

Tribunal Members

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Invitation for submissions

IPART invites comment on this document and encourages all interested parties to provide submissions addressing the matters discussed.

Submissions are due by Friday, 5 November 2021

We prefer to receive them electronically via our online submission form.

You can also send comments by mail to:

Energy Market Monitoring review 2020-21 Independent Pricing and Regulatory Tribunal PO Box K35

Haymarket Post Shop, Sydney NSW 1240

If you require assistance to make a submission (for example, if you would like to make a verbal submission) please contact one of the staff members listed above.

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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, past, present and emerging.

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

Executive Summary

The Australian energy markets will be transformed over the coming decade. As coal fired power stations are retired as they reach the end of their asset lives, the penetration of renewable energy sources will continue to grow. This will require changes to how the energy systems work, and how households engage with the energy market.

IPART is required to report annually on the performance and competitiveness of the retail energy markets. This report provides our draft findings on how competition has developed to date, and the new opportunities that will arise from the energy market transformation.

NSW is transitioning to renewable energy

In 2020, more than 20% of electricity in NSW was generated from renewable sources, and renewables made up around 40% of the 60 GW of installed generation capacity in NSW. The NSW Electricity Infrastructure Roadmap is forecast to deliver an additional 12 GW of solar, wind and dispatchable storage by 2030 as coal fired generators are retired. Under this roadmap, the NSW Government will enter into long term supply agreements with generators and battery providers in new renewable energy zones. At a national level, the Energy Security Board (ESB) has also considered mechanisms to ensure demand can be met.

New investments in renewable generation and storage will help ensure that our energy remains secure and affordable. They will also be fundamental in reducing carbon emissions - close to 40% of NSW's emissions currently comes from the electricity generation sector.⁴ The NSW Government is targeting 50% emissions reductions on 2005 levels by 2030, and net zero by 2050.⁵

Greater household engagement will help manage supply and demand

In 2021, wind and solar supplied around 50% of demand in the National Electricity Market (NEM) on certain days. Within the next five years, there are times when energy from these sources is anticipated to meet 100% of demand.⁶ This will fundamentally change how the energy system operates. At times, there could be more electricity being generated from renewable sources than the demand for this electricity. It could also mean large momentary fluctuations of supply – for example, when clouds pass overhead. In addition, frequency, voltage, and system strength – which are currently provided by coal and gas generators – will need to be provided in other ways.⁷

a	Including	hydro	generation.
	including	Hydro	generation.

Future advancements in inverter technology should be able to address many of these challenges. Households will be part of the solution. Household batteries could balance out these fluctuations by storing electricity at times of excess supply and discharging when additional supply is required. Different prices at different times of the day would signal to customers when to use more or less electricity. For example, low prices in the middle of the day would encourage people to use more when there is plenty of electricity generated from solar systems. Retailers could reward customers for using less electricity during peak periods.

New products are continuing to emerge

As retailers and networks realise operational value from these solutions, there will be more opportunities for energy retailers to provide customers with different energy offerings. In the same way that data and smart phones changed how telecommunications services are offered to customers, batteries and electric vehicles will also result in new bundling and pricing structures as the costs of these technologies fall.

The reduction in the costs of solar systems has in part driven the recent entry of new retailers. 16 new retailers have entered the market in the past 2 years alone (Table 1). Several of these are bundling solar systems in customers' retail contracts, for example, offering solar systems with no upfront costs, and instead incorporating the system costs into retail charges. Others are trialling new technologies such virtual power plants that automatically feed electricity in and out of home batteries depending on the wholesale price at the time.

There are now 40 retailers competing in the NSW electricity market. The small retailers have now gained 19% of market share from the 3 largest retailers (Origin Energy, EnergyAustralia, and AGL).

Table 1 Indicators of competition

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Market structure								
Number of retailers	13	18	22	22	24	25	33	40
Market share of small retailers	4%	7%	10%	12%	14%	17%	18%	19%
Customer engagement								
% of customers on market offers	60%	63%	69%	74%	78%	83%	87%	88%
Customer switching rates	NA	15%	16%	17%	19%	21%	18%	20%

Note: 2020-21 shows a net increase of 7 retailers. 8 new retailers entered the market and two existing retailers merged.

The influx of renewables has reduced electricity retail prices

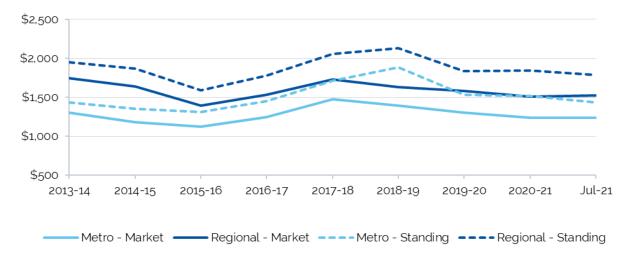
The growth in household solar systems has driven down wholesale prices in the middle of the day, leading to lower average wholesale and retail prices over the past two years. Since June 2020, retail prices have fallen by around 5%.

In combination with falling wholesale costs, the introduction of the 'default market offer' ('DMO') in 2019-20 has also reduced prices. This is a cap set by the Australian Energy Regulator (AER) on 'standing offers' - which are the offers for customers if they have not actively shopped around.

Figure 1 shows that prices have fluctuated since IPART started monitoring prices in 2014. Prices are now lower than 2013-14 levels. In real terms (once the impact of inflation has been removed), prices have fallen by around 10% to 20%. However, prices may increase again with the closure of the Liddell coal fired power station in 2022-2023, which currently supplies around 12% of NSW's electricity. A key objective of the NSW roadmap is to smooth price volatility as more coal fired power stations close, by ensuring the timely replacement of this capacity.

Figure 1 also shows that prices in regional areas remain around 25% higher than metro areas due to higher network costs, but this gap has narrowed since 2013-14.

Figure 1 Annual residential electricity bills for median offers by offer type and region (based on 4,125 kWh of electricity purchased, including GST, nominal)



Note: The regional prices are for the Essential Energy network, while the metro prices are a median of all offers in the Ausgrid and Endeavour Energy networks.

Source: Offers available on EnergyMadeEasy.

Customers can save by shopping around

While standing offer prices have reduced significantly since 2019-20, Figure 1 shows that customers can still save around 20% off these prices by shopping around for a 'market offer'. Around 20% of customers switched retailers last year, which is up on the year before. 88% of residential customers, and 78% of business customers are on market offers (Table 1).

There has been an increase in reported satisfaction with electricity and gas retail service over 2020-21, and the number of electricity-related complaints to the Energy & Water Ombudsman NSW (EWON) were lower compared to previous years.

Gas prices offered to most small customers have decreased

Most small customers in NSW (about 95%) are located in Jemena's network and the median market price offered in this region decreased by 6% over 2020-21.

Overall, we observed a general trend of competition improving in the retail gas market. The market share of smaller retailers has generally increased, more customers are now on market offers and are satisfied with their gas service.

COVID-19 has generally been managed well by retailers and regulators

While prices are down, customers may be paying more for their energy overall due to higher consumption as a result of COVID-19 lockdowns. In addition, the lockdowns have caused a significant number of households to lose income during the pandemic.

Over 2020-21, data reported to the AER shows some increase in levels of residential electricity debt on hardship programs. As a result, retailers have experienced higher levels of bad debt. However, customers have not been disconnected at higher rates, complaints have fallen, and retailers have not left the market. This has been in part due to the AER's statement of expectations which places a moratorium on disconnections while stay at home orders are in force.

As households recover from COVID over the next year, regulators should continue to ensure that the vulnerable customers continue to have access to reasonably priced electricity.

Draft findings

1.	 Retailers are increasingly competing for customers: there are now 40 retailers in the market, which is around three times more than in 2013-14 when we first started monitoring the market retailers compete for customers on price – the lowest offers in the market are around 35% lower than the highest offers. a range of innovative offers and non-price incentives are being offered to further attract customers. 	18
2.	Customers continue to engage in the market in 2020-21: - Switching rates increased from 18% to 20% - The proportion of customers on market offers is now 89% for residential customers (up from 88%), and 78% for business customers (unchanged).	21
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5.	The market concentration was steady in 2020-21. The combined market share of the "Big 3" retailers (Origin Energy, EnergyAustralia and AGL) was maintained as AGL purchased Amaysim/Click. In 2020-21 - 81% of customers are supplied by the "Big 3" - 97% of customers are supplied by 10 retailers. The remaining 3% of the market is shared between 30 retailers.	26
6.	Prices in the market trended down in 2020-21. - The median market offer fell by around 5%. - The median standing offer was relatively unchanged.	36
7.	Price changes broadly reflected the underlying changes in costs in 2020-21. A detailed review of prices and profit margins is not required.	36
8.	 IPART began monitoring the market when competition was found to be sufficiently competitive to protect customers. Prices have fallen in real terms since IPART began our monitoring role: In the Essential network, market prices have fallen by 22% in real terms, and standing offer prices have fallen by 18% since 2013-14. In the Ausgrid and Endeavour networks, market prices have fallen by around 15% in real terms, and standing offers are 11% lower compared to 2013-14. 	37
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10.	The spread of offers increased in the market in 2020-21. The average difference between a retailers' lowest and standing offers was around 20% up from 16% in the previous year.	40

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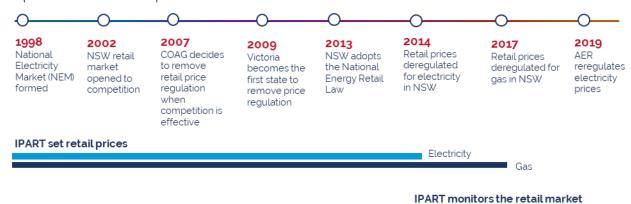
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1 Introduction

The NSW Government opened the electricity and gas retail markets to competition in 2002.¹¹ 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 the removed from July 2014 for electricity¹² and July 2017 for gas¹³, when competition was found to be sufficiently developed.¹⁴ IPART has since been required to monitor competition in these markets.¹⁵



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. The Australian Energy Regulator (AER) significantly reduced the allowed revenues for networks in 2015, and network costs have since stabilised.

More recently, wholesale costs have been volatile as the generation mix has started to change. The focus of future reform has now shifted to ensuring there is 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 are the benefits of competition?

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

b Since 2015-16, network costs have fallen by an average of 2% per year for Ausgrid customers, 1% for Endeavour customers, and increased by an average of 2% a year for Essential customers. These changes are based on network prices for an average residential customer on an anytime tariff purchasing 4,215 kWh per year.

In a competitive market, business will 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, then they will be outcompeted and lose customers.

The long-term cost reductions should outweigh the costs

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 are 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.

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 – recovering more of their costs from these customers. This has been called a "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 provides 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 increase. Our recommendations in previous reviews have focused on measures that would help customers engage effectively and regularly in the market to ensure they can access the best price.

In 2019-20, the AER re-introduced a cap on the prices that retailers can charge. This is called the "default market offer" or DMO.° This was intended to balance the objectives of protecting some customers 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. As a result of the DMO, the gap between the highest and lowest prices has narrowed.

^c 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.

Strong protections are required for vulnerable customers

Retailers may be inclined to stop supplying customers who are not keeping up with their bills, because they need to manage their costs to remain competitive. However, 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 are energy-specific consumer protections and more detailed provisions regulating the rights and obligations of retailers and consumers in retailer energy markets.

Other support measures have also been put in place to address the impacts of COVID-19. These are discussed further in Chapter 9.

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

1.2 Future of the electricity market

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, uncertainty around energy and climate policy has reduced investment in the wholesale market. In addition, the changing mix of generation will fundamentally change how the energy system operates.

Various expert market bodies have been undertaking significant work in reforming the electricity market so that it is able to meet the changing needs of the system and customers. The Energy Security Board (ESB) has delivered its final report for the redesign of the national electricity market to the Energy National Cabinet Reform Committee.

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.

We provide a high-level overview on these significant developments below.

1.2.1 Energy Security Board's Post-2025 market design

The ESB has been tasked to advise on changes required to the NEM as it transitions from largely coal fired generation to more variable renewable generation. The main drivers of this transition are:

- the dramatic and continued increase in supply of renewable energy driven by government policy (renewable targets) and community concerns about the impact of coal fired generation on carbon emissions
- the current thermal generation fleet ageing and becoming commercially unviable compared to renewables which have zero fuel costs and low operational costs (technology/capital costs are also decreasing)
- opportunity to unlock value from all the increased distributed energy resources ("DER"), investments that customers have made and reward flexible demand. 18

To accommodate a future market where electricity will mostly be sourced from renewable generation, the ESB has recommended a package of interrelated reforms. The main focus for the retail electricity market are the reforms related to the integration of DER and flexible demand which are shown in the ESB's recommended DER Implementation Plan (Figure 1.1). We provide further detail below.

Integration of distributed energy resources and rewarding flexible demand

The rapid uptake of solar PV means that aggregated DER can provide a competitive alternative to large scale generation and potentially deliver low-cost system services. Further, services provided by DER and flexible demand can reduce the need for investment in networks and benefit all customers, even those without DER assets. In its reforms the ESB also aims to reward customers for their flexible demand (through products and services that innovation offers) and manage risks to customers through the right protections, no matter how customers choose to use or receive energy.

Some of the key reforms recommended by the ESB are:

Flexible trading arrangements – To enable customers to choose different suppliers at the
same premises for different types of services. For example, one supplier to manage solar PV,
batteries, and electric vehicles, and another supplier for general purchases from the grid. The
current framework generally does not support customers easily engaging with more than one
energy service provider at their property and some networks do not allow small customers to
have a second connection point.

- Trader services Creating a single registration category for all entities who want to engage in the wholesale energy and energy services markets to make it easier for participants to provide new services to customers (for example, rewarding customers for their flexible demand). Currently, depending on whether participants want to trade energy or FCAS^d or both, it would have to register in multiple categories to participate in the different markets. This increases registration costs for service providers and is potentially a barrier to new participants entering new markets to provide different services.
- Scheduled lite To provide greater participation of non-scheduled resources in dispatch so
 consumers can obtain more value from their DER assets. Aggregators or local community
 batteries can give information on decentralised generation size, availability and operation to
 AEMO so it can safely and efficiently ensure that supply and demand is balanced. This can
 provide more accurate scheduling for all participants and possibly additional revenue
 streams for responsive resources.¹⁹
- Ensuring consumer protections are fit-for-purpose for new business models Businesses selling services that allow customers to optimise their energy use, provide demand flexibility and use of DER assets, and do not involve the sale of energy to the customer's premise are not currently within the scope of the National Energy Consumer Framework. Customers would still be covered by Australian Consumer Law. Arrangements will be reviewed to understand what risks consumers may face, so that the regulations strike the right balance between consumer protections and encouraging innovation in the market.

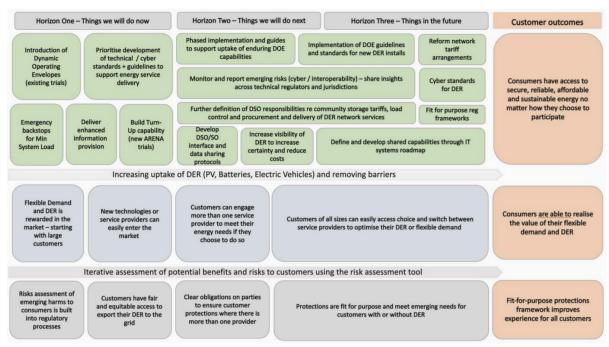


Figure 1.1 DER Implementation Plan

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

Frequency control ancillary services (provides either a fast injection or reduction of energy to balance supply and demand). AEMO has traditionally purchased such services from generators such as coal and gas plants.

1.2.2 NSW Electricity Infrastructure Roadmap

The NSW Government is investing in a co-ordinated portfolio of renewable energy zones, pumped hydro, and transmission infrastructure to meet the long-term energy needs of NSW as its ageing coal fired power stations are retired. Its roadmap is intended to reduce NSW electricity emissions by 90 million tonnes by 2030 and support NSW to deliver on its net zero by 2050 ambition.²⁰

Renewable energy zones will combine renewable energy generation such as wind and solar, and storage such as batteries to deliver electricity. Development on the first renewable energy zone in Central-West Orana is already underway and is expected to provide enough electricity to power 1.4 million homes by the mid-2020s (about 3 GW). The other renewable energy zones will be in the New England, South-West, Hunter-Central Coast and Illawarra regions.²¹

To support pumped hydro*, the NSW Government has also established a \$50 million grants program which will assist project developers with the cost of early stage detailed feasibility studies. The aim of the program is to establish a pipeline of up to 3 GW of pumped hydro projects. Applications for grants have closed and are expected to be awarded to applicants by end of 2021. Projects are required to be operational by end of 2029.²²

Water is pumped into an upper reservoir using cheaper energy when demand is low or there is an excess of renewable energy (e.g. wind or solar during the middle of the day), and then when electricity is required the water is released to the lower reservoir through a turbine to generate electricity. The water stored in the upper reservoir, awaiting its use, is essential a battery. Pumped hydro is an important part of the energy mix and can balance variable renewable generation such as wind and solar.

2 Scope and timetable

Since energy prices were deregulated, IPART has reported annually on the performance and competitiveness of the retail electricity and gas markets in NSW. This report outlines our findings on the NSW retail electricity market during 2020-21.

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

2.1 What do we report on?

Our market monitoring role is set out in the National Energy Retail Law (NSW).²³ 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 (Chapters 3 and 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 required²⁴
- whether a detailed review of retail prices and profit margins in each market is required (discussed in Chapter 6).²⁵

We can also report on any other relevant matter.²⁶ As part of our Draft Report, we have considered:

- energy reform both in NSW and nationally, and what this means for retail competition and climate change (Chapter 1)
- the impact of COVID on the energy customers and energy markets (Chapter 9)
- pricing for customers in embedded networks (Chapter 8)

For the gas market, we have discussed our findings in a separate Information Paper.

2.2 Purpose of our review

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 2.1). Given this broader oversight of the markets, the purpose of our review is to report 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.²⁷

In addition to our annual market monitoring reviews, 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.²⁸

Table 2.1 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		Quarterly
AEMC	Competition – NEM	Electricity and gas	2014	June each year. The AEMC did not release a report in 2021.
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.

2.3 Review timetable

We commenced this review in July this year. We have met with several energy consumer stakeholders and retailers in preparing this Draft Report. We welcome submissions to this Draft Report by 5 November 2021. After considering submissions and undertaking further analysis, we will submit our Final Report to the Minister for Energy and the Environment by 30 November 2021.



3 How retailers are competing

This chapter discusses the different ways that retailers competed in the electricity market in 2020-21, including the different types of innovative products that are being offered.

3.1 The number of active retailers continues to grow

There has been a significant increase in the number of retailers entering the market over the past two years, 8 new retailers in 2020-21.^f There are now 40 retailers providing offers in the NSW market, which is more than three times the number of retailers compared to 2013-14 when we first started monitoring the market (Figure 3.1).^g A full list of retailers, the areas and customer types they service, and the types of offers available is provided in Appendix A.

The continuous growth in the number of businesses indicates that it is relatively easy for businesses to set up in NSW. This places pressure on all businesses to reduce costs, become more efficient, provide good customer service, and offer products that better meet customers' needs. If they do not, they will lose market share to those businesses that can provide more value. Inefficient retailers would drop out of the market over time.

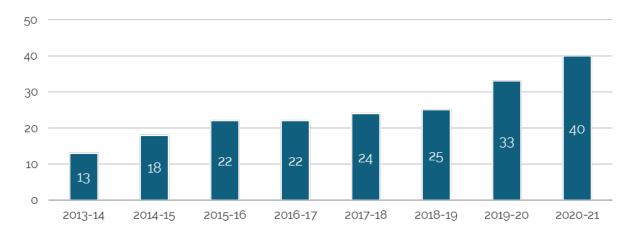


Figure 3.1 Number of retailers in NSW

Note: 2020-21 shows a net increase of 7 retailers. 8 new retailers entered the market and two existing retailers merged. Source: IPART analysis, EnergyMadeEasy data 2013-14 to 2020-21

f Based on the retailers with active offers on EnergyMadeEasy.

There are other retailers supplying customers but were not offering contracts to new customers in May 2021. There are also providers that only supply electricity to specific sites (known as "embedded networks").

3.2 Retailers compete on price

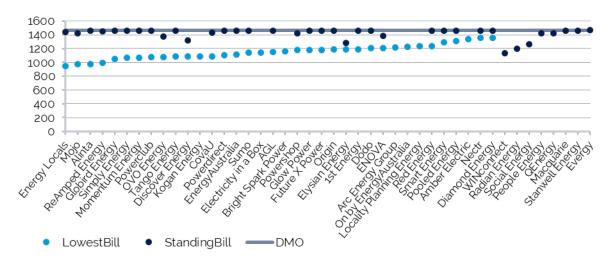
Retailers compete to offer customers the lowest prices. In 2020-21, the lowest prices in the market were around 35% lower than the highest prices.^h

Figure 3.2 shows the range of customers' bills for each retailer's lowest offer and standing offer as at June 2021 in the Ausgrid network area. We have calculated bills for a typical Ausgrid customer consuming 3,900 kWh per year.

'Standing offers' are for customers that haven't signed up to a 'market offer' – market offers are all other offers in the market. Since 2019-20, the AER has set a maximum bill for these offers (for a specified level of consumption), known as the "default market offer" or "DMO" and so most retailers have set their standing offers equal to the DMO. Some are slightly lower.

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 Any time tariff offers for residential customers in the Ausgrid network area (3,900 kWh pa, nominal, GST-inclusive)



Source: Offers available on EnergyMadeEasy, May 2021.

The bill amounts shown in Figure 3.2 are based on retailers' 'anytime offers'. These offers 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.

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

Other price structures are also available to some customers, including:

- Time-of-use tariffs, where customers pay different rates for electricity depending on what time of day and what day they use electricity.
- Demand tariffs, which are paid in combination with either anytime or time-of-use tariffs. They are an additional charge for the 30-minutes of maximum electricity used in the month during a set peak demand period (this is the 'demand' charge).

We will investigate the prices of these offers further in our Final Report.

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 and the Hunter), Endeavour (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 spread of offers in the Essential and Endeavour Energy network areas.

3.3 Retailers are offering an increasing variety of innovative offers and non-price incentives

As more retailers have entered the market, the range of innovative offers has grown. Many of these offers are tailored to customers with or interested in purchasing solar panels and batteries. However, there are also incentives available to other customers such as reward programs, flat monthly usage plans and free electricity on particular days.

Retailers are also focusing on the customer service experience, making billing information clear and simple to understand, and improving the accessibility of account information.

We discuss below the various types of offers that are available in the market.

3.3.1 Innovative offers for solar panels with and without batteries

A number of retailers are providing bundle options where they provide integrated services which include installation of solar panels and batteries, and ongoing management of energy use. For example:

- On by EnergyAustralia installs solar panels and batteries at no upfront cost under a 7-year contract and customers pay an electricity rate that will not increase during the period^{i, 29}
- GEE Energy offers plans where customers pay little or no upfront costs for their solar panel and batteries. Instead, customers pay fixed repayments (which also covers their energy usage) which cost less than what they are currently paying for their electricity.³⁰

¹ Under this bundling package, customers pay an electricity rate (excluding controlled load and daily supply charges) that would not increase during the contract period. Customers will need to pay an exit fee if leaving the plan within 7 years and customers do not receive feed in tariffs. The battery will also form part of the retailer's Virtual Power Plant.

- SocialEnergy also offer finance packages where customers pay little or no upfront costs for their solar panels and batteries installed. In addition, they offer customers who purchase and install solar panels and a battery with them, a feed-in tariff of 40c/kWh (for the first 3,000kWh of exports every quarter).³¹ This is significantly higher than IPART's feed-in tariff benchmark of around 5c/kWh for 2021-22^j and current market offers.
- SonnenConnect provides a virtual power plant scheme where customers can allow the retailer to remotely operate their batteries to stabilise the grid, and in return receive a daily credit.^k

3.3.2 Innovative offers to help customers manage their energy usage

Retailers are introducing a range of smart technology and proprietary apps to help customers manage their bills. Some apps^l can help automatically run smart home devices at times when energy is cheaper, and/or sell stored battery energy back to the grid timed at peak prices to generate more income for customers. These energy management apps also provide transparency on prices and usage data which can help customers better understand and manage their bills.

Other retailers are providing monthly payment plan options which:

- includes an energy usage allowance and customers pay extra if they use more. There are variations on how these are structured, for example:
 - SonnenFlat has monthly charges which provides an annual usage allowance, and designed for customers with solar and batteries. Once the annual usage allowance is exceeded, customers pay for usage from the grid^m.
 - On by Energy Australia offers all customers monthly plans which provides a monthly set amount. Customers are able to buy top up plans, or roll over unused amounts to the following month. These plans also include free electricity on Saturdays.ⁿ
- provide access to paying electricity at wholesale prices with the protection of paying no more than the DMO.°

^j IPART sets an annual guide for customers about how much they can expect to receive from their retailer for their excess solar electricity that is fed into the grid. IPART's website has 2021-22 solar feed-in tariff benchmark details.

SonnenConnect provides a daily credit of \$0.82/day excluding GST, and \$100 one time sign up bonus. Accessed 28 September 2021

Examples include Amber SmartShift and Discover Energy Smart Energy Insights. Accessed 28 September 2021

m For example, SonnenFlat have monthly fee plans for customers with solar and batteries. The plans range from \$49/month to \$69/month for an annual consumption amount of 4,000kWh to 12,500kWh. The benefit is level of bill certainty, however there are also extra charges for energy consumed above the annual amount, so customers should choose the most suitable plan depending on forecast usage. Accessed 28 September 2021

ⁿ On by EnergyAustralia plan where electricity charges are free every Saturday for a year. Accessed 28 September 2021

Our Amber's solar customers can also sell electricity at the real-time wholesale price. Accessed 28 September 2021

3.3.3 Non-price incentives to attract customers

In addition to the above innovative offers, retailers are also focusing on customer experience. To attract customers, retailers are making billing and usage information clear, simple to understand, and are improving the accessibility of account information. For example, having fewer plans that are simpler to understand and providing easy payment options through third party apps and some retailers are also offering multi-lingual customer service representatives and apps to assist customers where English is not their first language.

Other retailers are also offering reward programs which provide access to shopping discounts or allow customers to earn rewards when they shop (to credit back to their energy account)⁵. There are also bundling options with non-energy products. For example, On by EnergyAustralia has a 'Stack On' rewards program where customers receive greater discounts when they add products (such as phone and internet).

Some retailers are also marketing their green credentials and provide options for customers to reduce their impact on carbon emissions. For example, some retailers offer:

- net-zero emissions (or carbon neutral) electricity, meaning its customers' electricity usage is 100% carbon offset^t and some are offering this at no extra cost.^u
- GreenPower (Australian government accredited renewable energy program) options which allow customers' energy usage to be matched by renewable sources such as wind and solar. Some retailers are also offering GreenPower options at no extra cost.

3.3.4 Comparing innovative offers

Governments and regulators have put in place a variety of measures to help customers compare offers. One of the main objectives of the DMO is to provide a consistent benchmark so that customers can compare discounts between offers.

One retailer, Glow Power only offered 2 plans, marketing as simple plans with easy to understand discount innovations, accessed 13 September 2021. Other retailers are also offering 'set and forget' plans where rates and discounts are for the life of the plan and not limited to the first 12 months. Example is Radian Energy, accessed 13 September 2021

^q For example, Discover Energy has introduced payment via WeChat which is common payment platform for its customers. They are also planning to launch Apply Pay and Google Pay soon. Accessed 13 September 2021

For example one retailer advised us that most of their customers are from non-English speaking backgrounds and customers provided feedback on their excellent customer service and ability to communicate with customer service representatives who can communicate in different languages. Consultation 8 September 2021.

^s An example is 'Always on rewards' program by On by EnergyAustralia.

^t Carbon neutral means that the greenhouse gas emissions associated with an activity like generating power are reduced or offset to a total of zero. For a product to be considered carbon neutral, action must be taken to reduce and offset the emissions associated with supplying it to you.

^u No extra costs in this context means that the tariff rates quoted are inclusive of 100% carbon offset. This is compared with tariff rates quotes based on just electricity supply and with carbon neutral optional add-ons at extra costs.

For example, Origin Energy offers 25% Greenpower for Everyday Rewards members who join their Origin Go plan at no extra cost. Origin Energy energy plans, accessed 24 September 2021

The AER also publishes independent comparisons of retailers' energy offers through its Energy Made Easy website. This website calculates the annual bills the customer would face under different market offers on a consistent basis, using their actual historical energy usage or their household characteristics, and ranks them by price. This makes it easy for customers to compare a large number of offers, and to assess their suitability for their individual circumstances. There are also a large number of privately run comparator websites that can help customers compare and switch offers (eq., Compare the Market and Canstar Blue).

Currently, the AER is reviewing how to make energy bills simpler and easy to understand, to inform the development of a new enforceable Better Bills Guideline.³²

However, as more innovative pricing structures are being introduced, it may become more difficult to compare offers using these tools. PIAC was concerned that customers will not have the right tools to ensure they are getting good value.³³ For example, there are new offers that allow customers to pay flat monthly fees, where customers get an annual consumption amount. Customers will need to have an accurate understanding of their typical consumption profile to decide whether such plans suit their circumstances.

Customers who enter a contract that includes several different services or products with their electricity (such a solar panels, or other services like insurance), will also need confidence that they are getting value from this bundled product. It may be cheaper to purchase services separately. Some retailers are transparent about their bundled products, disclosing the underlying cost of each product and how much customers will save by purchasing multiple products from the same retailer.*

Going forward, the "consumer data right" will soon be extended to the energy sector. This should help consumers compare offers for their individual circumstances, and help energy providers tailor their offers to individual consumers. New regulations are likely to require require retailers to disclose data (including consumption data) to customers or their nominated accredited data recipients.

As innovation continues to develop, we will monitor the level of complexity in retailers' offers and whether customers are able to understand if they are getting a good deal.

For example, Origin Energy offers a combined electricity and NBN internet deal, where it discloses the underlying cost of each product and offers a \$10 per month discount to customers that sign up to both.

3.3.5 Smart meter uptake is increasing as customers install solar panels

Customers require smart meters* to access many of the innovative offers provided by retailers, as they need up-to-date information about their electricity usage. 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.

Smart meters are also being trialled to allow DNSPs and retailers to offer innovative solutions to meet growing electricity demands without increasing network expenditure.

Endeavour Energy is trialling a project called Off Peak Plus in Albion Park across 2,500 homes to reduce peak energy demand and maximising the use of renewable energy.³⁴ Smart meters are used to dynamically control homes' hot water systems to switch them on when excess solar generated electricity is available locally during the day. The program is run like a Virtual Power Plant or energy storage system but does not require the same hardware or software.²

When used in this way, smart meters can benefit the wider network, not just individual customers. Because they can transmit real time information, they can also provide operational benefits to networks. For example, they can help networks remotely identify outages or impending power supply problems without needing customers to report the issue.

Currently about 23% of all customers have smart meters in NSW. This ranges between 21% to 25% between the three NSW network areas, with the highest in the Endeavour Energy's network (Figure 3.3). The AEMC is currently reviewing the regulatory framework for metering services to investigate impediments to an efficient and timely roll-out of smart meters (See Box 3.1).

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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.

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.

² The aim is to extend the program to other regions and also to electricity vehicle charging and batteries.

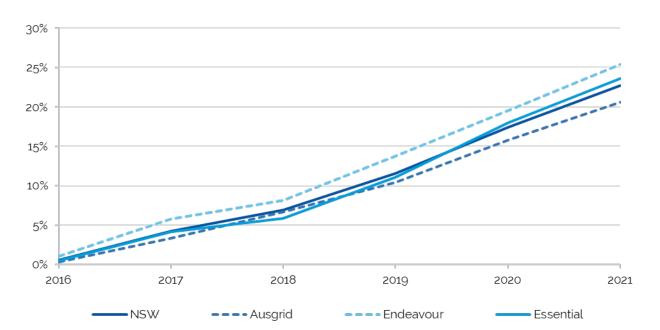


Figure 3.3 Proportion of customers with smart meters in NSW

Source: Directions paper, AEMC Review of the regulatory framework for metering services

Box 3.1 Uptake of smart meters

Around 25% of NSW customers have smart meters. Their full potential benefits remain largely unrealised for energy users and the grid, as uptake has been slower than expected.

Currently meters at new properties are installed as smart meters, and existing meters are replaced as smart meters when they are damaged or faulty.

Due to the installation costs, retailers may not offer to replace meters if they are not faulty or have reached their end of life. Some retailers have advised that more customers with smart meters would provide greater incentives for them to offer more innovative products.

The AEMC is currently reviewing the regulatory framework for metering services to investigate impediments to an efficient and timely roll-out of smart meters. It has recently released a directions paper, identifying some preliminary options to improve the roll-out. These include:

- ways to improve the customer experience, such as requiring retailers to install smart meters when customers request them and reduce delays in replacing meters.
- aligning incentives such as spreading installation costs across the parties that benefit or making multiple parties responsible for metering. At the moment, the retailer is responsible for providing smart meters, but the network provider who also benefits, does not bear the costs.
- ntroducing a 'backstop' date or dates by which time all accumulation meters or manually read interval meters must be replaced.

The AEMC is expected to publish its final report in March 2022 after stakeholder consultation.

Source: AEMC, Directions paper, AEMC Review of the regulatory framework for metering services. September 2021

Draft finding



- 1. Retailers are increasingly competing for customers:
 - there are now 40 retailers in the market, which is around three times more than in 2013-14 when we first started monitoring the market
 - retailers compete for customers on price the lowest offers in the market are around 35% lower than the highest offers.
 - a range of innovative offers and non-price incentives are being offered to further attract customers.

4 How customers are responding

This chapter discusses our findings on consumer behaviour in the retail electricity market in 2020-21, and consumer perceptions on 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.

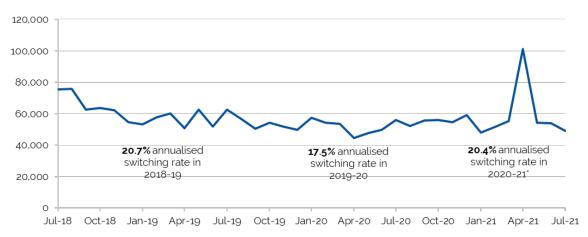
4.1 Increasing levels of customer engagement

We found that over 2020-21 customers continued to engage in the market. There were small increases in the rate of switching for residential electricity consumers compared to the previous year, and the proportion of residential customers on market offers grew.

4.1.1 Switching rates increased slightly

20.4% of customers changed their retailer in 2020-21. This compares to 17.5% and 20.7% in the previous two financial years (Figure 4.1)

Figure 4.1 Number of electricity consumers switching each month



Note: The 2020-21 switching rate was estimated as the total number of customer switches in 2020-21 divided the number of customers as at Q3 2020-21.

Source: IPART analysis. Number of customer switches: AEMO, NEM monthly retail transfer statistics, July 2018 to July 2021. Customer numbers: residential and small business customer number estimates from AER, Retail Performance Data Q3 2020-21, Schedule 2. Accessed September 2021.

Some of the increase in customers switching was due to a spike in the number of customers switching in April 2021, which is around double the monthly average. AEMO has advised us that this increase in numbers was mainly due to processing a bulk change for a retailer who acquired another retailer.³⁵

We estimate that if the rate of customers switching in April 2021 was at its monthly average, of the preceding 12 months, the switching rate in 2020-21 would have been around 19%. This is still higher than the previous year.

Higher switching rates may relate to a number of factors. The gains from switching increased in 2021, as the market offers fell relative to standing offers, and consumption increased with more people working from home. It may have become easier for customers to compare offers, since the introduction of the DMO. This requires retailers to measure discounts against the specified DMO level. Most retailers also enable customers to switch retailers online.

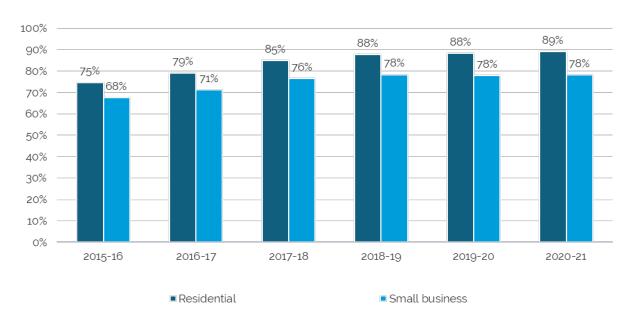
4.1.2 More customers were on market offers

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 89% in 2020-21, an increase of 1% compared to previous year.

For small business customers, 78% are on market offers and this remains unchanged compared to the previous two years (Figure 4.2). This was the lowest proportion across the NEM. The ACCC found that business customers on standing offers tend to have lower median usage than those on market offers. These customers have a smaller incentive to look for a better deal, as the size of any potential saving from switching is lower with lower usage. ³⁶

In 2020-21, many businesses were also affected by COVID-19, with median energy consumption down by 17% compared to the same quarter last year. ³⁷ It is not surprising that business customers would be less engaged in the market in these circumstances.

Figure 4.2 Proportion of residential and small business customers on market offers in NSW



Note: Year 2020-21 is reflective of Q3 2020-21 values Source: AER, Schedule 2 – Q3 2020-21 Retail Performance Data, accessed September 2021

Draft finding



- 2. Customers continue to engage in the market in 2020-21:
 - Switching rates increased from 18% to 20%
 - The proportion of customers on market offers is now 89% for residential customers (up from 88%), and 78% for business customers (unchanged).

4.2 Consumer sentiment and confidence has improved

There has been an increase in reported satisfaction with electricity retail services over 2020-21, and the number of electricity related complaints to the Energy & Water Ombudsman NSW (EWON) were lower compared to previous years. However, Energy Consumers Australia (ECA) found that many Australian consumers are concerned about the energy transition currently taking place, including future electricity affordability and reliability.

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 2021 survey of NSW electricity customers found that consumer sentiment has improved on many measures since last year, including:

- 83% are satisfied with the provision of electricity services (up 4% from the previous year)38
- 69% are satisfied with the level of competition (eg, range of choices or number of potential suppliers) in the electricity market (up 8% from previous year)³⁹
- 64% are satisfied that their billing and usage information is clear and simple to understand (up 7% from previous year)
- 59% are satisfied that they have the tools and assistance to manage energy use and costs (eg, smart phone devices, apps or other tools) (up 8% from previous year)
- 49% confident that the overall market (energy industry and energy regulators) is working in their long term interest (up 11% from previous year). 40
- 74% are satisfied with the value for money of their electricity service (up 13% from the previous year). However, customers considered that most other services such as mobile phone, water and banking service provided better value (see Figure 4.3).

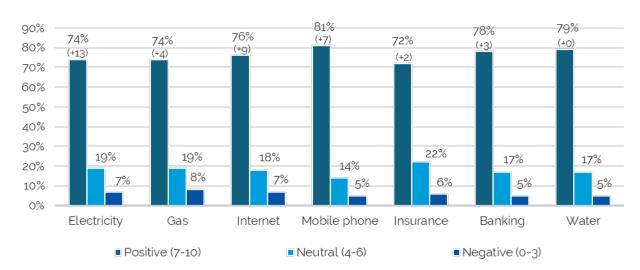


Figure 4.3 NSW consumer satisfaction with utilities and services – value for money (June 2021)

Source: Energy Consumers Australia, Sentiment Survey - June 2021, NSW, accessed 13 September 2021; Sentiment Survey June 2020

Despite the increased confidence, the ECA found that nationally, many household consumers are still concerned about:

- the future affordability of electricity (62% concerned that electricity and gas will become unaffordable for them over the next 10-20 years)
- that the energy system in Australia will fail to keep up with the changing way in which we use energy (69% of surveyed)
- that we won't have plans in place to replace or update ageing coal fired power plants when they reach the end of their operational lives (72% of surveyed)
- that there will be frequent electricity outages in 10-20 years' time (58% of surveyed).41

In NSW, 30% of households reported they have experienced an outage in the last 6 months. Of this group, 64% were satisfied with the number of times they had faults and 67% were happy with the time taken to restore the electricity supply. Around half (53%) of the customers were satisfied with the communication received from the retailer during the outage to keep them informed.⁴²

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). Most complaints relate to retailers and are about billing and customer service.

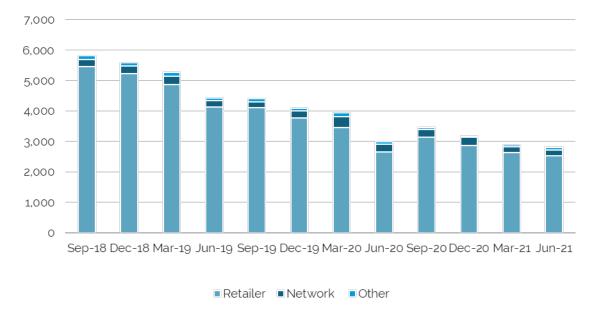


Figure 4.4 Quarterly number of electricity complaints reported by EWON

Source: EWON, EWON Insights, September 2018 to June 2021, accessed 7 September 2021.

EWON also reported that retailers have responded responsibly to vulnerable customers during COVID-19. Where there were cases of a possible breach by a retailer to the AER's Statement of Expectations, EWON found that in all cases the retailers immediately resolved the customer's complaint and provided the necessary support to rectify the initial problem.⁴³ However, EWON expects debt collection complaints to re-emerge when collection activity recommences later in the 2021-22 financial year once the current Greater Sydney COVID-19 lockdown ends.⁴⁴

Draft findings



3. There has been an increase in reported satisfaction with electricity retail service over 2020-21.



4. The number of electricity-related complaints to the Energy & Water Ombudsman NSW (EWON) was lower compared to previous years.

5 How the market structure is changing

Chapter 3 showed that there has been continuous growth in the number of retailers entering the market. with 16 new retailers entering in the last 2 years. This indicates that it is relatively easy for businesses to set up in NSW. This chapter discusses the rate that these businesses have been able to gain customers. It also considers whether there are barriers to expansion.

5.1 The growth of new retailers has been slow

Even though there are 40 electricity retailers in NSW, and customers are switching at relatively high rates, the market for residential and business customers is dominated by three businesses ("the big 3") – Origin Energy, EnergyAustralia, and AGL. These same retailers dominate the gas market.

Figure 5.1 shows that the market concentration has fallen over time but it is still relatively concentrated. The Herfindahl-Hirschman Index (HHI), which is a measure of market of concentration (see Box 5.1), is currently 2,293 for the retail electricity market.

The combined market share of the big 3 has slowly fallen over time, but they still supply 81% of customers in NSW in roughly equal shares (down from 93% in 2014-15). Origin and Energy Australia have lost market share (7% and 5% respectively since 2014-15). However, AGL has slightly increased its share of the market by 1%, with its acquisition of Click Energy Group (a subsidiary of Amaysim) in 2020.⁴⁵ As a result of AGL's acquisition of Click Energy, the combined market share of the big 3 remained stable in 2020-21.

The next largest retailer, Snowy Hydro, retailing under its Red Energy brand, has doubled its market share since 2014-15 to 8%. Snowy Hydro is Commonwealth Government owned.

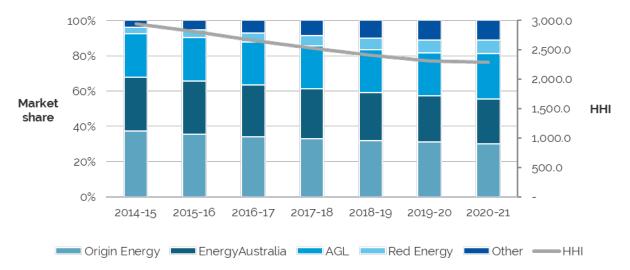


Figure 5.1 Market share and concentration

Source: AER, Schedule 2 - Q3 2020-21 Retail Energy Performance Data, June 2021.

The remaining 11% of the market is shared between the other retailers – up from 4% in 2014-15. 8% of this is held by 6 retailers. These retailers had more than 20,000 customers each in 2020-21 (Figure 5.2). The remaining 30 retailers in the market had less than 10,000 customers each, with a combined market share of around 3%).

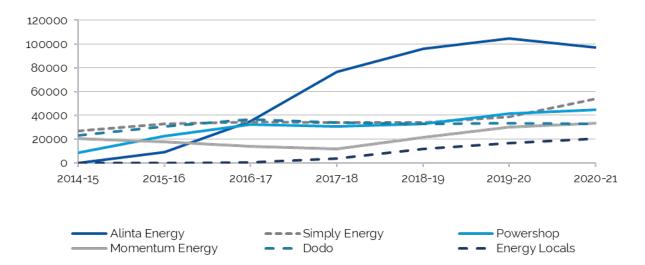


Figure 5.2 Customer numbers of smaller retailers

Note: This chart shows the customer numbers for the next 6 largest retailers after the Big 3 and Snowy Hydro. Source: AER, Schedule 2 - Q3 2020-21 Retail Energy Performance Data, June 2021.

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 (2,234) was slightly lower than for the residential market (2,301).

Box 5.1 The Herfindahl-Hirschman Index (HHI)

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.

Draft finding



- 5. The market concentration was steady in 2020-21. The combined market share of the "Big 3" retailers (Origin Energy, EnergyAustralia and AGL) was maintained as AGL purchased Amaysim/Click. In 2020-21
 - 81% of customers are supplied by the "Big 3"
 - 97% of customers are supplied by 10 retailers. The remaining 3% of the market is shared between 30 retailers.

5.2 Barriers to expanding market share

We have previously reported on a number of barriers to smaller retailers expanding their market shares, including retention and win-back strategies and inconsistent regulations across the NEM. These are discussed below.

5.2.1 Retention and win-back offers

We have continued to hear that 'retention offers' and 'win-back' offers make it challenging for smaller retailers to gain new customers. When customers sign up with a new retailer, they will often be contacted by their existing retailer with a more attractive offer before the customers switch (a "retention" offer or "save") or after the switch takes place ("a win-back offer"). Often, the customer will then choose to stay with or return to the incumbent retailer. In the meantime, the new retailer has incurred marketing and customer acquisition costs that it will not recover from that customer.

After previously banning retention offers, 46 the New Zealand Electricity Authority introduced a ban on retailers winning back their previous customers for 180 days after the customer has switched to another retailer in March 2020. It said that this provided an incentive to retailers to offer better prices and products to their customers upfront, rather than waiting until they decide to leave before offering them a better deal. 47

IPART made a similar recommendation in our 2017-18 market monitoring report. We recommended that the NSW Government submit a new transitional rule change to the AEMC to prohibit retailers from engaging in retention and win-back activities for six months following a switch. We considered that the proposed rule should be in place for a fixed transitional period (for example, three years) while competition continues to develop.⁴⁸ The NSW Government has not submitted a rule change consistent with our recommendation.

In October 2021, new processes have commenced to speed up the customer transfer processes to reduce the time available for the existing retailers to make a retention offer a transfer takes place. The time for consumers to change electricity retailers will reduce from up to 3 months to 2 days. ⁴⁹ However retailers will still be able to contact people after they have switched to another retailer. In future reviews we will monitor whether 'win-back' offers increase, offsetting any reduction in "retention" offers, and consider whether to make any further recommendations.

5.2.2 Regulatory consistency across the NEM

In past reports we found that inconsistent regulations across the NEM drive additional costs and make it difficult for retailers to expand across jurisdictions.⁵⁰

NSW has unique requirements on retailers through its Social Programs for Energy Code. It also has its own rules relating to smart meter installations and operation. Frocesses can also vary between networks, which can be difficult and cumbersome for small retailers to navigate. However, the NSW specific requirements are less likely to be an issue in NSW as they are in Victoria, which operates under its own retail code. In contrast, NSW and the other states have adopted the National Energy Consumer Framework (although there are still variations between states). Framework (although there are still variations between states).

Retailers were surveyed on their views about barriers to entry and expansion as part of the AEMC's 2020 review. They responded using a sliding scale to indicate how much of a barrier 'different retail licence arrangements/regulations' between jurisdictions are to entering and expanding in the retail market. The sliding scale went from 0 (not a barrier) to 100 (a very strong barrier). Retailers indicated that this was a much stronger barrier in Victoria (around 80 for entry and expansion), compared to the other jurisdictions, including NSW (which mostly indicated 30 to 40 for entry and expansion).⁵³

6 Price outcomes

We assessed the changes in electricity prices and the underlying costs of supplying electricity in 2020-21. We have also considered the most recent price changes in July 2021. In a competitive market, we would expect that the change in prices broadly reflects the changes in the underlying market costs of supply.

The sections below summarise the key trends since IPART began monitoring the market, and then discusses them in more detail. It also reports on the differences between regions for residential and business customers. The following chapter provides further analysis of the impact of the default market offer on pricing outcomes.

6.1 Overview of price trends

Residential electricity prices have fluctuated over the past 8 years since IPART began monitoring the market. An overview of the key trends in prices is shown in Figure 6.1:

- Prices have fallen from their peak in 2017-18 and 2018-19, and are now lower than in 2013-14 when IPART began monitoring prices. The most recent price reductions are due to falling wholesale prices.
- Standing offer prices (the dotted lines on the chart) are higher than market offer prices (the solid lines). The difference between them was largest in 2018-19, before new rules to cap standing offer prices were introduced in 2019-20. Standing offer prices have since fallen significantly, and the difference between standing offers and market offers has narrowed to 20% in 2020-21.
- Prices in regional areas have remained around 25% higher than prices in metro areas. This is because in regional areas network costs are around 60% higher than metro areas (per household), because the poles and wires cover a larger geographic area with a much sparser population.

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

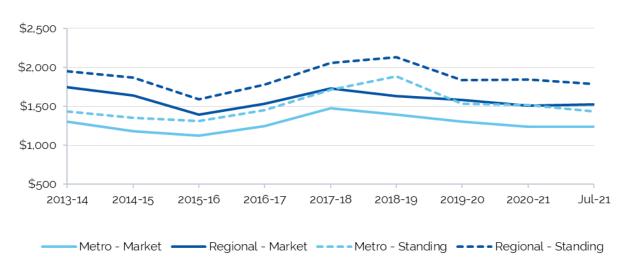


Figure 6.1 Annual residential electricity bills for median offers by offer type and region (based on 4,125 kWh of electricity purchased, including GST, nominal)

Note: The regional prices are for the Essential Energy network, while the metro prices are a median of all offers in the Ausgrid and Endeavour Energy networks.

Source: Offers available on EnergyMadeEasy.

6.2 Prices have fallen by around 5% since June 2020

As explained in Chapter 3, there are a range of different prices available in the market for different offers, depending on network area, type of offer (standing/market), and tariff type. This section discusses the price changes during 2020-21, and the recent prices in July 2021 since the new price caps for standing offers have come into effect.^{aa} 54

Figure 6.2 and Figure 6.3 show the changes in the median offer in each network area by offer type since June 2020. These are based on the available "all-day" offers in the market.

Figure 6.2 shows that retail prices for **residential customers** have fallen between June 2020 and June 2021, and again in July 2021. It shows that in 2020-21, the median **market offer** fell by around 5%. In July 2021, the median market offer was relatively unchanged.

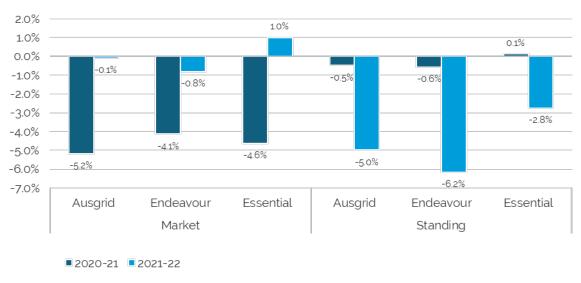
Standing offers are also lower than they were in June 2020. In 2020-21, **standing offer** prices remained fairly flat, before falling by around 5% in July 2021.

This pattern of falling market offers in 2020-21, followed by falling standing offers in July 2021 was also seen in offers for **business customers**. However, there was more variation in the price changes between networks and the median market offer fell by slightly more in 2020-21. Notably, the median market offer for Ausgrid business customers fell by 9% in 2020-21.

-

^{aa} On 1 July each year, network prices change. Many retailers adjust their prices at this time to reflect these changes, because network prices make up around half of their costs.

Figure 6.2 Change in median offers for residential electricity offers for 2020-21 and 2021-22 by network area and offer type (based on 4,125 kWh of electricity purchased, nominal)



Source: Offers available on EnergyMadeEasy, May 2021 July 2021.

Figure 6.3 Change in median offers for business electricity offers for 2020-21 and 2021-22 by network area and offer type (based on 20,000 kWh of electricity purchased, including GST, nominal)



Source: Offers available on EnergyMadeEasy, May 2021 July 2021.

6.2.1 The recent price reductions reflect falling wholesale costs

The falling retail prices broadly reflects the changes in the costs of supply. Therefore, we do not consider that a detailed review of prices and margins is required.

The 2020-21 price reductions were driven by falling wholesale costs. The other major cost component, network costs, increased by around 2% for typical residential customers.

Wholesale costs

Wholesale costs are relatively volatile. They currently make up around 30% of retailers' costs (based on retailers' costs of their lowest market offers).⁵⁵

Wholesale prices are set for each half hour of each day on the spot market. Figure 6.4 shows that the average annual wholesale spot price fell around 25% during 2020-21, from \$65/MWh in 2019-20 to \$48/MWh. The monthly average fell as low as \$35/MWh in February 2021.

However, prices spiked in the last quarter of 2020-21, which were at their highest level since 2007 for this time of year. Between March and June, spot prices exceeded \$5,000/MWh in NSW 8 times.⁵⁶ These high prices were largely driven by a high number of planned and unplanned coal generator outages,^{bb} as well as line outages around the Vic-NSW interconnector that limited NSW's ability to import cheaper generation from Victoria. Over this period, more expensive gas and hydro generation was needed to meet demand, and gas and coal prices were also high. At the same time demand increased with some very cold days with the beginning of winter.⁵⁷

Prices have since reduced (Figure 6.4) and are expected to stay low over 2021-22 and 2022-23.

Monitoring the NSW electricity retail market 2020-21

bb 80% of high prices across the NEM occurred in the 3 weeks following the failure of the Callide C power station on 25 May. This exacerbated the planned outages at Bayswater and Vales Point power stations, which were offline for almost the whole guarter due to maintenance.



Figure 6.4 Average wholesale spot prices since June 2018

Source: AEMO Average price data.

The impact of wholesale costs on retail prices can be difficult to measure due to the different ways that retailers manage their wholesale costs. While wholesale prices are set on the spot market, retailers manage these costs by purchasing contracts for a significant portion of their demand in advance based on their expectations of these prices. Many retailers build up this "hedge book" over two years in advance. This means that changes in the daily spot prices don't necessarily immediately impact retailers' margins or consumer prices. For example, Figure 6.5 shows that during 2018 and 2019, baseload futures contracts for 2020-21 were being sold for around \$75/MW, which was much higher than the ultimate average spot price of around \$50. These are financial instruments traded on the ASX and reflect an agreement to purchase electricity at an agreed price at a future date.

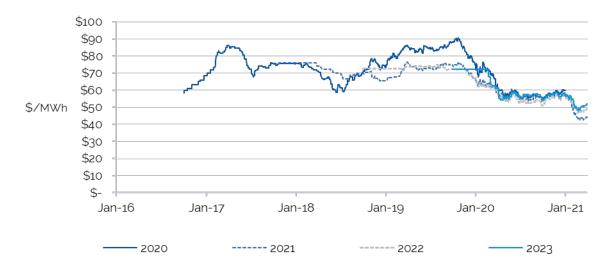


Figure 6.5 Prices for calendar year base futures contracts (calendar years)

Source: AER, Data - State of the energy market 2021 - Chapter 2 National Electricity Market, Figure 2.27 - Prices for calendar year base futures.

Baseload futures have increased by around 20% to since the March data shown in Figure 6.5 above. Since July 2021, base load futures contracts have averaged around \$60 to \$65 per MWh for the next 2 years. While these prices have increased, they do not indicate that participants are currently anticipating a significant market impact from the closure of Liddell power station over 2022 and 2023.

Network costs

Network costs are the costs of transporting electricity from the generators to customers via the transmission and distribution networks. Transmission costs make up around 5 to 10% of customers' bill and distribution costs make up around 35% (based on retailers' costs of their lowest market offers). 58 The AER sets the revenue that network operators can earn every 5 years:

- In 2018, the AER set the revenue that can be earned by Transgrid, which provides transmission services in NSW. The AER estimated that transmission costs will increase by around \$9 a year per household each year between 2018-19 and 2022-23 as a result of its decision.⁵⁹
- In 2019, the AER set the revenue that can be earned for the distribution network operators. As a result of its decisions, it estimated that network costs would fall by \$70⁶⁰ and \$25⁶¹ for typical households in the Ausgrid and Endeavour networks respectively by 2023-24 (compared to 2018-19). It estimates costs for the Essential network will increase by \$111 for the same period.⁶²

After the AER has decided how much revenue the network operators can earn, the networks can choose how to set their prices to recover these costs. Even if the AER's requires the networks' total revenue to go down, the network operators can increase some prices and offset these with other price reductions. The prices lists are approved by the AER each year.

We have used these network price lists to calculate the change in network costs for a typical customer on an 'anytime' tariff. Figure 6.6 shows there were mostly modest increases for 2020-21

and 2021-22 (around 2 to 5%), except for the Endeavour network in 2021-22, where network costs fell by almost 3%.

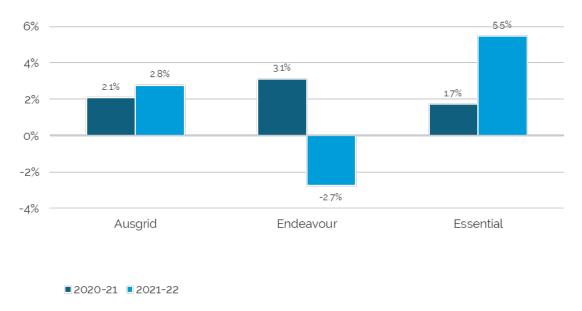


Figure 6.6 Change in network costs 2020-21 and 2021-22

Source: Network price lists.

6.2.2 Different price changes for market and standing offers

Figure 6.2 and Figure 6.3 show differences between the price changes for standing and market offers.

The changes in standing offers reflect the changes to the DMO prices set by the AER. As discussed elsewhere in this report, the DMO caps the prices for standing offers, and so most retailers set their standing offer in line with the DMO.

The DMO price is set above the level of efficient costs to provide 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. 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 is likely to overestimate retailers' costs. ⁶⁴

In addition, standing offer price changes may lag behind market offer changes. The AER must finalise the DMO in April for the next financial year⁶⁵ and then prices must apply for the whole year.⁶⁶ In contrast, retailers can update the market offers at any time to reflect changing market conditions.

6.2.3 Changes in what customers pay

The prices in the section above are based on the available offers in the market, rather than the prices from customers' bills. There may be a slight difference between the change in the median available offers versus the offers that customers are actually on. As shown in Chapter 4, only around 20% of customers switch each year, choosing the newest offers. The older offers may no longer be generally available, and the change in the prices of these offers may lag.

The NSW Government collects bill information from retailers for rebate customers, and it publishes an overview of the data each year. Around a third of NSW residential customers are rebate customers. We understand that this data may be available for our consideration for our Final Report. This will help us understand the prices that customers are paying – not just those that are available in the market.

The ACCC also collects billing data. It compares the first quarter of 2020-21 with the same quarter in 2019-20 using data across the three NSW networks. It shows:

- For residential customers:
 - A 3.1% reduction in market offers (compared to IPART's finding of around 5% reduction)
 - A 4.9% reduction in standing offers (compared to IPART's finding that these prices were flat)
- For business customers:
 - A 0.3% reduction in market offers (compared to IPART's finding of around 6% reduction)
 - A 6.8% increase in standing offers (compared to IPART's finding that these prices were relatively flat)⁶⁷

Part of the difference between the findings of IPART and the ACCC is that the ACCC's changes are for the 'effective' price', which also reflects changes in consumption. It is calculated as the bill divided by consumption. An average customer pays around 25% to 30% in fixed charges, which means that all else being equal, the higher the consumption, the lower the effective rate, and vice-versa. As explained in Chapter 9 of our report, the ACCC found that electricity use for all residential customers (those on standing and market offers) increased by 13% and fell for all business customers by 15% between the first quarter of 2019-20 and the first quarter of 2020-21 as a result of COVID-19 restrictions.⁶⁸

Draft findings



- 6. Prices in the market trended down in 2020-21.
 - The median market offer fell by around 5%.
 - The median standing offer was relatively unchanged.



7. Price changes broadly reflected the underlying changes in costs in 2020-21. A detailed review of prices and profit margins is not required.

6.3 Prices have fallen since IPART has been monitoring prices

As explained in Chapter 1, IPART stopped setting retail electricity prices from July 2014 when competition was found to be sufficiently developed. Since then, we have been monitoring the prices in the market. Figure 6.7 shows that most prices have fallen during this time. All prices have fallen in real terms (when the impact of inflation is taken into account).

The largest price reductions were in the Essential network, where market prices have fallen by 13% since 2013-14 (22% real), and standing offer prices have fallen by 8% (18% real). This is due to significant reductions in network costs (see Figure 6.8 below).

In the Ausgrid and Endeavour networks, market prices have fallen by around 5% (15% real) since 2013-14, while standing offers are almost the same as the regulated prices in 2013-14 (an 11% price reduction in real terms).

5% 0% 0% -5% -4% -5% -10% -8% -11% -11% 13% -15% -15% -15% -20% -18% -25% Endeavour Essential Endeavour Essential Ausgrid Ausgrid Market Standing ■ Nominal ■ Real

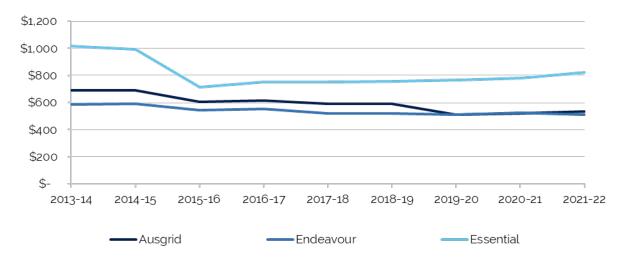
Figure 6.7 Change in residential prices since 2013-14

Source: Offers available on EnergyMadeEasy,

The reduction in prices over this longer period mainly reflects reductions in network costs that occurred in 2015-16 (Figure 6.8). Figure 6.8 shows that network prices fell by around 10% for a typical residential customer in 2015-16 for the Ausgrid and Endeavour networks, and around 30% in the Essential network area.

These reductions were subsequently more than offset by large increases in wholesale prices, which peaked in 2017-18. Wholesale prices increased due to high coal and gas prices, and the closure of Hazelwood power station in March 2017. Since then, wholesale prices have fallen as the supply of renewable energy sources has grown – particularly rooftop solar.

Figure 6.8 Network costs for residential customer since 2013-14 (4,125 kWh electricity purchased, by network area)



Source: Network price lists.

Draft finding



- 8. IPART began monitoring the market when competition was found to be sufficiently competitive to protect customers. Prices have fallen in real terms since IPART began our monitoring role:
 - In the Essential network, market prices have fallen by 22% in real terms, and standing offer prices have fallen by 18% since 2013-14.
 - In the Ausgrid and Endeavour networks, market prices have fallen by around 15% in real terms, and standing offers are 11% lower compared to 2013-14.

7 Impact of the default market offer (DMO)

As explained in the previous chapter, the "Default market offer" or "DMO" is a cap on bills at a specified level of consumption that a retailer can charge customers. The AER introduced the DMO on 1 July 2019 and resets it every year.

A different DMO applies for each network areas across most regions in Australia – in particular, it applies where a state does not have another form of price regulation. The AER sets the DMO for each network that should broadly reflect the costs it expects retailers to incur in supplying electricity to customers.

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').⁷²

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

7.1 Standing offer prices have fallen

Figure 7.1 shows how prices have changed since the introduction of the default market offer, using residential 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.

Figure 7.1 also shows a significant reduction in standing offer prices in 2019-20 when the DMO was introduced. The median standing offer fell by 9% to 19% (depending on network area, and customer type (business/residential)). The 75th percentile price fell by around 25% for residential customers and 17% to 24% for business customers (depending on network area). These reductions in prices was much greater than the change in the median of retailers' lowest market offers during the same period (reductions of up to 3%).

The lower standing offer prices has been maintained in 2020-21.[∞]

Appendix B includes the charts of the Ausgrid and Essential Energy networks for business and residential customers.

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^{cc} Compared to the standing offer prices in the two years before the DMO was introduced.

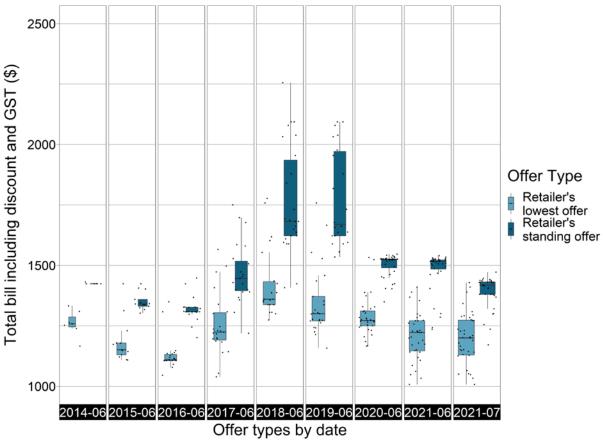


Figure 7.1 Distribution of residential offers in the Endeavour Energy network (4,215 kWh of electricity purchased)

Note: Any-time offers only.

Source: Offers available on EnergyMadeEasy

Draft finding



9. Median standing offer prices fell by between 9 and 19% when the default market offer ("DMO") was introduced in 2019-20.

7.2 The spread of offers widened in 2020-21

As a result of the falling standing offers, the difference between the standing offers and market offers reduced significantly in 2019-20. The average difference between each retailer's lowest offer and standing offer narrowed from around 23% to 16% compared to the previous year.

The spread of retailers' lowest offers also reduced in 2019-20. This is shown in Figure 7.1 above by the size of the lighter blue box, which halved compared the previous years. The blue box shows the bills at the 25th, 50th, and 75th percentiles.

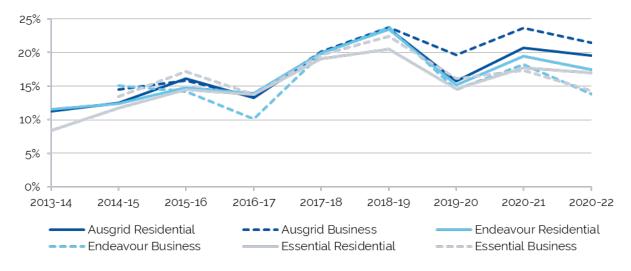
Figure 7.1 shows that the lowest offers fell overall in 2019-20. However, last year we reported that the reduction in the spread of offers may indicate that the DMO may have caused the lowest market offers to be higher than what they otherwise would have been.⁷³ Preventing retailers from charging higher standing offer prices to some customers may reduce the available revenue to fund larger discounts for other customers.

The range of offers in 2020-21 increased, which suggests that this has not be the case. In particular:

- The range of retailers' **lowest** offers increased similar to the range in 2017-18 and 2018-19. This is also seen in the July 2021 data (Figure 7.1)
- The average difference between retailers' lowest offers and standing offers increased closer to 20% overall ranging from an average of 17% to 24% depending on the network and customer type (business/residential) (Figure 7.2).

On 1 July 2021, standing offers fell by around 5% while market offers stayed steady. As a result, the difference between standing offers and the lowest offers reduced again to 14% to 21%. This reduction may be temporary as retailers may be slower to adjust their market prices. We will monitor the impact during the 2021-22 year in our report next year.

Figure 7.2 Average difference between each retailer's lowest and standing offer (as a percentage of the standing offer)



Note: Any-time offers only. We don't have data on market prices for business customers for 2013-14. Source: Available offers on EnergyMadeEasy.

Draft finding



10. The spread of offers increased in the market in 2020-21. The average difference between a retailers' lowest and standing offers was around 20% up from 16% in the previous year.

7.3 Impact on customer engagement and innovation

The intent of the DMO to ensure that disengaged customers do not pay excessive prices. However, it could result in some fewer customers actively shopping around because they believe that they are paying a 'fair' price for energy – even though they could switch onto a cheaper market offer. In turn, a smaller market for 'active' customers could lead to less vigorous competition and innovation, with fewer retailers competing in this market. The requirement for retailers to compare their offers to the DMO may also stifle innovation for non-average customers. This is explained in more detail below.

Overall, there appears to be no evidence of lower customer engagement during 2020-21. As discussed in Chapter 4, switching rates were similar to before the DMO was introduced, and customer sentiment improved from the previous year. As discussed in Chapter 3, there are increasingly innovative offers in the market. To better understand the impact of the requirement to use the DMO as a 'reference price', we will further investigate the level of tariff differentiation in our Final Report.

7.3.1 Requirement to compare offers to the DMO

Prior to the introduction of the DMO, some retailers would set very high standing offer prices so they could advertise very large discounts from these rates. As a result, the bills for the offers with the largest discounts could be higher than the offers with low or no discounts. So that offers are comparable, retailers are now required to compare their offers to the DMO, which serves as a common benchmark.

The DMO is set a level for the average annual consumption in each network areas. This makes offers much easier for average customers to compare offers. However, it can result in offers designed for other different patterns of consumption comparing poorly, even if these offers would provide the best value for these type of customers (Box 7.1 provides an example to illustrate this). As a result, retailers may be less likely to design offers that benefit non-average customers.

Last year, the AEMC reported that some retailers found it difficult to advertise some offers while meeting the requirements to compare market offers with the DMO. These offers include spot market pass through offers or offers that included a feed-in tariff for solar. Because the feed-intariff component could not be accounted for in the comparison to the reference price, these bills can appear higher than what a customer is likely to actually pay.⁷⁴

Box 7.1 Example of how headline discount can vary depending on assumed level of consumption

This example shows three offers that are tailored to different households: small, medium, and large. Compared to the example DMO, offer 1 would have the highest headline discount rate at 10%. However, the best offer for each customer depends on the household consumption.

The bolded cells in the table below show the best offers for each household size. It shows that offer 1 is best for an average household. However a low consumption household (3,000 kWh per year) would be best off on offer 2, which has a low supply charge, and a higher usage tariff. A high consumption household (using 9,000 kWh per year) would be better off on offer 3, which has a highly daily usage charge, and a low consumption tariff.

Offer	Daily supply charge	Consumption tariff	Bills for different households Consumption (kWh pa)		Discount to DMO	
	cents	c/kWh	Low (2,500 kWh)	Average (4,200 kWh)	High (9,000 kWh)	
Example DMO				\$1,600		
Offer 1	86	27	\$989	\$1,448	\$2,744	-10%
Offer 2	24	34	\$938	\$1,516	\$3,148	-5%
Offer 3	300	16	\$1,495	\$1,767	\$2,535	10%

7.4 Mixed views on whether the DMO is at the right level

In our view, the DMO is a reasonable measure to balance protecting consumers from higher standing offer prices. We support it being set at a level that ensures retailers and customers have an incentive to engage in the market to drive prices down over the longer term.

Retailers have told us as part of this review process that the DMO should be higher to support longer term outcomes. Retailers considered that the DMO should include additional allowances for:

- Regulatory costs associated with increasing compliance and obligations. Some retailers have advised that they have reallocated resources from their R&D teams to manage the regulatory changes.
- Increased bad debts from the COVID-19 impact and the inability to disconnect from AER's Statement of Expectations.
- Installation of smart meters.

These concerns were similar to those previously raised to the AER for consideration in setting the DMO for 2021-22. The AER decided to not make any adjustments to the DMO price to reflect increases in retailers' operating costs under the 'step-change' framework. Under the step change framework, the AER assesses whether the DMO policy objectives would be achieved if an adjustment was not made.

It considered that the increased retailer costs due to impact of COVID-19 were not significant enough to warrant an adjustment, and that the penetration of advance meter costs is too low to warrant an allowance. It also considered that incremental cost changes due to new regulatory requirements would generally be compensated by CPI indexation in calculating the DMO.⁷⁶

The AER applied a 'stress test' increase of \$35 to retailer costs (as an estimate of the cumulative impact of additional retailer costs). Even accounting for these, the AER estimated that the buffer in the DMO provides around 11% to 15% margin across retailers in the Essential, Endeavour and Ausgrid network. It considered that this buffer was sufficient to absorb increases in costs and concluded that the DMO price continues to meet the policy objectives.⁷⁷

8 Prices for customers in embedded networks

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.⁷⁸

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. 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.

Owners are also able to outsource energy services to an authorised retailer. However, in these situations, consumers are not protected by the DMO. This is because customers of embedded networks do not fall under the definition of 'small customers' to which the DMO applies. dd This also means that there is no requirement for retailers to reference their embedded network offers against the DMO.

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 EnergyMadeEasy and also requested prices from retailers on a voluntary basis.

8.1 Embedded networks could negotiate or seek better electricity offers

From the information available, we did not observe any embedded network offers for small customers that were above the relevant DMO (Figure 8.1 and Figure 8.2). Most offers were below the DMO. However, these offers do not represent the full range of prices actually paid by embedded network customers.

dd Under the Competition and Consumer (Industry Code – Electricity Retail) Regulations s. 6(2), the DMO applies to 'small customers' which are residential customers, residential customers with a controlled load and small business customers. However, Regulation s. 6(3)(c) states that a consumer is not a 'small customer' if the supply is by means of an embedded network.

ee Altogether, WINconnect, Energy Locals, Humenergy Group, EnergyAustralia and Evergy's offers were available on EnergyMadeEasy. Origin Energy, Network Energy Services and ENSA provided their prices voluntarily.

Altogether \$1,393 EnergyAustralia (Ausgrid **Energy Locals** DMO) Ausgrid **ENSA** Evergy Humenergy Group Network Energy Services Origin Energy WINconnect Altogether \$1,609 (Endeavour Energy EnergyAustralia =ndeavour **Energy Locals** DMO) **ENSA** Humenergy Group Network Energy Services Origin Energy \$1,907 WINconnect (Essential Energy Energy Locals Essential Energy DMO) **ENSA** Humenergy Group Origin Energy WINconnect \$1,100 \$1,700 \$1,900 \$900 \$1,300 \$1,500 \$2,100

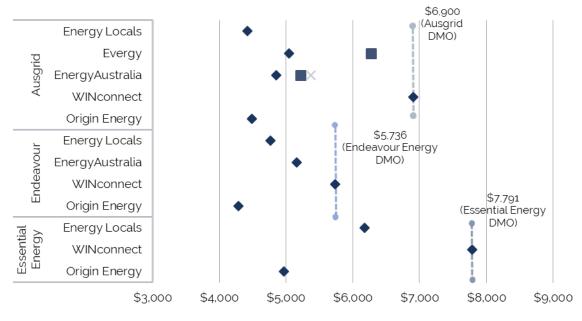
Figure 8.1 Embedded network (single rate) offers - Residential (August 2021)

Note: Some of the offers available are specific to a particular embedded network, whereas others are standing offers available to any embedded network within the distribution area.

There is limited data on the number of embedded network customers in NSW. Some stakeholders have reported that it could exceed 500,000 customers across the NEM (AEMC, Updating the regulatory frameworks for embedded networks, June 2019, p ii.).

 $Source: Voluntary\ responses\ to\ data\ requests\ and\ Energy Made Easy\ (available\ as\ parked\ offers).$

Figure 8.2 Embedded network offers (single rate) – Small business (August 2021)



Source: Voluntary responses to data requests and EnergyMadeEasy (available as parked offers)

Figure 8.1 and Figure 8.2 also show that offers vary considerably with some retailers only listing rates that are equal to the DMO. However, they may charge lower rates that are not publicly available as they offer to match competitors' rates. In discussions, retailers advised that they consider the embedded network market to be competitive and that Body Corporates/Owners Corporations can negotiate better deals or switch providers.

Where apartment/unit owners can represent their interests on the Body Corporate, there is an incentive to negotiate or switch providers for a better deal as they would personally benefit from the lower rates. Based on Figure 8.1 and Figure 8.2, there may be some embedded networks on rates that are equal to the DMO or could benefit from negotiating/switching to a better offer. Given that the key benefit of embedded networks is the ability to purchase electricity in bulk at discount rates, customers should be on offers lower than would otherwise be available to them individually. However, there are reports of Body Corporates being locked into long-term supply agreements at uncompetitive rates.^{ff}

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. The AEMC has previously conducted a review into updating the regulatory framework for embedded networks, which could benefit all customers in embedded networks. This is discussed further in the next section.

8.2 Improved customer protections are needed for embedded network customers

In 2017, the AEMC completed a review of the regulatory frameworks for embedded networks following substantial growth in the number of embedded networks registering to be exempt sellers with the AER. Its recommendations included:

- improving individual consumer access to retail market competition in embedded networks by capturing all embedded network customers in AEMO's market systems and by standardising network billing arrangements between embedded networks and NEM retailers
- elevating embedded networks to the national energy framework to ensure that customers receive the same level of consumer protections as customers that interact directly with their retailer.^{99 81}

In its 2017 review of the regulatory arrangements on embedded networks, the AEMC was informed of a situation in a new apartment block where at the first annual general meeting, the owners corporation was formed and then required by the developer to sign a 10-year fixed term contract with a company arranged by the property developer for utilities, including electricity. The electricity rates turned out to be higher than the local standing offer. AEMC, Review of regulatory arrangements on embedded networks – final report, November 2017, p 41.

⁹⁹ The National Electricity Retail Law (NERL) and National Energy Retail Regulations (NERR) that apply to retail customers do not apply to consumers in embedded networks. This is because the tripartite relationship between retailer, customer and local network service provider does not translate in the context of embedded networks, as there is no local network service provider at the child connection point for the consumer in the embedded network (instead there is the embedded network service provider). For example, the AER has less ability to monitor and enforce requirements such as proper notice for planned interruptions by embedded network service providers. AEMC, Review of regulatory arrangements on embedded networks – final report, November 2017, pp 144-145.

In 2019, the AEMC recommended specific legislative changes to implement the advice it provided in its 2017 review. Its proposed legislative changes are currently with the COAG Energy Council.⁸²

Over 2020-21, EWON received about 80 to 130 complaints per quarter from embedded network customers and most of these (about 80%) related to services provided by authorised retailers. ⁸³ The most common issues were about high bills and difficulty leaving embedded networks to access retail competition.

8.3 The NSW Government is consulting on charging options for land lease communities

Land lease communities are embedded networks where consumers own or rent the home they live in but lease the land from a community operator (for example, caravan and residential parks).

In NSW, the *Residential (Land Lease) Communities Act 2013 (NSW)* limits the amount that land lease community operators may charge residents for electricity. Operators cannot charge residential more than the amount the operator has been charged for electricity consumed by the resident. This has provided lower than average electricity prices for many residents. However, it also means that operators cannot levy an additional charge to recover costs associated with maintaining the embedded network, billing, meter reading and EWON membership fees.⁸⁴

The Government is currently consulting on setting the maximum price that operators can charge at the median market price as published by IPART.⁸⁵ Appendix B shows the tariffs of the median market offers for each distribution network.

8.4 NSW Government energy assistance measures extended to embedded network customers

The NSW Social Programs for Energy Code (Code) sets out how retailers must assist in delivering the Government's energy assistance measures (e.g. rebates available for eligible participants such as concession card holders and receivers of the family tax benefit) and how they claim reimbursement from the Government.

Both EWON and PIAC previously raised concerns that embedded network customers are excluded from access to the NSW Government's energy assistance measures, for example Energy Accounts Payment Assistance vouchers.⁸⁶

The revised NSW Social Programs for Energy Code now extends the Government's energy assistance measures to embedded network customers from 1 February 2022.87

9 Impacts of COVID-19

The restrictions from COVID-19 have had a major impact on the economy and customers' behaviour. There were changes in how customers used electricity, and also in their financial circumstances, with some being impacted by job losses.

This chapter discusses the impacts on electricity customers and the measures that have been put in place to help them during this time. It also considers the impacts that COVID-19 has had on retailers.

We expect that the impact of COVID-19 will be greater in NSW over 2021-22. NSW entered into more lockdown restrictions from late June 2021, which are anticipated to continue until at least October 2021 at the time of this report. We will continue to monitor the impact of COVID-19 in our next review.

9.1 Increases in residential bills

While prices generally fell or stayed steady in 2020-21, overall bills increased for residential customers. This is because customers used more electricity as they spent more time at home. Many households shifted to working from home during all or parts of this period.

In its May report on its Inquiry into the National Electricity Market, the ACCC considered the change in quarterly consumption and bills over the past three years. In NSW, the median quarterly usage for residential customers increased by 13% and the median quarterly bill increased by 11% (or \$37) between the first quarter of 2019-20 and the same quarter in 2020-21.88

The increase in residential usage as a result of COVID-19 is significant given the longer-term trend in prior years of a gradual reduction in grid electricity use, reflecting improved energy efficiency and increased uptake of solar panels.⁸⁹

Figure 9.1 shows the change in average quarterly bills for different groups of customers, including:

- Concession customers, who are customers who received rebates or assistance under the NSW Social Programs for Energy Code (e.g. rebates are available for eligible participants such as concession card holders and receivers of the family tax benefit).
- Hardship customers, who are customers who participated in a retailer's hardship program. Retailers are required under the National Energy Retail Law 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.

The bills for all customer groups increased during 2020-21, except for payment plan customers, which are already significantly higher than other customers. The median quarterly bill for payment plan customers was an average of \$140 higher than general customer in 2020-21, and the median quarterly bill for hardship customers in 2020-21 was around \$110 higher (see Table 9.1)

Bills for concession customers were lower than for general customers, as they receive rebates on their bills.



Figure 9.1 Quarterly bill by residential customer groups in NSW

Note: The chart shows the 25th percentile, median (middle line) and 75% percentile of quarterly bills by residential groups. Source: ACCC, Appendix E, Supplementary spreadsheet with billing data and figures, May 2021, Residential bills

The bills for hardship and payment plan customers are higher than for general customers because on average, these customers use more electricity. In NSW, hardship customers' median quarterly usage of around 2,500 kWh was around 1,000 kWh higher that of general customers in 2020-21. Payment plan customers used around 700 kWh more than general customers in 2020-21.90

The higher usage by customers on hardship and payment plans is likely due to a number of factors. They 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). With lower uptake of solar panels, these customers are more reliant on electricity usage

from the grid. They may also reside in properties and use electrical appliances that are less energy efficient.⁹¹

9.2 Support in response to COVID-19

There were a number of assistance measures introduced to help customers manage the impacts of COVID-19. These included both general assistance (such as the Commonwealth job keeper program and increases to job seeker) and also additional measures and rebates targeted specifically for electricity use. These are discussed below.

The number of customers entering hardship programs across the NEM over 2020-21 was below the pre COVID-19 benchmark. This is likely due to the range of support measures provided to vulnerable customers in response to the pandemic.

9.2.1 No disconnections without customer consent

The AER published its first Statement of Expectations of energy businesses on 9 April 2020 to protect consumers during the COVID-19 pandemic. It asked retailers to offer payment plan or hardship arrangements to all residential and small business customers who may be in financial stress, and not to disconnect customers without their agreement. The expectations have been extended and amended three times, after they were originally intended to lapse at the end of June 2021.

On 29 June 2021, the AER announced that the Statement of Expectations will be on 'standby'. This means that it will automatically come into effect when a Local Government Areas (LGA) is subject to stay-at-home orders that last 7 days or more and will continue to apply for 14 days after stay-at-home orders are lifted. 92

In terms of actual disconnections over 2020-21, as expected they were below the pre COVID-19 benchmark. The number of disconnections averaged around 500 a week across the NEM in 2020-21, which is significantly less than pre-COVID-19 benchmarks of around 1,400 disconnections a week.⁹³

In our recent discussion with PIAC, it emphasised for retailers to be more proactive in assisting vulnerable customers. PIAC raised concern that some retailers may be waiting until after the pandemic to disconnect customers for non-payment, rather than engaging with them now to help them reduce their debt. In its view, disconnections are not effective at overall debt management, as vulnerable customers will go without food and other essentials to keep their electricity connected.

While there have been lower levels of customers entering hardship programs, the AER's data shows that average level of hardship debt on entry has increased over 20% higher than the benchmark. This implies that the customers have been entering hardship programs once they have accumulated larger amounts of debt. Customers already on hardship programs were also found to be accumulating more debt.

9.2.2 NSW Government support

To assist vulnerable customers, the NSW Government temporarily increased the Energy Accounts Payment Assistance (EAPA) Scheme^{hh} from its annual limit of \$1,200 per household to \$1,600. In 2020-21, around 59,000 energy customers received over 366,000 EAPA vouchers and the EAPA spend was 27% higher compared to 2019-20.94

The NSW Government also offers a range of assistance to households. Its assistance payments are shown in Table 9.1.

Table 9.1 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
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

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 21 September 2021

9.2.3 Assistance for business customers

In contrast to residential customers, small businesses' bills fell over 2020-21. This reflected government restrictions and reduced onsite business activity, or in some cases, closing their businesses. In NSW, the median quarterly usage decreased by 17% and the median quarterly bill decreased by 15% (or \$90) between 2019 and 2020.95

However, even if businesses were required to close, they still incur electricity costs. At a minimum, they continue to pay the fixed charges of being connected, even if they are not using electricity.

hh The Energy Accounts Payment Assistance (EAPA) Scheme helps people experiencing a short term financial crisis or emergency to pay their electricity or natural gas bill. This scheme is only for short term assistance. The NSW Government first announced this increase on 27 April 2020 and the duration of the increased limit is being reviewed on an ongoing basis in light of lockdown circumstances.

In April 2020, Energy Networks Australia announced its 'network relief package'. Under this package they rebated network charges for small businesses if their consumption was less than 40MWh and significantly reduced (by 75%) between 1 April to 30 June 2020. ⁹⁶

In our recent discussion with stakeholders, one advised that in their view, they found that the network relief package eligibility requirements were relatively difficult and even when accessed, the value of rebated network charges was relatively low (around \$50 per quarter per business).

9.3 Impact on retailers

Energy retailers are facing increased costs and falling revenues arising from COVID-19. Additional costs may include 'onshoring' workers, closing call centres and transitioning workforces to a working from home arrangement.

There are also substantial customer related costs including an increased focus on hardship programs, and bad and doubtful debt expenses. In our recent consultation with various retailers, there was consistent feedback of increasing customer debt due to COVID-19. Retailers who have previously relied upon its ability to disconnect customers to assist its debt collection process, are bearing more bad debt risk since the implementation of AER's Statement of Expectations.

While this has mostly been manageable to date, this has impacted their retail margins. The retail margin earned by smaller retailers are also considerably lower than that earned by large retailers, meaning that small retailers are likely to be disproportionately impacted by increases in customer debt.⁹⁷

Given the increasing detrimental impact to retailers' cash flows and margins, some retailers have expressed to us the need to consider extra bad debt allowances when estimating the DMO cap. As discussed in Chapter 7, in its most recent DMO determination, the AER considered that the increased retailer costs due to impact of COVID-19 were not significant enough to warrant an adjustment.

The network relief package provided some relief for retailers. For small retailers, network charges were rebated for residential customers where payment goes into default/arrears as a result of COVID-19. For large retailers, network charges were deferred for residential customers who go on payment plans or hardship arrangements as a result of COVID-19.98

On 6 August 2020, the AEMC formalised and extended this package with a rule change that allows some (small) retailers to defer paying some network costs incurred between 6 August 2020 and 6 February 2021 for up to six months.⁹⁹

IPART also provided concessional treatment to some retailers regarding their Energy Savings Scheme (ESS) obligations for 2020.

-

Eligible small retailers' individual energy savings target for 2020 were reduced by 100%. The NSW Government provided this relief to small retailers through a Ministerial Order, the Energy Savings Scheme (Small Retailer) Order 2020.



A List of retailers in the market

Table A.1 below shows the retailers that had electricity offers available on Energy Made Easy in May 2021. 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 May 2021

	3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3				
	Retailer	Tariffs offered			
		Any time (single rate)	Time of use (TUO)	Demand	
1	Origin Energy	✓	✓	Ausgrid business customers only	
2	i) EnergyAustralia	✓	✓	Ausgrid and Endeavour business customers only	
	ii) On by EnergyAustralia (new)	Residential only	Residential only	-	
3	i) AGL	✓	✓	Ausgrid business customers only	
	ii) ActewAGL	Endeavour and Essential only	Endeavour and Essential only	-	
	iii) Powerdirect	✓	✓	Ausgrid business customers only	
4	Red Energy	✓	✓	✓	
5	1st Energy	✓	✓	Ausgrid business customers only	
6	Alinta Energy	✓	✓	Ausgrid and Endeavour customers only	
7	Amber Electric	Residential only	-	-	
8	Arc Energy Group (new)	Residential only	-	-	
9	Blue NRG	Business only	Business only	Business customers only	
10	Bright Spark Power	✓	Business only	-	
11	CovaU	✓	✓	✓	
12	Diamond Energy	✓	✓	-	
13	Discover Energy	✓	✓	✓	
14	Dodo Power & Gas	✓	✓	-	
15	Electricity in a Box (new)	✓	✓	-	
16	Elysian Energy	✓	✓	✓	
17	Energy Locals	✓	✓	-	
18	Enova Energy	✓	✓	-	

19	Future X Power	✓	✓	-
20	Globird Energy	✓	✓	✓
21	Glow Power (new)	✓	✓	Ausgrid business customers only
22	i) Kogan Energy	Residential only	Residential only	-
	ii) Powershop	✓	Ausgrid and Essential only	Ausgrid business customers only
23	Locality Planning Energy	Residential only	Residential only	Ausgrid and Endeavour customers only
24	Mojo Power	✓	✓	-
25	Momentum Energy	Residential only	Residential only	Ausgrid and Endeavour customers only
26	Nectr	Business only	Business only	-
27	Next Business Energy	Residential only	Residential only	Business customers only
28	OVO Energy	Residential only	Residential only	-
29	People Energy (new)	Ausgrid and endeavour only	Ausgrid and endeavour only	-
30	Pooled Energy	✓	-	Ausgrid business customers only
31	Powerclub	✓	-	-
32	QEnergy	✓	-	Business customers only
33	Radian Energy (new)	✓	✓	-
34	ReAmped Energy	✓	✓	-
35	Simply Energy	✓	✓	Ausgrid business customers only
36	Smart Energy (new)	Ausgrid residential only		-
37	Social Energy (new)	Residential only	-	-
38	Sonnen (new)	Residential only	-	-
39	Sumo	✓	✓	Ausgrid and Endeavour customers only
40	Tango Energy	✓	✓	Ausgrid and Endeavour customers only

B Median market offers and tariffs

Table B.1 shows the median market residential offers in July 2021 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 July 2021

	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 and GST)	c/day (after discounts, excluding GST)	c/kWh (after discounts, excluding GST)	Annual kWh	Annual bill (including GST)
Ausgrid	\$1,177	80.4	19.9	3900	\$1,393
Endeavour	\$1,375	98.8	18.1	4900	\$1,609
Essential	\$1,621	121.7	22.4	4600	\$1,907

Note: Based on anytime offers only. Duplicate offers are excluded before the median offers are calculated. We exclude offers with eligibility criteria (e.g. to sport clubs), 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 July 2021

	Median daily supply charge	Median consumption rate
	c/day (after discounts, excluding GST)	c/kWh (after discounts, excluding GST)
Ausgrid	77.5	20.0
Endeavour	76.1	20.0
Essential	121.7	21.1

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

C Range of offers in each network area

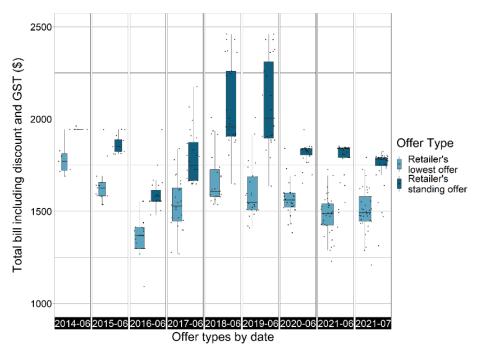
This appendix shows the range of offers in the market over time for residential and business customers by network area. The charts show the standing and lowest offers for each retailer. The bill amounts used in this appendix are based on based on consumption of 4,215 kWh for residential customers, and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

2500

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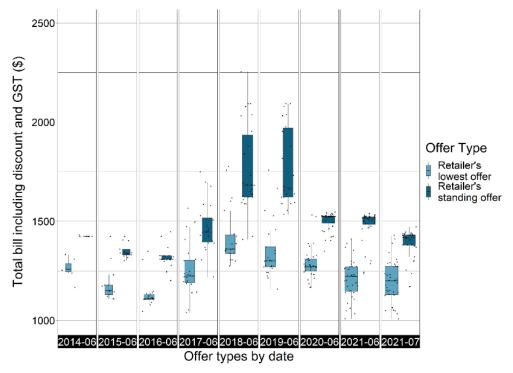
Figure C.1 Distribution of residential offers in the Ausgrid network (4,215 kWh)

Figure C.2 Distribution of residential offers in the Essential Energy network (4,215 kWh)



Note: Any-time offers only. Source:EnergyMadeEasy

Figure C.3 Distribution of residential offers in the Endeavour network (4,215 kWh)



2014-06 2016-06 2017-06 2018-06 2019-06 2020-06 2021-07

7500

Offer Type

SR Skanding

Offer types by date

Figure C.4 Distribution of business offers in the Ausgrid network (20,000 kWh)

Note: Any-time offers only. Source:EnergyMadeEasy

Figure C.5 Distribution of business offers in the Essential Energy network (20,000 kWh)

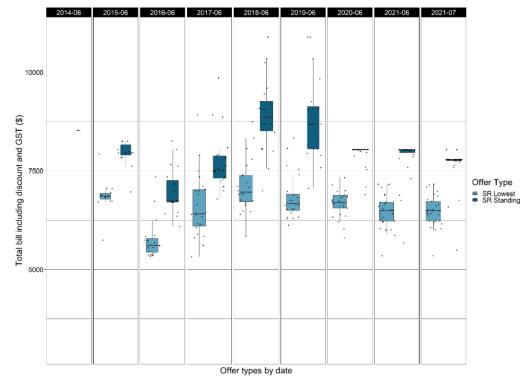
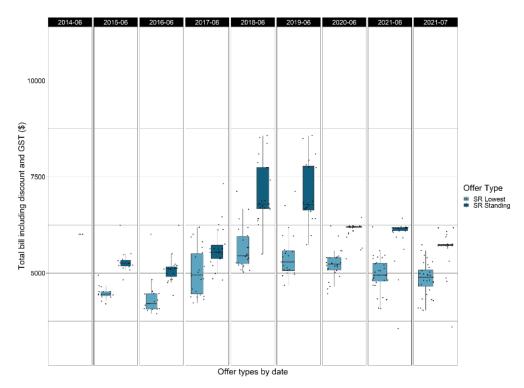


Figure C.6 Distribution of business offers in the Endeavour network (20,000 kWh)



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