d In August 2022, those figures dropped to just 4% for Ausgrid, and 5% for the Endeavour and Essential networks. In contrast, the lowest offers in the market were around 35% lower than the highest offers in 2020-21.^{e 98} As Chapter 6 discusses further, for the first time there are some examples of retailers in the market with market offers that are higher than the standing offer.

Chapter 6 has more information about pricing outcomes for customers, cost drivers and trends over time. Chapter 7 discusses the impacts of the DMO in detail.

Figure 3.2. Anytime tariff offers for residential customers in the Ausgrid network area in June 2022



a. Annual electricity bills based on 3,900 kWh pa, nominal, GST-inclusive.

b. Standing offers data for some retailers were not available.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

^d Calculated based on median lowest and median highest residential single rate market offers.

^e Based on AER's DMO consumption levels for each network.

The bill amounts shown in Figure 3.2 are based on retailers' 'anytime offers'. These are single rate (as opposed to time of use or demand tariffs) offers that typically have a fixed daily supply charge and a consumption charge per kilowatt hour (kWh) of electricity consumed (an anytime tariff). Most customers are on these 'anytime offers' because most customers still have accumulation meters, which can only measure the total amount of energy consumed over a time period.

Prices also vary depending on network area, mainly because of the different network costs in each region. There are three network areas in NSW – Ausgrid (covering most of Sydney, Central Coast and the Hunter), Endeavour Energy (covering most of South West Sydney and the Illawarra), and Essential Energy, which covers the rest of the state. Figure 3.2 shows prices for the Ausgrid network area. We found a similar pattern of reduced variation and convergence of market and standing offers in the Essential Energy and Endeavour Energy network areas.

3.3 There are fewer offers available in the market

In previous years we have reported on a growing number and diversity of offers in retail markets that has accompanied an increasing number of active retailers. This year has seen a reversal of those trends.

Even after accounting for retailers suspended from the market, there are fewer offers available at the time of analysis, likely linked to the high costs of new customers to the retailer (because their load is not already hedged) and the inability in current market conditions to offer as wide a diversity of products.

There was a significant drop in the number of offers in the market between 2020-21 and 2021-22. At the time of this analysis, in May 2021, there were 12,757 offers in the market which reduced to 6,206 offers in June 2022 (representing a 51% reduction) and 5740 offers in August 2022 (an additional 8% reduction from June).^f

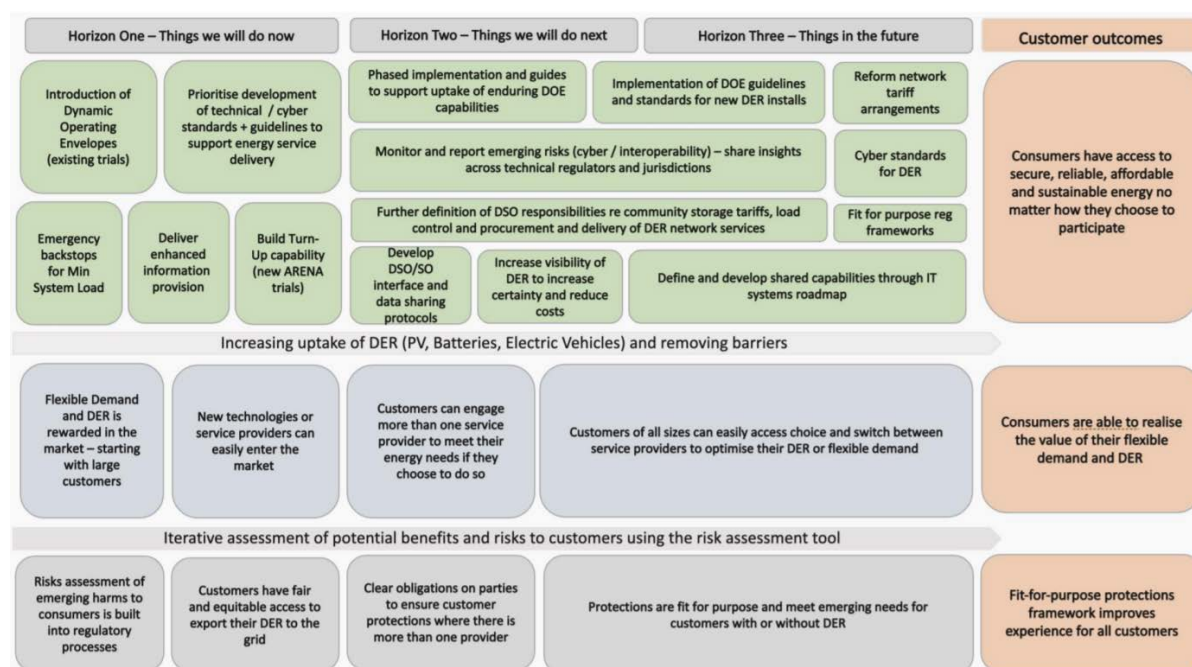
Many smaller retailers, particularly those known to have struggled with rising wholesale costs such as Discover Energy and Future X Power, have not submitted any retail offers to Energy Made Easy in August 2022. Overall, as discussed above, this suggests a lower willingness to take on new customers given their spot market exposure. There may also be less imperative for larger retailers to compete given the 'flight to safety' underway and the gain in customers through the Retailer of Last Resort process. Offers for fixed rate plans were also disappearing for the same reasons.⁹⁹

^f Offer numbers are based on the number of unique plan IDs. Offer numbers are volatile and are subject to change within the month. We note that the high number of offers is driven by small variations in time of use offers. Therefore, while the percentage change on last year does indicate movement in the market, the number of offers itself may not be a strong indicator of competition.

3.4 The current context of high energy costs may pose both challenges and a strong incentive for retailer innovation in the market

Last year we reported on the direction of policy reforms and retail market offer innovations as the energy market transitions to a renewable fuel mix. We highlighted that the transition will rely on solving several key challenges, especially integration of distributed energy resources and flexible demand. The transition has been comprehensively mapped by the Energy Security Board which has recommended reforms related to the integration of distributed energy resources and flexible demand. These are shown in the ESB's recommended distributed energy resources Implementation Plan (Figure 3.3).

Figure 3.3. Distributed energy resources Implementation Plan



Source: ESB, [Post 2025 Market Design Final Report \(Part B\)](#), July 2021, p 73.

Retailers are still offering a range of plans that aim to leverage generation behind the meter and demand flexibility in ways that benefit customers, retailers and networks.

Examples of notable innovative retail plans include:

- Simply Energy's VPP Energy Plan. This plan allows owners of solar and home battery storage systems to earn up to \$1,500 in bill credit over 5 years and a one-off sign-up credit of \$300, for energy they provide to the grid.¹⁰⁰
- Simply Energy's Staff Solar Sharing Scheme, which won the Canstar Blue Innovation Award for 2022. This scheme focuses on the sustainability benefits of connecting staff at its partner manufacturing firm Hunter Douglas in Sydney's Rydalmere to excess electricity generated outside operational hours by the rooftop solar system on its manufacturing facility. This was made possible by technology developer Enosi's power tracing software platform.¹⁰¹

- AGL Energy's innovation hub, AGL Next, has partnered with Honey Insurance to bundle home and contents insurance with its energy services. This offer includes complimentary smart home technology products valued at \$250 that are designed to alert customers of fire, water damage and theft. Customers are rewarded with up to 8% off their premium for this reduced risk.¹⁰²
- Origin Energy's partnership with Energy Queensland that is trialling installations of pole-mounted batteries.¹⁰³ These will test how localised energy storage solutions can benefit customers. These trials are similar to those launched by Victorian distributor United Energy as part of its 'Electric Avenue' project. Backed by ARENA, this project involves the construction of 40 batteries mounted to electricity poles that will operate as a VPP in Melbourne's northern suburbs.¹⁰⁴ Ausgrid has also installed three community batteries across its network.¹⁰⁵

The NSW Government is actively examining ways to promote innovation in the energy sector. In December 2021 it released its public consultation paper on 'Promoting innovation for NSW energy customers'¹⁰⁶, which focused on three key areas:

1. Digital energy technologies
2. The future of distributed energy resources
3. Energy customers' digital journey

The application of the Consumer Data Right for Energy is set to begin in November 2022. This is expected to promote greater competition between retailers, as consumers will have more information available to compare energy plans.

However, the current context of high wholesale energy costs raises concerns about how retailers are likely to pursue innovative offers in the future in a market under stress. For instance, innovative business models centred around Virtual Power Plants (VPPs) are likely operating on slim margins as they have not yet achieved bankability or scale.¹⁰⁷ Nonetheless, their commercial viability is expected to improve significantly and transform existing 'gentailers' into future 'VPP-tailers'. Key drivers of these expected trends include early coal plant exits, increases in behind-the-meter capacity and consumers seeking to avoid high energy costs. Retailers could arguably capitalise on this heightened customer engagement with the market through demand response schemes and associated offers.¹⁰⁸

The current high wholesale market conditions is also likely to act as a sharp motivator for both retailers and customers to develop workable solutions to integrate large- and small-scale renewables and demand response schemes reliably into the grid to avoid worsening price shocks in future. This is also likely to be a time of heightened customer engagement with the market and retailers as they seek to avoid higher energy prices, and as such presents an opportunity to broaden the uptake of innovative offers. This is another reason to ensure that our consumer protection frameworks are fit for purpose now, as innovative but potentially more complex retail offer development and customer uptake grows.

There are also different pathways innovation could take based on market conditions and perceived customer preferences for some kinds of innovation over others. For example, flexible demand management, including remote coordination of smart home devices and incentives to shift demand off peak, represents one clear direction of innovative offers, but does require substantial customer education, engagement, and behaviour change. However, recent research from the ESC which looked at consumer behaviour in response to actual offers in the market¹⁰⁹ suggests that customers may not be interested in adjusting consumption behaviours for what are often marginal gains to them and involve very complex or sophisticated rules and incentives. If this is the case, customers may be more interested in simply ensuring the source of their energy is renewable.

We will continue to monitor retail offer innovation in the market in future reports to understand how innovation responds to recent high wholesale prices and the impacts we have described for retailers and customers.

Finding



1. Retailers are still competing for customers, but key indicators of competition are now in decline:
 - There are now 27 retailers in the market (35 at the end of 2021-22), which represents the first year-on-year reduction in the number of retailers since deregulation. However, this is still more than twice the number of retailers in 2013-14 when we first started monitoring the market.
 - Retailers compete for customers on price, but substantially less so than in previous years as high wholesale prices dramatically reduce the discount retailers are able to provide relative to the standing offer. The lowest offers in the market in June 2022 are only around 11% lower than the highest market offers.
 - Retailers are still offering service innovation, aligned with the imperative to avoid high wholesale costs and leverage value from distributed energy resources and demand flexibility.

Chapter 4 »

How customers are responding

04

This chapter discusses our findings on consumer behaviour in the retail electricity market in 2021-22, and consumer perceptions of market outcomes. We have considered several indicators including engagement in the market (switching and proportion of consumers on market offers), customer satisfaction, confidence in the market and the number of electricity related complaints. We have provided details about retail gas markets in our Gas Information Paper.

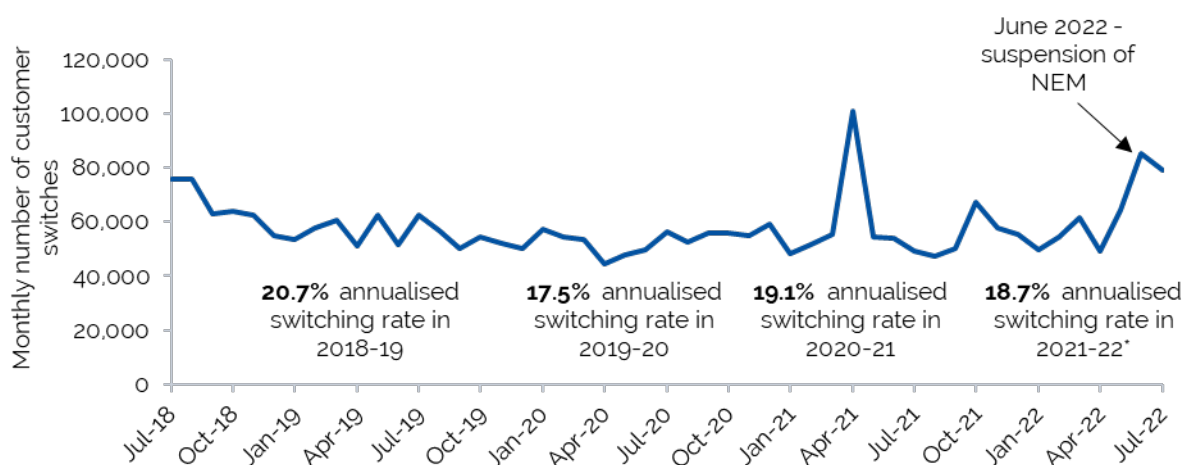
4.1 Increasing levels of customer engagement

We found that over 2021-22 customers continued to engage in the market. There were similar rates of switching for residential electricity consumers compared to recent years, and the proportion of residential customers on market offers grew.

4.1.1 Switching rates remained stable

During 2021-22, 18.7% of customers changed their retailer. This compares to 19.1% in 2020-21 and 17.5% in 2019-20 (Figure 4.1).

Figure 4.1 Number of electricity consumers switching each month



Note: The 2021-22 switching rate was estimated as the total number of customer switches in 2021-22 divided the number of customers as at Q3 2021-22.

Source: Number of customer switches: AEMO, NEM monthly retail transfer statistics, July 2018 to July 2022. Customer numbers: residential and small business customer number estimates from AER, Retail Performance Data Q3 2021-22, Schedule 2. Accessed August 2022.

There was a significant spike in July 2022 which can partly be attributed to the Retailer of Last Resort events that occurred in this month and other consequences of the wholesale price spike (such as retailers instructing customers to leave^a, or customers fear their retailer might fail or raise prices, both of which were highly publicised). The rising prices may have also prompted a greater number of people to change offers in order to get a better deal. Appendix C.3 shows there is a spread of offers available in the Ausgrid network (even though the median market offer has increases to a level similar to the median standing offer). The increased media attention on the energy market may also have triggered consumers to be more engaged in the market.

In its household sentiment survey for June 2022, ECA found that the most common reasons for switching electricity companies was finding a better plan on an independent price comparison website (28%) and not being satisfied with the value for money of their old company (30%).¹¹⁰

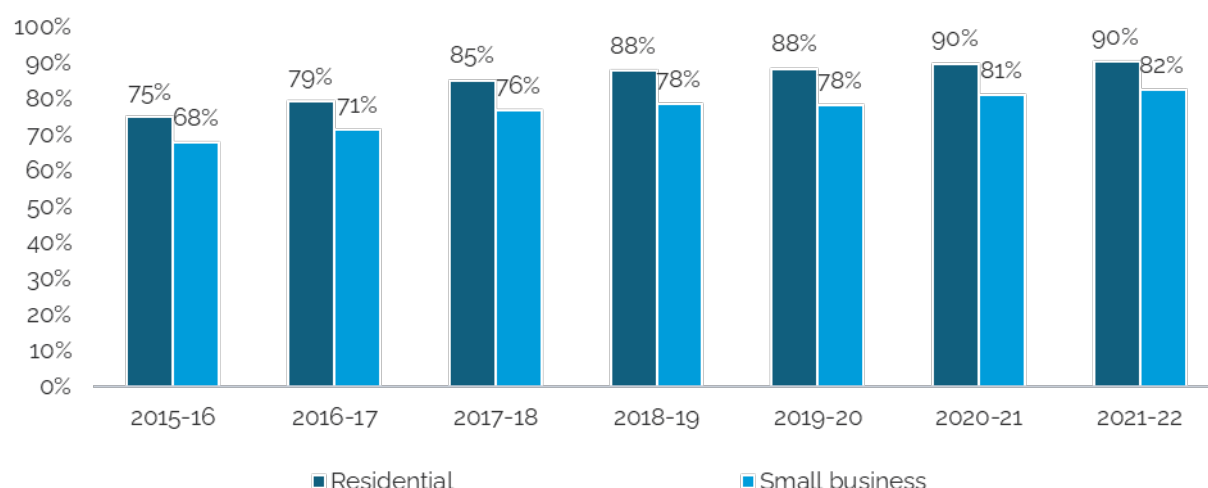
While switching remains an important indicator of how customers are responding in the market, as PIAC has raised in its submission to our Draft Report, we do note that there are some limitations to switching data, including the following:

- it does not capture cases where customers move to a new contract with the same retailer
- it captures cases where a customer moves house, even when they do not switch retailers.¹¹¹

4.1.2 More customers were on market offers

As customers switch between offers, an increasing proportion are moving from standing offers onto market offers. In NSW, the proportion of residential customers on market offers is 90% in 2021-22, no change compared to the previous year (Figure 4.2). The proportion of small business customers on market offers increased by 1 percentage point to 82% in 2021-22.

Figure 4.2 Proportion of small customers on market offers



Note: Year 2021-22 is reflective of Q3 2021-22 values

Source: AER, Schedule 2 - Q3 2021-22 Retail Energy Performance Data, June 2022.

^a For example, [ReAmped](https://reampedenergy.com.au) customers are currently better off with another provider (reampedenergy.com.au).

The level of savings obtained from switching to a market offer depends highly on the level of consumption and small business customers have a wide variation in energy consumption.¹¹² The ACCC found that by switching from the median standing offer to the 25th percentile market offer, small businesses in NSW could save 23% on their energy bills, the highest in the NEM.¹¹³ As discussed above, the historical difference between retailers lowest market offer and their standing offer has remained relatively stable at around 10% or above up until May 2022 (12-24% in May 2022). The difference has narrowed significantly, and if this continues, it will likely affect the switching rate patterns going forward. This will be another important issue to watch closely in future market monitoring reports.

As discussed in the 2020-21 report, not all customers who are on market offers are paying lower prices.¹¹⁴ Many customers may have switched in the past few years and then remained on their current market offer on the assumption that it continues to be a good offer, even when there may be better alternatives in the market or when an initial discount period has expired. This issue may now have larger bill impacts on customers because some market offers might be higher than the standing offer, and because the difference between the market and standing offer is now small.

4.1.3 Easy switching is important for competition, but customers can face challenges switching to a better deal

It is important that customers are informed and able to actively shop around for the best deal for their circumstances. This is one important driver of pressure on retailers to either improve their offering or lower their prices.

This means it should not be onerous for any customer to switch. Easy access to information to support decision making is key to this. Therefore, impartial information resources like Energy Made Easy needs to work as intended to effectively support consumer choice.

Availability of offers live on Energy Made Easy

In its submission to our Draft Report, PIAC referenced a report they have recently published documenting a range of challenges with Energy Made Easy. The report concerns a separate sustainability program run by All Sustainable Futures Inc (ASF) called 'Save4Good', which ran from 2019 to April 2021.

The Save4Good program involved expert consultants using Energy Made Easy to identify the best energy deal for disadvantaged households and then pursuing that offer with the retailer over the phone on their behalf.¹¹⁵ In the course of this work, All Sustainable Futures experienced retailers refusing to honour offers published on Energy Made Easy. All Sustainable Futures reported the following observations:

- Retailers claimed that the nominated offer from Energy Made Easy was not available that day, even when the consultants had negotiated that same offer for another household in the same area earlier in the day.
- There was large variation in the type and quantum of the discount that the same retailer would offer to households in the same area, seemingly with little explanation.

- Success in negotiating a better plan was highly dependent on the negotiating skills of the consumer rather than their circumstances. Negotiation was often hindered by a range of issues including:
 - The difficulty working through what are often complex plans.
 - Complex jargon, which is difficult to understand and difficult to translate for people who speak languages other than English.
 - Long sign-up phone calls, which couldn't always be accommodated (negotiating a plan took a minimum of 45 minutes, before discussion of rebates or hardship programs). This was especially difficult for those with caring responsibilities, mental health issues, pay-as-you-go phone plans, and other barriers.

The issue of retailer conduct in relation to Energy Made Easy offers is the responsibility of the AER who monitor for compliance with the rules that apply to Energy Made Easy.^b Retailers are currently required by the AER's Retail Pricing Information Guidelines to publish offers on Energy Made Easy within 2 business days of the offer becoming available, and remove it from Energy Made Easy within 2 business days of it becoming obsolete.¹¹⁶

Energy Made Easy will be most effective in supporting competitive market outcomes and customer outcomes if all live offers on Energy Made Easy are honoured by the retailer (subject to the published terms and conditions). There is a risk of consumer distrust of Energy Made Easy if retailers will not honour the offers chosen by customers and Energy Made Easy does not align with common expectations that advertised goods and services should be generally available. Further, the time customers waste selecting an offer that will not be honoured by the retailer becomes another barrier to switching.

Our view is that retailers should be required to honour any offer that is live on Energy Made Easy at the time a customer requests it, if that customer is otherwise eligible for the offer under the published terms and conditions. We consider that this change would be required for the implementation of the AER's work to transform Energy Made Easy into an online switching service.¹¹⁷ Therefore, operating Energy Made Easy as a switching service (that is ideally available in different languages) is likely to provide a solution to some of the issues PIAC has raised. It could also significantly improve customer ease of switching, including by reducing language barriers and eliminating the time needed to negotiate over the phone. However, other barriers identified by PIAC remain, including internet access and computer literacy.¹¹⁸

The AER has indicated that its work to transform Energy Made Easy into a switching service is a long-term project. We think that the current context of rising energy prices and other pressures on customer ability to pay (such as rising inflation) means that shorter-term solutions are required. It is essential that customers face as few barriers to switching as possible when the pressure on energy bills is greater than it has been in recent years. Therefore, the AER should also investigate what options are available to resolve these issues in the short term, to support customers to be active in the market through this period of rising prices.

^b The AER is aware of the particular research project referred to in PIAC's submission to our Draft Report.

Accessibility of Energy Made Easy information


A related concern is the broader usability of Energy Made Easy and the ability of customers to effectively use this information tool to switch to a better deal. The AER's own research in support of the [Towards Energy Equity strategy](#) has also found that customers find it difficult to use Energy Made Easy. It reported that "For consumers, the process of comparing providers is often perceived to be highly complex to understand and navigate".¹¹⁹ Improving the usability and effectiveness of Energy Made Easy is already a priority and ongoing workstream under the strategy.

Consumers' energy data (that they input to Energy Made Easy), and results from Energy Made Easy should be as accessible to consumers as possible.



As part of the extension of the Consumer Data Right to the energy sector, the AER has recently published an application programming interface (API) and set of data standards that will allow automated access to Energy Made Easy data for sophisticated customers capable of bespoke data analysis and operations. This could allow these sophisticated users to develop a program or app that non-technical users could access.¹²⁰

However, there should also be a range of other options to suit different consumer needs. In particular, the Energy Made Easy site should provide a simpler point and click interface to support custom queries of the available Energy Made Easy plan data, for example, comparisons of specific fees and charges or terms and conditions. This could include, for example, functionality to click to download a csv file containing all offer fields.

Finding

- 2.  Customers continue to engage in the market in 2021-22:
 - Switching rates decreased slightly from 19% to 18.7%, but are still consistent with switching rates over previous years.
 - The proportion of residential customers on market offers is similar to previous years - at 90%, and 82% for business customers (up from 81%).
- 3.  Some evidence suggests that not all live offers on Energy Made Easy are made available to customers. This can undermine consumer trust in the service as an accurate information source and present another barrier to customer switching.

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.
- 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.

4.2 Consumer sentiment and confidence has decreased slightly on some measures

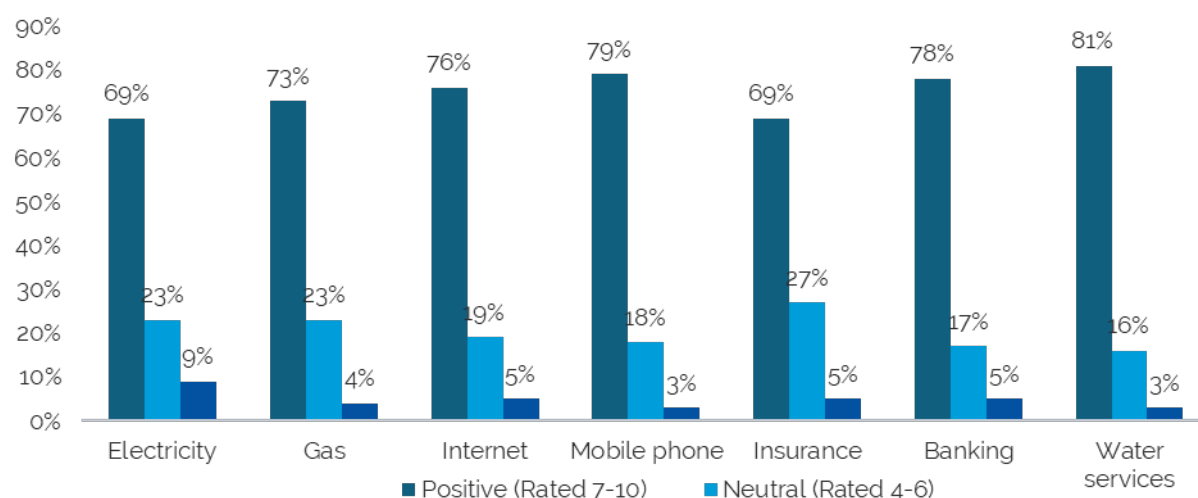
Consistent with trends over recent years, the number of electricity related complaints to EWON were lower compared to previous years. However, ECA found decreasing indicators of consumer sentiment on some measures in its regular community survey.

4.2.1 Energy Consumers Australia survey

The ECA conducts sentiment surveys assessing the attitudes and activity of residential and small business energy consumers across Australia. The June 2022 survey of NSW electricity customers¹²¹ found that consumer sentiment decreased on many measures since last year:

- 79% are satisfied with the provision of electricity services (down 2% from the previous year).
- 69% are satisfied with the level of competition (e.g. range of choices or number of potential suppliers) in the electricity market (same as previous year).
- 73% are satisfied that their billing and usage information is clear and simple to understand (no change previous year).
- 47% confident that the overall market (energy industry and energy regulators) is working in their long-term interest (down 2% from previous year).
- 68% are satisfied with the value for money of their electricity service (down 6% from previous year). However, customers considered that most other services such as mobile phone, water and banking service provided better value (Figure 4.3).

Figure 4.3 NSW consumer satisfaction with utilities and services – value for money as at June 2022

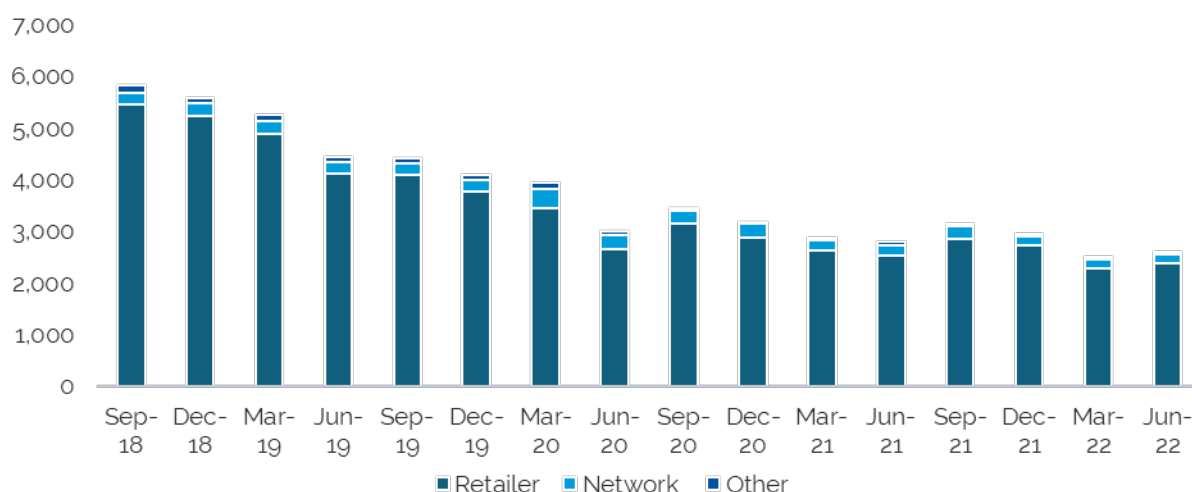


Source: Energy Consumers Australia, Sentiment Survey – June 2022, NSW, accessed August 2022; Sentiment Survey June 2022.

4.2.2 Electricity complaints have been trending down over the past few years

EWON publishes quarterly statistics on the number of complaints for electricity, gas and water. Over the past few years, the number of electricity complaints has generally been falling (Figure 4.4). However, unlike the previous 3 years, in 2021-22 there was an increase in retailer complaints between the third and fourth quarters of the year (Figure 4.4).

Figure 4.4 Quarterly number of electricity complaints reported by EWON



Source: EWON, EWON Insights, September 2018 to June 2022, accessed August 2022.

In total, there were 11,237 complaints in 2021-22 compared with 12,315 and 15,445 in the two previous years respectively. Most complaints relate to retailers and are about billing and customer service.

The ECA June 2022 survey found that, for the first time in five years, overall household satisfaction with electricity declined across the country, from 83% at the time of the June 2021 survey to 80% at the time of the June 2022 survey. Similarly, satisfaction in the cost of electricity fell from 56% to 53% from June 2021 to June 2022, however this was mainly driven by South Australia, Western Australia and Victoria. The survey also revealed that households were less satisfied with the time to restore electricity in an outage, down from 63% to 56% from June 2021 to June 2022. However, the ECA note that this survey was done following the 2022 floods which affected large areas of eastern Australia, and likely contributed to the 36% of Australian households experiencing an electricity outage in the past 6 months.

The ECA say that household confidence that the overall market is working in the long-term interests of consumers is down from 46% to 44% from June 2021 to June 2022, however this was mostly driven by decreases in Western Australia, South-East Queensland, South Australia and Tasmania.¹²²

Findings



4. Reported satisfaction with electricity retail services over 2021-22 decreased slightly.



5. The number of electricity-related complaints to EWON in 2021-22 was lower compared to previous years.

Chapter 5 »

How the market structure is changing

05

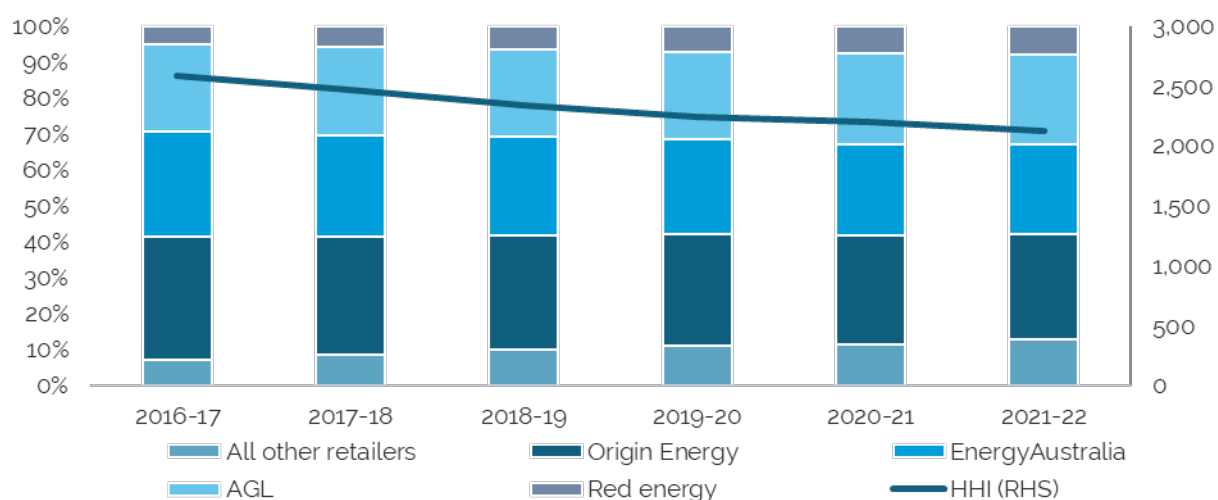
Chapter 3 showed that there has, for the first time, been a decrease in the number of retailers in the market. This is largely linked to the difficulties operating with very high wholesale costs of energy. The two previous years saw a total of 16 new operators enter the market, following an unbroken run of increasing retailer numbers since deregulation in 2013-14. This chapter discusses changes in market share, that is, how businesses have been gaining and losing customers. It also considers whether there are barriers to entry and expansion. We have provided further analysis of retail gas markets in our Gas Information Paper.

It is important to note that at the time of this report, we have access to the Q3 2021-22 AER retail market performance data which captures up to March 2022. Therefore, much of the market volatility that started around June 2022 will not be captured in our assessment of competition. Our analysis below will need to be revisited once the data for Q4 2021-22 becomes available. Our analysis of retail offers and retailer numbers from Energy Made Easy elsewhere in this report does include data up to August 2022.

5.1 Wholesale market volatility in 2021-22 affected retail market competition

Figure 5.1 shows that the market concentration has fallen over time but the retail market remains relatively concentrated. The Herfindahl-Hirschman Index (HHI), which is a measure of market concentration (see Box 5.1), fell from its 2020-21 value of at 2,293 to 2,189 based on March 2022 data for the retail electricity market.

Figure 5.1 Market concentration for small electricity customers in NSW



Source: AER, Schedule 2 - Q3 2021-22 Retail Energy Performance Data, June 2022.

The retail electricity market continues to be dominated by the Big 3 – Origin Energy, EnergyAustralia, and AGL Energy. These same retailers dominate the gas market. The combined market share of the Big 3 has slowly fallen over time, but they still supply 79% of customers in NSW in roughly equal shares (down from 88% in 2016-17)¹²³. Origin and EnergyAustralia have lost market share (5 percentage points and 4 percentage points respectively since 2016-17). Overall, the combined market share of the Big 3 decreased by 2 percentage points in 2021-22. The next biggest retailer is Red Energy which increased its market share by around 0.5 percentage points to 8% in 2021-22.

Though not evident from AER data which only captures up to March 2022, research from the ESC suggests more recent market volatility and high wholesale energy costs may be driving a 'flight to safety' among customers. This refers to customers switching to a large retailer for the first time or back to large retailers. This could be for a number of reasons including concern that smaller retailers may fail in a market under stress, advice from some smaller retailers to switch to an alternative provider, or concern from customers about actual or potential price rises at smaller retailers. This may also be occurring in NSW, and we will monitor this closely next year when more recent data will be available. In conjunction with the notable cluster of retailer exits in August 2022, we suggest market concentration may emerge as a key issue to watch for next year's report.

Box 5.1 The Herfindahl-Hirschman Index

The HHI is a common measure of market concentration. The results can range from close to zero for a highly competitive market, to 10,000 which represents a monopoly market.

The information below assists interpretation of the result:

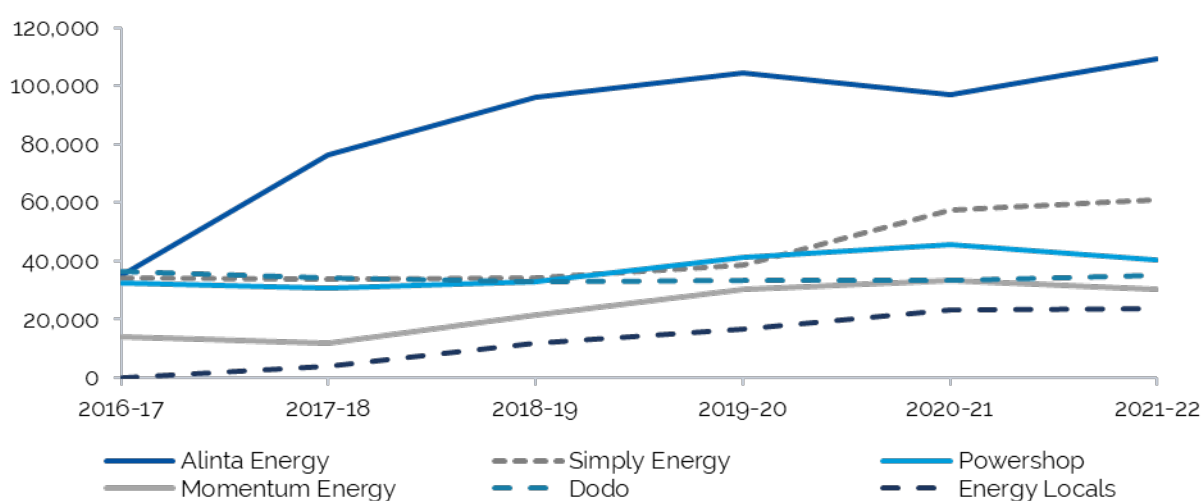
- The ACCC considers a post-merger industry with a HHI of 2,000 or less is less likely to raise competition concerns (used when considering the impact of mergers).
- An ACCC review of the mobile telecommunications market found a HHI of around:
 - 3,100 for mobile services
 - 3,500 for fixed broadband services
 - 4,500 for fixed voice services.
- The United States Department of Justice and Federal Trade Commission considers market concentrations below 1,500 are competitive and above 2,500 are highly concentrated.

Source: ACCC, Merger Guidelines 2008, updated 2017, p 35; ACCC, Communications Sector Market Study Final Report, April 2018, p 23; U.S. Department of Justice and the Federal Trade Commission, Horizontal Merger Guidelines, 19 August 2010, p 19.

After the Big 3 and Red Energy, the remaining 13% of the market is shared between the other retailers.¹²⁴ About 8% of this is held by 6 retailers. These retailers had more than 20,000 customers each in 2021-22 (Figure 5.2). In total, the 10 largest retailers held 95% of the market. The remaining 25 retailers in the market make up a combined market share of around 5%.¹²⁵

Our assessment above includes the combined markets for residential and small business customers. We also considered the two markets for residential and small business customers separately. There are similar levels of competition in the small business and residential markets. The HHI for the small business market (2,144) was slightly lower than for the residential market (2,195).¹²⁶

Figure 5.2 Market share for small electricity customers in NSW



Note: Customer numbers of the 6 largest electricity retailers after Origin Energy, EnergyAustralia and AGL Energy.

Source: AER, Schedule 2 - Q3 2021-22 Retail Energy Performance Data, June 2022.

Finding



6. The market concentration reduced slightly in 2021-22, but this likely reflects the timeframe of available data which does not capture Q4 2021-22 and should be revisited when new data is available. The combined market share of the Big 3 retailers was down slightly on last year. In 2022-22:
 - 79% of customers are supplied by the Big 3.
 - 95% of customers are supplied by 10 retailers. The remaining 5% of the market is shared between 25 retailers.

5.2 Barriers to expanding market share

We have previously reported on barriers to smaller retailers expanding their market shares. Below we discuss the potential barriers created by current wholesale market prices and the lack of regulatory consistency in some emerging areas of energy technology.

5.2.1 High wholesale energy costs may deter retailer entry in the short to medium term

In Chapter 2, we explored the recent volatility in wholesale markets, and how this flows through to impact retail markets. In Chapter 3, we explored how this wholesale market context has driven exits from the retail electricity market.

Another potential consequence of a volatile wholesale market and persistently high energy costs is that it becomes a barrier to entry for retailers in the near and medium term.

As we discussed in Chapter 2, retailers have a range of strategies to avoid being exposed to spot prices in procuring the energy their customers need. However, it may be the case that in a high-cost environment, access to these strategies is determined by scale, and smaller retailers may not be able to use them to mitigate spot price exposure. If high hedging costs persist (as discussed in Chapter 2), then it may be the case that only retailers with large asset bases will be able to use these financial instruments to manage exposure to the spot market.¹²⁷

For prospective market entrants looking into the current market environment, it may therefore be unclear what viable strategy exists to grow their market share should they choose to enter. This may be exacerbated by the potential for consumer distrust of new, small retailers because of the recent wave of market exits.

5.2.2 Underdevelopment of technology and interoperability standards may impede some specialised service providers

As discussed in Chapter 2 and Chapter 3, there is an expanding role for smart technologies in the energy transition and as a means to adapt demand to times of day when wholesale energy prices are lower. Retailers are offering integrated solutions that coordinate solar panels, batteries, electric vehicles, water heating systems, and smart home devices to supply the grid when prices are high, and/or draw energy from the grid specifically when prices are low. Coordinating storage, generation and demand behind the meter is also key to minimising household bills.

However, as the ESB has noted¹²⁸, there is currently a material gap in regulation and standards concerning the interoperability of different technologies. There is currently no coherent set of data standards or requirement that different kinds, and different makes, of equipment (for example, different brands of solar panels or household batteries) have to be able to 'talk to each other' or to a central control system such as a retailer. The ability of different smart devices, or hot water systems, or home batteries to be able to interface with a different control system than the one they were manufactured for varies. Some of these devices may therefore not be able to be included in a holistic solution that coordinates all of a customer's load or energy generation.

For a retailer specialising in offers that reward and/or coordinate distributed energy resources and demand flexibility, lack of interoperability could represent a material barrier to entry because it limits the total pool of customers with these technologies that the retailer could potentially target (or at least makes this uncertain). It may also limit the total value these retailers can offer customers. While this problem likely affects both large and small retailers, small and specialised retailers are less able to spread their risks over a large, diversified customer base.

For these reasons, the ESB's Horizon 1 focuses specifically on technical standards and guidance within the distributed energy resources implementation plan. The ESB released its Stage 1 Interoperability Policy Framework for consultation in December 2021, which acknowledges the risk that poor interoperability standards can become a barrier to market entry, and a risk to customers who can become 'locked in' with a single provider.¹²⁹ The ESB is currently considering stakeholder feedback on the consultation draft.

Chapter 6 »

Prices in the market

06

We assessed the changes in electricity prices and the underlying costs of supplying electricity in 2021-22. We have also considered the prices in July and August 2022, following the changes to the caps on standing offers and NEM market suspension. In a competitive market, we would expect that the change in prices broadly reflects the changes in the underlying market costs of supply.

The price analysis in this chapter is based on 'flat-rate' offers – where the unit price of electricity is the same at all times of the day. These are distinct from 'time-of-use' offers, which are considered in the next chapter.

The prices in this analysis are based on the available offers in the market, rather than the prices from customers' bills. Therefore, they may not reflect the price changes experienced by all customers. Slightly under 20% of customers switch each year, choosing the newest offers. The customers who have not switched may be on older offers that are no longer generally available. Bill outcomes will be affected by changes in consumption as well as changes in price. In its submission to our Draft Report, PIAC requested that we include an analysis of actual experience and outcomes of customers, including analysis of actual bills.¹³⁰ Since publishing our Draft Report, new billing data on what customers are actually paying has become publicly available. We provide this analysis in Chapter 8.

The sections below explain key trends since IPART began monitoring the market. It also reports on the differences between regions for residential and business customers.

6.1 Overview of price trends

Residential electricity prices have fluctuated over the past 8 years since IPART began monitoring the market. This change in market and standing offer prices is shown in Figure 6.1 (see Box 6.1 for an explanation of market and standing offers).

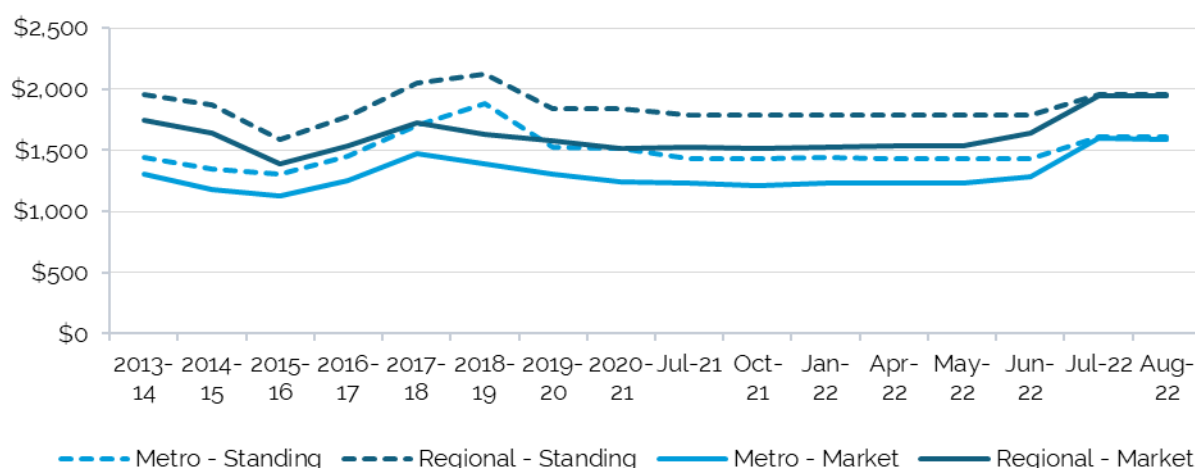
Figure 6.1 compares annual average prices from previous years, and monthly median prices from 2021-22. It shows that recent substantial price rises have only occurred late in the 2021-22 year, and accelerated in 2022-23. In addition:

- For market offer prices (the solid lines on the chart), prices in 2021-22 stayed below their peak in 2017-18 and 2018-19, and slightly below prices in 2013-14 when IPART began its monitoring role. However, this changes dramatically in July and August 2022 when prices rise to their highest since deregulation in 2013-14.
- Standing offer prices (the dotted lines on the chart) are higher than market offer. The difference between them was largest in 2018-19, before new rules to cap standing offer prices and reset them annually were introduced in 2019-20. Standing offer prices have since fallen significantly. However, due to high wholesale electricity prices the median standing offer increased on 1 July 2022.¹³¹ Standing offer prices are now higher than they were in 2013-14 when the market was deregulated, but still lower than their peak in 2018-19.
- The difference between standing offers and market offers has narrowed drastically from 2022-23. In May 2022 the median residential market offer was approximately 15% below the standing offer. This is still a smaller gap than last year (which was around 20%).¹³² However, in August 2022, the median market offer was less than 2% below the median standing offer. In some cases, individual market offers are higher than the standing offer.

- Prices in regional areas have remained around 27% higher than prices in metro areas by the end of 2021-22.²³ This is because in regional areas, network costs are around 60% higher than metro areas, because the poles and wires cover a larger geographic area with a much sparser population.¹³³

These observations are discussed in more detail in the following sections.

Figure 6.1 Annual residential electricity bills for median offers by offer type and region



a. Annual electricity bills based on 4,215 kWh of residential electricity purchased, including GST, nominal

b. Regional refers to median of all offers in the Essential Energy network. Metro refers to the median of all offers in the Ausgrid and Endeavour Energy networks.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

The changes in retail prices broadly reflects the changes in the costs of supply. The 2021-22 price increases were driven by rising wholesale costs (discussed in Chapter 2). The other major cost component, network costs, increased from 2020-21 to 2021-22 by on average less than 4% for typical residential customers.¹³⁴ From 2021-22 to 2022-23 this figure was less than 2%.¹³⁵

The ACCC conducts detailed reviews of prices and margins annually.¹³⁶ Therefore, we do not consider that IPART needs to further review changes in costs.

Box 6.1 Market offers vs standing offers¹³⁷

A standing offer is a standard retail contract available to customers not on a market offer. For instance, where there is no existing connection the local area retailer is obligated to offer to supply under the standard retail contract. The standing retailer contract is also the default contract under certain circumstances, such as when a

²³ Median residential market offers as at June 2022.

Box 6.1 Market offers vs standing offers¹³⁷

customer moves into a premises and starts consuming without arranging a market offer, or a customer's previous retail contract terminates but the customer continues to consume electricity at the premises. Only around 10% of residential and 18% of small business customers are on a standing offer.

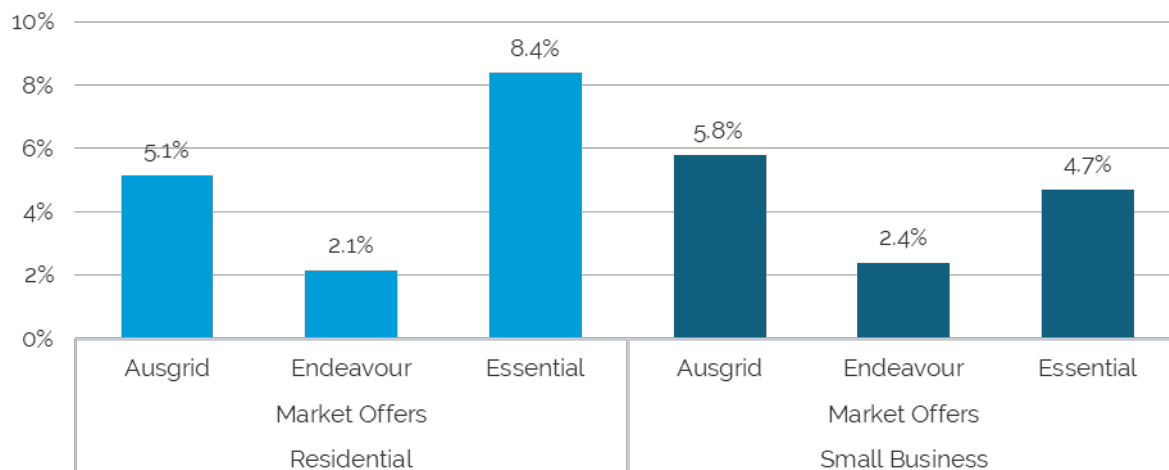
The model terms and conditions of the standard retail contract are set out in the National Energy Customer Framework (NECF). Since 2019-20 the DMO determined by the AER caps the maximum price that retailers can charge customers on a standard retail contract. Standing offer contracts are typically updated once per year to reflect the AER's annual determination of the DMO.

A market offer, or a market retail contract, is a plan that a customer can choose to enter with a retailer. The requirements for a market retail contract are less prescriptive. For instance, the model terms and conditions in the National Energy Customer Framework do not apply to market retail contracts, although there are still minimum requirements that apply. There is no regulated price cap that determines the maximum retailers can charge customers on a market offer (although prices for market retail contracts have tended to be lower than prices for standard retail contracts). Retailers determine which market offers they will provide to the market and when to alter the offers that are available. As a result, market offers are typically priced to reflect the conditions of the market at the time, unlike standing offers which reflect the DMO set only once per year.

6.2 Prices have risen modestly from 2020-21 to 2021-22 and strongly over early 2022-23

Overall, median market offer prices for both residential and small business customers increased from 2020-21 to 2021-22 (Figure 6.2). For residential customers, they increased most in the Essential network, by about 8%. For small business customers, the greatest increase was in the Ausgrid network (almost 6%).

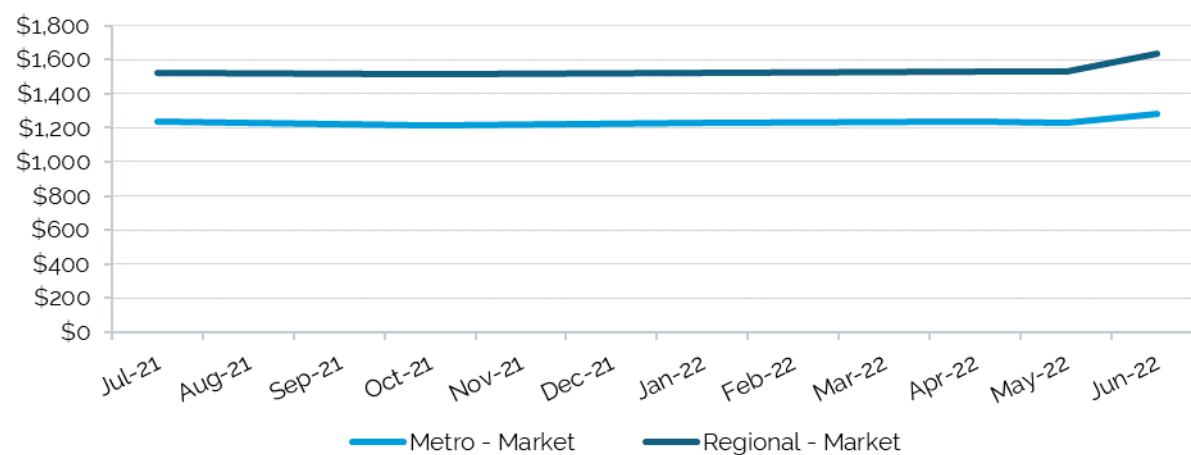
Figure 6.2 Change in median market offer prices for residential and small business electricity by network area, June 2021 to June 2022



a. Annual electricity bills based on 4,215 kWh of residential and 20 MWh of business electricity purchased, including GST, nominal.
Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

However, the overall year-on-year price changes conceal what was actually very little price movement across most of 2021-22 except for the final two months of the financial year (May and June). See Figure 6.3 and Figure 6.4.

Figure 6.3 Median market offers for residential electricity over 2021-22 by region

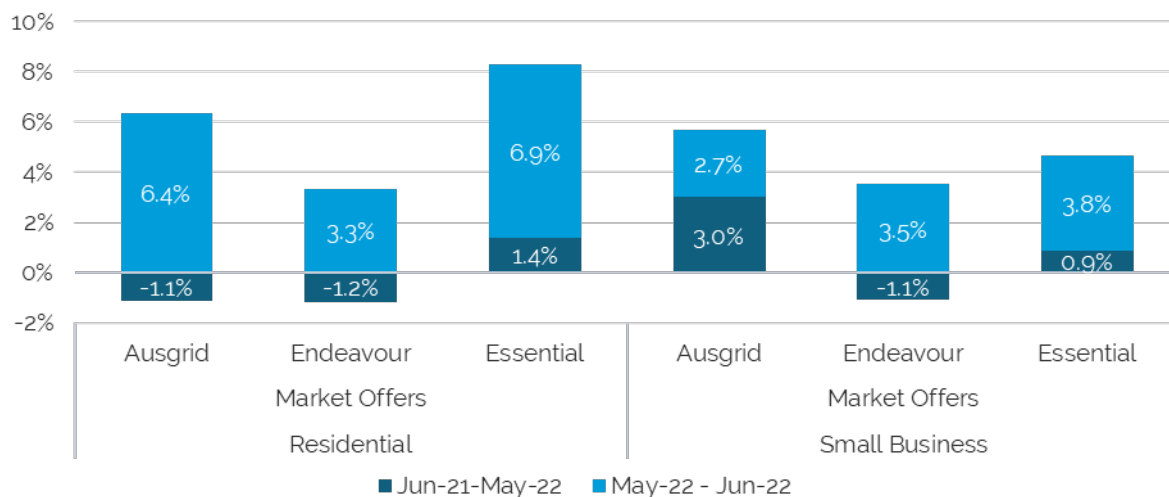


a. Annual electricity bills based on 4,215 kWh of residential electricity purchased, incl GST, nominal

b. Regional refers to median of all offers in the Essential Energy network. Metro refers to the median of all offers in the Ausgrid and Endeavour Energy networks.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Figure 6.4 Change in median offers for residential electricity offers June 2021 to June 2022 by network area and offer type



a. Based on 4,215 kWh of residential and 20 MWh of business electricity purchased, including GST, nominal.

b. Jun 21 – May 22 is calculated as the percentage change in the median offer price from June 2021 to May 2022. May 22 – Jun 22 is calculated as the percentage change in the median offer price from May 2022 to June 2022. This is intended to demonstrate relative prices changes at different points in the year. Light blue and dark blue figures cannot be added to measure offer price changes from June 2021 to June 2022.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

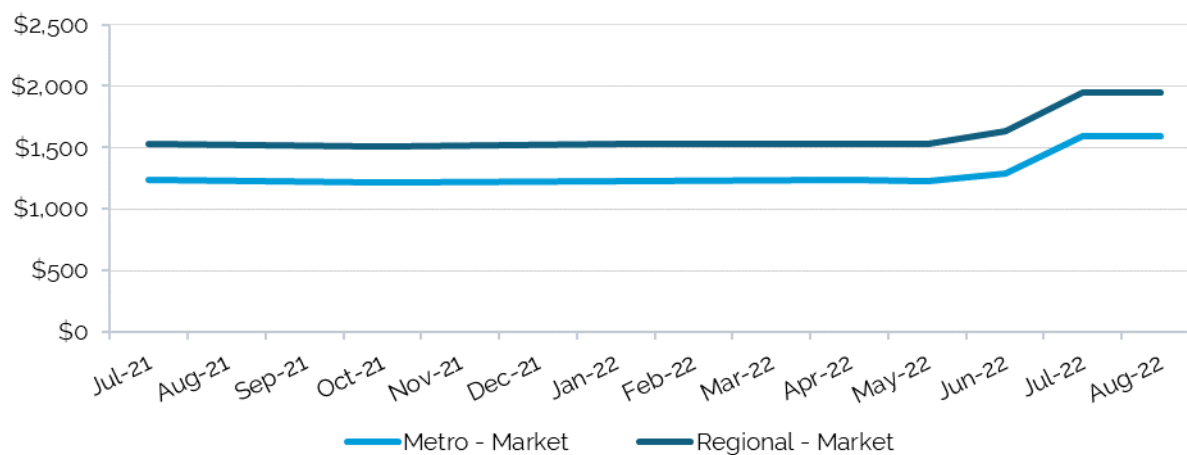
For residential market offers, prices were effectively flat (plus or minus about 1%) in all networks from June 2021 to May 2022. However, in the final month of 2021-22 all network areas saw prices rising much more substantially, increasing between 3% and 7% over the previous month. This pattern is similar for business customers, except for Ausgrid customers who saw a 3% rise earlier in 2021-22 (prices rose subtly but steadily every month before larger rises in May and June). Small business offers rose less in total than residential offers, between 2% and 4% increase in the final month of 2021-22.

Market offer prices for electricity increased markedly since June 2022

Median market offers for typical residential customers increased by roughly \$300 per year for all network areas between June and August of 2022 (Figure 6.5).²⁴ Figure 6.6 shows that this was a 19% price increase for regional customers, and a 24% price increase for metro customers (where wholesale costs are a higher proportion of customer bills). For business customers, prices increased by around a third.

²⁴ Typical annual consumption of 4,215 kWh electricity.

Figure 6.5 Median market offers for residential electricity over 2021-22 and early 2022-23 by region



a. Annual electricity bills based on 4,215 kWh of residential electricity purchased, including GST, nominal

b. Regional refers to median of all offers in the Essential Energy network. Metro refers to the median of all offers in the Ausgrid and Endeavour Energy networks.

Source: IPART analysis of data from Energy Made Easy, accessed May-August 2022.

Figure 6.6 Change in median market offers June-August 2022 by network area and customer type



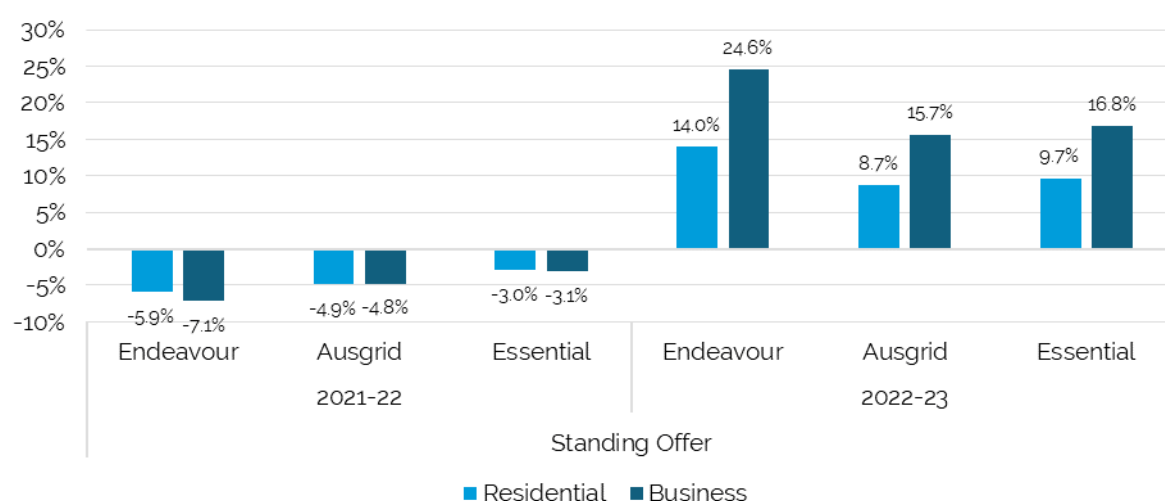
a. Based on 4,215 kWh of residential and 20 MWh of business electricity purchased, including GST, nominal.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Standing offer prices fell in July 2021 then rose in July 2022 to reflect changes in the DMO

Since 2020-21, standing offers decreased by between 3% and 6% for residential customers, and by a similar amount for small business customers (between 3% and 7%) (Figure 6.7). Because standing offers are capped by the DMO set by the AER, most retailers set their standing offer to match the DMO. Standing offer price decreases therefore reflect the change in the DMO when it was reset on 1 July 2021, and not up-to-date market conditions.

Figure 6.7 Change from previous year in median standing offers by network area and customer type



a. Based on 4,215 kWh of residential and 20 MWh of business electricity purchased, including GST, nominal.

b. 2021-22 refers to the period between June 2021 and June 2022. 2022-23 refers to the period between June 2022 and August 2022.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Following the AER's subsequent DMO reset on 1 July 2022, Figure 6.7 shows that standing offers rose markedly:

- by between about 9% and about 14% for residential customers and
- by between around 16% and around 25% for small business customers.

These increases are driven by rising wholesale electricity costs, however, standing offers did not rise as much as market offers because the DMO was set for the 2022-23 year in late May, based on forecasts that did not anticipate the full extent of wholesale energy price increases in early 2022-23.

A key characteristic of the DMO is that it lags behind market offer changes (and changes in market conditions) because they are set once annually (see Box 6.2). The AER must finalise the DMO in late May for the next financial year¹³⁸ and then those maximum prices must apply for the whole year.¹³⁹ In contrast, retailers can update the market offers at any time to reflect changing market conditions.

Box 6.2 The Default Market Offer

The DMO is the maximum price that retailers can charge electricity customers on standing offers.

The purpose of the DMO is to act as a fallback price for those customers who are not engaged in the market, and should not be a low-priced alternative to a market offer.¹⁴⁰ It aims to:

- bring down standing offer prices which are unjustifiably high, and
- make it easier for customers to compare electricity plans by requiring all retailers to show discounts with reference to the DMO (i.e. discounts off the same reference price).¹⁴¹

The DMO came into effect on 1 July 2019 determined by the AER. The AER is required to determine a reasonable total annual price for supplying electricity to small residential customers and small business customers on standing offers in New South Wales, South Australia and south-east Queensland.¹⁴² The AER is required to determine the DMO for a financial year in May of the previous financial year.

A different DMO applies for each network areas across most regions in Australia. The DMO for each network should broadly reflect the costs the AER expects retailers to incur in supplying electricity to customers. The DMO price is set according to a building block methodology that includes:

- network costs
- wholesale energy costs
- environmental costs
- retail costs and allowances.¹⁴³

The DMO is intended to be set at a level that provides the opportunity for retailers to compete, and to provide incentives for customers to participate in the market. Its purpose is to act as a 'reasonable fall-back position' for those not engaged in the market.¹⁴⁴ While the changes in the DMO are intended to be broadly reflective of the expected changes in costs, the level of the DMO will be different to the efficient costs actually faced by retailers. In particular, the wholesale energy cost estimate used by the AER is the costs of the hedging strategy to meet the 95th percentile of the distribution of spot price outcomes, which under regular conditions is likely to overestimate retailers' costs.¹⁴⁵ However, as this report has explored, retailers have not faced normal conditions towards the end of 2021-22 and early 2022-23. Therefore it may be the case that the wholesale cost and headroom allowances in the 2021-22 DMO were insufficient for retailers to recover their costs. This observation is supported by

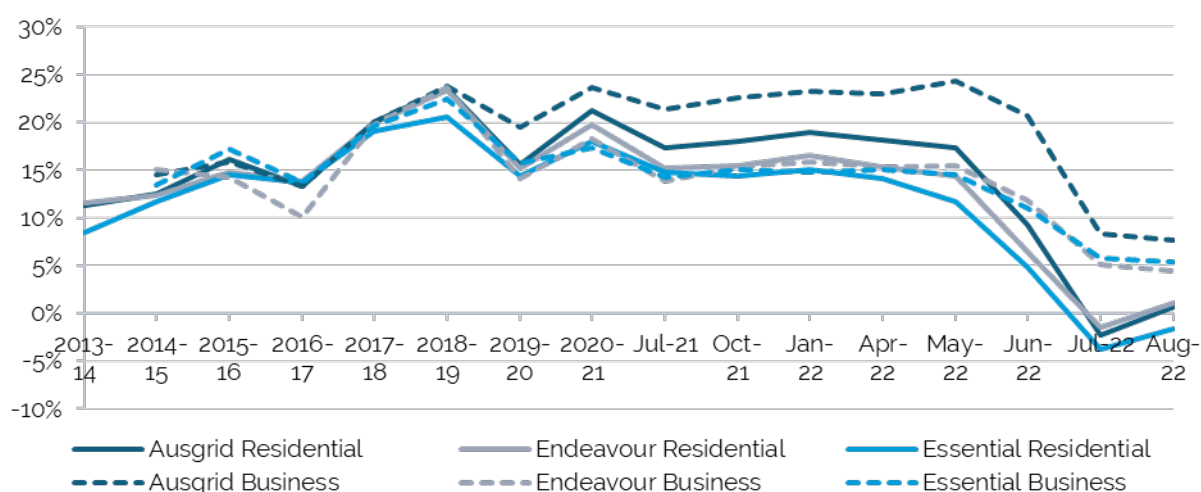
Figure 6.8 below which shows that some of the *lowest* market offers are now above the standing offer.

The gap between the median lowest market offer and the median standing offer narrowed dramatically in July and August 2022 (

Figure 6.8). The average difference remained stable up until May 2022 (ranging between 12% and 24% depending on the network and business/residential), but narrowed significantly from June 2022, and even dropped to negative (that is, the market offer is above the standing offer) for residential customers in July and August. The average difference for small business customers was higher than for residential customers in July and August at around 5-8% depending on the network.

Chapter 9 provides further analysis of the impact of the default market offer on pricing outcomes.

Figure 6.8 Average difference between each retailer's lowest and standing offer (as a percentage of the standing offer)



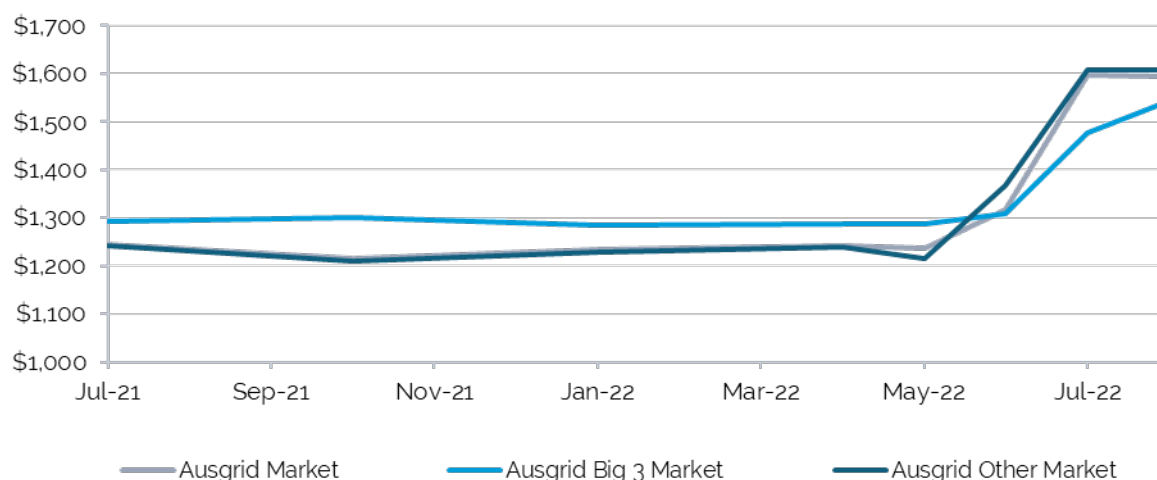
Note: Anytime (that is, single rate, rather than time of use or demand tariffs) offers only. We don't have data on market prices for business customers for 2013-14.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Since May 2022, Big 3 retailer offer prices increased by a lot less than smaller retailers in the market

We also looked at how the median market offer of the Big 3 compares to all other retailers over time, especially following June 2022. Figure 6.9 shows this comparison, using the Ausgrid network as an example. It shows that historically, the market offers of the Big 3 have been slightly higher than those of the other retailers in the market. In June 2022, the gap narrowed, as the market offers of other retailers increased significantly while only slightly increasing for the Big 3. In July and August, the market offers of other retailers increased far more than they did for the Big 3. This might be explained by smaller retailers needing to increase their prices significantly in order to stay in operation, while the Big 3 may have more of a financial buffer and so can limit or defer price increases. Alternatively, this may reflect differences in hedging strategies between larger and smaller retailers, where large retailers are hedged more conservatively (and therefore were less exposed to very high spot market prices). Smaller retailers, who may have a higher risk appetite as part of a business model to grow market share, may have greater proportions of unhedged load for which very high costs needed to be recovered.

Figure 6.9 Median offer of Big 3 retailers vs all other retailers (Ausgrid network)



a. Based on 4,215 kWh of residential electricity purchased, including GST, nominal.

b. Ausgrid Market refers to the median market offer among all market offers while Ausgrid Big 3 Market and Ausgrid Other Market refer to the median offers among the Big 3 retailers (Origin, EnergyAustralia, AGL Energy) and all other retailers respectively.

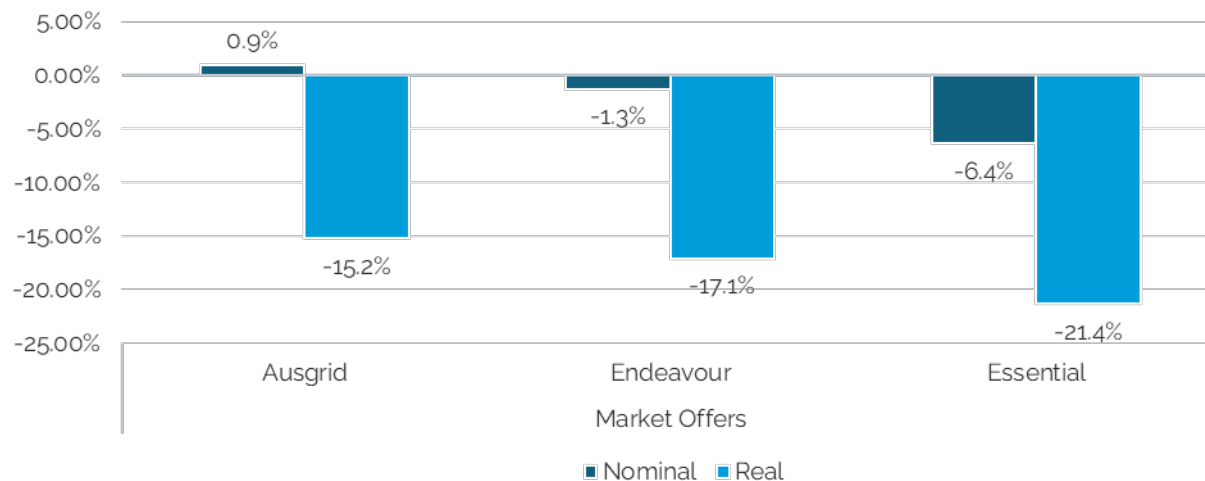
Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

6.3 Prices in some networks are now higher than when IPART began monitoring markets in 2013-14

Consistent with trends discussed above, there are strong differences in how current prices compare to earlier periods in time depending on the time of year analysed. If we consider the difference between when IPART first started monitoring the markets and 2021-22, we see patterns consistent with previous recent reports.

Measured up until June 2022, market offers are materially lower than in 2013-14 in real terms; between 15% and 21% lower (Figure 6.10). This reflects the trend of the last few years where retailers discount off the standing offer to attract customers. Up until the end of 2021-22, customers on the median market offer were substantially better off than in 2013-14.

Figure 6.10 Cumulative price change in nominal and real terms from 2013-14 to June 2022

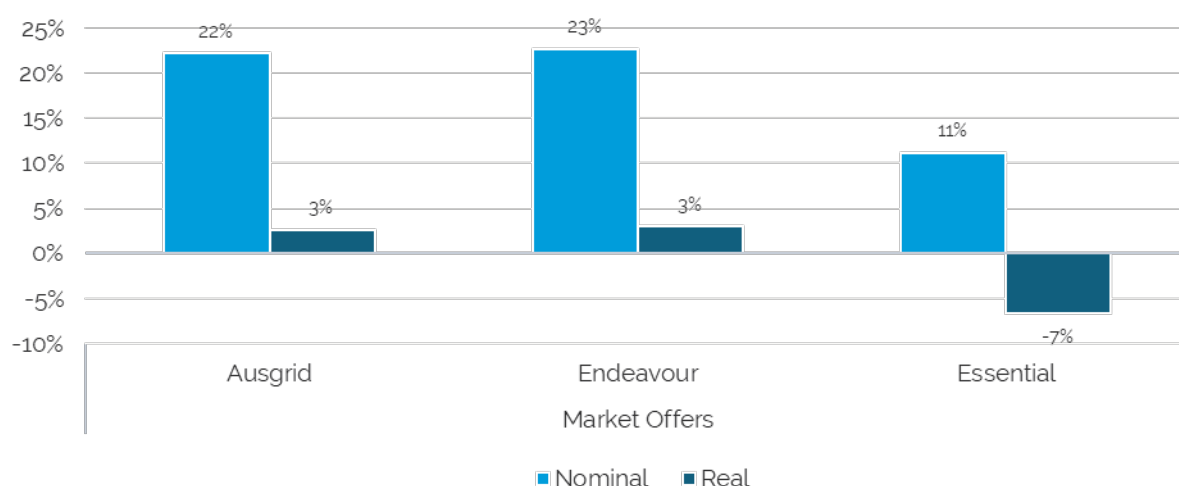


a. Median residential market offers, based on 4,215 kWh of residential electricity purchased, including GST.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

However, if we include recent months (July and August 2022) in the analysis, the picture presented by cumulative price changes is quite different (Figure 6.11). In real terms, in the Ausgrid and Endeavour networks, market prices have increased, by 3%, while they have decreased by 7% in the Essential network. This highlights the extent of price rises in market offers that have been concentrated in recent months and shows the impact of a specific external shock – the increase in wholesale energy costs.





Figure 6.11 Cumulative price change in nominal and real terms from 2013-14 to August 2022



a. Median residential market offers, based on 4,215 kWh of residential electricity purchased, including GST.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Findings

-  7. Market offer prices were mostly flat over most of 2021-22, however prices increased in May and June:
 - The median market offer for residential and business customers rose by between 2% to 8% in nominal terms from June 2021 to June 2022.
 - The median market offer for residential and business customers rose by between 19% and 34% in nominal terms between June and August 2022.
-  8. The median standing offer fell moderately following the 1 July 2021 reset of the DMO, but rose substantially following the 1 July 2022 reset by around 9% to 25%.
-  9. Price changes broadly reflected the underlying changes in costs in 2021-22 – wholesale prices specifically. A detailed review of prices and profit margins is not required.
-  10. As at June 2022, market prices in all networks were lower in real terms than they were in 2013-14 when retail electricity prices were deregulated in NSW. However, because of the subsequent price increases, as at August 2022, market prices were 3% higher in real terms than they were in 2013-14 in the Ausgrid and Endeavour networks.

Chapter 7 »

Time-of-use prices

07

Time-of-use offers are available to customers with interval or smart meters which are capable of recording usage data at least every 30 minutes. Retailers typically offer three different pricing periods (which may vary for different times of the year):

- peak - more expensive usage prices apply, usually during the afternoon and evenings on weekdays^a
- shoulder – less expensive usage prices apply, usually during the middle of the day and late evenings, and during the weekends
- off-peak – least expensive usage prices apply, usually overnight and early morning, and during the weekends.

The exact pricing periods offered differ between retailers and distribution networks (Box 7.1).

These different pricing options better reflect the costs of supplying electricity. They also provide an incentive for customers to shift usage away from expensive peak periods to the cheaper shoulder and off-peak periods. From the retailer's perspective, shifting demand out of peak periods drives down the cost of energy, savings that can be shared with customers through lower off-peak pricing. This can also help reduce other costs. For example, network upgrades may no longer be required or may be delayed if peak use falls in that part of the network.

This chapter uses offer data from Energy Made Easy to compare price outcomes for customers on market time-of-use offer compared to market flat-rate or 'anytime' offers.

Box 7.1 Time-of-use pricing periods

We provide below each network service provider's time-of-use pricing periods. Retailers are free to set their own periods for their time-of-use offers. However, most adopt the periods set by each of the network service providers.

Ausgrid

- Peak period
 - 'Summer' (1 November to 31 March): 2pm to 8pm on business days
 - 'Winter' (1 June to 31 August): 5pm to 9pm on business days
- Shoulder period:
 - Summer: 7am to 2pm and from 8pm to 10pm on business days
 - Winter: 7am to 5pm and from 9pm to 10pm on business days
 - Applies from 7am to 10pm on all other business days
 - Applies from 7am to 10pm on both weekends and public holidays

^a Shoulder/off-peak prices are applied for usage during the afternoon/evenings on the weekend.

Box 7.1 Time-of-use pricing periods

- Off-peak period:
 - applies from 10pm to 7am daily.¹⁴⁶

Endeavour Energy

- Peak period – applies from 4pm to 8pm on business days
- Off-peak period – applies at all other times.

For Obsolete tariffs^a:

- Peak period – applies from 1pm to 8pm on business days
- Shoulder period – applies from 7am to 1pm and 8pm to 10pm on business days
- Off-peak – applies at all other times.¹⁴⁷

Essential Energy

- Peak period – applies from 5pm to 8pm on weekdays^b
- Shoulder period – applies from 7am to 5pm and 8pm to 10pm on weekdays^b
- Off-peak period – applies at all other times.¹⁴⁸

For Obsolete tariffs^c:

- Peak period – applies from 7am to 9am and 5pm to 8pm on weekdays
- Shoulder period – applies from 9am to 5pm and 8pm to 10pm on weekdays
- Off-peak period – applies at all other times.

a. On 1 July 2019, Endeavour Energy's new time-of-use periods came into effect to better reflect when network usage peaks. The pricing periods under 'Obsolete tariffs' are only applicable to existing customers as at 1 July 2019.

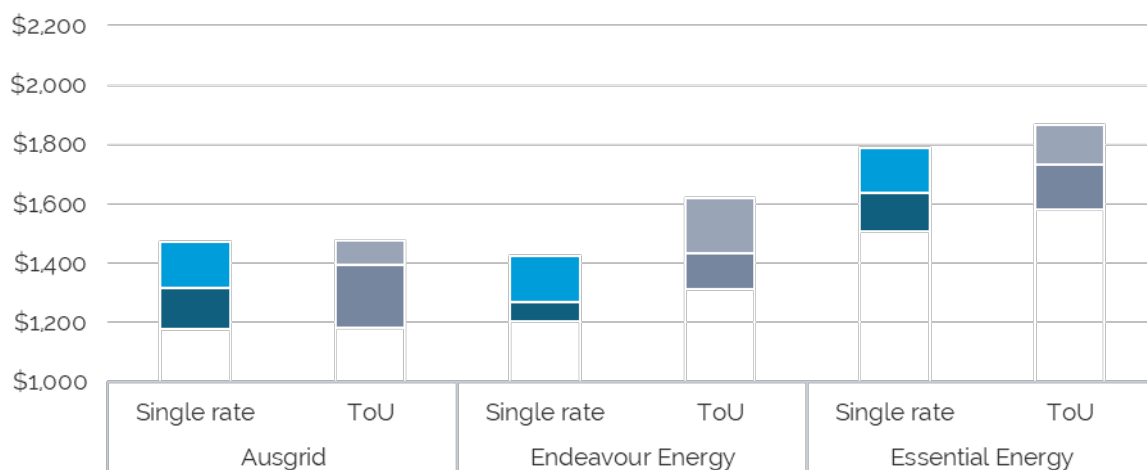
b. If a public holiday falls on a weekday then it is treated as a weekday.

c. On 1 July 2017, Essential Energy's new time-of-use periods came into effect to better reflect when network usage peaks. However, the 'Obsolete tariffs' will continue to apply to customers on Type 5 meters with time-of-use capability (Essential Energy considers that it cannot cost effectively manually reprogram these type of meters for its customers).

7.1 A typical customer is better off on a single-rate offer

We found that the median single rate market offer was lower than the median time-of-use offer, by about 6% in the Ausgrid and Essential networks, and by about 13% in the Endeavour network. This finding was similar for low, medium and higher levels of overall consumption. Figure 7.1 compares single rate and time-of-use offers across the three distribution networks for a typical customer using 4,215 kWh of electricity a year.

Figure 7.1 Comparison of single rate and time-of-use market offers 2021-22 (as at June 2022) (4,215 kWh)



Note: The chart shows the 25th percentile, median (middle line) and 75th percentile of market offers for single rate and time-of-use (ToU), by network.

Source: IPART analysis of data from [Energy Made Easy](#), accessed June 2022.

In dollar terms, this meant that in June a typical customer with a typical usage profile was better off under a single rate market offer by:

- about \$77 in the Ausgrid network
- about \$164 in the Endeavour network
- about \$96 in the Essential network

Even the lowest time-of-use market offers (Ausgrid: \$1,056, Endeavour Energy: \$1,124, Essential Energy: \$1,348) are all higher than the lowest single rate offers across the three network areas (Ausgrid: \$1,037, Endeavour Energy: \$1,048, Essential Energy: \$1,306). These are only slightly higher in Ausgrid and Essential networks (about 2% and 3% respectively) but materially higher (about 16%) in the Endeavour network.

7.2 Small savings are available if customers can halve their peak usage

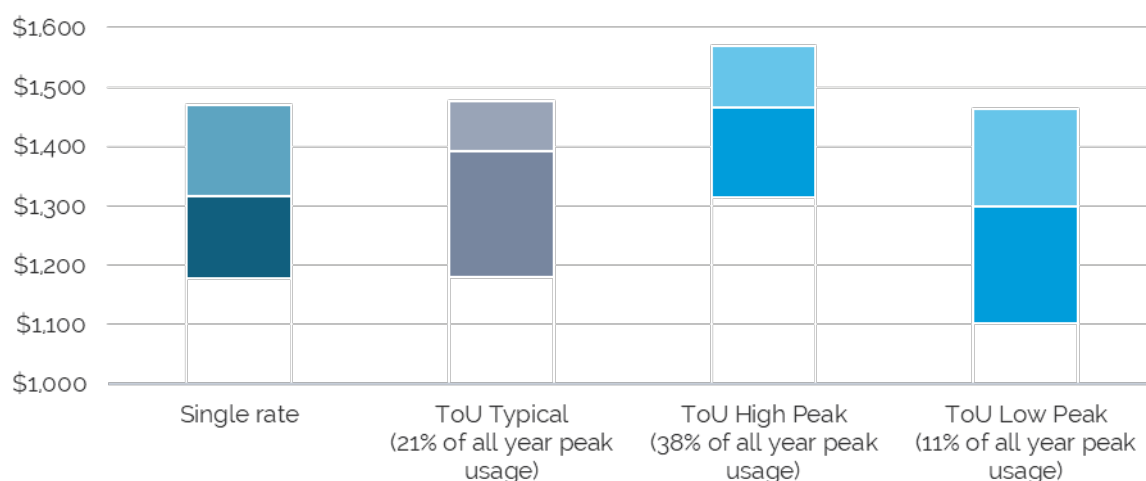
Under time-of-use pricing, customers will pay different amounts depending on when they consumer their electricity.

Figure 7.2 compares potential bill outcomes for different usage profiles under the time-of-use market offers available in the Ausgrid network area (as at June 2022). The overall consumption is the same in each scenario (4,215 kWh), but the times when customers use their electricity are different.

As expected, customers who have higher usage during peak periods are likely to face a higher bill compared to those with lower usage during peak periods.

Figure 7.2 shows that for the same annual usage, the only customers who are better off under a time-of-use offer are those with low usage during peak times. However, even if they can halve their peak usage (compared to a typical customer), they would only be about 1% (or about \$18) better off over a year on the median time-of-use offer compared to the median single rate offer.

Figure 7.2 Comparison of single rate and time-of-use market offers In Ausgrid's network area under different peak usage profiles 2021-22 (as at June 2022) (4,215 kWh)



Note: The chart shows the 25th percentile, median (middle line) and 75th percentile of market offers for single rate, and time-of-use (ToU) with differing amounts of peak period usage, but with the same overall consumption (4,215 kWh)
Source: IPART analysis of data from [Energy Made Easy](#), accessed June 2022.

Further, time-of-use offers differ depending on whether the peak, off peak and shoulder periods are the same all year round (known as an all-year time-of-use offer), or whether these differ by season (known as a seasonal time-of-use offer). Our analysis of Energy Made Easy offers for the Ausgrid network finds that for those customers with a typical usage profile, the median all-year time-of-use offer is about 6%, or \$74, more expensive than the median market flat rate offer. The median seasonal time-of-use offer is about 3%, or \$38, more expensive than the median flat rate market offer.

This means that for customers who are on time-of-use offers and who are not on a flat rate offer, the median seasonal time-of-use offer leaves customers slightly better off (by around 3%, or \$37) than those on all-year time-of-use offers. The main reason for this is that there are fewer peak price periods in total over the year for seasonal time-of-use offers.

It is therefore quite important for customers to have a good understanding of their usage (including how their peak time usage varies by season) and their ability to shift their electricity consumption away from peak times if they are to make the most of a time-of-use offer.

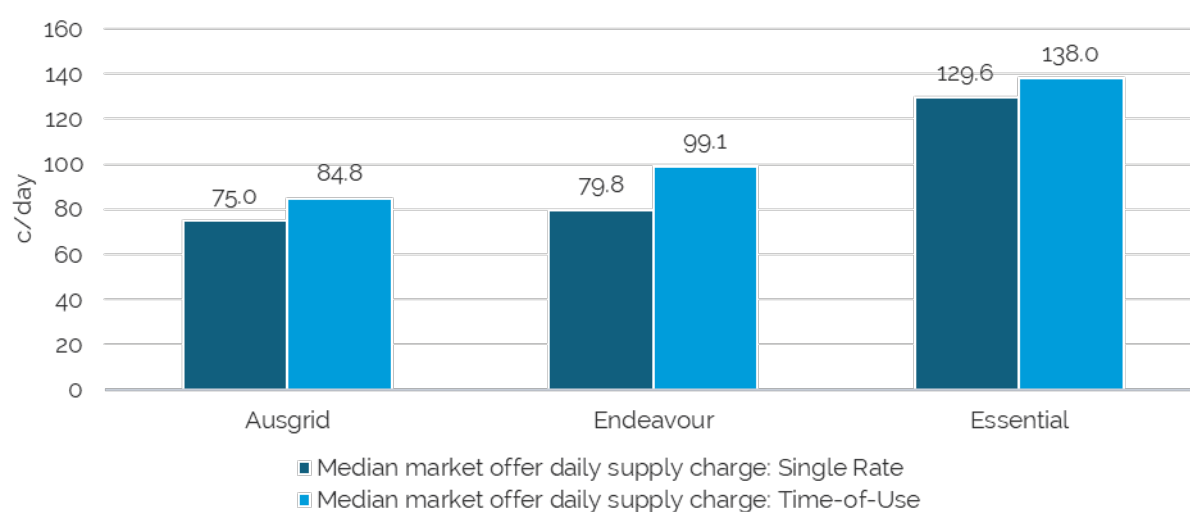
7.3 Time-of-use offers have higher fixed charges

One of the reasons that median time-of-use offers were higher than median single rate offers is that time-of-use offers tend to have higher supply charges, which reflect network costs determined by the AER (Figure 7.3 below). Energy Made Easy offer data shows that the supply charges of the median time-of-use offer in all network areas was higher than the median market single rate supply charge, by around:

- 13% in the Ausgrid network
- 24% in the Endeavour network
- 6% in the Essential network.

Higher supply charges are often a concern for customers with low electricity usage, because these charges cannot be avoided and can make up a higher proportion of the overall bill. Customers on time-of-use offers with low usage should therefore attempt to shift as much of their electricity usage out of peak price periods as possible to reduce their bills.

Figure 7.3 Comparison of median market offer supply charges: single rate and time-of-use (as at June 2022, c/day)



Note: Figures calculated after discounts and excluding GST.

Source: IPART analysis of data from [Energy Made Easy](#), accessed June 2022.



- Typical customers will only be better off under time-of-use offers if they can effectively shift their consumption out of peak periods. Median single rate market offers in the Ausgrid network were lower than time-of-use offers except for customers with a low proportion of their usage during the peak.

Chapter 8 >>

Customer outcomes



This chapter considers key outcomes for customers during the 2021-22 year. In particular, it considers the change in what customers actually pay, rather than the changes in the prices of available offers. As explained in Chapter 6, customers who have not switched may be on older offers that are no longer generally available. In addition, changes in bills will also be affected by change in consumption as well as changes in price.

We considered 2 sources of publicly available billing data when assessing how bills have changed:

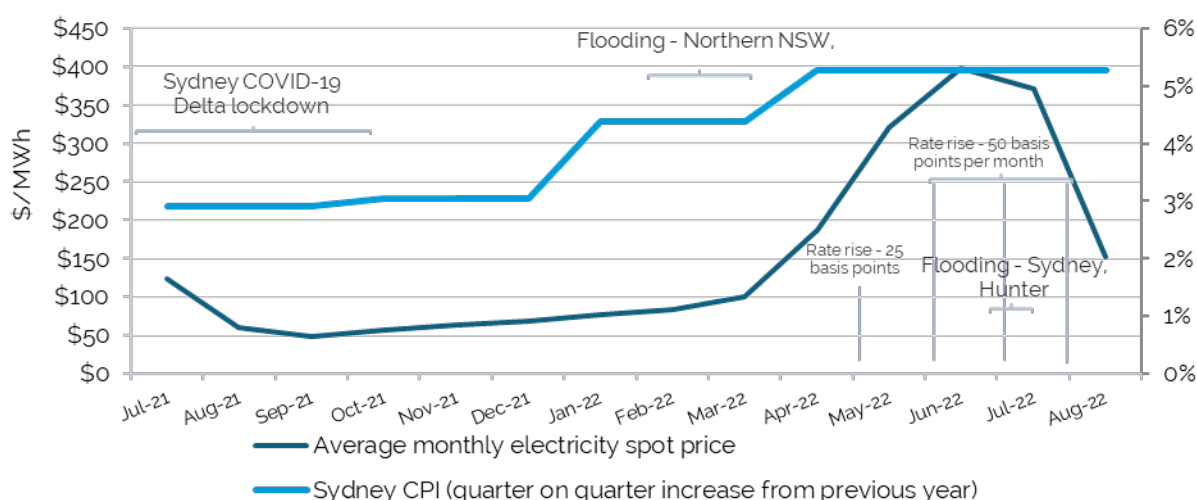
- Data collected under the NSW Government's Social Programs for Energy Code.¹⁴⁹ Retailers must provide billing data for all customers receiving rebates (around 28% of all NSW customers¹⁵⁰). Eligible customers include NSW holders of a health care card, Pensioner, Concession Card, Department of Veterans' Affairs Gold Card or customers who receive the Family Tax Benefit.¹⁵¹ The department reports on this data separately for each network area. The latest available information published is for July to December 2021.
- The ACCC's inquiry into prices, profits and margins in the supply of electricity in the National Electricity Market.¹⁵² This data is NSW-wide and is reported for the period of July to September 2021.

Both of these data sources are from the first half of the financial year, before the price increases discussed in Chapter 6. Since then, a number of factors have simultaneously put pressure on customers' ability to pay for energy. These include:

- high energy prices towards the end of the year
- rising cost of living driven by inflation and interest rate rises
- potential economic effects of COVID-19
- natural disasters, primarily flooding driven by an exceptionally wet year.

These factors are shown on a timeline over the 2021-22 year below in Figure 8.1. The potential cumulative impacts of these factors raise concerns about consumer hardship and customers experiencing vulnerability, as discussed in the sections below.

Figure 8.1 Timeline of key factors that can impact customers' ability to pay



Source: IPART analysis of [AEMO NEMWEB data](#); [SMH](#), 31 March 2022; [ABC News](#), 3 March 2022; [The Guardian](#), 2 March 2022; [SMH](#), June 30 2022; [BBC News](#), 4 July 2022; [SMH](#), 11 October 2022; [ABC News](#), 25 June 2021; ABS, Sydney Consumer Price Index (TABLE 5. CPI: Groups, Index Numbers by Capital City, Series ID A2325806K), Reserve Bank of Australia, Monetary Policy Decisions 2022.

8.1 Bills remained flat in the first half of 2021-22

In our report last year, we found that bills had increased in the first year of the pandemic (from 2019 to 2020) by around 1-3% and usage had increased by around 4-7%, likely due to new daily patterns of work and leisure at home that became commonplace in with COVID-19 lockdowns and other restrictions.¹⁵³ We considered at that time that the impact of COVID-19 could be greater in 2021 because the longest lockdown of the pandemic in NSW was in July to October 2021.

However, data from the NSW Government's [Social Programs for Energy Code](#) shows that the 2021 bill and usage results for July to December 2021 were quite similar to the corresponding period in 2020.¹⁵⁴ On average across the three networks areas, bills for rebate customers on standing offers increased by less than 1% and bills for rebate customers on market offers decreased by less than half of 1% (before any rebates are applied). Figure 8.2 shows that when broken down by different networks and offer types, average bill changes ranged from -1.5% to 2.3%.

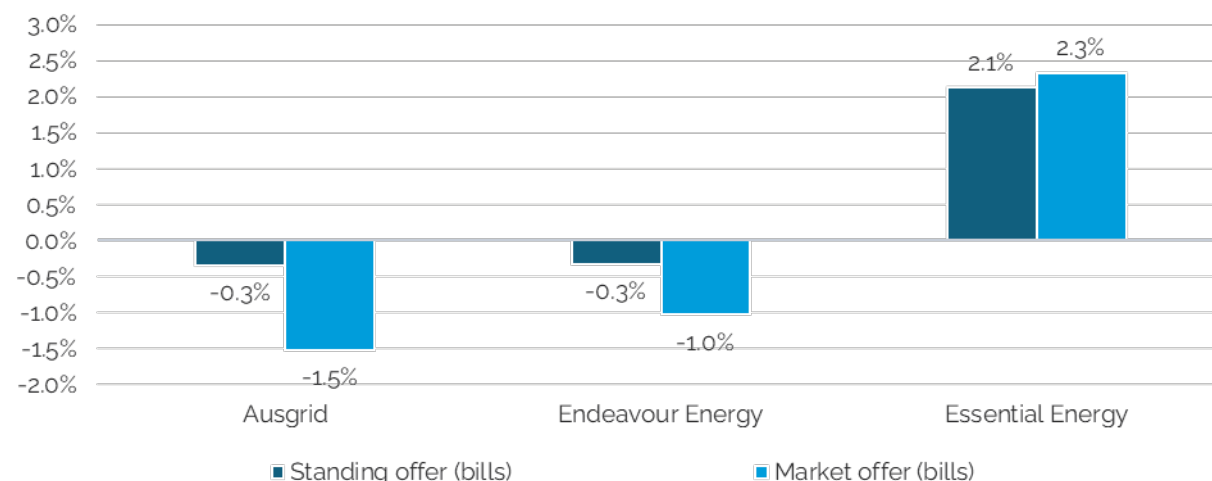
This is consistent with our finding that the available offers in the market remained fairly flat between the first half of the financial year and the previous financial year.

In addition, usage remained fairly similar in the first half of 2021-22 to the corresponding period in the prior year (Figure 8.3), even though there were greater restrictions on movement.^a This may suggest a stronger rebound to pre-pandemic work and lifestyle habits once the 2021 lockdown was lifted in mid-October 2021, in contrast to more cautious behaviours in 2020 involving more people staying home more often (even when not legally required to).

^a ACCC data for NSW overall also showed similar usage to last year (1.6% increase).

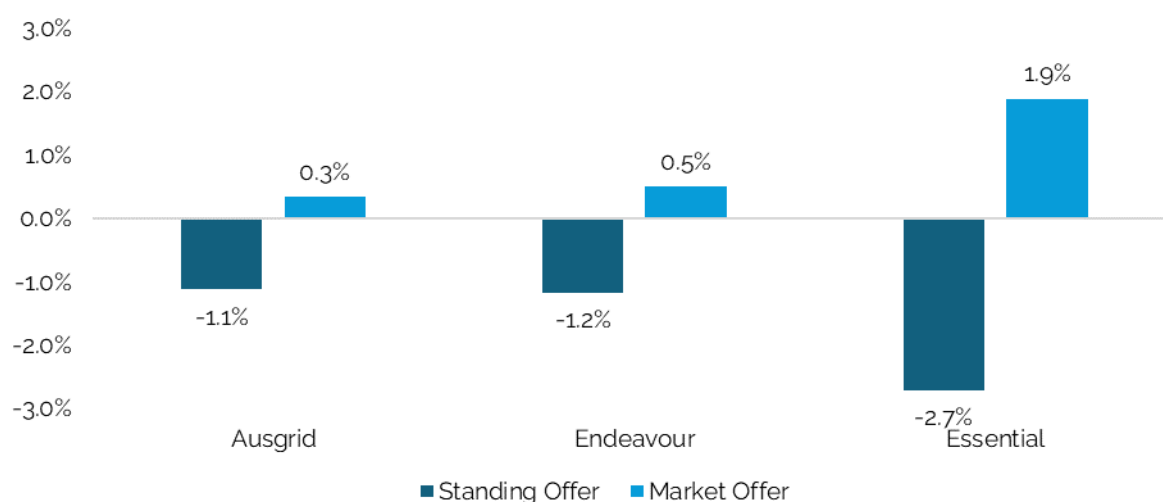
Analysis conducted for the ESC about the impact of COVID-19 on load in 2020 in Victoria found that while there may be some evidence of an increase in residential consumption associated with lockdowns (as we found in our report last year)¹⁵⁵, there was only weak evidence of any change in the timing of consumption across the day.¹⁵⁶

Figure 8.2 Change in average **bills** for residential electricity rebate customers (Jul-Dec 2020 to Jul-Dec 2021)



Note: Average bill changes are calculated on customers' bills before any rebates are deducted.
Source: NSW Government, [Social Programs for energy code retailer reporting](#), accessed 12 October 2022.

Figure 8.3 Change in average **usage** for residential electricity rebate customers (Jul-Dec 2020 to Jul-Dec 2021)



Source: NSW Government, [Social Programs for energy code retailer reporting](#), accessed 12 October 2022.

In its May report, the ACCC reported on the change in quarterly consumption and bills over the past four years. The ACCC's data shows that rather than fairly flat bills as shown in the NSW billing, the median quarterly bill for residential customers decreased moderately by 6% in the June to December 2021-22 quarter. Its finding was fairly consistent across all customer groups, as shown in section 8.3. There was a small increase in usage of around 2%.¹⁵⁷

As well as some slight timing differences, the differences in bill changes between the ACCC's data and NSW Government data could reflect:

- the ACCC's bill changes being calculated after rebates have been applied, which would produce a higher percentage change in bills, compared to the rebate data where the changes have been calculated based on the bill before the rebate
- the ACCC's data only relating to a sample of customers, whereas the rebate data is for all rebate customers.

8.2 Bills by socio-economic indices

Data from the NSW Government's [Social Programs for Energy Code](#) reports on the average cost of electricity (bill before any rebates are applied divided by usage) by local government area. We compared this data against the ABS' Socio-Economic Indexes for Areas (SEIFA) to examine whether there was a correlation between prices paid and relative disadvantage. The latest Socio-Economic Index information is constructed from the 2016 census data. It uses data on indicators such as income, education, employment and housing to compare the relative socio-economic circumstances of one area to another.¹⁵⁸ In Figure 8.4 below, a lower SEIFA index number means that the area is relatively disadvantaged compared to areas with a higher SEIFA index number.

Overall, prices in some relatively disadvantaged areas were similar to less disadvantaged areas. However, the data does suggest there is a small but significant correlation between average prices (total consumption divided by total bill) and relative disadvantage. Figure 8.4 suggests that average electricity costs of lower SEIFA index areas (more disadvantaged areas) are slightly higher than areas that are less disadvantaged (with higher SEIFA indices).

This likely reflects a number of factors. On average, regional and rural LGAs tend to experience more disadvantage and have lower SEIFA indexes. These areas are also more likely to be in the Essential network which has substantially higher network costs (Figure 8.5, Figure 8.6).

Differences in prices between areas with a similar SEIFA index are likely to reflect differences in electricity consumption, including differing levels of rooftop solar penetration, rather than the relative take-up of cheaper offers.

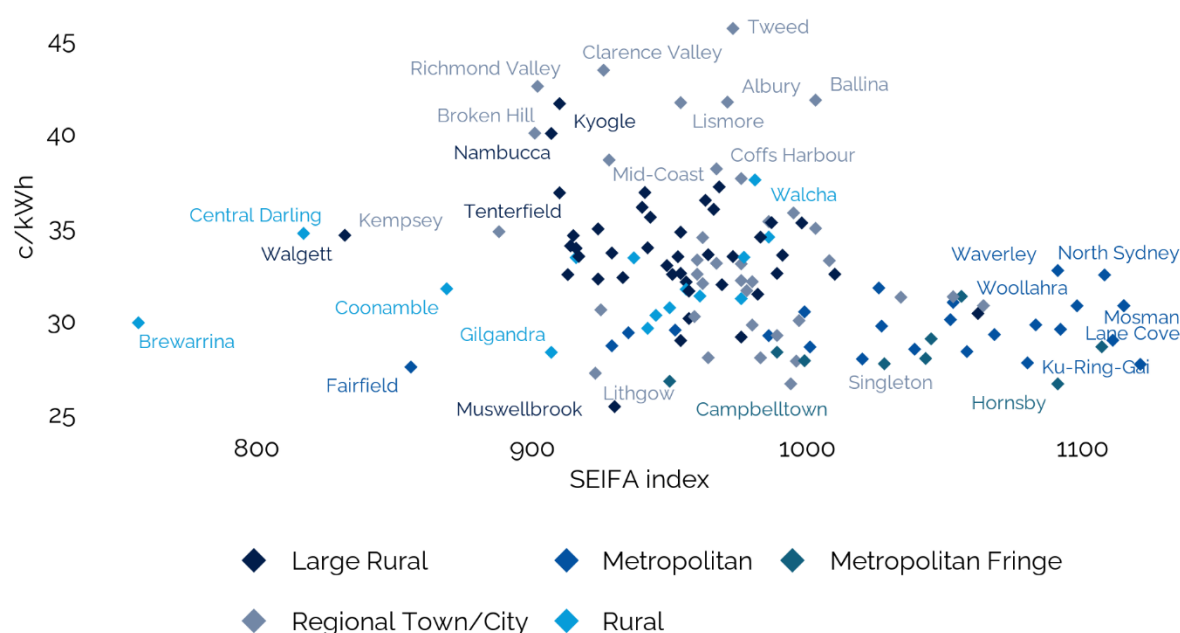
Figure 8.4 Average cost of electricity for rebate customers by Socio-Economic Indexes for Local Government Areas (Jul-Dec 2021)



Note: The SEIFA index used is the 'Index of relative socio-economic disadvantage'. The index of relative socio-economic advantage and disadvantage that is also available showed a similar result. Average cost of electricity is the total electricity bill (usage charges and daily supply charges) divided by electricity use. The total electricity bill used is the amount customers would have paid before any rebates are deducted.

Source: NSW Government, [Social Programs for energy code retailer reporting](#), accessed 12 October 2022, and ABS [Census of Population and Housing: Socio-Economic Indexes for Areas \(SEIFA\), Australia 2016](#), accessed 12 October 2022.

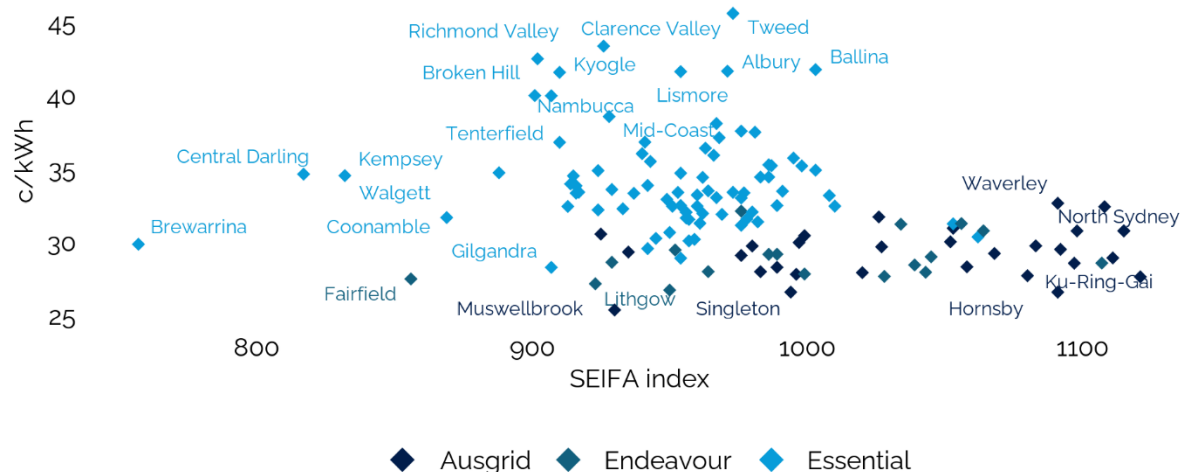
Figure 8.5 Average cost of electricity for rebate customers by Socio-Economic Indexes and by remoteness for Local Government Areas (Jul-Dec 2021)



Note: The SEIFA index used is the 'Index of relative socio-economic disadvantage'. The index of relative socio-economic advantage and disadvantage that is also available showed a similar result. Average cost of electricity is the total electricity bill (usage charges and daily supply charges) divided by electricity use. The total electricity bill used is the amount customers would have paid before any rebates are deducted.

Source: NSW Government, [Social Programs for energy code retailer reporting](#), accessed 12 October 2022, and ABS [Census of Population and Housing: Socio-Economic Indexes for Areas \(SEIFA\), Australia 2016](#), accessed 12 October 2022. NSW Office of Local Government, [Australian Classification of Local Governments and OLG group numbers](#), accessed 1 November 2022.

Figure 8.6 Average cost of electricity for rebate customers by Socio-Economic Indexes and by network area for Local Government Areas (Jul-Dec 2021)



Note: The SEIFA index used is the 'Index of relative socio-economic disadvantage'. The index of relative socio-economic advantage and disadvantage that is also available showed a similar result. Average cost of electricity is the total electricity bill (usage charges and daily supply charges) divided by electricity use. The total electricity bill used is the amount customers would have paid before any rebates are deducted.

Source: NSW Government, [Social Programs for energy code retailer reporting](#), accessed 12 October 2022, and ABS [Census of Population and Housing: Socio-Economic Indexes for Areas \(SEIFA\), Australia 2016](#), accessed 12 October 2022, Ausgrid, [Network Area Check](#), accessed 6 November 2022, Endeavour Energy, [Our network coverage](#), accessed 6 November 2022, Essential Energy, [Our Network Area](#), accessed 6 November 2022

8.3 Hardship and payment plan customers have higher bills

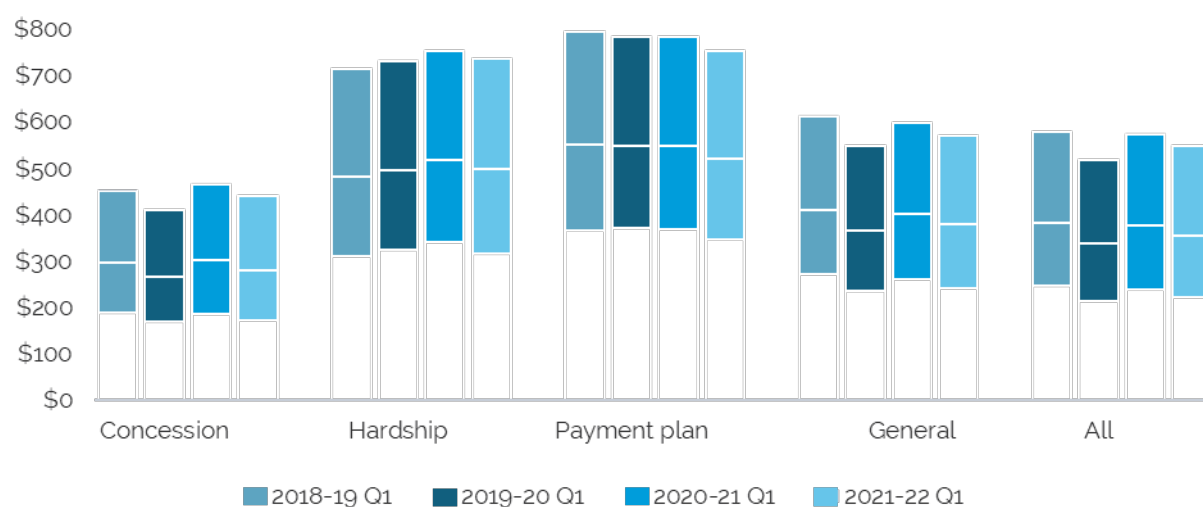
Figure 8.7 shows the ACCC's finding on bills by different customer types:

- Concession customers, who are customers who received rebates or assistance under the NSW Social Programs for Energy Code (see section 8.1).
- Hardship customers, who are customers who participated in a retailer's hardship program. Under the National Energy Retail Law, retailers are required to provide programs to assist customers experiencing payment difficulties due to hardship
- Payment plan customers, who are customers who had an arrangement with their retailer to pay in instalments due to experiencing financial difficulties. It excludes flexible arrangements for convenience or budgeting reasons
- General customers, who don't fall into the above categories.

It shows that bills for concession customers are lower than for general customers, as they receive rebates on their bills. However, hardship and payment plan customers have higher bills. In 2021-22, the median quarterly bill was an average of:

- \$142 higher for payment plan customers
- \$121 higher for hardship customers.

Figure 8.7 Quarterly bill by residential customer groups in NSW



Note: The chart shows the 25th percentile, median (middle line) and 75th percentile of quarterly bills by residential groups.
Source: ACCC, Appendix E, Supplementary spreadsheet with billing data and figures, May 2022, Residential bills

PIAC has highlighted in its submission to our Draft Report that consumers on hardship programs consume more electricity than those not on these programs.¹⁵⁹

The ACCC data shows that in 2021-22, compared to the median usage for general customers in NSW of around 1,500 kWh in the June to September quarter:

- hardship customers' median quarterly usage of around 2,600 kWh was around 77% higher.
- payment plan customers used around 2,200 kWh or around 51% more.¹⁶⁰

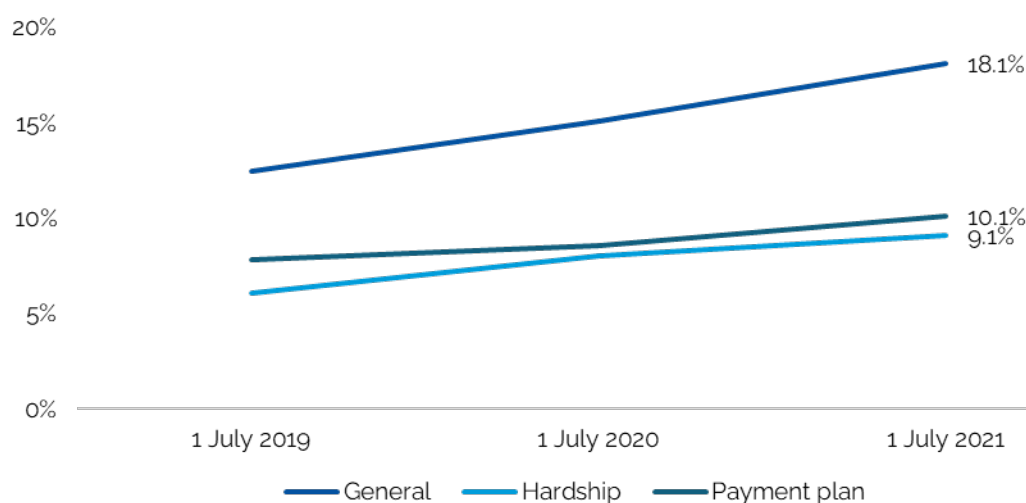
The data shows that the increase in usage between 2020-21 and 2021-22, although small, was greatest for hardship customers, followed by payment plan customers, which both saw a percentage increase of at least twice that of general customers.¹⁶¹

The higher usage by customers on hardship and payment plans is likely due to a number of factors. PIAC has submitted that this indicates an affordability issue for lower-income consumers who cannot access consumer energy resources (e.g. solar panels or batteries) and energy efficient homes and appliances. It stated that high bills and debt further erode their ability to purchase these appliances or access solar. It asked to look at the systemic outcomes for all consumers, including those being left behind as we transition away from carbon-intensive energy.¹⁶²

As we reported last year, customers experiencing vulnerability are less likely to have access to solar panels due to barriers from the upfront installation costs and/or live in apartments or are renting (solar customers typically own their own home).¹⁶³

Figure 8.8 shows that around 18% of general customers (those who were not in the concession, hardship or payment plan group) had solar in NSW as at 1 July 2021, but the take-up rate was around half this for hardship and payment plan customers. The ACCC data does show a slight increase over last year in the proportion of hardship customers with solar (around 1 percentage point increase) and payment plan customers (around 2 percentage point increase). However, this is a slower rate of increase compared to the rest of the customer base, which saw a 3 percentage point increase over the year in customers with solar.

Figure 8.8 Proportion of residential customers who had solar in NSW by customer type



Source: ACCC, [Supplementary spreadsheet with billing data and figures](#), Appendix E, May 2022.

The AER notes that “while some consumers are choosing to use batteries, electric vehicles and energy efficient appliances in their homes, many consumers experiencing vulnerability face a range of barriers in accessing such technology.”¹⁶⁴ These new technologies have the potential to assist vulnerable consumers in understanding energy services and reduce their energy costs, yet are likely unattainable for my customers with debt or are on hardship programs.

PIAC has also highlighted the importance of thermally efficient housing in reducing energy use and improving affordability for those experiencing vulnerability.¹⁶⁵ One development that may assist with these issues into the future is the set of improvements to minimum energy efficiency standards for new homes in the National Construction Code (NCC) recently agreed by Building Ministers.¹⁶⁶ The associated regulatory impact modelling found that the benefits for each house of raising energy efficiency standards exceeds the additional cost at the time of construction. Specifically, it estimated an average energy bill saving of around \$180 per year for each new house.¹⁶⁷ The updates to the NCC will come into effect in October 2023.

8.4 Customer hardship has worsened

Retail performance data reported by the AER indicates decline in a number of key indicators of customer hardship. It is important to note that like the billing data above this data spans a period of flat prices in the market, and does not cover the final quarter of 2021-22 where price rises began. Between June 2021 and March 2022:

- the number of residential and small business customers repaying energy debt in NSW increased by around 4%¹⁶⁸
- the average amount of energy debt carried by residential customers increased by around \$76 (around 7%), up from \$1,028¹⁶⁹
- the number of residential energy customers on payment plans in NSW has increased by around 6%¹⁷⁰
- disconnections for residential electricity customers increased by around 4%.¹⁷¹

AER data indicate similar trends among residential electricity customers on hardship programs. In NSW, the number of customers on these programs has increased by 24%, from 28,793 in June 2021 to 35,594 by March 2022.¹⁷² The average debt on entry into hardship programs in NSW had risen by about 30% by the third quarter of 2021-22 (March 2022) to \$1,614.¹⁷³

The average debt of NSW customers on these hardship programs remains high at an average of \$1,648 in March 2022 compared to \$1,630 in June 2021 and \$1,274 in June 2020.¹⁷⁴ The AER considers that it is unlikely that these hardship programs are working as intended, with the average hardship debt being higher than the debt on entry to hardship programs in Queensland, New South Wales and South Australia.¹⁷⁵ This suggests that consumers' debt is increasing when they are on a hardship program. However, the number of customer energy disconnections for customers on hardship plans is low and continues to decrease in NSW.¹⁷⁶

Increasing hardship may in part reflect ongoing economic impacts of COVID-19 lockdowns or other health measures. Some customers who may have had their work or business disrupted by health orders or the need to home-school or care for others may struggle to pay for energy due to lost income. In addition, there were prohibitions on disconnections during lockdown may have delayed entry into hardship or payment plan arrangements.¹⁷⁷ When the prohibitions on disconnection were in place, it may be that many customers who would ordinarily have entered an assistance plan earlier in 2021 may only have done so much later following the recommencement of disconnection warnings. However, we note that PIAC has commented in its submission to our Draft Report that for many customers, disconnection warnings actually do little but add stress to an already difficult situation.¹⁷⁸

Disconnection numbers will be an important indicator for our 2022-23 market monitoring report, once the full impact of energy price rises have been passed into customer bills.

To the extent that more customers are unable to pay for energy because of COVID-19 impacts, the cost to retailers of managing bad debt may increase.

Chapter 4 notes that the AER published its [Towards Energy Equity strategy](#) in October 2022. It seeks to strengthen protections for customers experiencing hardship.¹⁷⁹ Under its strategy, the AER has announced five key compliance and enforcement priorities. These include the requirement for retailers to identify and tailor their assistance to residential customers in financial difficulty, particularly those affected by family violence. The AEMC also issued a related draft rule in June 2022 to ensure retailers establish more secure means of communicating with these customers.¹⁸⁰ A key outcome is to reduce customer energy debt.

The AER is also currently seeking to review the disconnection threshold so that it aligns with the current energy market and economic climate.¹⁸¹ Currently, consumers can be disconnected if they have more than \$300 owing on their bills. However, this threshold was set in April 2012 and has remained unchanged, even as CPI has increased by 22.8%.¹⁸²

The AER recommends Action 8, which is to “Consider the need for a payment difficulty framework in the National Energy Customer Framework”.¹⁸³ Victoria changed its approach to managing consumer payment difficulties in 2019, with energy businesses now being required to proactively identify consumers who have debt and may need assistance. The Victorian framework also allows energy businesses to provide tailored support for vulnerable customers. The AER consider there are opportunities to learn from the Victorian framework in developing strategies to assist vulnerable customers in other jurisdictions.

8.5 Rebates and assistance measures are available but may be underutilised

The NSW Government offers a range of assistance to households. Its assistance payments are shown in Table 8.1. Service NSW also operates an in-person service as part of its Savings Finder initiative that provides customer with expert help accessing savings and rebates specific to their circumstances.¹⁸⁴

Table 8.1 NSW Government rebates

Rebate scheme	Description	Maximum rebate value per year
Low Income Household Rebate	Helps low income NSW households cover the costs of their energy bills	\$285
NSW Gas Rebate	Helps low income NSW households cover the costs of their natural gas	\$110
Family Energy Rebate	Helps NSW family households with dependent children cover the costs of their energy bills.	\$180
Life Support Rebate	Helps NSW customers who need, or have someone living with them who needs to use approved energy-intensive medical equipment at home	Varies depending on equipment type ^a
Medical Energy Rebate	Helps NSW customers who have an inability to self-regulate body temperature when exposed to extreme hot or cold environmental temperatures	\$285
Seniors Energy Rebate	Helps eligible independent retirees to cover the cost of their electricity.	\$200
Energy Accounts Payment Assistance (EAPA)	Helps people in financial crisis cover the cost of energy bills	\$50 vouchers – depends on individual assessment

Note: For life support rebate, 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. More details at [NSW Life Support Rebate](#). Source: NSW Government Energy Saver, [Find an energy rebate](#), accessed 13 September 2022.

A recent PIAC report on the Save4Good initiative (discussed by PIAC in its submission to our Draft Report) provided a number of observations from the Save4Good program about disadvantaged households and energy rebate access.¹⁸⁵ The Save4Good program involved expert consultants assisting disadvantaged and low-income households to switch to a better energy plan for their circumstances and access rebates they may be eligible for. In particular:

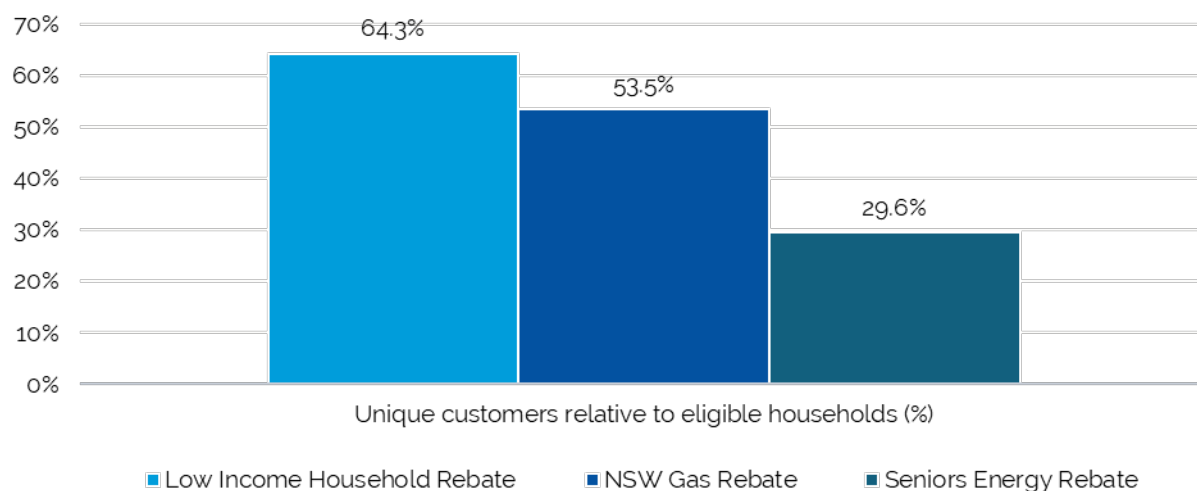
- The expert consultants experienced retailers actively avoiding discussions of a hardship plan, with one initially denying having a hardship program.^b There were also instances of retailers failing the requirement that they support customers into NSW Government energy rebate programs they are eligible for.

Many households (21% of the Save4Good program, or 84 households) were not receiving rebates they were eligible for – “Reasons eligible people were not receiving rebates included: people did not know they existed; they thought they were receiving it; they did not understand their conversation with the energy retailer; they did not know how to access it; and/or they thought they would automatically get it when they were eligible.”¹⁸⁶

NSW Government data also suggests some rebate programs are undersubscribed. Data provided under the NSW Social Programs for Energy Code shows that for the July to December period in 2021, less than 65% of estimated eligible households were receiving rebates for the Low Income Household Rebate, the NSW Gas Rebate, and the Seniors Energy Rebate (Figure 8.9).

^b The program also found that of the households in the program receiving the Low Income Household Rebate, 90% were not on the best retail plan despite the requirement for retailers to make reasonable efforts to inform the consumer about their options to switch. It is not clear whether or not these efforts were made by retailers.

Figure 8.9 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, [Social Programs for energy code retailer reporting](#), Table 2, accessed 12 October 2022.

It is important customers experiencing vulnerability are aware of support payments that may be available to them as energy prices are likely to rise in the near future as inflation and cost of living also rises.



We recommend that the NSW Government consider how best to promote further customer awareness and engagement with the range of support initiatives already available to help customers, prioritising customers experiencing vulnerability. This includes further building public knowledge of existing rebate initiatives and access to expert help. This could be done alongside our other recommendation that the NSW Government provide further public information about innovative retail offers (see section 2.4.5), and the NSW Government's existing program to help people with cost of living.

PIAC also considers that the NSW Government should explore options for improved design of NSW rebates to create better outcomes for consumers, reducing carbon, whilst saving the NSW Government money in the longer term. It has also highlighted the need for Government to improve the design of Energy Accounts Payment Assistance (EAPA) to help people in long term need and with debt amounts.


We agree that there would be value in a broader review of NSW Government rebates, as the current context of rising energy prices and rising inflation puts pressure on customer ability to pay for energy. This is especially the case for disadvantaged households and those experiencing vulnerability. For these customers, rebates and support must be both accessible and well designed so that rebate system is delivering intended outcomes for those who need assistance.

This issue extends beyond just energy. As PIAC has highlighted in its submission to our Draft Report, some customers forgo other essentials like food in order to afford energy, and there can be health consequences where customers forgo heating or cooling in the home due to energy costs. PIAC has suggested that these impacts are analysed.¹⁸⁷ In future reports we will be looking what additional publicly available information is available to explore these issues. We agree there should be a holistic approach to considering how the needs of customers experiencing vulnerability are met.

Finding

-  12. Bills remained flat in the first half of 2021-22. On average across the three networks areas, bills for rebate customers on standing offers increased by less than 1% and bills for rebate customers on market offers decreased by less than half of 1%.
-  13. Multiple factors such as rising inflation, extreme weather events and ongoing COVID-19 impacts have put pressure on customers' capacity to pay for energy. Even prior to price rises in Q4 2021-22, there have been increases since June 2021 in numbers of customers:
 - in energy debt (around 4% increase)
 - on payment plans (around 6% increase)
 - in hardship programs (around 24% increase for residential customers).

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.

Chapter 9 »

Impact of the default market offer

09

The DMO is a cap on bills at a specified level of consumption^a that a retailer can charge residential and small business customers on the standing offer contract. 'Standing offers' are the default offer for customers that haven't signed up to a 'market offer' – market offers are all other offers in the market. Customers might be on a standing offer if they have:

- never switched to a retailer's market offer
- moved into a premises and are supplied by the existing retailer but are yet to make contact with the retailer.

The intent of the DMO is to:

- bring down standing offer prices which are unjustifiably high, and
- make it easier for customers to compare electricity plans by requiring all retailers to show discounts with reference to the DMO (i.e. discounts off the same reference price).¹⁸⁸

Since 2019-20, the AER has set a maximum bill for standing offers once annually¹⁸⁹, and so most retailers have set their standing offers equal to the DMO. Some standing offers are slightly lower. In NSW there are around 10% of residential, and about 18% of small business customers on standing offers.

A different DMO applies for each network area in the NEM where there is no other form of price regulation. The AER sets a DMO for each network that should broadly reflect the costs it expects retailers to incur in supplying electricity to customers.

This chapter considers the impacts of the DMO on prices and competition since its introduction.

9.1 The DMO appears to be functioning appropriately as a reference price in 2021-22

Although it only directly protects a small percentage of customers, the DMO acts as a 'soft cap' on market offers because retailers are required to advertise the discount of a given market offer relative to the DMO. Most customers would look elsewhere for a better deal if that discount were negative (i.e. the market offer is higher than DMO).

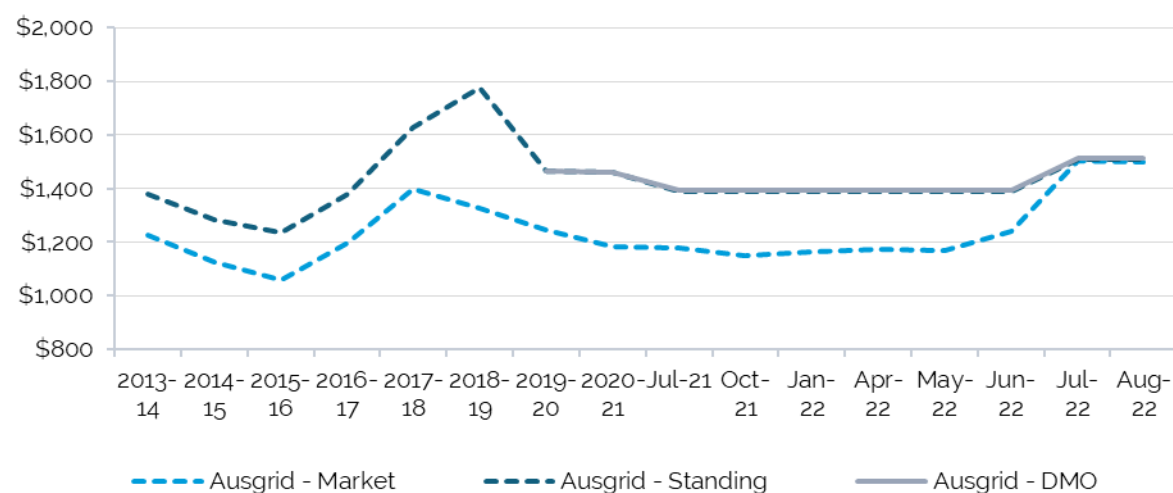
The DMO appears to be working as intended for 2021-22. This means during 2021-22 retailers competed for customers by discounting market offers relative to the standing offer. However this changed in July 2022 when market offers increased to be quite close to the standing offer (which is capped by the DMO). This suggests that the DMO may protect customers in the future but may reduce competition in the retail market if retailers are unable to recover their costs and leave the market.

While this report is focused on the financial year 2021-22, wholesale market volatility has continued throughout July and August 2022. This suggests a greater focus on the role and function of the DMO may be relevant for subsequent market monitoring reports, especially if we see further retailer exits in the remainder of 2022-23.

^a 3,900 kWh per year for residential customers, and 20 MWh per year for small business customers

Nevertheless, Figure 9.1, Figure 9.2, and Figure 9.3 show that market offers for customers were lower than the standing offers in all network areas. This suggests the DMO was providing an effective reference price for residential customers in all networks over 2021-22, without impeding retail competition. The relationship between standing and market offers was very similar across the three network areas.

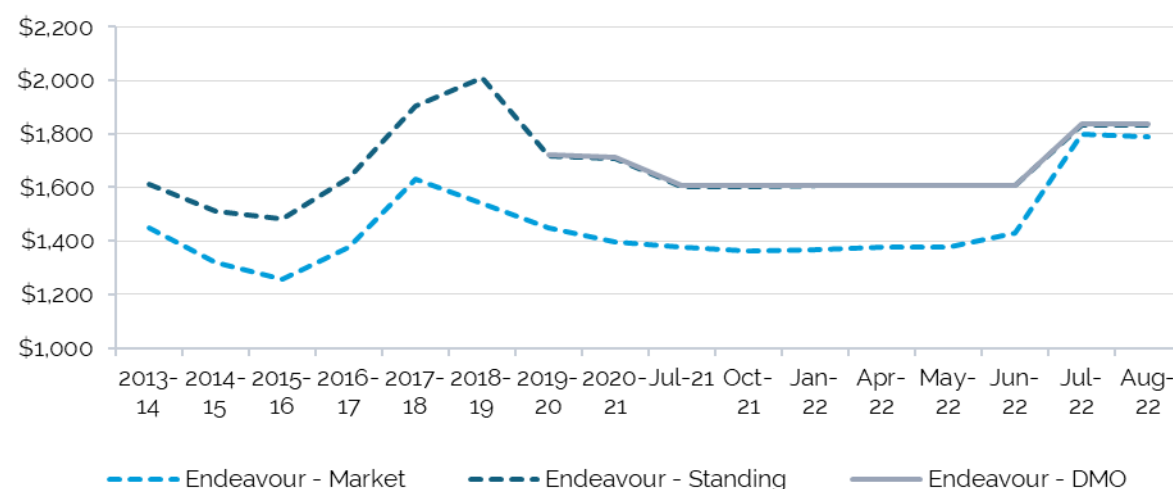
Figure 9.1 Annual median residential electricity bills for Ausgrid



a. Based on 3,900 kWh of residential electricity purchased, including GST, nominal.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

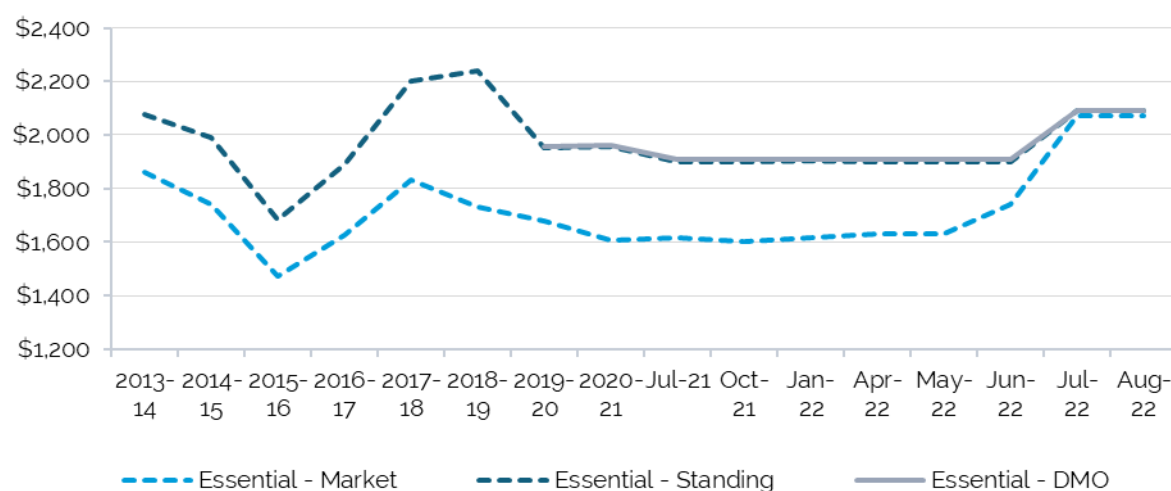
Figure 9.2 Annual median residential electricity bills for Endeavour Energy



a. Based on 4,900 kWh of residential electricity purchased, including GST, nominal.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Figure 9.3 Annual median residential electricity bills for Essential Energy



a. Based on 4,600 kWh of residential electricity purchased, including GST, nominal.

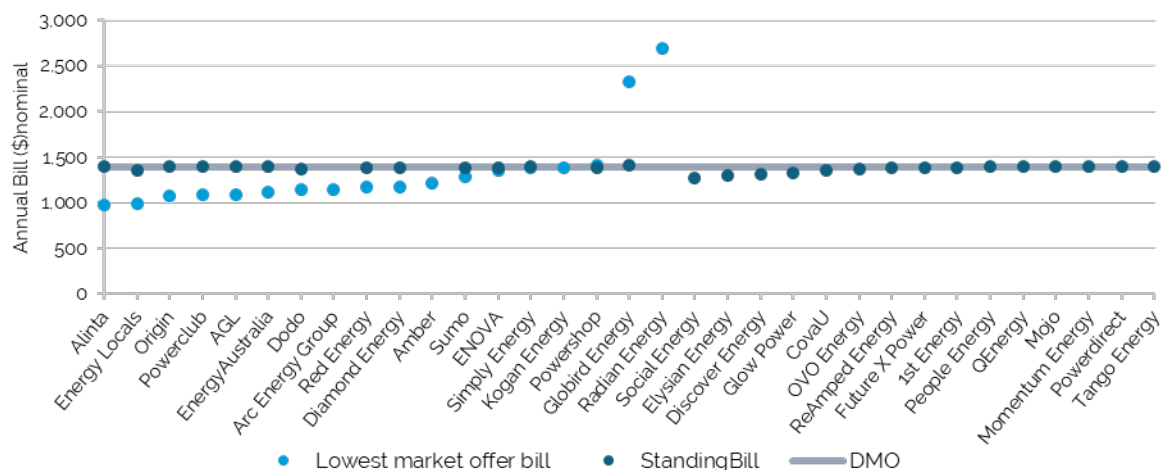
Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

The relationship between market and standing offers means that during 2021-22 retailers competed for customers by discounting market offers relative to the standing offer, which is one indicator of effective competition in the market.

However this changed in July 2022, when market offers increased to become closer to the standing offer. This is because market offers can be changed any time and therefore fluctuate with market conditions including the rising wholesale prices towards the end of 2021-22. However, the standing offer is capped by the DMO which was fixed for 2021-22 before recent wholesale market conditions and therefore cannot rise to reflect those conditions.

During the financial year 2021-22, many retailers had offers which were lower than their standing offer and the DMO. This can be seen for residential customers in the Ausgrid network in Figure 9.4 and similarly for business customers in Figure 9.5. Many retailers do not offer market offers, which means they are not actively competing for new customers and instead retaining their existing customer base.

Figure 9.4 Anytime tariff offers for residential customers in the Ausgrid network area in June 2022

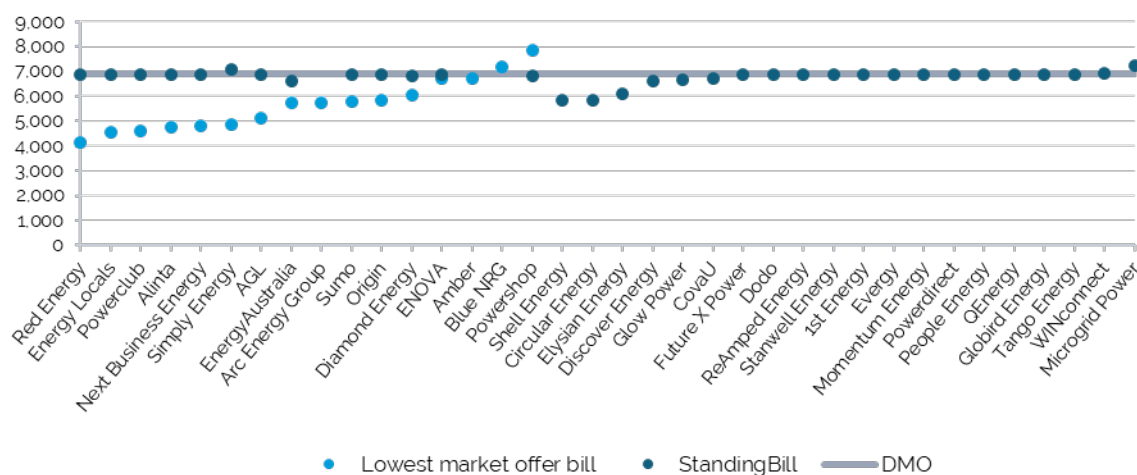


a. Annual electricity bills based on 3,900 kWh pa, nominal, GST-inclusive

b. Standing offers data for some retailers were not available.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Figure 9.5 Anytime tariff offers for small business customers in the Ausgrid network area in June 2022



a. Annual electricity bills based on 20 MWh pa, nominal, GST-inclusive

b. Standing offers data for some retailers were not available.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Market offer prices have recently increased, with some now above the DMO. When considered alongside market exits and retailers with no market offers, this suggests the DMO does not provide enough headroom for wholesale electricity cost increases or further innovation of service offerings. This may mean that the DMO is less able to serve its purpose during times of wholesale price volatility and very high price peaks.^b This is because the DMO is set ahead of time, based on market expectations. If costs end up being materially higher than determined in the DMO, then retailers may be unable to cover their costs. However, this also means that retailers who can endure peak price periods may benefit from a DMO that, by lagging the market, provides more headroom than is needed when prices fall again because the DMO was calculated on a previous period with high prices.

At the same time, Energy Made Easy data shows that even some of the lowest priced offers in the market are currently set above the DMO. This should become a focus of next year's market monitoring report and for the annual reset of the DMO by the AER. In its submission to our Draft Report, the AER agreed that the recent wholesale energy market volatility has had material impacts for retailers, and has indicated it will factor impacts over the year into its consideration of the 2022-23 DMO.¹⁹⁰

Retailers are not obligated to offer the DMO to customers on market offers. The designated retailer (a customer's current retailer, or if one does not exist, the local area retailer) must advise the customer of the availability of the retailer's standing offer if the customer is a residential or small business customer consuming less than a specified threshold.^{c,191} A retailer must publish its standing offer prices on its website, which must comply with the DMO in relevant jurisdictions.¹⁹² This effectively caps market offers at the DMO since customers can request to change to the DMO.

The Department of Industry, Science and Resources has recently completed a review into the DMO and reference price. It found that:¹⁹³

- Consumer awareness of the DMO and reference price increased between July 2020 and January 2021.
- Consumers felt that the policy made it easier to shop around for new electricity deals.
- Consumers recognise that the reference price should make it easier to compare offers.
- Increased market participation followed the introduction of the DMO and reference price.

Finding



14. Standing offers remained lower than historic peaks around 2018-19 in all networks. In the Ausgrid and Endeavour networks standing offers in 2021-22 were similar to 2013-14 when retail electricity was deregulated, but were lower in the Essential network, noting that the standing offer does not account for the full extent of recent wholesale market price volatility.

^b Though we note this is not necessarily a role or requirement of the DMO.

^c The specified threshold for a small business customer is 100MWh, 160MWh in South Australia or 150MWh in Tasmania.

-  15. Standing offers rose materially on 1 July 2022 to reflect higher wholesale energy costs and higher than in 2013-14 in all networks. Some retailers have now set their lowest market offers above the standing offer.
-  16. The DMO functioned effectively as a reference price that caps standing offers in 2021-22, however early developments in 2022-23 suggest it will need to be closely observed next year to ensure it provides enough headroom for retailers to enable competition.

Chapter 10 »

Prices for customers in
embedded networks

10

Embedded networks are private electricity networks which supply multiple homes or businesses that are connected to the network through a single parent meter. Examples are residential complexes, retirement villages, residential parks, shopping centres and office buildings. The owner of the site buys energy in bulk from a retailer and then on-sells the energy to the different consumers at the site.¹⁹⁴

Owners that on-sell the energy themselves are known as 'exempt sellers' because they do not need to become authorised by the AER as energy retailers. However, they do need to hold a valid exemption from the AER and follow the AER's exempt seller guideline.¹⁹⁵ If a consumer purchases their energy from an exempt seller, then they are indirectly protected by the DMO. This is because the AER's exempt seller guideline limits the maximum price to the standing offer that a local area retailer would charge customers.¹⁹⁶

10.1 Consumer protection issues for customers in embedded networks are currently under review in NSW

Last year, we reported on concerns that consumer protections for customers in embedded networks may be inadequate because:

- Owners of embedded networks are able to outsource energy services to an authorised retailer. However, in these situations, consumers are not protected by the DMO. Where this occurs this also means that there is no requirement for retailers to reference their embedded network offers against the DMO.
- Where all tenants are leasing the premises within the embedded network, the owner/s do not necessarily have an incentive to negotiate with retailers for a better rate. Customers in these situations could be better off with access to retail competition.
- There is currently poor visibility over key statistics for embedded networks (including how many there are, how many customers there are, and key information about household type, typical usage, and other features of a typical embedded network customer). This includes price outcomes for customers.

We committed to monitoring any key developments concerning embedded networks this year.

Insufficient information remains a barrier to better understanding and addressing consumer protection issues in embedded networks, and something that can potentially be avoided with appropriate early intervention around innovative retail offers.

The AEMC recently conducted a review to update the regulatory frameworks for embedded networks. The review found that "the current regulatory arrangements for embedded electricity networks are no longer fit for purpose, resulting in some customers not being able to access competitive prices or important customer protections."¹⁹⁷ In response, the AEMC presented a package of law and rule changes which seek to address these issues.

The package was designed to improve customer protections and access to retail market competition for embedded network customers. The proposed framework is being considered by Governments.

Similarly, the Department of Environment, Land, Water and Planning in Victoria has completed a review into embedded networks in Victoria, with a Final Recommendations Report being delivered January 2022. The review identified that there is/are:

- inequities in consumer protections
- a range of practical barriers that prevent access to the competitive retail market
- a lack of information disclosure
- limitations in the regulatory framework which frequently result in poor outcomes for embedded network customers.

A key recommendation from the review is that the Victorian Government should ban embedded networks in new apartment buildings (with exemptions for high renewable energy embedded networks), and that all existing and new embedded networks be subject to additional conditions.¹⁹⁸

One stakeholder submitted to our Draft Report that NSW should also ban embedded networks. This follows their experience purchasing an off-the-plan apartment without knowing it would be in an embedded network, and the frustration of not being able to select their retailer or do anything to get out of the long term (10 year) energy contract.¹⁹⁹

PIAC has submitted that IPART should be required "to investigate and report on embedded network and exempt selling issues in its annual energy retail monitoring report, including having access to numbers of people in embedded networks, the exemption class, the structure under which they pay for energy as well as access to actual bills. This should include assessing impediments to accessing EAPA as well as the sale of hot and chilled water."²⁰⁰ PIAC considers that there should not be a separate framework for embedded networks and exempt sellers, because the contend that this fundamentally disadvantages end consumers, who cannot choose their retailer. They also highlight that the lack of robust information makes it difficult to assess and consumer protection and support issues, and develop appropriate response measures. Specific issues include:

- requirements (currently not applicable to exempt sellers) to proactively identify customers who may be experiencing payment difficulties.
- potential issues with EAPA eligibility for embedded network customers, and
- the approach of embedded network providers to disclosing and charging for energy required for water heating and chilling.

The AER in its [Towards Energy Equity strategy](#) has also noted these issues with unequal consumer protections for customers in embedded networks. The AER has taken a number of steps to remedy these issues, including²⁰¹:

- introducing hardship protections for customers of exempt sellers
- improving dispute resolution options for customers of exempt sellers, in collaboration with Ombudsman Schemes

The AER is also reviewing its exempt selling guidelines to ensure updated protections for customers experiencing domestic violence apply for embedded network customers.²⁰²

The parliament of NSW is currently undertaking an inquiry into embedded networks in NSW in response to the 2019 AEMC recommendations. The terms of reference direct a focus on:

- a. "the current legal framework regulating embedded networks
- b. changes to the legal framework proposed by the Australian Energy Market Commission in its 2019 review on updating the regulatory frameworks for embedded networks
- c. the effect of embedded networks on NSW residents and businesses, including any health or safety concerns
- d. policy and legal solutions to address the effect of and concerns about embedded networks, including to address any gaps in the regulatory framework or safety concerns raised by NSW residents and businesses
- e. any other related matters."²⁰³

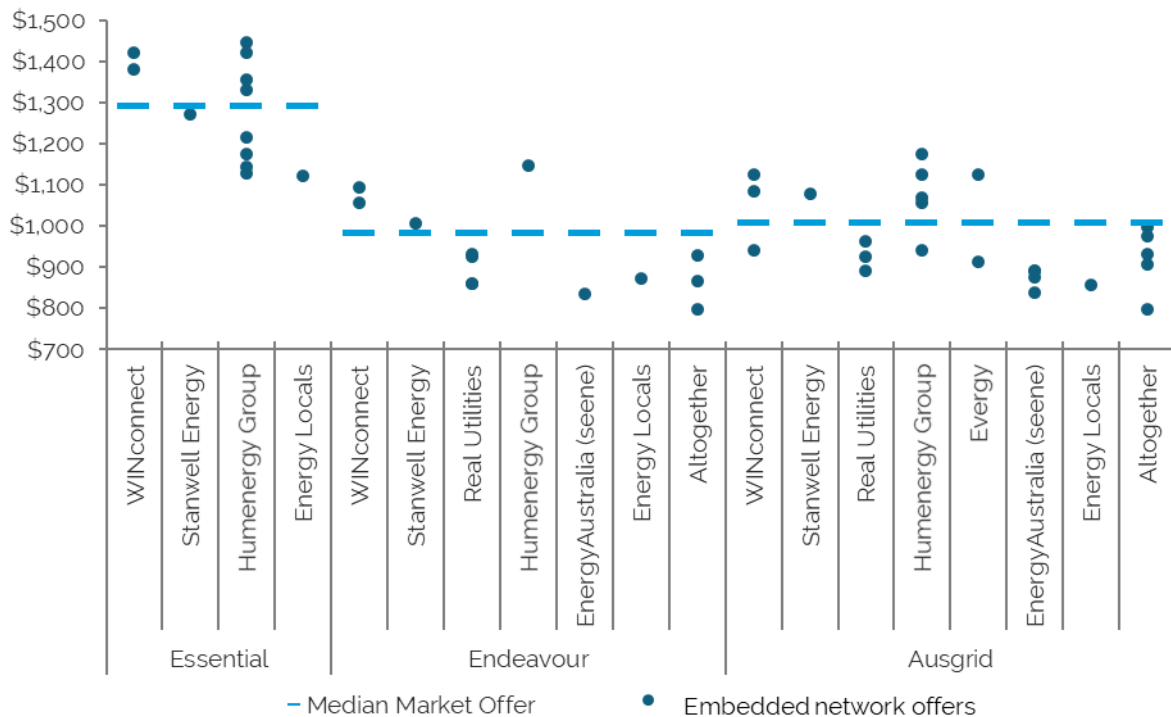
This inquiry is currently ongoing, so the findings are not yet available. However, there are several submissions which are available from a wide range of stakeholders. These include submissions from energy retailers, NSW electricity distribution networks, PIAC, the AEMC, the AER, the Law Society of NSW, and many others. Many of these submissions highlight the two key issues of unequal access to price competition and inferior end consumer protections discussed above. Some submissions raise further issues, such as the potential for embedded networks to impede sustainability and resilience measures in developments.²⁰⁴

If the results of the inquiry become available for analysis in time for our 2022-23 energy market monitoring review, we will seek to incorporate these into our analysis next year. We will consider if the work of the inquiry requires any further role for IPART monitoring embedded networks beyond our current price analyses, provided below.²⁰⁵

10.2 Price outcomes for embedded network customers

Like last year, we have investigated prices for embedded networks where services are provided by authorised retailers to help us understand whether they are likely to be exceeding the DMO. As there is no requirement for retailers to report their prices for embedded networks, we used the offers available on Energy Made Easy. However, these offers do not represent the full range of prices actually paid by embedded network customers. Embedded network operators may also charge lower rates that are not publicly available as they offer to match competitors' rates.

Figure 10.1 Embedded networks – annual residential bills by network in June 2022 compared to market offer median



a. Based on 2,920 kWh (8 kWh per day) of residential electricity purchased, including GST, nominal.

Source: IPART analysis of embedded network offers from [Energy Made Easy](#), accessed May-August 2022.

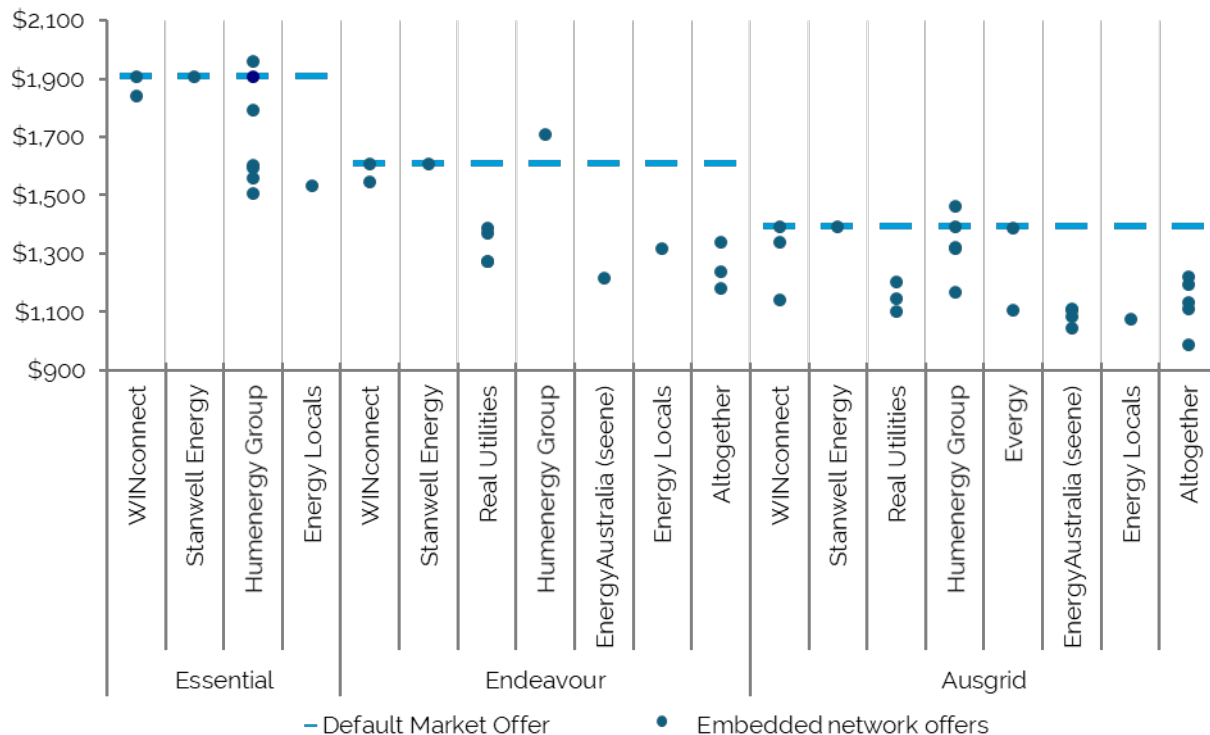
Figure 10.1 and shows the median residential market offer (light blue dash) compared with bills for different embedded network operators in different electricity network areas. We have calculated bills using our estimate of typical consumption for a residential embedded network customer (2,920 kWh annually).

Figure 10.1 shows that in June 2022, there are many cases where the embedded network bill is higher than the median market offer available outside an embedded network. There are 5 cases where all of the retailer's embedded network bills are higher than the median market offer (Stanwell Energy in the Ausgrid network, Humenergy Group, Stanwell Energy and WINconnect in the Endeavour network, and WINconnect in the Essential network). Overall, with just a few exceptions the median market offer falls somewhere in the middle of the spread of embedded network offers. When they are higher, there is a mix of bills that are slightly higher and bills that are substantially higher.

While this may suggest that embedded network customers might be likely to access a better deal amongst market offers, the data from June 2022 may reflect the transitional state of the market as retailers adjust all their offers to respond to very high wholesale prices and the reset of the standing offer on 1 July 2022. Our analysis of offers in August finds that few embedded network offers are above the market offer median.

Another key concern with the current regulatory framework is that there can be cases where end customers in embedded networks are not protected by the DMO. We have analysed residential embedded network offers and calculated bills based on DMO usage (3,900 kWh per year) for June 2022 and compared them to the bill for a customer on a standing offer capped by the DMO (see Figure 10.2).

Figure 10.2 Embedded networks –annual residential bills by network at June 2022, compared to DMO



a. Ausgrid bills are based on 3,900 kWh of residential electricity purchased, including GST, nominal.

b. Endeavour bills are based on 4,900 kWh of residential electricity purchased, including GST, nominal.

c. Essential bills are based on 4,600 kWh of residential electricity purchased, including GST, nominal.

Source: IPART analysis of embedded network offers from [Energy Made Easy](#), accessed May-August 2022.

In June, while most bills fall well below the DMO there are still 3 instances where the embedded network bill exceeds the DMO. All of these bills are for customers supplied by the Humenergy Group.

It should be noted that our analysis estimates bills based on offer information, and this may not represent bills actually paid by embedded network customers. Further, there is limited information available on real usage for residential customers in embedded networks. The consumption used by the AER to set the DMO for residential customers (3,900 kWh per year) may exceed the usage of a typical residential embedded network customer given that these customers are more likely to live in apartments. Therefore, our comparison of embedded network bills against the DMO may not be representative.

Lastly, this data does not reflect the experiences of customers of embedded networks, as described by EWON in its submission to the NSW inquiry into embedded networks. The submission highlights some of the issues customers of embedded networks face, including a lack

of consumer protection and regulation of embedded networks, which may not necessarily manifest themselves as higher prices and so would not be apparent in the price and billing data.

We will consider the final findings emerging from the ongoing Parliamentary Inquiry into embedded networks into our 2022-23 Energy Market Monitoring report.

Appendices

Appendix A >>

List of retailers in the market



Table A.1 below shows the retailers that had electricity offers available on Energy Made Easy in June 2022. Some retailers have multiple brands. It also shows the types of offers that were available.

A tick indicates that the offer was available across NSW, that is, in all three network areas (Ausgrid, Endeavour Energy and Essential Energy). Where the offer/s were restricted to certain customer sub-groups, either by location or customer type, this information is provided in text.

Table A.1 Summary of types of offers on Energy Made Easy in June 2022

	Retailer	Anytime (single rate)	Tariffs offered	
			Time of use (TOU)	Demand
1	Origin Energy	✓	✓	Ausgrid business customers only
2	EnergyAustralia	✓	Ausgrid and Essential only	Ausgrid and Endeavour only
3	AGL Energy	✓	✓	✓
	ActewAGL	Endeavour and Essential only	Endeavour and Essential only	Essential business customers only
	Powerdirect	✓	✓	Ausgrid and Endeavour only
4	Red Energy	✓	✓	✓
5	1st Energy	✓	✓	Ausgrid business customers only
6	Alinta Energy	✓	✓	Ausgrid and Endeavour only
7	Amber	✓	-	-
8	Arc Energy Group	Ausgrid and Endeavour only	Ausgrid and Endeavour business customers only	-
9	Blue NRG	Business customers only	Ausgrid and Essential business customers only	Business customers only
10	Circular Energy	✓	✓	-
11	CovaU	✓	✓	✓
12	Diamond Energy	✓	✓	-
13	Discover Energy	✓	✓	✓
14	Dodo Power & Gas	✓	✓	-
15	Elysian Energy	✓	✓	Business customers only
16	Energy Locals	✓	✓	✓
17	Enova Energy	✓	✓	-
18	Future X Power	✓	-	-

	Retailer	Anytime (single rate)	Tariffs offered	
			Time of use (TOU)	Demand
19	Globird Energy	✓	✓	✓
20	Glow Power	✓	✓	Ausgrid business customers only
21	Kogan Energy	Residential only	Residential only	-
	Powershop	✓	✓	Ausgrid and Endeavour only
22	Mojo Power	Residential only	Residential only	-
23	Momentum Energy	✓	✓	Ausgrid and Endeavour only
24	Next Business Energy	Business customers only	Business customers only	Business customers only
25	OVO Energy	Residential only	-	-
26	People Energy	✓	Residential only	-
27	Powerclub	✓	✓	-
28	QEnergy	✓	✓	Ausgrid business customers only
29	Radian Energy	Residential only	Residential only	-
30	ReAmped Energy	✓	-	-
31	Simply Energy	✓	✓	Ausgrid business customers only
32	Social Energy	Residential only	-	-
33	Sonnen	Residential only	-	-
34	Sumo	✓	✓	✓
35	Tango Energy	✓	✓	Ausgrid residential customers only

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Appendix B »

Median market offers and tariffs

B

Table B.1 shows the median market residential offers in June 2022 and August 2022 calculated at the DMO consumption level for each network area. It shows the consumption and daily supply charges associated with the median offers (excluding GST and after discounts).

Table B.1 Median market offers by network area June/August 2022

	Median market offer	Daily supply charge of median offer	Consumption rate of median offer	Consumption used to calculate the median offer (DMO level)	DMO price
	Annual bill (after discounts, including GST)	c/day (after discounts, excluding GST)	c/kWh (after discounts, excluding GST)	Annual kWh	Annual bill (including GST)
June					
Ausgrid	\$1,240	70.5	22.1	3900	\$1,393
Endeavour	\$1,428	71.4	21.1	4900	\$1,609
Essential	\$1,741	130.4	23.8	4600	\$1,907
August					
Ausgrid	\$1,497	79.7	27.4	3900	\$1,512
Endeavour	\$1,789	82.9	26.9	4900	\$1,836
Essential	\$2,070	147.5	29.2	4600	\$2,092

Note: Based on Anytime offers only. Duplicate offers are excluded before the median offers are calculated. We exclude offers with eligibility criteria (e.g. require a battery), demand tariffs, offers with controlled loads, and offers where solar is a requirement of the offer.

Table B.2 shows the median daily supply charge and consumption tariffs for anytime offers in each network area.

Table B.2 Median tariffs for market offers by network area June/August 2022

	Median daily supply charge c/day (after discounts, excluding GST)	Median consumption rate c/kWh (after discounts, excluding GST)
June		
Ausgrid	75.0	22.1
Endeavour	79.8	21.1
Essential	129.6	23.9
August		
Ausgrid	79.9	27.0
Endeavour	85.1	26.3
Essential	143.3	28.6

Note: Based on anytime offers only. Duplicate offers are excluded before the median tariffs are calculated. We exclude offers with eligibility criteria (e.g. require a battery), demand tariffs, offers with controlled loads, and offers where solar is a requirement of the offer.

Appendix C »

Range of offers in each network area



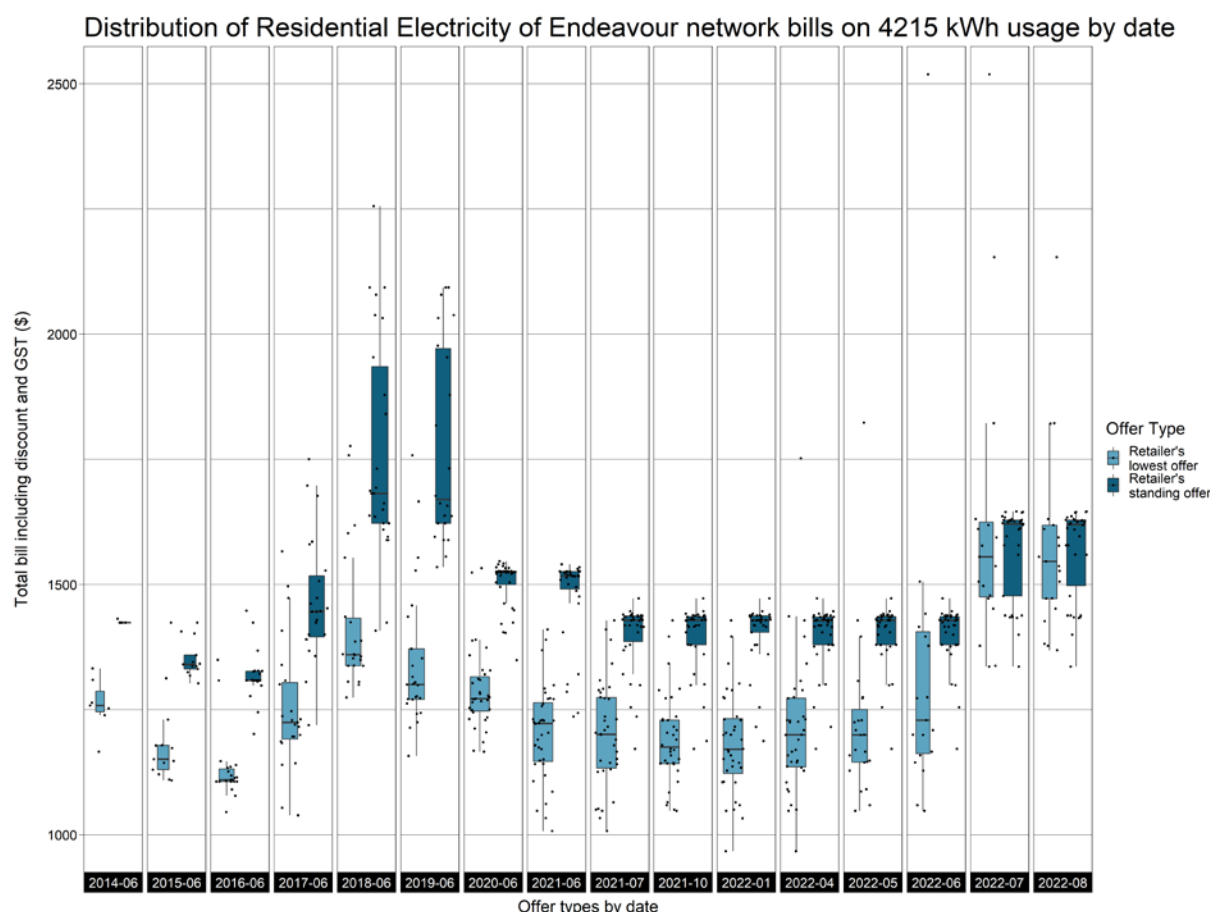
C

This appendix shows the range of offers in the market over time for residential and business customers by network area. The charts show the standing and lowest offers for each retailer. The bill amounts used in this appendix are based on consumption of 4,215 kWh for residential customers, and 20,000 kWh for business customers.

Figure C.1 shows how prices have changed since the introduction of the default market offer, using residential anytime offers in the Endeavour Energy network to illustrate. It shows that prior to 2019-20, there was a large range of standing offers in the market. This range has since narrowed significantly, with most retailers now setting their standing offers equal to the DMO. Some retailers offer slightly lower rates.

As noted earlier, in July and August 2022, the median lowest market offer among all retailers increased dramatically which can be seen in Figure C.1

Figure C.1 Distribution of annual residential bills in the Endeavour Energy network – standing offers and lowest market offers

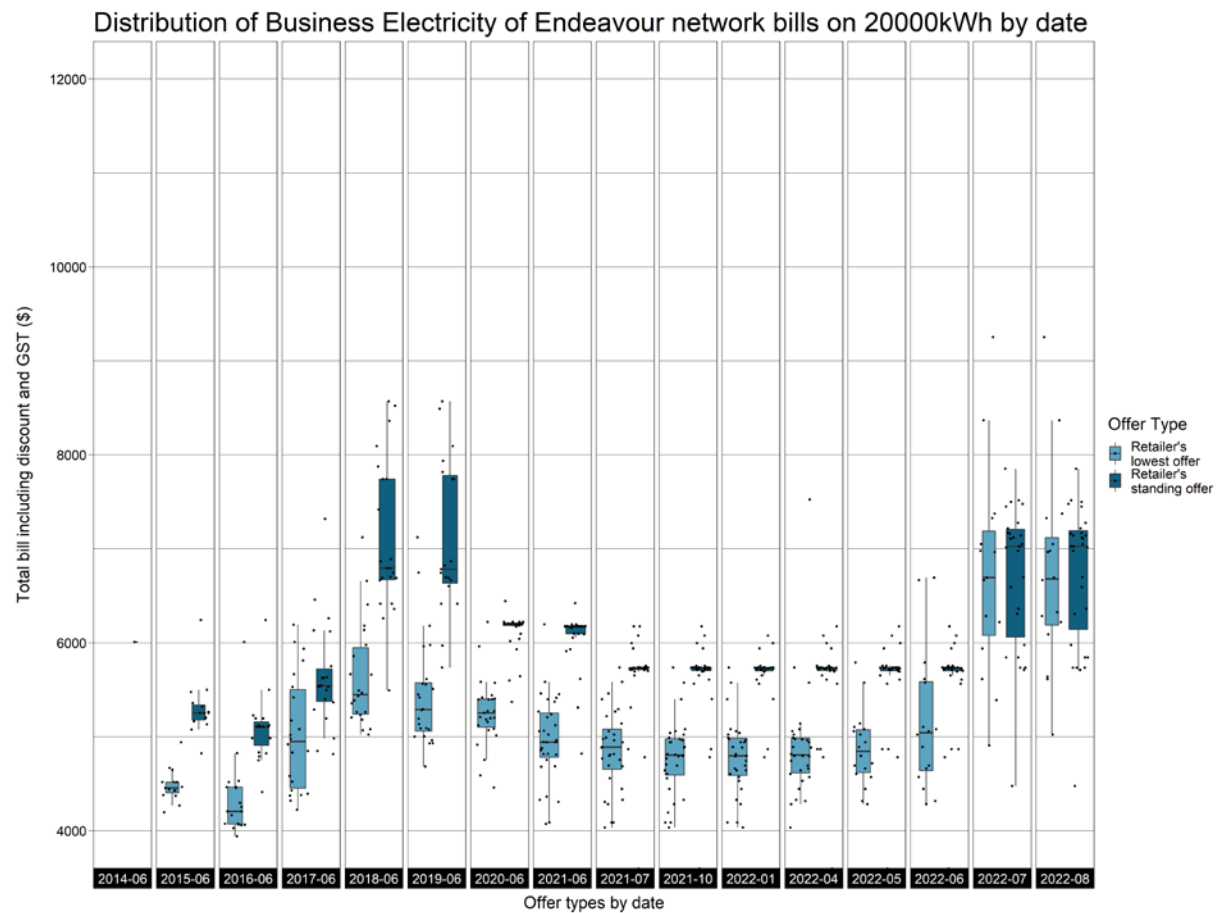


a. Based on 4,215 kWh of residential electricity purchased, including GST, nominal.

b. Anytime offers only.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Figure C.2 Distribution of annual small business bills in the Endeavour Energy network – standing offers and lowest market offers



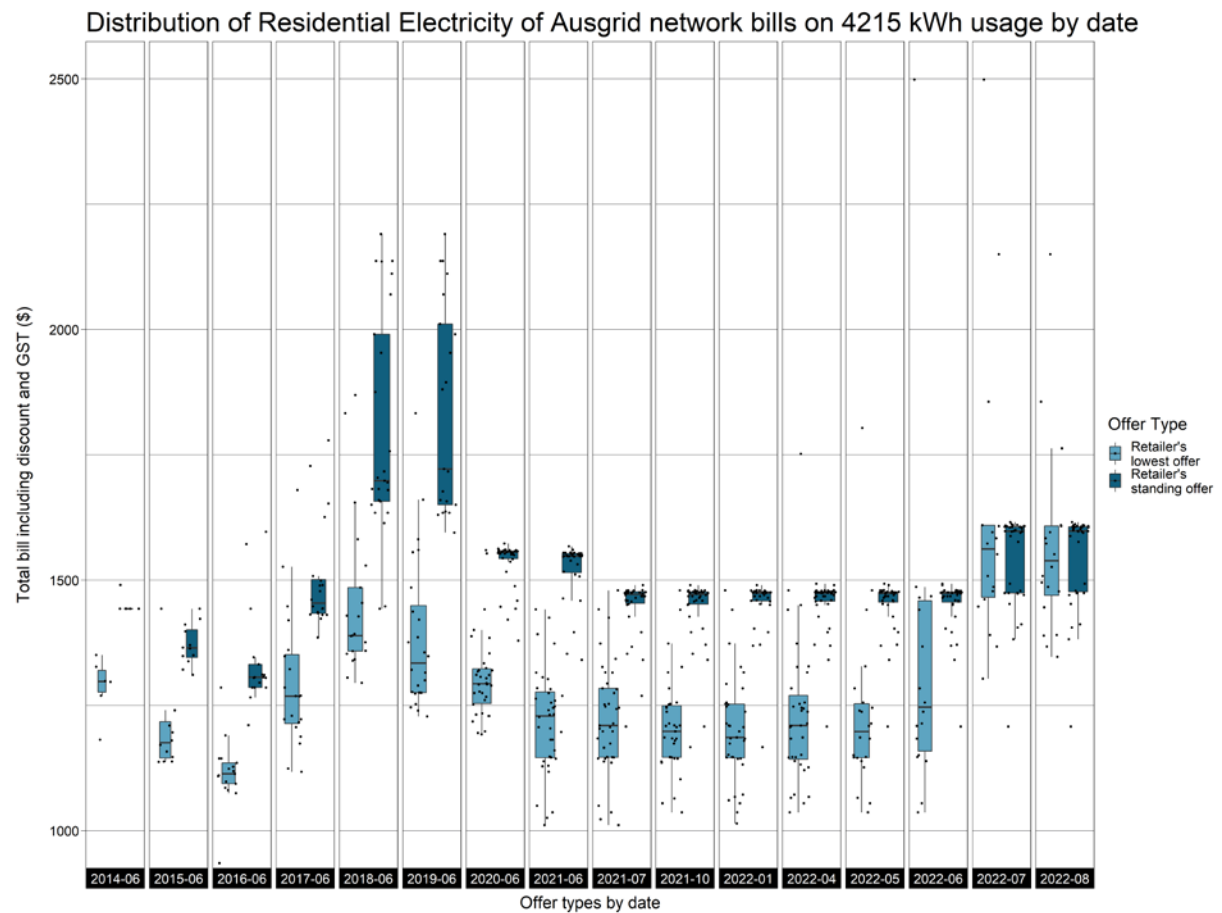
a. Based on 20MWh of residential electricity purchased, including GST, nominal.

b. Anytime offers only.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Figures C.3 to C.4 shows the same charts of the Ausgrid and Essential Energy networks for business and residential customers.

Figure C.3 Distribution of annual residential bills in the Ausgrid network – standing offers and lowest market offers

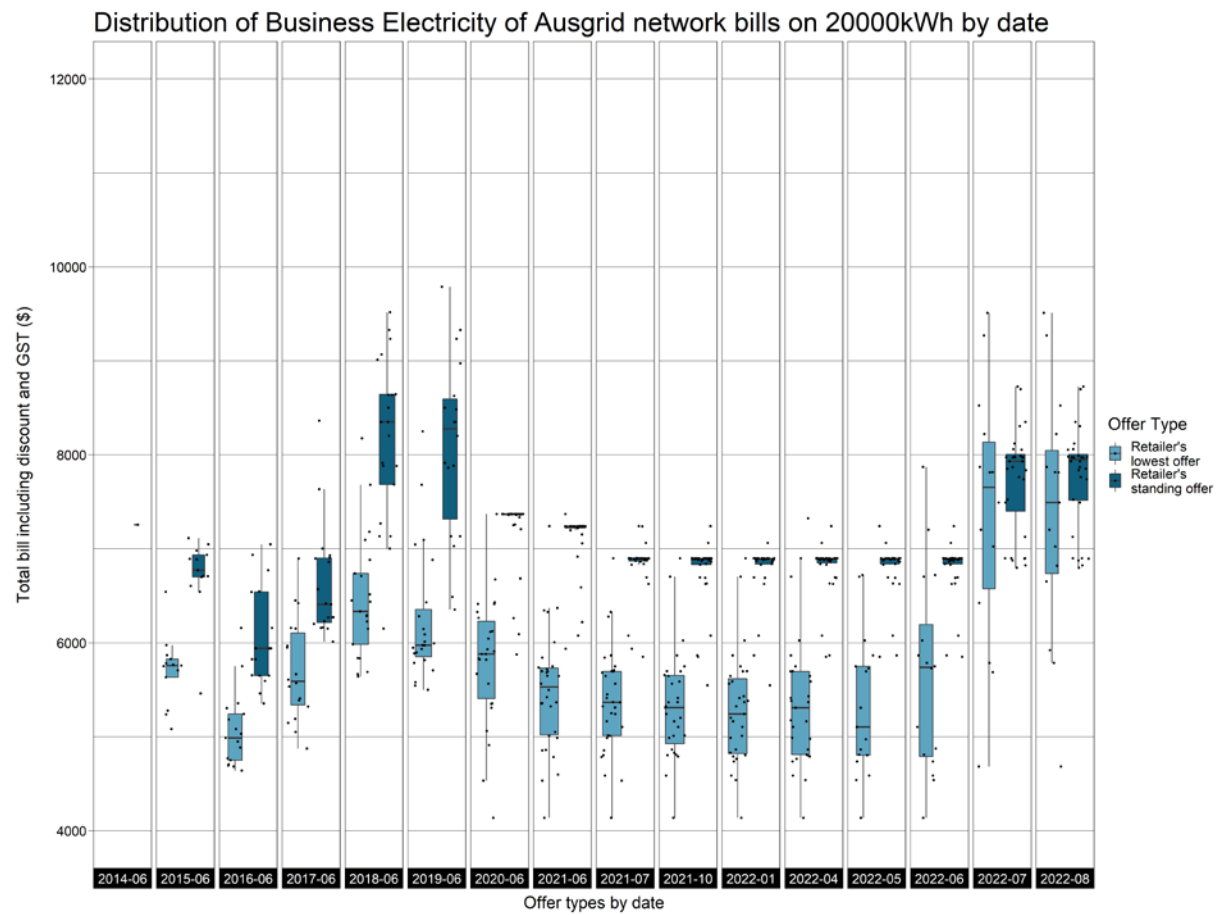


a. Based on 4,215 kWh of residential electricity purchased, including GST, nominal.

b. Anytime offers only.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Figure C.4 Distribution of annual small business bills in the Ausgrid network – standing offers and lowest market offers

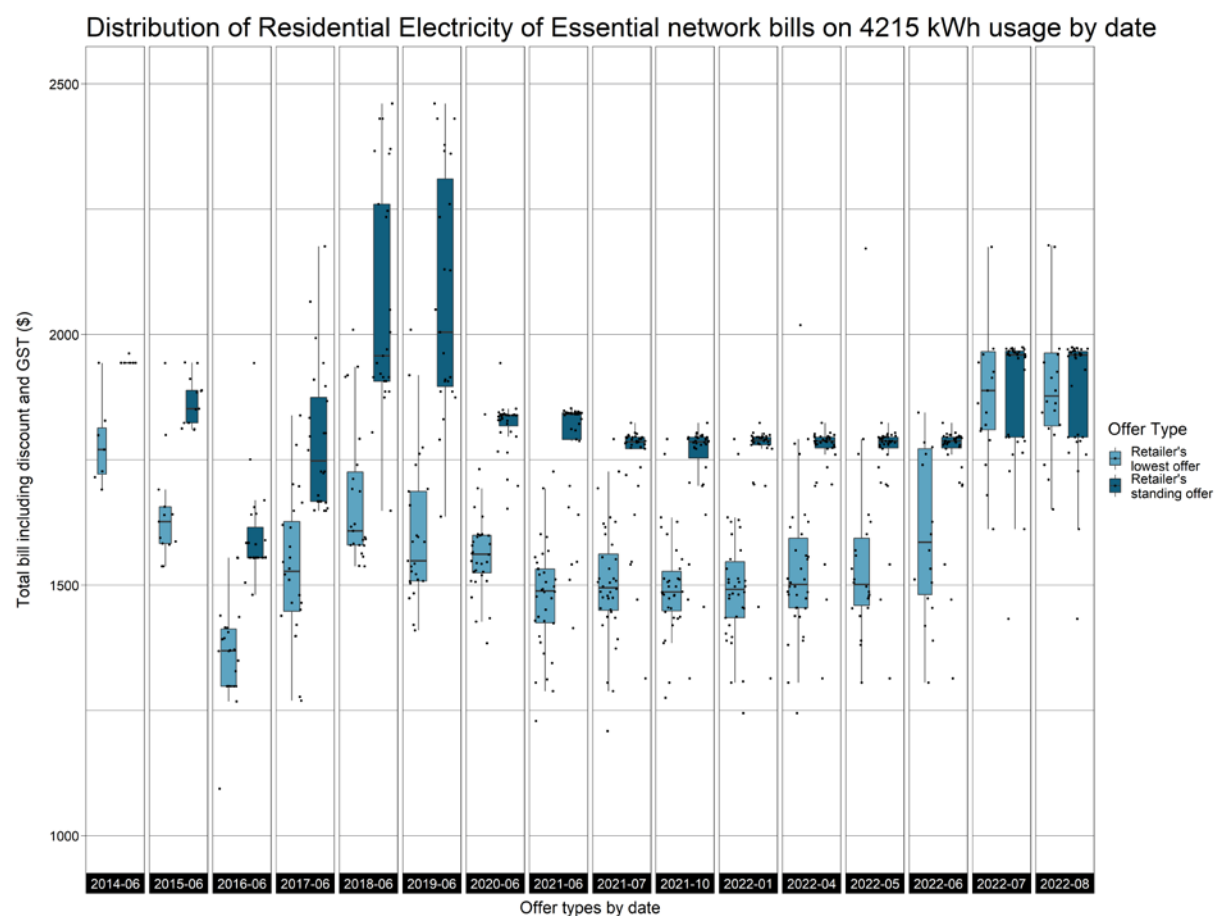


a. Based on 20MWh of residential electricity purchased, including GST, nominal.

b. Anytime offers only.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Figure C.5 Distribution of annual residential bills in the Essential Energy network – standing offers and lowest market offers

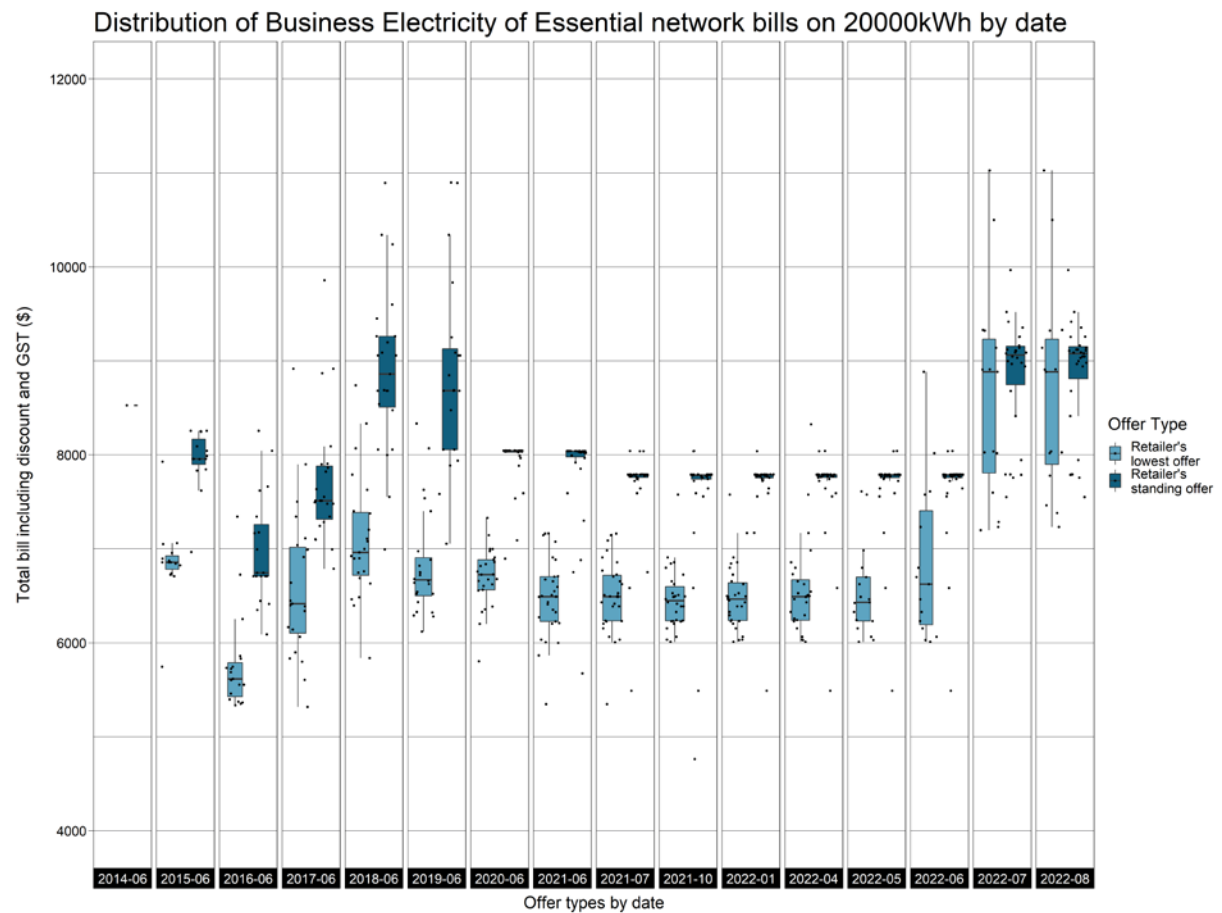


a. Based on 4,215 kWh of residential electricity purchased, including GST, nominal.

b. Anytime offers only.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Figure C.6 Distribution of annual small business bills in the Essential Energy network – standing offers and lowest market offers



a. Based on 20MWh of residential electricity purchased, including GST, nominal.

b. Anytime offers only.

Source: IPART analysis of data from [Energy Made Easy](#), accessed May-August 2022.

Glossary

5MS	five-minute settlement
ACCC	Australian Competition and Consumer Commission
ACT	Australian Capital Territory
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
AGN	Australian Gas Networks
ARENA	Australian Renewable Energy Agency
ASX	Australian Securities Exchange
Big 3	the three largest electricity retailers in NSW (Origin Energy, EnergyAustralia and AGL Energy).
c/day	cents per day
c/kWh	cents per kilowatt hour
CPI	Consumer Price Index
COVID-19	Coronavirus disease 2019
DELWP	Department of Environment, Land, Water and Planning (Victoria)
DER	distributed energy resource
DMO	default market offer
DPE	NSW Department of Planning and Environment
DRSP	demand response service provider
ECA	Energy Consumers Australia
EME	Energy Made Easy
EnergyCo	Energy Corporation of NSW
ESB	Energy Security Board
ESC	Essential Services Commission (Victoria)
ESS	energy savings scheme
EV	electric vehicle
EWON	Energy and Water Ombudsman NSW
GHG	greenhouse gas
GJ	gigajoule
GS	global settlement
GST	goods and services tax

HHI	Herfindahl-Hirschman Index
IPART	Independent Pricing and Regulatory Tribunal
IRP	integrated resource provider
ISP	integrated system plan
JKM	Japan Korea Marker
kWh	kilowatt hour
LNG	liquefied natural gas
MWh	megawatt hour
NECF	National Energy Customer Framework
NEM	National Electricity Market
NERL	National Energy Retail Law
NSW	New South Wales
OECC	NSW Office of Energy and Climate Change
Ofgem	Office of Gas and Electricity Markets (UK)
p.a.	per annum
PDRS	peak demand reduction scheme
PIAC	Public Interest Advocacy Centre
Q1	quarter 1
Q2	quarter 2
Q3	quarter 3
Q4	quarter 4
QLD	Queensland
RERT	reliability and emergency reserve trader
REZ	renewable energy zone
RGT	renewable gas target
RoLR	retailer of last resort
SA	South Australia
SoE	statement of expectations
Spot market	one-off transactions, as distinct from transactions occurring under supply contracts
TOU	time of use
V2G	vehicle-to-grid
V2H	vehicle-to-home

VNI	Victoria – NSW Interconnector
VPP	virtual power plant
WDR	wholesale demand response

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