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**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
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<tr>
<td>ACCC</td>
<td>Australian Competition and Consumer Commission</td>
</tr>
<tr>
<td>AEMC</td>
<td>Australian Energy Market Commission</td>
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<tr>
<td>AEMO</td>
<td>Australian Energy Market Operator</td>
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<tr>
<td>AER</td>
<td>Australian Energy Regulator</td>
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<tr>
<td>CDR</td>
<td>Consumer Data Right</td>
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<tr>
<td>c/kWh</td>
<td>cents per kilowatt hour</td>
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<tr>
<td>DELWP</td>
<td>Department of Environment, Land, Water and Planning (Victoria)</td>
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<tr>
<td>DMO</td>
<td>Default Market Offer</td>
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<tr>
<td>ECA</td>
<td>Energy Consumers Australia</td>
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<tr>
<td>EME</td>
<td>Energy Made Easy</td>
</tr>
<tr>
<td>Electricity Retail Code</td>
<td>Competition and Consumer (Industry Code—Electricity Retail) Regulations 2019—a mandatory code prescribed under the <em>Competition and Consumer Act 2010</em> (Cth)</td>
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<tr>
<td>Energy Retail Code (Vic)</td>
<td>a mandatory code established and maintained by the Essential Services Commission of Victoria</td>
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<td>ESCV</td>
<td>Essential Services Commission of Victoria</td>
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<tr>
<td>FiT</td>
<td>feed-in tariff</td>
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<tr>
<td>GST</td>
<td>goods and services tax</td>
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<tr>
<td>kWh</td>
<td>kilowatt hour</td>
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<tr>
<td>NEM</td>
<td>National Electricity Market</td>
</tr>
<tr>
<td>NERL</td>
<td>National Energy Retail Law—a schedule to the <em>National Energy Retail Law (South Australia)</em> Act 2011</td>
</tr>
<tr>
<td>NSW</td>
<td>New South Wales</td>
</tr>
<tr>
<td>PEMM Act</td>
<td>Prohibiting Energy Market Misconduct Act—Part XICA of the <em>Competition and Consumer Act 2010</em> (Cth)</td>
</tr>
<tr>
<td>PV</td>
<td>photovoltaic</td>
</tr>
<tr>
<td>SA</td>
<td>South Australia</td>
</tr>
<tr>
<td>SEQ</td>
<td>South East Queensland</td>
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<tr>
<td>SME</td>
<td>small and medium enterprise</td>
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<tr>
<td>VDO</td>
<td>Victorian Default Offer</td>
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<td>VEC</td>
<td>Victorian Energy Compare</td>
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Executive summary

The Australian Competition and Consumer Commission (ACCC) uses a new dataset encompassing over 8.5 million electricity bills in this report to assess the early effects of the Default Market Offer (DMO) and Victorian Default Offer (VDO) reforms implemented to improve affordability in the National Electricity Market (NEM). This is a unique dataset that we will be building on over the course of our inquiry to provide insights into the effects of those reforms and other changes in the industry on customer experiences.

Billing data enables us to examine outcomes for different residential and small and medium enterprise (SME) customer groups such as those on hardship programs or payment plans due to experiencing financial difficulties and those who had solar photovoltaic (PV) systems. It supplements our analysis of retailers’ costs of supplying electricity and their publicly available offers that was presented in our last two reports.

We used our compulsory information gathering powers to obtain the billing data from 11 retailers that collectively supply over 95 per cent of residential customers and 80 per cent of SME customers across Victoria, New South Wales (NSW), South Australia (SA) and South East Queensland (SEQ). We acquired data about every bill the retailers issued to over 1.5 million customers between 1 July 2018 and 31 December 2019.

We have also released a supplementary report that sets out recent market developments, including some of the effects of the COVID-19 pandemic on electricity used from the grid and updates on our electricity sector monitoring and enforcement work. Both reports are available on the ACCC’s website at: https://www.accc.gov.au/regulated-infrastructure/energy/electricity-market-monitoring-2018-2025.

Key results and findings

Prices paid by standing offer customers were generally lower in 2019

The median effective price paid by standing offer customers across the four regions decreased by 4.4 per cent (residential) and 7.5 per cent (SME) between 2018 and 2019. There were similar outcomes in each individual region, although the median effective price paid by standing offer customers dropped the most in Victoria, by 6.6 per cent (residential) and 18.5 per cent (SME).

These results are a good sign that the DMO and VDO reforms, which came into effect on 1 July 2019, have begun working to protect standing offer customers from paying excessive electricity prices and improve affordability.

At this early stage, the DMO and VDO reforms do not appear to have had adverse effects on market offer prices

The median effective price paid by market offer customers across the four regions decreased by 3.5 per cent (residential) and 1.5 per cent (SME). All individual regions saw decreases, although the median effective price paid by SME market offer customers in Victoria increased by 0.3 per cent.

It is encouraging that many market offer customers also saw savings after the DMO and VDO reforms came into effect, likely due to a range of factors including lower supply costs in most regions. In Victoria, changes in wholesale, network and environmental costs would have had net upward effects on prices.
We compared the changes in median market offer prices paid with estimated price impacts due to changes in supply costs to see whether the introduction of the DMO and VDO to regulate standing offers may be resulting in market offer customers paying higher prices. At this early stage, the DMO and VDO reforms do not appear to have had adverse effects on prices paid by market offer customers even though some advertised lower-priced market offers were withdrawn after 1 July 2019. Also, a larger proportion of customers chose market offers over standing offers in 2019, which indicates greater customer engagement.

The use of conditional discounts was less

The proportion of residential customers on market offers with conditional discounts decreased in every region between 2018 and 2019, with an overall drop from 65 to 59 per cent. This is consistent with results reported in our November 2019 report of a significant decrease in the number of advertised market offers with conditional discounts. The results are a positive outcome of reforms to advertising requirements following our concerns with the use of conditional discounts which resulted in significant penalties if customers did not meet the conditions, such as paying on time.

Usage was lower in 2019 but hardship and payment plan customers use more

Residential and SME standing offer customers across the four regions used around 7 and 9 per cent less electricity from the grid in 2019 Q3 compared with 2018 Q3, while market offer customers used around 2 and 6 per cent less. While also lower in 2019, hardship and payment plan customers had significantly higher usage from the grid than residential customers in general. Although these customer groups, which include many customers who experience financial difficulties, faced lower effective prices, their higher usage meant that their median annual bills in 2018–19 were $433 and $638 higher than the median annual bill of $1215 for residential customers in general.

It pays to shop around for market offers, especially for customers of the ‘big three’ retailers (AGL, EnergyAustralia and Origin)

The median effective price paid by residential market offer customers across the four regions was around 17 per cent lower than standing offer customers in 2019. For a standing offer customer that used a median amount of electricity from the grid, this difference means switching could save $219 a year. In the case of SME market offer customers, their median effective price across the four regions was around 25 per cent lower in 2019. This difference means switching could save a SME standing offer customer that used a median amount of electricity from the grid $424 a year.

While there will be some differences in results for individual retailers, the median effective price paid by market offer customers of the big three together was higher in every region, although the differences were greatest in SA and SEQ and Victoria (SME only). This means that customers of the big three retailers could potentially save the most by shopping around.

The DMO and VDO are useful benchmarks for all customers to compare offers across the market. Otherwise, free government energy comparison services such as Energy Made Easy (EME) and Victorian Energy Compare (VEC) are a way for customers to enter their usage data and compare the annual costs of offers to find the best deals for their individual circumstances.

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Best practice is for retailers to ensure that payment plan customers are on offers that minimise their costs

The median effective prices paid by concession and hardship customers across the four regions, two groups that include many customers who experience financial difficulties or other kinds of disadvantage, were around 17 and 15 per cent lower than residential customers in general in 2019. While the median effective price paid by payment plan customers who were facing financial difficulties was 2.5 per cent lower.

Lower prices for concession and hardship customers are likely a result of assistance provided to those customers. This includes government-funded discounts or rebates to help concession customers cover their energy costs and requirements for retailers to transfer hardship customers onto offers that will minimise their energy costs.

In contrast, there is no requirement for retailers to ensure that payment plan customers are on offers that will minimise their energy costs. Around 50 per cent of payment plan customers on market offers had conditional discounts in 2019, but less than 60 per cent of those customers achieved their discounts. This means that many of these customers ended up paying significant financial penalties and higher electricity prices, which may have exacerbated their existing financial difficulties.

We consider the best practice is for retailers to ensure that payment plan customers are on offers that most suit their circumstances. This would involve retailers transferring payment plan customers to offers that minimise their energy costs when they arrange to pay in instalments because of financial difficulty.

Retailers could do more to help SME customers minimise their costs

Around 15 per cent of SME customers across the four regions were still on standing offers in 2019 compared to around 8 per cent of residential customers. This indicates that SME customers are less engaged in the market than residential customers and are potentially missing out on opportunities to save on their electricity costs.

It is a positive that the Australian Government has progressed a recommendation we made for a program to help small businesses find better energy deals and reduce their energy use. But, with many SME customers potentially being too time poor to engage at all, we consider the best practice is for retailers to ensure that SME customers are on offers that most suit their circumstances and minimise their energy costs.

Government programs that help customers install solar PV systems could improve electricity affordability for those customers, but should not be at the expense of other electricity users

Feed-in tariff (FiT) payments to solar customers significantly reduce their effective prices for electricity used from the grid and improve electricity affordability. The median effective price paid by customers with solar PV systems across the four regions was around 24 per cent lower in 2019 than that paid by non-solar customers, although the results do not capture the upfront costs of installation. The effect was that, even though solar residential customers tended to use slightly more electricity from the grid in 2018–19 than non-solar residential customers, their median annual bill was $313 lower.

Hardship and payment plan customers used more electricity from the grid in 2019 than other residential customer groups and so would most benefit from a solar PV system, as would many SME customers. But they were the customer groups least likely to have solar PV

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systems and therefore may face heightened affordability risks through higher annual bills even if they are on the best-priced market offers.

There are merits to government programs that help customers who have high usage and are experiencing financial difficulties in particular to access solar PV systems. However, there will still be many customers who cannot access solar PV systems, either due to cost or other barriers. It is important that those customers do not face higher costs as a result of any such programs, as has been the case with some previous environmental schemes funded through increased network charges for all electricity users. We consider the best practice is for governments to fund programs in an equitable way, such as through government budgets, to avoid potentially exacerbating affordability issues for electricity users without solar PV systems.

Next steps

We will build on the analysis in this report using results for 2020 in our next report due in May 2021.
1. Introduction

Under our current inquiry, we monitor the effects of reforms and other changes on prices, profits and margins in the NEM. Below is some background to why the ACCC has this role, and how we have approached the task in this report.

1.1. Why the ACCC is monitoring customer outcomes

In 2019, the Australian and Victorian governments implemented the DMO and VDO respectively to cap standing offer prices for residential and SME customers. They also implemented rules about how and when electricity retailers are to present information to improve the comparability of offers across the market. In 2020, the Australian Government implemented the Prohibiting Energy Market Misconduct (PEMM) Act to ensure that electricity retailers pass on cost savings to customers, and to prohibit conduct by other market participants that would be detrimental to competition.¹

These reforms follow findings by the ACCC that the average effective price for residential customers increased by around 56 per cent in real terms between 2007–08 and 2017–18, and that electricity retailers had adopted pricing structures and marketing practices that were opaque and not comparable across the market.² The ACCC found common themes between the experiences and concerns of residential and SME customers.³

The Australian Government asked the ACCC to monitor the effects on customer outcomes over seven years, until 2025. Our terms of reference for the inquiry are at appendix A.

1.2. How the ACCC has approached the task in this report

In our last two reports we analysed retailers’ costs of supplying electricity to customers and the price of their publicly available offers. This provided information about what customers were paying on average and whether advertised electricity plans were generally becoming more or less expensive. But we could not use the data to analyse how the outcomes varied for different customer groups, or whether the results in advertised electricity plans were also reflective of the outcomes for existing customers.

To enable us to more extensively examine the factors affecting outcomes for different customer groups, we compulsorily acquired data from 11 retailers for over 8.5 million bills issued to over 1.5 million customers across Victoria, NSW, SA and SEQ between 1 July 2018 and 31 December 2019. The billing data includes account and plan details, tariff types, solar rebates, discounts available and achieved, concessions, bill amounts and usage. It also includes whether a customer was in a hardship program or on a payment plan due to financial difficulties. Unlike an analysis of advertised electricity plans, the billing data also captures prices paid by customers who are on plans that are no longer available.

Although there is a wide range of analysis that we could perform with the billing data, we have focussed our analysis in this report on five areas that provide key insights into the impacts of the DMO and VDO reforms on different customer groups. We have also established benchmarks for future analysis of, for example, the impacts of the COVID-19 pandemic on customer outcomes. The five areas are:

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² ACCC, Restoring electricity affordability and Australia’s competitive advantage, Retail Electricity Pricing Inquiry—Final Report, June 2018, p. v.
• bill amounts and effective prices
• types of electricity plans customers are on
• the proportion of customers on electricity plans with conditional discounts and how often they achieve the discounts
• electricity usage, including for those customers who have access to solar panels compared with those who do not
• tenure of customers on hardship programs.

We intend to repeat the data collection and analysis annually. We hope to extend our analysis of the billing data in future reports by, for example, combining it with demographic data from the Australian Bureau of Statistics (ABS) to examine outcomes for different socio-economic areas. We also welcome any suggestions on analysis that would be beneficial to include in our future reports.

Our data collection and analysis methodology is outlined in appendix B.
2. Overview of analysis and findings

In this section we present the key results from our analysis of the billing data, with further detail provided in the following sections. We also bring that analysis together with some conclusions on areas that look to be working well and those that might need a greater focus.

2.1. Key results

Prices paid were generally lower in 2019 than in 2018

There were improved outcomes for many standing offer customers in 2019 as the median effective price paid across the four regions decreased by 4.4 per cent (residential) and 7.5 per cent (SME), while the median effective price paid by market offer customers decreased by 3.5 per cent (residential) and 1.5 per cent (SME) (figure 2.1). There were similar outcomes in each individual region, although the median effective price paid by standing offer customers dropped the most in Victoria, by 6.6 per cent (residential) and 18.5 per cent (SME), and the median effective price paid by SME market offer customers in Victoria increased by 0.3 per cent.

Figure 2.1: Median effective prices paid by residential and SME standing and market offer customers in 2019 Q3 (change from 2018 Q3), all regions combined

We had expected the decrease for standing offer customers owing to the introduction of the DMO and VDO on 1 July 2019, including the bigger decrease in Victoria given the lower-priced VDO. Around 86 per cent of residential standing offer customers had tariff types that were covered by the DMO and VDO and so would have immediately benefitted from the reforms. Around 71 per cent of SME standing offer customers were also on tariff types that were covered. We expect the majority of all standing offer customers to be covered from 2020 onwards following increased coverage of both the DMO and VDO.
The decrease for many market offer customers was also welcome, likely due to a range of factors such as lower network and wholesale costs and customers using the DMO and VDO as benchmarks to shop around for a better deal. For example, wholesale costs, which comprise around 33 per cent of residential customer bills, dropped by 3 per cent on a c/kWh basis between 2017–18 and 2018–19 at the NEM-wide level.\(^7\) In Victoria, however, changes in wholesale and network costs would have had net upward effects (table 2.1). A few retailers also stated that they contacted customers to ensure that they were on the retailer’s best plan, and reduced prices for some market offer customers on non-discounted plans. These announcements were made ahead of the commencement of the DMO and VDO reforms, and new rules in Victoria requiring retailers to tell their customers whether they are on the retailer’s best offer.

### Impact of DMO and VDO reforms on market offer prices

One concern with the introduction of the DMO and particularly the lower-priced VDO was that retailers would increase prices for market offer customers to make up for lost revenue from standing offer customers. A comparison of the changes in median market offer prices paid with estimated price impacts due to changes in supply costs, however, does not indicate that the introduction of the DMO and VDO have had adverse effects (table 2.1). In most cases, the decrease in the median effective price paid by market offer customers was greater than the effects of changes in estimated wholesale, network and environmental cost impacts. In Victoria, the increase in the median effective price paid by SME market offer customers was less than indicated by the change in estimated supply costs. Competition among retailers may be maintaining downward pressure on market offer prices.

Table 2.1: Changes in median market offer effective prices paid compared with estimated price impacts of changes in supply cost components

<table>
<thead>
<tr>
<th></th>
<th>Change in median market offer price paid (c/kWh; 2018 Q3 to 2019 Q3)</th>
<th>Estimated average price impact due to network, wholesale and environmental costs (c/kWh; 2017–18 to 2018–19)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All regions / NEM-wide</td>
<td>-3.5%</td>
<td>-0.8%</td>
</tr>
<tr>
<td>Victoria</td>
<td>-1.4%</td>
<td>3.7%</td>
</tr>
<tr>
<td>NSW</td>
<td>-4.4%</td>
<td>-1.3%</td>
</tr>
<tr>
<td>SA</td>
<td>-3.1%</td>
<td>-3.1%</td>
</tr>
<tr>
<td>SEQ</td>
<td>-7.6%</td>
<td>-4.9%</td>
</tr>
<tr>
<td><strong>SME</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All regions / NEM-wide</td>
<td>-1.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Victoria</td>
<td>0.3%</td>
<td>8.9%</td>
</tr>
<tr>
<td>NSW</td>
<td>-2.8%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>SA</td>
<td>-1.0%</td>
<td>-5.7%</td>
</tr>
<tr>
<td>SEQ</td>
<td>-3.7%</td>
<td>-9.0%</td>
</tr>
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</table>

Source: ACCC analysis of retailer billing and cost data. Cost data was previously analysed in our November 2019 report.

Market offer customers continued to pay less than standing offer customers, and SME customers in particular paid more due to less engagement

The difference in prices paid by standing and market offer customers highlights the potential savings that can be achieved by shopping around. The median effective price paid by residential market offer customers across the four regions was 5.5 c/kWh or around 17 per cent lower than residential standing offer customers, and 10.7 c/kWh or around 25 per cent lower in the case of SME customers (figure 2.1). This equals savings of $219 a year for a residential customer using 3988 kWh from the grid, and $424 a year for a SME customer using 3967 kWh from the grid. These annual usage amounts reflect the median amount used by residential and SME standing offer customers in 2018–19.

Figure 2.2: Share of residential and SME customers on standing and market offers in 2019 Q3 (change from 2018 Q3), all regions combined

Although a larger proportion of customers chose market offers in 2019, the comparatively higher proportion of SME customers on standing offers indicates that they may be less engaged in the market than residential customers, possibly due to being time poor (figure 2.2). This means they are missing out on opportunities to save on their electricity costs. The DMO and VDO provide a useful benchmark for all customers to compare offers across the market. Otherwise, free government energy comparison services such as EME and VEC are a way for customers to compare the annual costs of offers to find the best deals for their individual circumstances.8

For SME customers, there was also significant variability in the amount of electricity used from the grid in general because they encompass a very diverse range of business types and sizes. For example, while the annual prices of the DMO and VDO assume an annual usage of 20 000 kWh, 50 per cent of SME customers used between 2466 kWh and 17 707 kWh from the grid in 2018–19. This means that free government energy comparison

services such as EME and VEC, which enable customers to enter their actual usage data to compare the annual costs of offers when shopping around, could be particularly useful for SME customers.\(^9\)

The results also highlight the potential benefits of the roll-out of the Consumer Data Right (CDR) to the energy sector. For example, time poor SME customers could eventually benefit from accredited data recipients using their actual usage data to provide more tailored and competitive services.

**Concession and hardship customers paid lower prices, but payment plan customers paid more than those customer groups**

The median effective prices paid by concession and hardship customers across the four regions were around 17 and 15 per cent lower than residential customers in general in 2019, while the median effective price paid by payment plan customers was 2.5 per cent lower (figure 2.3). Payment plan customers made arrangements with their retailer due to experiencing financial difficulties. While there was a slight increase in the median effective price paid by hardship customers between 2018 and 2019, we believe it was at least in part due to special circumstances that saw discounted prices for a number of those customers in 2018.

**Figure 2.3:** Median effective prices paid by residential customer groups in 2019 Q3 (change from 2018 Q3), all regions combined

![Figure 2.3: Median effective prices paid by residential customer groups in 2019 Q3 (change from 2018 Q3), all regions combined](image)

Source: ACCC analysis of retailer billing data.

The different levels of assistance these customer groups receive is likely to be part of the reason for the differences in prices paid. For example, retailers are required to transfer hardship customers onto offers that minimise their energy costs under the Australian Energy Regulator’s (AER) binding Customer Hardship Policy Guideline\(^10\) and Victoria’s Payment

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As a result, hardship customers were least likely to be on market offers with conditional discounts where they were exposed to potentially significant financial penalties for not meeting payment conditions (figure 2.4).

Concession customers instead receive government-funded discounts or rebates to help cover their energy costs, which are included in the results. Concession customers also had a higher uptake of solar PV systems and used less electricity from the grid, which further reduced their energy costs. As a result, even though concession customers were a lot more likely to be on market offers with conditional discounts compared to hardship and payment plan customers, they were also most likely to meet the conditions to achieve their discounts (figure 2.4).

For payment plan customers, the premise is that they are usually able to pay for their electricity usage, but they require some temporary assistance to manage their debts. There is no requirement for retailers to transfer payment plan customers onto offers that will minimise their energy costs. Around 50 per cent of payment plan customers on market offers had conditional discounts in 2019, while less than 60 per cent of those customers achieved their discounts (figure 2.4). This meant that many of these customers would have paid significant financial penalties that result in higher prices, which may have exacerbated the financial difficulties they already faced.

New rules that cap the size of these discounts will hopefully rebalance the risks of conditional discounts by still providing opportunities for customers to save on their electricity bills but limit their financial exposure. However, the results suggest that payment plan customers should be transferred to another type of offer, perhaps at the time that they make the arrangement with their retailer.

Figure 2.4: Proportion of residential market offer customers who had, and achieved, conditional discounts in 2019 Q3, all regions combined

Source: ACCC analysis of retailer billing data.

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11 Energy Retail Code (Vic), s 79(1)(e).
Market offer customers of the ‘big three’ retailers (AGL, EnergyAustralia and Origin) tended to pay higher prices

The big three retailers continue to serve most customers across eastern and southern Australia, although other retailers such as Alinta, Snowy-Hydro and Simply Energy have built significant market share in some regions. While there will be some differences in results for individual retailers, comparing effective prices paid by market offer customers of the big three together to those of non-big three retailers is one indicator of competition.

The median effective prices paid by residential market offer customers of the big three together were 0.4 and 0.7 per cent higher than those paid by customers of non-big three retailers in NSW and Victoria, while in SA and SEQ they were 3.6 and 7.7 per cent higher. For SME market offer customers, the median effective prices paid were 0.3 per cent higher in NSW and between 4.3 and 6 per cent higher in SEQ, SA and Victoria. These results are consistent with the shift away from the big three retailers in some regions, with the Australian Energy Market Commission (AEMC) finding low satisfaction with value for money as the main reason customers switch.\(^{12}\)

In Victoria, the median effective price paid by residential market offer customers of non-big three retailers increased by 0.7 c/kWh or 2.5 per cent between 2018 and 2019, while there was a decrease for customers of the big three (figure 2.5). The same was true for SME market offer customers of the non-big three retailers, where there was an increase of 1.2 c/kWh or 4.2 per cent. In all the other regions, the median effective prices paid by market offer customers of both non-big three and big three retailers decreased.

Figure 2.5: Change in median effective prices of big three and non-big three market offer customers between 2018 Q3 and 2019 Q3, each region

Source: ACCC analysis of retailer billing data. Figure shows interquartile ranges and median values.

It is too early to draw conclusions, but the compression in prices between the non-big three and big three retailers in Victoria could be related to the introduction of the VDO.

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\(^{12}\) AEMC, 2020 Retail Energy Competition Review, 30 June 2020, p. 84.
Submissions to the Essential Services Commission of Victoria (ESCV) raised concerns that the lower-priced VDO would provide little headroom for retailers to set their own prices. This could be particularly challenging for smaller retailers, which tend to have higher costs to serve per customer than larger retailers.

**Solar customers paid lower prices than non-solar customers**

The median effective price paid by customers with solar PV systems across the four regions was around 24 per cent lower in 2019 than that paid by non-solar customers, although the results do not capture the upfront costs of installation (figure 2.6). This is due to FiT payments made to solar customers for any unused electricity that their solar PV system feeds into the grid, which are included in the results. This translates to a significant difference in customer bills and electricity affordability. For example, even though solar residential customers tended to use slightly more electricity from the grid in 2018–19 than non-solar residential customers, their median annual bill was $313 lower.

**Figure 2.6:** Median effective prices paid by solar and non-solar customers in 2019 Q3 (change from 2018 Q3), all regions combined

![Figure 2.6: Median effective prices paid by solar and non-solar customers in 2019 Q3 (change from 2018 Q3), all regions combined](source: ACCC analysis of retailer billing data.)

Early adopters of solar PV systems who continue to receive premium FiT payments are getting a particularly good deal. Around half of the solar residential customers in SEQ received premium FiT payments, which resulted in a median effective price that was 10.4 c/kWh less than non-solar customers in 2019. In NSW, customers received only negotiated FiT payments, which resulted in a median effective price that was 4 c/kWh less.

Hardship and payment plan customers used more electricity from the grid in 2019 than other residential customer groups and so would most benefit from a solar PV system, as would many SME customers. But they were the customer groups least likely to have solar PV systems and therefore face heightened affordability risks. While hardship and payment plan customers faced lower effective prices, their higher usage meant that their median annual bills in 2018–19 were $433 and $638 higher than the median annual bill of $1215 for residential customers in general, at $1648 and $1853 respectively.
To the extent that customers are not able to reduce their electricity costs because they cannot access or afford the upfront costs of solar PV systems, the difference in effective prices may highlight an equity issue. There are a range of government programs that assist customers on lower incomes or experiencing financial difficulties to access solar PV systems. For example, under the ‘Solar for Rentals’ program in Victoria, eligible landlords can receive a rebate that lowers the upfront costs of installing a solar PV system. This benefits the landlord by making the property more attractive to prospective tenants, and benefits the tenants through lower electricity prices.

2.2. Conclusions

Although it is still early days, the results indicate that the pricing and advertising reforms introduced by the Australian and Victorian governments are working to protect customers from paying excessive electricity prices and improve affordability. Promisingly, the current results do not indicate that the introduction of the DMO and VDO reforms have led to increases or adverse effects on prices paid by market offer customers, which was a concern raised by some prior to their introduction.

Also encouraging is that concession, hardship and payment plan customers, which include many customers who experience financial difficulties, paid lower effective prices than residential customers in general. However, we do have some concerns that payment plan customers paid more than concession and hardship customers over the same period. So while the results indicate the existing assistance for concession and hardship customers are leading to positive outcomes for those customers, payment plan customers may benefit from further assistance. The best practice is for retailers to ensure that payment plan customers are on offers that most suit their circumstances. This would involve retailers transferring payment plan customers to offers that minimise their energy costs when they arrange to pay in instalments because of financial difficulty.

Similarly for SME customers, the results indicate that further work is needed to improve their engagement and ensure that they are on the best offers for their circumstances. We have previously recommended that governments should fund small business organisations to provide tailored retail electricity market advice. So it is a positive that the Australian Government has progressed this recommendation through the Business Energy Advice Program, which is intended to deliver trusted advice to help small businesses get better energy deals and reduce their energy usage. However, with many SME customers potentially being too time poor to engage at all, the best practice is for retailers to also ensure that SME customers are on offers that most suit their circumstances and minimise their energy costs.

The difference in effective prices paid by solar and non-solar customers highlights the potential benefits of having solar PV systems on electricity affordability. Government programs can help reduce some of the cost barriers faced by customers experiencing financial difficulty in particular for installing solar PV systems, which could improve electricity affordability for those customers. However, there will still be many customers who cannot access solar PV systems and it is important that they do not face higher electricity costs as a result of the way any such programs are funded. The best practice is for governments to fund programs in an equitable way, such as through government budgets, to avoid potentially exacerbating affordability issues for electricity users without solar PV systems.

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3. Detailed billing data analysis

In this section of the report, we provide more detailed analysis of customer billing data. It is structured as follows:

- 3.1: actual prices customers pay
- 3.2: customer usage
- 3.3: types of offers customers are on and their tariff types
- 3.4: conditional discounts.

We examine outcomes for residential and SME customers, comparing regions, market offer and standing offer customers, and non-solar and solar customers. For residential customers, we also look at outcomes for different customer groups such as concession, hardship and payment plan customers.

Below are some notes on our analytical approach that should be kept in mind:

- Results are in $2019 and are GST exclusive.
- We analysed customer billing data over the 2018–19 financial year and over quarterly periods. As retailer billing cycles vary and therefore do not align with quarterly periods, we applied rules to assign quantitative and qualitative variables to relevant periods to enable analysis.
- 2018 Q3 and 2019 Q3 results are presented as we do not yet have a complete dataset for 2019 Q4. However, wherever possible, we checked preliminary results using the Q4 data and found that they were consistent with our findings.
- Our analysis of prices paid by customers is based on effective prices rather than bill amounts. This is because bill amounts depend on the amount of electricity used, whereas effective prices take usage into account and therefore provide a better comparison over time and across customer groups.
- Our analysis of customer usage is based on electricity consumed from the grid, and does not include electricity that solar customers have generated for their own use.
- Where relevant, we used the median instead of the mean as it shows what the majority tends toward by reducing the impacts of extreme high or low values.
- Payment plan customers refers to customers who had an arrangement with their retailer to pay in instalments due to experiencing financial difficulties, and excludes flexible arrangements for convenience or budgeting reasons.
- The ‘other’ customer group refers to customers who were not in hardship, on a payment plan or received a concession for any part of the relevant period.
- The ‘all’ customer group refers to all customers in the sample within the relevant period. This includes customers who were in hardship, on a payment plan or received a concession for only a portion of the relevant period and so were not counted in any of the other categories.
- Further details on our data collection and analysis methodology is outlined in appendix B.

Appendix E contains additional figures that are not presented in this section but are sometimes referred to, such as tariff type and median bill amount charts, as well as all region by region breakdowns.
3.1. Actual prices customers pay

In this section we examine the effective prices that different customer groups paid for electricity used from the grid. This analysis is to see what impact the introduction of the DMO and VDO had on prices for existing customers. While it is premature to draw conclusions about the longer-term impact of the reforms, it is important to observe these initial impacts and to establish benchmarks for future analysis.

In our November 2019 report, we observed that the prices for many advertised standing offers had fallen after the DMO and VDO were introduced.14 We also observed that many advertised market offers continued to be more competitively priced than standing offers and therefore provided opportunities for customers to make additional savings if they shopped around.15 The billing data enables us to see how retailers’ advertised offers translated to actual customer outcomes because it also captures prices paid by customers who are on offers that are no longer available.

We find there were improved outcomes for many residential and SME customers as median effective prices paid generally decreased between 2018 and 2019. Encouragingly, concession, hardship and payment plan customers, which include many customers who experience financial difficulties, paid lower effective prices than residential customers in general. However, we do have some concerns that payment plan customers paid more than concession and hardship customers, despite also facing financial difficulties. We also observe that a higher proportion of SME customers were on standing offers and so were paying higher prices than they would if they were on market offers, and that market offer customers with the ‘big three’ retailers tended to pay higher effective prices than those with non-big three retailers.

In our November 2019 report, we also found that residential solar customers likely paid significantly less on average than non-solar customers.16 From the billing data, we find that solar customers did pay much lower effective prices than non-solar customers, and that solar customers receiving premium FiT payments are getting a particularly good deal.

Residential customers

We compare the median effective prices paid by residential customers in 2018 and 2019, broken down by:

- market offer and standing offer customers
- customer groups including concession, hardship, and payment plan customers
- the big three retailers compared with others
- non-solar and solar offer customers.

3.1.1. Prices paid by residential market and standing offer customers

Figure 3.1 shows that the median effective price paid by residential standing offer customers across the four regions decreased by 1.5 c/kWh between 2018 and 2019, and by 1 c/kWh for market offer customers. Standing offer prices therefore dropped by more than market offer prices, by 4.4 and 3.5 per cent respectively.

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While the decrease in median effective prices means there were improved outcomes for residential standing offer customers, figure 3.1 also shows that they paid effective prices that were 6 c/kWh more in 2018 and 5.5 c/kWh more in 2019 than market offer customers. This difference equals an extra $219 a year for a residential standing offer customer using the median amount of electricity from the grid (3988 kWh). This outcome is consistent with our pricing analysis of advertised offers in our November 2019 report. We reported that residential customers on standing offers could save around $55 to $230 a year by switching to a median priced market offer, depending on the region and distribution zone.\textsuperscript{17}

\textbf{Figure 3.1: Prices paid by residential market and standing offer customers, all regions combined}

There were similar outcomes for residential customers in each region, although the median effective price paid by standing offer customers dropped the most in Victoria, by 2.5 c/kWh or 6.6 per cent between 2018 and 2019.\textsuperscript{18} This reflects the lower-priced VDO that is intended to provide a ‘fair’ price compared with the DMO that aims to reduce the ‘loyalty tax’ paid by disengaged customers.\textsuperscript{19} Overall, the initial savings for residential standing offer customers are particularly encouraging as they show that the DMO and VDO are working to protect these customers from paying excessive electricity prices and improve affordability. We explore which and how many customers have benefitted from the decrease in standing offer prices in section 3.3.

While we expected savings for standing offer customers, it is also encouraging that residential market offer customers have also seen savings. The lower effective prices for market offers customers in 2019 are likely attributable to a range of factors, including:


\textsuperscript{18} See appendix E, figures A1.2 to A1.5.

• net reductions in network, wholesale and environmental costs, which together comprise 84 per cent of the average annual residential customer bill and effective price on a NEM-wide basis, as examined below\textsuperscript{20}

• moderate decreases in retail costs and retail margins in 2018–19, which comprise 11 and 4 per cent respectively of the average residential annual bill NEM-wide\textsuperscript{21}

• major retailers contacting market offer customers in early 2019 to ensure they were on the best deal and reducing prices for some market offer customers on non-discounted offers from 1 July 2019, as discussed in section 3.1.3

• new advertising requirements that make it easier for customers to compare offers, which may have assisted customers to switch to better deals.\textsuperscript{22} An increase in customer confidence of access to easily understood information and ability to make choices in 2020 may support this, based on the AEMC analysis of the Energy Consumers Australia (ECA) Survey for April 2019 to April 2020.\textsuperscript{23}

One concern with the introduction of the DMO and particularly the lower-priced VDO was that retailers would increase prices for market offer customers to make up for lost revenue from standing offer customers. Although there was a decrease in the median market offer effective price paid by residential customers in every region, it could be the case that decreases were less than expected given movements in supply costs. For example, there were lower allowable revenues for most distribution networks from the AER’s network decisions in the first half of 2019, which would be expected to have downward effects on prices.\textsuperscript{24} Similarly, wholesale costs dropped 3 per cent on a c/kWh basis between 2017–18 and 2018–19 at the NEM-wide level.\textsuperscript{25} However, environmental costs increased by around 8 per cent on a c/kWh basis between 2017–18 and 2018–19 at the NEM-wide level.\textsuperscript{26}

Table 3.1 compares the changes in median market offer prices paid by residential customers between 2018 Q3 and 2019 Q3 with estimated price impacts between 2017–18 and 2018–19 due to changes in network, wholesale and environmental costs. In most regions, the decrease in the residential median market offer effective price paid was greater than the effects of changes in estimated wholesale, network and environmental cost impacts. In Victoria, we estimated increased prices due to combined wholesale, network and environmental cost changes, while median market offer effective prices paid actually decreased.


\textsuperscript{21} Ibid, pp. 67–9.

\textsuperscript{22} *Electricity Retail Code*, ss 12 and 14.


\textsuperscript{26} Ibid, p. 31.
Table 3.1: Changes in residential median market offer effective prices paid compared with estimated price impacts of changes in supply cost components

<table>
<thead>
<tr>
<th>Change in median market offer price paid (c/kWh; 2018 Q3 to 2019 Q3)</th>
<th>Estimated average price impact due to network, wholesale and environmental costs (c/kWh; 2017–18 to 2018–19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All regions / NEM-wide</td>
<td>-3.5%</td>
</tr>
<tr>
<td>Victoria</td>
<td>-1.4%</td>
</tr>
<tr>
<td>NSW</td>
<td>-4.4%</td>
</tr>
<tr>
<td>SA</td>
<td>-3.1%</td>
</tr>
<tr>
<td>SEQ</td>
<td>-7.6%</td>
</tr>
<tr>
<td>Victoria</td>
<td>3.7%</td>
</tr>
<tr>
<td>NSW</td>
<td>-1.3%</td>
</tr>
<tr>
<td>SA</td>
<td>-3.1%</td>
</tr>
<tr>
<td>SEQ</td>
<td>-4.9%</td>
</tr>
</tbody>
</table>

Source: ACCC analysis of retailer billing and cost data. Cost data was previously analysed in our November 2019 report.

Although the time periods between our retailer billing and cost datasets do not perfectly align, and there may be lag effects between when cost component changes flow through to prices paid by customers, these approximate results do not indicate that the DMO and VDO reforms have had adverse effects on prices paid by residential market offer customers.

3.1.2. Prices paid by residential customer groups

Figure 3.2 shows that concession, hardship and payment plan customers across the four regions paid lower effective prices than residential customers in general in 2018 and 2019, but payment plan customers paid higher effective prices than concession and hardship customers. There was also an increase in the median effective price paid by hardship customers, which contrasts with a decrease for other customer groups and the aggregate decrease observed in figure 3.1. There were however some differences in the changes in individual regions, as discussed below.
Compared with residential customers in general, who paid a median effective price of 27.6 c/kWh in 2019, a decrease of 1.2 c/kWh or 4.2 per cent:

- concession customers paid 23 c/kWh, a decrease of 1.2 c/kWh or 5 per cent
- hardship customers paid 23.5 c/kWh, an increase of 0.4 c/kWh or 1.7 per cent
- payment plan customers paid 26.9 c/kWh, a decrease of 0.3 c/kWh or 1.1 per cent.

It is positive that concession, hardship and payment plan customers paid lower effective prices than residential customers in general in 2018 and 2019.

Concession customers benefit from government-funded rebates or percentage discounts on their electricity costs. For example, the annual value of energy concessions may be up to $231 in SA for 2020–21,27 $285 in NSW28 and $340 in Queensland.29 In Victoria, the concession is 17.5 per cent of a customer’s electricity usage and service costs.30 These concessions are paid through retailers and so contribute to the lower effective prices we observe for concession customers.

Hardship customers comprise a very small proportion of customers in the NEM, at around 1.1 per cent in jurisdictions where the National Energy Retail Law (NERL) applies,31 and 0.94 customers per 100 in Victoria.32 But figure 3.3 shows that around 67 per cent have

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been on a hardship program for more than 6 months. This suggests that the majority of hardship customers face ongoing or more permanent barriers in meeting their electricity costs. In section 3.4.2 we discuss how existing policies that require retailers to support hardship customers and ensure that they are on the best offers are helping to provide relief to these customers.

The slight increase in the median effective price paid by hardship customers between 2018 and 2019 was due to decreases in Victoria and SEQ being offset by increases in NSW and SA. Most hardship customers in Queensland, NSW and SA are with the big three retailers.\(^{33}\) AGL reported a debt-write off in the second half of 2018 to forgive debts by hardship customers.\(^{34}\) This likely resulted in discounted prices paid by a number of hardship customers in that year, and at least in part explains the increase in some regions between 2018 and 2019.

While we see improved outcomes for payment plan customers overall, they paid between 3.9 and 4.1 c/kWh more than hardship and concession customers over the same period, despite also facing financial difficulties. In section 3.4 we find that payment plan customers who were on market offers with conditional discounts were the customer group least likely to achieve their discounts, which would contribute to them paying higher prices.

The outcomes for payment plan customers were similar in each region, except in NSW where their median effective price increased by 0.8 c/kWh or 3.5 per cent between 2018 and 2019. More notably, the median effective price paid by payment plan customers in SA was higher than those paid by residential customers in general, by around 0.1 c/kWh in 2018 and 0.3 c/kWh in 2019.

Figure 3.3: Tenure of residential hardship customers in 2018–19, each region

![Diagram showing tenure of residential hardship customers in 2018–19, each region.](source: ACCC analysis of retailer billing data.)

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3.1.3. Prices paid by residential market offer customers with the big three retailers

The ‘big three’ retailers (AGL, EnergyAustralia and Origin) continue to serve most customers across eastern and southern Australia. While other retailers such as Alinta, Snowy-Hydro and Simply Energy have built significant market share in some regions, the big three still have advantages due to their incumbency, vertical integration with generation assets and economies of scale. So, while there will be some differences in results for individual retailers, it is interesting to look at how the effective prices paid by market offer customers of the big three together compare with those paid by non-big three market offer customers as one indicator of competition among retailers.

In 2019, big three residential market offer customers paid the following relative to non-big three customers:

- 0.2 c/kWh or 0.7 per cent more in Victoria
- 0.1 c/kWh or 0.4 per cent more in NSW
- 1.2 c/kWh or 3.6 per cent more in SA
- 1.7 c/kWh or 7.7 per cent more in SEQ.

The results for SEQ, which had the biggest difference, are shown in figure 3.4.

**Figure 3.4: Prices paid by SEQ residential market offer customers by retailer category**

The main reason given by customers for switching retailers is a lack of satisfaction with the value for money offered by their existing plan, so the lower median effective prices we

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observe for non-big three retailers is consistent with the shift away from the big three in some regions.37

We also find that market offer median effective prices for big three residential customers decreased between 2018 and 2019, by between 1.3 and 1.8 c/kWh across the four regions.38 Figure 3.4 illustrates this price decrease for SEQ. Charts for other regions are included in appendix E.

The big three have a much larger proportion of customers on standing offers than non-big three retailers, and concerns were raised that the big three may seek to increase their market offer prices to compensate for revenue lost through reduced standing offer prices.39 As discussed in section 3.1.1, there is no evidence that this has happened in the period immediately following the introduction of the DMO and VDO.

Figure 3.5 shows that median effective prices for non-big three residential market offer customers in Victoria increased between 2018 and 2019, but this was not the case in NSW, SA and SEQ. Between 2018 and 2019, median effective prices for non-big three customers changed as follows:

- decreased by 0.8 c/kWh or 3 per cent in NSW
- decreased by 0.3 c/kWh or 0.9 per cent in SA
- decreased by 1.6 c/kWh or 6.8 per cent in SEQ
- increased by 0.7 c/kWh or 2.5 per cent in Victoria.40

As outlined in section 3.1.1, lower supply costs combined with reduced retail margins likely contributed to the general decrease in prices in 2019. In the first half of 2019, ahead of the DMO and VDO reforms coming into effect and new rules in Victoria requiring retailers to tell their customers whether they are on the retailer’s best offer, the big three also stated they would reduce prices for some of their market offer customers and contact customers to ensure they were on the best plan. Origin announced that it would reduce prices for market offer customers on non-discounted plans from 1 July 2019.41 AGL stated that it would continue to proactively contact customers who could benefit from reviewing their current energy plan to help make sure they are on the best plan available.42 EnergyAustralia stated that existing customers were proactively approached well ahead of the DMO and VDO changes to ensure they were on the best plan.43 Therefore, the decrease in effective prices for big three customers may represent customers being switched to cheaper offers with their existing big three retailer, or a price reduction for existing market offers.

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37 AEMC, 2020 Retail Energy Competition Review, 30 June 2020, p. 84.
This compression in prices between the non-big three and big three retailers in Victoria may be related to the introduction of the VDO, although it is too early to draw conclusions. Submissions to the ESCV raised concerns that the lower-priced VDO would provide little headroom for retailers to set their own prices.\(^44\) This could be particularly challenging for smaller retailers, which tend to have higher costs to serve per customer than larger retailers.\(^45\)

### 3.1.4. Prices paid by residential non-solar and solar customers

Figure 3.6 shows that solar customers across the four regions continued to pay much lower prices than non-solar customers. The solar customer median effective price was 7.1 and 6.9 c/kWh lower than non-solar customers in 2018 and 2019 respectively. Given that solar customers used only slightly more electricity from the grid than non-solar customers (figure 3.13 in section 3.2), this difference in effective prices is not driven by differences in usage. Similar outcomes are observed in each region, although with varying degrees. The median effective price paid by non-solar and solar customers decreased by 1.1 and 0.9 c/kWh respectively between 2018 and 2019, or 3.7 and 4 per cent.

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FiT payments largely explain why solar customers paid significantly less. Solar offers generally include the same supply and usage rates as common non-solar offers but include a FiT rate. This rate is typically a credit that solar customers receive for any unused electricity that their solar PV system sends back to the grid. We observed in our November 2019 report that FiT payments reduced the average residential customer bill NEM-wide by more than one third.46

Early adopters of solar PV systems who still receive premium FiT payments are getting a particularly good deal. For example, effective prices for solar customers in SEQ were around 10.4 c/kWh less than non-solar customers in 2019, in part because around half of the solar customers received premium FiT rates.47 In contrast, solar customers in NSW, who received only negotiated FiT rates rather than premium FiT rates, paid around 4 c/kWh less than non-solar customers in 2019.48

As we discuss further in section 3.2, hardship and payment plan customers used the most electricity from the grid and so would most benefit from a solar PV system. But they were the customer groups least likely to have solar and therefore face heightened affordability risks.49 We know that there can be significant barriers to installing solar for some customers, such as high up-front costs of installation, unsuitability of premises or not owning the property. Therefore, government programs that assist customers to access solar PV systems or afford the initial cost of installation may help address affordability issues. For example, there are rebates valued up to $1850 offered in Victoria for homeowners to install a solar PV system.50

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47 Based on billing data provided by retailers.
48 Ibid.
49 See appendix E, figures A11.1 to A11.5.
SME customers

We compare the median effective prices paid by SME customers in 2018 and 2019, broken down by:

- market and standing offer customers
- the big three retailers compared with others
- non-solar and solar customers.

3.1.5. Prices paid by SME market and standing offer customers

Figure 3.7 shows that the median effective price paid by SME standing offer customers across the four regions decreased by 3.5 c/kWh between 2018 and 2019, and by 0.5 c/kWh for market offer customers. Standing offer prices therefore dropped by more than market offer prices, by 7.5 and 1.5 per cent respectively. The price decrease for SME standing offer customers was more than for residential customers (4.4 per cent, figure 3.1), which suggests that more SME customers were on excessively priced standing offers prior to the introduction of the DMO and VDO.

Also, as with residential customers, SME standing offer customers continued to pay higher effective prices than market offer customers. SME standing offer customers paid a median effective price that was around 10.7 c/kWh higher in 2019, although this was down from 13.7 c/kWh in 2018. The difference equals an extra $424 a year for a SME standing offer customer using the median amount of electricity from the grid (3967 kWh). Many SME standing offer customers can therefore achieve further savings by switching to a competitive market offer.

Figure 3.7: Prices paid by SME market and standing offer customers, all regions combined

Source: ACCC analysis of retailer billing data. Figure shows interquartile ranges and median values.
There were similar outcomes in each region, although the median effective price paid by SME market offer customers in Victoria increased by 0.3 per cent. As we found with residential customers, the SME standing offer median effective price dropped the most in Victoria, by 10.5 c/kWh or 18.5 per cent between 2018 and 2019. This reflects the lower-priced VDO compared with the DMO. Overall, the initial savings by standing offer customers are encouraging and indicate that the DMO and VDO are working to ensure that those customers are not charged excessive prices.

The lower effective prices for SME customers are likely influenced by some of the same factors discussed in the residential section, including:

- changes in network, wholesale and environmental costs, which together comprise 86 per cent of the average SME customer effective price on a NEM-wide basis, as examined below\(^{51}\)

- new advertising requirements that make it easier for customers to compare offers, which may have assisted SME customers to switch to better deals.\(^{52}\) An increase in small business’s confidence of access to easily understood information and ability to make decisions in 2020 may support this, based on the AEMC analysis of the ECA Survey for April 2019 to April 2020.\(^{53}\)

However, the median effective price paid by SME market offer customers continued to be higher than residential market offer customers, who paid 28.2 and 27.2 c/kWh in 2018 and 2019 respectively, shown in figure 3.1. Our November 2019 report observed that the retail margin on a cents per kWh basis was 1 c/kWh higher for SME customers than for residential customers in 2018–19, and comprised 8 per cent of the average SME customer bill compared with 4 per cent of the average residential customer bill.\(^{54}\) This could reflect additional risks incurred by retailers in supplying SME customers, but it may also reflect that SME customers tended to be less engaged with the market, which would enable retailers to recover more of their costs from SME customers than residential customers.

Table 3.2 shows that although there was a decrease in the median market offer effective price paid by SME customers for all four regions, the estimated net impact of changes in wholesale, network and environmental costs was an increase in the estimated average effective price.

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\(^{52}\) *Electricity Retail Code*, ss 12 and 14.


Table 3.2: Changes in SME median market offer effective prices paid compared with estimated price impacts of changes in supply cost components

<table>
<thead>
<tr>
<th>Change in median market offer price paid (c/kWh; 2018 Q3 to 2019 Q3)</th>
<th>Estimated average price impact due to network, wholesale and environmental costs (c/kWh; 2017–18 to 2018–19)</th>
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<tbody>
<tr>
<td>All regions / NEM-wide</td>
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<tr>
<td>Victoria</td>
<td>0.3%</td>
</tr>
<tr>
<td>NSW</td>
<td>-2.8%</td>
</tr>
<tr>
<td>SA</td>
<td>-1.0%</td>
</tr>
<tr>
<td>SEQ</td>
<td>-3.7%</td>
</tr>
</tbody>
</table>

Source: ACCC analysis of retailer billing and cost data.

As previously noted, the time periods between our retailer billing and cost datasets do not perfectly align, and there may be lag effects between when cost component changes flow through to prices paid by customers. Additionally, analysis of retailer cost data on a region-by-region basis is less precise for SME customers than for residential customers due to data limitations. However, in Victoria, which was the only region that saw an increase in the median effective price paid by SME market offer customers, the increase was significantly lower than the estimated net effect of changes in wholesale, network and environmental costs. Overall, these approximate results do not indicate that the DMO and VDO reforms have had adverse effects on prices paid by SME market offer customers.

3.1.6. Prices paid by SME market offer customers with the big three retailers

Figure 3.8 shows that in SA, big three SME market offer customers paid higher median effective prices than non-big three customers. Other regions showed similar results, although the price difference in NSW was small. In 2019, big three SME market offer customers paid the following relative to non-big three customers:

- 1.8 c/kWh or 6 per cent more in Victoria
- 0.1 c/kWh or 0.3 per cent more in NSW
- 2.1 c/kWh or 5.4 per cent more in SA
- 1.2 c/kWh or 4.2 per cent more in SEQ.

Therefore, SME customers can potentially make significant savings by switching to smaller retailers with more competitively-priced offers, especially in SA and Victoria.
We also find that market offer median effective prices for big three SME customers decreased from 2018 to 2019, by between 0.1 and 0.9 c/kWh across the four regions. As was the case for residential customers, lower supply costs, combined with reduced retail margins, likely contributed to the decrease.

Median effective prices decreased for SME customers with non-big three retailers in SEQ, NSW and SA, but increased in Victoria. Between 2018 and 2019, median effective prices for non-big three SME market offer customers:
- decreased by 1 c/kWh or 3.1 per cent in NSW
- decreased by 0.8 c/kWh or 2 per cent in SA
- decreased by 1.8 c/kWh or 6 per cent in SEQ
- increased by 1.2 c/kWh or 4.2 per cent in Victoria.

As discussed for residential customers in section 3.1.3, this increase in SME prices for smaller Victorian retailers may be related to the introduction of the lower-priced VDO, which applies to both residential and small business customers.

### 3.1.7 Prices paid by SME non-solar and solar customers

Figure 3.9 shows that SME solar customers across the four regions continued to pay much lower prices than non-solar customers, with a median effective price of 8 and 8.2 c/kWh less in 2018 and 2019 respectively. The median effective price paid by SME non-solar and solar customers decreased by 1 and 1.2 c/kWh respectively between 2018 and 2019, or 2.8 and 4.4 per cent. In section 3.2, we find that SME solar customers tended to have much higher electricity usage from the grid than SME non-solar customers. This indicates SME customers who have invested in a solar PV system have benefited from FiT payments and are paying much lower effective prices. Similar outcomes are observed in each region,
although with varying degrees that likely reflect differences in the FiT rates, as discussed in section 3.1.4.

**Figure 3.9:** Prices by non-solar and solar SME customers, all regions combined

It is particularly interesting that the spread of prices paid by SME non-solar customers is larger compared with solar customers in 2018 and 2019, which is the opposite of residential customers over the same period. This may be because many SME non-solar customers had very low usage (figure 3.16 in section 3.2) and so fixed supply costs comprise a larger share of their bill. This results in a higher effective price because their electricity cost is divided by a much smaller amount of usage. In section 3.2, we show that there is significant variability in electricity used from the grid by SME non-solar and solar customers compared with residential customers where there is only a small difference. This explains the different price outcomes in the spread.

### 3.2. Customer usage

In this section we examine the amount of electricity customers used from the grid. We do this to understand usage patterns of different customer groups, the possible drivers behind the differences, and the effect usage has on bill amounts. We also compare the median usage amounts found through the billing data with the 'model' usage amounts used to calculate the DMO and VDO to see how likely they are to provide an indication of customers’ bill amounts.

In our November 2019 report, we found that the average annual bill for residential customers, which was calculated using retailers’ cost data, had decreased in 2018–19, partly due to an overall decrease in the amount of electricity used from the grid.\(^{55}\) We identified the primary driver of this fall in usage as being an increasing number of residential customers with solar PV systems.\(^{56}\)

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\(^{56}\) Ibid, p. 33.
Our analysis of the billing data found that around 16 per cent of residential customers and 6 per cent for SME customers had solar PV systems in 2018–19. In both cases, solar customers tended to use more electricity from the grid than non-solar customers, which means they likely would have used even more if not for their solar PV systems. Solar customers paid lower effective prices, while residential solar customers also had lower median annual bills, highlighting the potential benefits of solar PV systems on electricity affordability.

Hardship and payment plan customers used much more electricity from the grid than other residential customer groups in 2018–19. They also had a lower uptake of solar PV systems than residential customers in general. This resulted in them having significantly higher bills even though they were more likely to be on market offers and have lower effective prices. In contrast, concession customers had a relatively high uptake of solar PV systems and used lower electricity from the grid, which resulted in lower median annual bill amounts.

Overall, residential and SME customers on standing offers tended to use less electricity from the grid which, aside from barriers to access, may be one of the reasons they also had a lower uptake of solar PV systems than market offer customers. But lower usage standing offer customers would still save on their electricity bills if they switched to better valued market offers. All customers can use the DMO and VDO to compare offers across the market, with many residential customers also likely to find that the annual price of the DMO and VDO, or a comparison to those annual prices, would give a good indication of their annual bill amounts.

Residential customers
We look at the amount of electricity residential customers used from the grid, comparing market and standing offer customers, customer groups and non-solar and solar customers.

3.2.1. Usage by residential market and standing offer customers
Figure 3.10 shows that residential market offer customers across the four regions used more electricity from the grid than standing offer customers in 2018–19.
Figure 3.10: Usage by residential market and standing offer customers in 2018–19, all regions combined

Residential market offer customers had a median annual usage of 4630 kWh, or 642 kWh more than standing offer customers at 3988 kWh. Although market offer customers used more electricity from the grid, their median annual bill in 2018–19 was $29 lower than for standing offer customers, at $1212 and $1241 respectively. This indicates that residential customers who used more electricity from the grid had stronger financial incentives to reduce their electricity bills by seeking out better value offers. Lower usage customers can still save money by switching to a lower-priced market offer. For example, if a customer with a median annual usage of 3988 kWh paid the median effective price of a market offer customer in 2019 (27.2 c/kWh) rather than the median effective price for a standing offer customer (32.7 c/kWh), they would save $219 a year.

The median annual usage values we found for residential standing and market offer customers compare relatively well with the model usage amounts used by the AER and ESCV to calculate the annual price of the DMO and VDO respectively. For example, the AER used model usage amounts of between 3900 kWh and 4900 kWh for residential customers without a controlled load for 2019–20, and the ESCV used a model usage amount of 4000 kWh.

This means that many residential customers would find that the annual price of the DMO and VDO, or a comparison to those annual prices, give a good indication of their annual bill amounts when comparing offers across the market. For customers who have different usage levels, the DMO and VDO still provide a useful benchmark for comparing offers across the market by providing a common reference point.

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57 See appendix E, figure A3.6.
59 ESCV, Victorian Default Offer to apply from 1 July 2019, Advice to Victorian Government, 3 May 2019, p. 3.
Additionally, the expected roll-out of the CDR to the energy sector will allow customers to require data holders such as their retailers and the Australian Energy Market Operator (AEMO) to share their data with accredited data recipients (such as comparison sites) to get more tailored and competitive prices.\footnote{ACCC, \textit{CDR in the energy sector}, \url{https://www.accc.gov.au/focus-areas/consumer-data-right-cdr/cdr-in-the-energy-sector}, accessed 3 September 2020.} This will complement existing free government energy comparison services such as EME or VEC, where customers can enter their usage and compare costs under different offers.

We expect to see some of the effects of the COVID-19 pandemic on customer usage patterns in our analysis of 2019–20 billing data. Our supplementary report on recent market developments finds that residential consumption in Victoria increased by 10 to 30 per cent between April and May 2020.\footnote{ACCC, \textit{Inquiry into the National Electricity Market—Supplementary report— recent market developments and ACCC activities}, September 2020, p. 9.} We will be looking at how the COVID-19 pandemic has affected usage and electricity bills in our next report, which is due in May 2021.

Figure 3.11 shows that both market and standing offer customers across the four regions tended to use less electricity from the grid in 2019 Q3 compared to 2018 Q3.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure3.11.png}
\caption{Quarterly usage by residential market and standing offer customers in 2018 and 2019, all regions combined}
\end{figure}

Source: ACCC analysis of retailer billing data.

Residential standing offer customers used 7 per cent less electricity from the grid in 2019 Q3, while market offer customers used 2 per cent less. We also found that the proportion of standing offer customers generally decreased over the same period (figure 3.17), although there was a slight increase in Victoria.

The results could indicate that standing offer customers with higher usage values in NSW, SA and SEQ moved to market offers to take advantage of lower prices. As previously highlighted, the effective prices faced by market offer customers tended to be lower than for standing offer customers. This could be because the advertising reforms that came into
effect on 1 July 2019 helped those customers to engage with the market and select a better plan for their circumstances, although it is too early to tell.

Similarly to annual usage, we expect to see the effects of the COVID-19 pandemic on quarterly usage in our analysis of the billing data in our next report due in May 2021. With longer and more severe lockdowns in Victoria compared with other regions, we will examine the effects on the Q3 data at a more granular state-by-state level.

### 3.2.2. Usage by residential customer groups

Figure 3.12 shows that hardship and payment plan customers across the four regions used significantly more electricity compared to other customer groups in 2018–19.

**Figure 3.12: Usage by residential customer groups in 2018–19, all regions combined**

![Usage by residential customer groups in 2018–19, all regions combined](Image)

Source: ACCC analysis of retailer billing data. Figure shows interquartile ranges and median values.

Hardship and payment plan customers had a median annual usage of 7771 kWh and 7079 kWh respectively. The higher usage values for these customers were likely due to a combination of factors, such as less access to solar PV systems or residing in properties and using electrical appliances that were less energy efficient. For example, we found that only 7 to 8 per cent of all hardship and payment plan customers were solar customers in 2018 Q3 and 2019 Q3. We previously found that non-solar customers tended to be customers who could not install solar PV systems, like those who live in apartments or rented, while solar customers typically owned their own home and faced no barriers to install such systems.

The higher usage values and therefore higher bills may have been the reason why these customers faced payment difficulties in the first place. Even though hardship and payment plan customers faced lower effective prices (figure 3.2), their median annual bills in 2018–19

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62 See appendix E, figure A11.1.

were $433 and $638 higher than the median annual bill of $1215 for residential customers in general, at $1648 and $1853 respectively.\textsuperscript{64}

Concession customers on the other hand had the lowest median annual usage of all the customer groups, at 4041 kWh. This translated to a median annual bill in 2018–19 that was $292 lower than the median annual bill for residential customers in general, at $923. It is possible that these customers generally used less electricity from the grid because of the type of property they lived in or size of their household. We know that concession customers are a diverse group of customers that includes seniors, people with disabilities, and people generally experiencing disadvantage that results in lower income levels.\textsuperscript{65}

However, we also found a higher uptake of solar PV systems by concession customers compared with residential customers in general. Between 17 and 18 per cent of concession customers were solar customers in 2018 Q3 and 2019 Q3, which was the highest proportion among all residential customer groups.\textsuperscript{66} This relatively high uptake by concession customers was possibly partly attributable to government programs that assisted with the up-front costs of installation, as discussed in the next section.

The different levels of usage across customer groups and the effect on bills highlight the potential benefits of using actual usage data to allow customers to choose offers that best suit their circumstances. They can already do this by using free government comparison services such as EME and VEC. Further, as noted earlier, the CDR will allow customers to get access to more tailored and competitive services by requiring their retailers and AEMO to share their actual usage data with accredited data recipients.\textsuperscript{67} As highlighted in other sections though, some customers may benefit from additional assistance to ensure that they are on the best plan for their circumstances.

3.2.3. Usage by residential non-solar and solar customers

Figure 3.13 shows that residential solar customers across the four regions used slightly more electricity from the grid than non-solar customers in 2018–19.

\textsuperscript{64} See appendix E, figure A3.16.


\textsuperscript{66} See appendix E, figure A11.1.

Residential non-solar customers had a median annual usage of 4530 kWh, while solar customers had a slightly higher median annual usage of 4712 kWh. Even though solar customers used slightly more electricity from the grid, their median annual bill for 2018–19 was $313 lower, at $946 and $1259 respectively. This highlights the potential benefits of solar PV systems and the associated FiT rebates on the affordability of electricity. FiT rebates were discussed in more detail in section 3.1.

To the extent that customers are not able to reduce their electricity costs because they cannot access or afford the upfront costs of solar PV systems, the differences in effective prices and bills may highlight an equity issue. As raised earlier, hardship and payment plan customers are more likely to face barriers installing solar PV systems even though they are likely to significantly benefit from reducing the amount of electricity used from the grid.

There are a range of government programs that assist lower income or vulnerable customers to access solar PV systems. For example:

- Under the ‘Solar for Rentals’ program in Victoria, eligible landlords can receive a rebate that lowers the upfront costs of installing a solar PV system. This benefits the landlord by making the property more attractive to prospective tenants, and benefits the tenants through lower electricity prices.

- The ‘Interest Free Loans for Solar and Storage Scheme’ in Queensland that closed on 30 June 2019 provided eligible applicants solar loans of up to $4500.

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68 See appendix E, figure A3.26.
• The ‘Home Battery Scheme’ in South Australia provided subsidies and low-interest loans to pay for home battery systems (and new solar PV systems if required), where low-income households can access higher subsidies.71

However, there will still be many customers who cannot access solar PV systems, either due to cost or other barriers. It is important that those customers do not face higher costs as a result of any such programs, as has been the case with some previous environmental schemes funded through increased network charges for all electricity users. We consider the best practice is for governments to fund programs in an equitable way, such as through government budgets, to avoid potentially exacerbating affordability issues for electricity users without solar PV systems.72

SME customers

We look at the amount of electricity SME customers used from the grid, comparing market and standing offer customers, across regions and non-solar and solar customers.

3.2.4. Usage by SME market and standing offer customers

Similarly to residential customers, figure 3.14 shows that SME market offer customers across all four regions used more electricity from the grid than standing offer customers in 2018–19.

Figure 3.14: Usage by SME market and standing offer customers in 2018–19, all regions combined

Source: ACCC analysis of retailer billing data. Figure shows interquartile ranges and median values.

SME market offer customers had a median annual usage value of 7692 kWh in 2018–19, nearly twice as much as standing offer customers at 3967 kWh. In contrast to residential

customers, SME market offer customers had a higher median annual bill in 2018–19 that was $669 higher than standing offer customers, at $2352 and $1683 respectively. However, as market offer customers generally faced lower effective prices than standing offer customers (figure 3.1), the difference in the annual bill is in part due to the significant difference in usage levels. Relative to residential customers, there were a higher proportion of SME customers on standing offers who could make significant savings on their electricity bills by moving to a better priced market offer. For example, if a customer with a median annual usage of 3967 kWh paid the median effective price for a market offer customer in 2019 (32.3 c/kWh) rather than the median for a standing offer customer (43 c/kWh), they would save $424.

There was significant variability in the amount of electricity used from the grid by SME customers in general because they encompass a diverse range of business types and sizes. The interquartile ranges in figure 3.14, which is the usage range of the middle 50 per cent of SME customers, shows this variability. For SME market offer customers, the interquartile range was 2893 kWh to 19 443 kWh, while for SME standing offer customers it was 1236 kWh to 10 690 kWh. It is therefore not unexpected that the median usage values we found for SME standing offer customers differ from the model usage amount of 20 000 kWh used by the AER and ESCV to determine the annual price of the DMO and VDO for 2019–20. The billing data shows that an annual usage of 20 000 kWh is at the higher end of the interquartile ranges and more closely reflects the amount used by the top 25 per cent of SME customers. The difference is likely a reflection of the wide and varied range of usage among SME customers.

The DMO and VDO still provide a useful benchmark for these customers to compare offers, because they provide a single reference comparison. Otherwise, free government energy comparison services such as EME and VEC is one way for SME customers to use their actual usage data to find better offers. The results also highlight the potential benefits of rolling out the CDR in the energy sector. For example, time poor SME customers could eventually benefit from accredited data recipients using their actual usage data to provide more tailored and competitive services.

3.2.5. Usage by SME customers in each region

Figure 3.15 shows that SME customers across all regions used roughly similar amounts of electricity from the grid in 2018–19, except for SA where they used less.

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73 See appendix E, figure A4.7.
SME customers in SA had the lowest median annual usage of all regions, at 4773 kWh. One possible explanation is the relatively higher take up of solar PV systems by SME customers in SA, at around 10 per cent in 2018 Q3 and 2019 Q3. This lower reliance on electricity from the grid was reflected in the lower median annual bill in 2018–19 faced by SME customers in SA, which was $380 lower compared to the median annual bill of $2225 for SME customers in general, at $1845.\(^7^5\) As SME customers in SA faced the highest effective prices of all regions in 2018 Q3 and 2019 Q3,\(^7^6\) they perhaps had stronger financial incentives to invest in solar PV systems.

SME customers in SEQ and NSW had the highest median annual usage of all regions, at 8239 kWh and 7480 kWh respectively. Even though usage was slightly higher for SME customers in SEQ compared to NSW, their median annual bills in 2018–19 were quite similar, at $2427 and $2412 respectively.\(^7^7\) This is due to the lower effective prices that customers in SEQ faced in 2018 Q3 and 2019 Q3,\(^7^8\) partly reflecting the higher uptake of solar PV systems in that region. In 2018 Q3 and 2019 Q3, the proportion of SME solar customers in SEQ was around 9 to 10 per cent, while in NSW it was 4 to 5 per cent. We also found that 45 per cent of SME solar customers in SEQ were still receiving premium FiT rebates as at 30 June 2019, putting further downward pressure on their electricity bills and effective prices.\(^7^9\) In contrast, as at 30 June 2019, NSW had no SME solar customers receiving premium FiT rebates.\(^8^0\)

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\(^7^5\) See appendix E, figure A4.22.
\(^7^6\) See appendix E, figure A2.1.
\(^7^7\) See appendix E, figure A4.22.
\(^7^8\) See appendix E, figure A2.1.
\(^7^9\) Based on billing data provided by retailers.
\(^8^0\) Ibid.
Victoria had lower usage than NSW in 2018–19 despite roughly the same uptake of solar PV systems, but Victoria has a higher reliance on gas. As discussed in our supplementary report, business consumption of electricity from the grid in Victoria fell by 10 to 20 per cent between April and May 2020. With longer and more severe lockdowns in Victoria, we will be particularly interested to examine the effects there compared to the other regions when we examine the effects of the COVID-19 pandemic on the usage of SME customers in our next report, due in May 2021.

3.2.6. Usage by SME non-solar and solar customers

Figure 3.16 shows that solar customers across all four regions used more electricity from the grid than non-solar customers in 2018–19, with the difference more pronounced than for residential customers.

Figure 3.16: Usage by SME non-solar and solar customers in 2018–19, all regions combined

SME non-solar customers had a median annual usage of 6728 kWh, while solar customers had a higher median annual usage of 9768 kWh. In contrast to residential customers where median bills for solar customers were lower, the larger difference in usage meant that SME solar customers had a median annual bill in 2018–19 that was $285 higher compared to non-solar customers, at $2484 and $2199 respectively.

However, the much lower effective prices for SME solar customers (figure 3.9) shows that SME customers who invested in solar PV systems benefitted by reducing their reliance on electricity from the grid and paying lower electricity bills than they otherwise would have.

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82 ACCC, Inquiry into the National Electricity Market—Supplementary report—recent market developments and ACCC activities, September 2020, p. 9.
83 See appendix E, figure A4.17.
3.3. Types of offers customers are on

In this section we look at the proportion of customers who were on standing and market offers and their tariff types. This analysis provides an early assessment of whether the regulation of standing offer prices are effective in protecting all customers, including the vulnerable. It also provides some insights into whether customers were engaged in the market or could benefit from the advertising reforms that improve the comparability of offers.

Standing offers are the plans that customers are placed on by their retailer if they do not, or cannot, access a market offer. These offers were originally intended to provide a safety net to make sure that customers get a basic service at a reasonable price. However, following deregulation of electricity prices in Victoria, NSW, SA and SEQ, standing offers became some of the highest priced plans. The ACCC was particularly concerned about the impact on vulnerable customers who often already faced financial difficulties.

In our November 2019 report we found that the median price for standing offers decreased by about 10 per cent in NSW, SA and SEQ and by about 20 per cent in Victoria following the introduction of the DMO and VDO. Our analysis of billing data looks into which customers were on standing offers and have therefore immediately benefitted from these price reductions. We find that the majority of standing offer customers will have seen a reduction in their electricity prices from 1 July 2019.

However, some stakeholders raised concerns that the introduction of the DMO, and especially the lower-priced VDO, would lead to less competitively priced market offers and reduced customer engagement. In our November 2019 report we found that the spread of market offers decreased after 1 July 2019, but that competitively priced market offers remained. This means that customers could still get a better deal by switching from a standing offer to a market offer.

Our analysis of billing data enables an early assessment into whether the reforms are having unintended consequences for customer engagement. We find that in most regions residential customers continue to move away from standing offers to market offers. However, the reverse was true for some residential customer groups in Victoria, and we will be closely monitoring these results over time. We also find that higher numbers of SME customers remain on standing offers, and they could benefit from tailored communication explaining the savings they could make by shopping around using the DMO and VDO.

The proportions of standing offer customers found in our analysis may be different from those published by the AER. This is mainly because our data captures customers who were on standing offers over a period of time, while the AER uses a point in time measure.

Residential customers

We compare the proportion of residential customers who were on standing and market offers in 2018 and 2019. We break this down by region and customer group, and also compare differences between non-solar and solar customers.
3.3.1. Residential market and standing offer customers by region

The ACCC previously found that residential customers were moving away from standing offers in recent years.\(^90\) Figure 3.17 shows a further decrease in standing offer customers between 2018 and 2019 for all regions except Victoria. Standing offer customers comprised around 8 per cent of all customers in 2019, a decrease of 1.5 percentage points, with market offer customers at 92 per cent.

![Figure 3.17: Proportion of residential customers on market and standing offers, each region](image)

NSW had the largest decrease in the proportion of standing offer customers, from around 14 to 11 per cent. This was followed by SEQ, which decreased by 2 percentage points to 9 per cent, with SA remaining relatively stable at 8 per cent. Victoria was the only region to record an increase in the proportion of standing offer customers, from 4.5 to 5 per cent. However it remains the state with the lowest proportion of standing offer customers. We explore changes in the proportion of standing offer customers in Victoria further in figure 3.19. The AER's Retail Markets Report similarly found that the proportion of customers on market offers (across NSW, SA, QLD and the Australian Capital Territory combined) increased by 2 percentage points between 2017–18 and 2018–19.\(^91\) The ESCV’s Energy Market Report found a 0.8 per cent decrease in the proportion of standing offer customers in Victoria between 2017–18 and 2018–19.\(^92\)

The high and increasing proportion of market offer customers across all four regions is positive given that effective prices for market offer customers tend to be lower than for standing offer customers, as discussed in section 3.1. The high proportion of market offer customers indicate that the majority of customers were engaged to some extent. Reforms to

\(^{90}\) ACCC, Restoring electricity affordability and Australia’s competitive advantage, Retail Electricity Pricing Inquiry—Final Report, June 2018, p. 243.


make it easier for customers to compare the prices of different offers could therefore benefit the large number of customers who do shop around for market offers.

For the relatively smaller proportion of customers who were on standing offers, most of those customers would have benefitted from savings to their electricity bills as a result of the DMO and VDO. In the period examined, the DMO and VDO applied to standing offers with flat rate tariffs, including those with a controlled load component.93 We found that 86 per cent of all standing offer customers had flat rate tariffs in 2019.94 The savings are demonstrated in figure 3.1, which shows that there was a decrease in effective prices for standing offer customers between 2018 and 2019.

Recent changes to the Electricity Retail Code mean that the DMO also applies to standing offers with time of use tariffs from 1 July 2020.95 Our analysis shows that this will benefit around a further 21 per cent of all standing offer customers in NSW, but a much smaller proportion in SA and SEQ where few standing offer customers had time of use tariffs in 2019.96 In Victoria, the VDO applies to all standing offers from 1 January 2020.97 These recent changes are positive developments, especially as they bring cost savings to the majority of standing offer customers and significantly reduce the risk of vulnerable customers being charged excessively high electricity prices.

While it is still too early to tell, the continued decrease in the proportion of residential customers on standing offers between 2018 and 2019 is encouraging as it indicates that the introduction of the DMO in particular has not reduced customer engagement. This is supported by analysis of AEMO switching data in our November 2019 Report, which shows that customer switching rates remained largely unchanged in all four regions over the three months since the introduction of the DMO and VDO.98 In contrast, AEMC analysis of annualised AEMO switching data found a 5 per cent decrease in switching in 2019 across the NEM.99 This covered the six-month period before the introduction of the reforms, as well as the six months after the introduction of the reforms. At this early stage, the concerns raised by the AEMC about the risk of reduced customer engagement as a result of decreased price dispersion are not present in the billing data we analysed.100

### 3.3.2. Residential standing offer customers by customer group

Figure 3.18 shows that there was a shift away from standing offers for all customer groups between 2018 and 2019. However, our analysis in figure 3.19 shows that this was not the case for some customer groups in Victoria.

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93 AER, Default Market Offer Prices 2019-20, Final Determination, 30 April 2019, p. 8; ESCV, Victorian Default Offer to apply from 1 July 2019, Advice to Victorian Government, 3 May 2019, p. 3.
94 See appendix E, supplementary table A13.2.
96 See appendix E, supplementary table A13.2.
99 AEMC, 2020 Retail energy competition review, June 2020, p.84.
The proportion of hardship and payment plan customers on standing offers was relatively small in 2019, at less than 2 per cent compared to around 8 per cent for all customers. The ACCC has previously said that this could be because hardship and payment plan customers have a greater incentive to find better priced market offers.\(^{101}\) Also, retailers are required to place hardship customers onto offers that minimise their energy costs under retailers’ hardship policies.\(^{102}\) These observations are supported by our analysis that, although many hardship and payment plan customers had significantly higher electricity usage compared to other customer groups (figure 3.12), they also paid lower effective prices (figure 3.2).

Concession customers experienced the greatest decrease between 2018 and 2019, from 8 to 6 per cent. However, the proportion of concession standing offer customers remained substantially higher than for hardship or payment plan customers. Concession customers generally had the lowest electricity usage of any customer group (figure 3.12) and the lowest effective prices (figure 3.2). Unlike for hardship customers, retailers are not required to provide assistance in finding the lowest priced electricity plans to concession customers.

Our results suggest that concession customers may, as a whole, be less engaged than hardship or payment plan customers either because their overall bill amount is lower, or because they simply find the market difficult to navigate. However, even lower usage customers can save more by moving to a competitive market offer.

Figure 3.19 shows a slight increase in the proportion of Victorian customers who were on standing offers between 2018 and 2019, from 4.5 to 5 per cent. This contrasts with our findings for the other three regions.\(^{103}\)

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\(^{101}\) ACCC, *Restoring electricity affordability and Australia’s competitive advantage*, Retail Electricity Pricing Inquiry—Final Report, June 2018, p. 244.


\(^{103}\) See appendix E, figures A7.4 to A7.6.
The slight overall increase in the proportion of standing offer customers in Victoria was driven by the ‘other’ category, which increased from 4.8 to 5.5 per cent between 2018 and 2019. However, Victoria continued to have significantly lower proportions of standing offer customers in both 2018 and 2019 compared to the other regions. Preliminary analysis of 2019 Q4 data suggests that the proportion of standing offer customers in Victoria stayed relatively constant compared to 2019 Q3.

The concern here is whether the lower-priced VDO may lead to reduced customer engagement, a risk that was raised by the AEMC. The Victorian Government decided that the VDO should provide customers with universal access to a ‘fair’ price, whereas the DMO is intended to be a ‘fall-back position’ and acts as a price cap, while still allowing for continued competition in market offers. In our November 2019 report we found that many of the market offers priced above the DMO disappeared after 1 July 2019, while there were still a significant number of market offers priced above the VDO. It is possible that customers may be more likely to move onto standing offers in Victoria as a result.

At this stage, it is too early to tell if the change in the proportion of standing offer customers in Victoria is the beginning of a trend, and whether the change is due to the differences in the policy aims of the Victorian and Australian governments.

### 3.3.3. Residential standing offer customers by non-solar and solar

Figure 3.20 shows that the proportion of standing offers for both non-solar and solar customers across the four regions decreased between 2018 and 2019, by 1.4 and 0.9 percentage points respectively.
While the proportion of standing offer customers decreased for both groups, non-solar customers were much more likely to be on a standing offer than solar customers. Over 9 per cent of non-solar customers were on standing offers in 2019, compared to around 4 per cent of solar customers. The difference in proportions of standing offer non-solar and solar customers could be due to solar customers naturally shopping around for a competitive market offer as part of their research and purchasing of solar PV systems.

Our analysis indicates that reforms to standing offer prices have assisted a greater proportion of non-solar customers, who do not receive the benefits of having solar PV systems such as reduced grid electricity usage and rebates to offset their electricity charges. Given that non-solar customers paid significantly higher effective prices than solar customers (figure 3.6), it is a positive that the reforms to standing offer prices will have provided some relief to non-solar customers who were paying excessively high electricity prices.

### SME customers

We compare the proportion of SME customers who were on standing and market offers in 2018 and 2019. We break this down by region and non-solar and solar.

#### 3.3.4. SME market and standing offer customers by region

The ACCC previously found that a higher proportion of SME customers tended to be on standing offers compared with residential customers.\(^\text{107}\) Figure 3.21 shows that approximately 15 per cent of all SME customers across the four regions were on standing offers in 2019 and around 85 per cent were on market offers. The proportion of SME standing offer customers continues to be higher than for residential customers.

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Figure 3.21: Proportion of SME customers on market and standing offers in 2019 Q3, each region

Source: ACCC analysis of retailer billing data. Market offer customers may include some customers who were on a market offer for only part of the period. For further information on methodology, please refer to appendix B.

SEQ had the highest proportion of SME standing offer customers at 21 per cent in 2019, followed by NSW at 17 per cent and SA at 15 per cent. Similar to residential customers, Victoria had the lowest proportion of SME standing offer customers at 11 per cent.

The higher proportion of SME standing offer customers compared to residential customers means that DMO and VDO reforms likely benefitted a larger share of SME customers. The DMO covered SME flat rate tariffs without a controlled load component, and we found that between 55 and 85 per cent of standing offer customers in DMO regions were on that tariff type in 2019. In Victoria, the VDO covered flat tariff rates with or without a controlled load component. We found that almost 70 per cent of standing offer customers in Victoria were on these tariff types in 2019.109

In our November 2019 report, we found that the reduction in standing offer prices between June 2019 and September 2019 indicated annual savings of between $510 and $980 in DMO regions, depending on distribution zone.111 From January 2020, the coverage of the VDO was expanded and now covers all types of standing offers. This further increases the number of Victorian standing offer customers who will save on their electricity bills.

However, SME customers can make additional savings by switching to a market offer. As discussed in section 3.1, the median effective price paid by standing offer customers was 10.7 c/kWh more than market offer customers in 2019. In our November 2019 report we found that switching to the median flat rate market offer as at September 2019 could save

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108 See appendix E, figure A14.2.
109 ESCV, Victorian Default Offer to apply from 1 July 2019, Advice to Victorian Government, 3 May 2019, p. 3.
110 See appendix E, figure A14.2.
SME customers between $720 and $1155 per year, depending on distribution zone. These savings may be even more important now given the current financial stresses facing SME customers as a result of the COVID-19 pandemic. However, the comparatively higher proportion of SME standing offer customers indicates that SME customers may be less engaged in the market than residential customers, possibly due to being more time poor.

We have previously recommended that governments should fund small business organisations to provide tailored retail electricity market advice. The Australian Government has progressed this recommendation through the Business Energy Advice Program, which is intended to deliver trusted advice to help small businesses get better energy deals and reduce their energy usage.

3.3.5. SME standing offer customers by region over time

Figure 3.22 shows that the proportion of SME standing offer customers across the four regions decreased slightly to around 15 per cent between 2018 and 2019, but there continued to be a higher proportion compared to residential customers.

Figure 3.22: Proportion of SME customers on standing offers, each region

While the overall proportion of SME standing offer customers decreased, there were some differences between regions. Encouragingly, the proportions of SME standing offer customers in NSW and SEQ decreased between 2018 and 2019, by 3 and 1 per cent respectively. In SA, the proportion of SME standing offer customers remained relatively steady at 15 per cent. These results provide an early indication that the introduction of the

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DMO has not led to reduced customer engagement, although we will be monitoring these results over the long term.

In Victoria, the proportion of SME standing offer customers stayed relatively constant at 11 per cent between 2018 and 2019. This was in contrast to the slight increase in the proportion of residential standing offer customers over the same period. Victoria also had the lowest proportion of SME standing offer customers out of the four regions in both periods. These results are consistent with the AER’s observations that Victorian customers continue to have the highest rates of switching between retailers.116 As with residential customers, it is too early to tell if the lower-priced VDO will result in reduced customer engagement, but these results are encouraging and suggest that this is not the case.

3.3.6. SME standing offer customers by non-solar and solar

Figure 3.23 shows that the proportion of SME standing offers for both non-solar and solar customers decreased between 2018 and 2019, by 1.2 and 0.7 percentage points respectively.

Figure 3.23: Proportion of non-solar and solar SME customers on standing offers, all regions combined

As with residential customers, although the proportions of SME standing offer customers decreased for both groups between 2018 and 2019, non-solar customers were much more likely to be on a standing offer than solar customers. The proportion of SME standing offer non-solar customers was double the proportion for solar customers at 16 per cent and 8 per cent respectively. The reason for the difference may partly be because of the difference in usage between non-solar and solar customers. Figure 3.16 shows that non-solar customers used significantly less electricity from the grid than solar customers, and so there may be a perception that there is less to be gained by shopping around.

3.4. Conditional discounts

In this section we examine the proportion of customers who were on market offers with conditional discounts, and whether they obtained their discounts. We do this to inform our assessment of whether changes to the way retailers are allowed to advertise conditional discounts are having positive effects on customer outcomes, and the extent to which any concerns remain.

Conditional discounts reward customers who meet certain conditions, such as paying a bill on time or paying a bill using direct debit, by reducing their electricity bills. Conditional discounts are also a way for retailers to manage the risk and associated costs of late payments by encouraging timely bill payments.

However, the ACCC has had the following concerns with conditional discounts: 117

- Customers risked paying much higher electricity prices if they did not meet the conditions to obtain the discount, and this was not always made clear to them when they signed up to an offer.
- The size of the discounts were often much greater than retailers’ potential cost savings, meaning that customers effectively paid an excessive penalty if they did not achieve their discounts.
- Customers experiencing financial difficulties were least likely to meet the conditions to achieve the discount, and so those least able to afford it were disproportionately affected.

In our November 2019 report we found a significant decrease in the number of advertised market offers with conditional discounts after changes to rules around advertising took effect. 118 We also found that the size of the conditional discounts were generally much smaller. This did not mean that customers who previously benefited from large conditional discounts were going to be paying more for their electricity, because rates had decreased. 119

Our examination of billing data in this report supplements our prior analysis by providing insights into how customers have responded to the changes. We find that, although many customers remain on market offers with conditional discounts, many of these customers also achieved their conditional discounts. However, we have some particular concerns for payment plan customers as they had the lowest achievement rates of all customer groups and ended up paying higher effective prices than hardship and concession customers despite also facing financial difficulties.

Residential customers

We compare the proportion of residential customers who were on market offers with conditional discounts in 2018 and 2019, and break it down by region and customer group. We then look at the proportion of those who achieved their conditional discounts by customer group.

3.4.1. Residential customers with conditional discounts by region

Figure 3.24 shows that the proportion of residential customers on market offers with conditional discounts decreased in every region between 2018 and 2019, with an overall drop from 65 to 59 per cent.

119 Ibid.
NSW experienced the biggest decrease, where the proportion of customers with conditional discounts dropped from 64 to 56 per cent. SEQ experienced the smallest decrease, where the proportion decreased from 54 to 51 per cent. SEQ also had the lowest proportion of customers with conditional discounts compared to other regions across both periods. Victoria had the highest proportion of customers with conditional discounts compared to other regions, but decreased from 69 per cent to 65 per cent. SA had the second highest proportion of customers with conditional discounts, down from 66 to 60 per cent.

Despite these decreases, a large proportion of residential customers remained on market offers with conditional discounts after 1 July 2019. This contrasts with the significant decrease in the proportion of advertised market offers with conditional discounts that we observed in our November 2019 report.120 This indicates that changes to the rules on advertising had an immediate effect on retailer conduct, with many retailers moving away from conditional discounts. However, customers were either slow to engage or had switched to new market offers that still had conditional discounts. It is therefore important to examine which customers remained on market offers with conditional discounts, and whether they achieved their discounts, to better understand whether these early results are of concern.

3.4.2. Residential customers with conditional discounts by group

Figure 3.25 shows that the proportion of residential customers on market offers with conditional discounts decreased for every customer group between 2018 and 2019.

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Hardship customers were much less likely to be on market offers with conditional discounts in 2018 and 2019 compared to all other customer groups, at 32 and 30 per cent respectively. This is likely because retailers are required to transfer hardship customers onto offers that minimise their energy costs under the AER’s binding Customer Hardship Policy Guideline and Victoria’s Payment Difficulty Framework. Therefore, our results may indicate that the policies around retailer assistance for hardship customers are yielding some positive consumer outcomes by reducing the likelihood of these customers being exposed to significant financial penalties.

In contrast, we found that payment plan and concession customers were much more likely to be on market offers with conditional discounts in 2018 and 2019 compared to hardship customers. The proportion of payment plan customers with conditional discounts in 2018 and 2019 was 52 and 50 per cent respectively, while for concession customers it was 63 and 58 per cent respectively. This means that many payment plan and concession customers were exposed to the financial risks of missing a conditional discount. This may reflect differences in the nature of assistance required of retailers for these customer groups, as compared to hardship customers. Both the AER’s Sustainable Payment Plans Framework and Victoria’s Payment Difficulty Framework do not require retailers to assist payment plan customers by transferring them onto offers that will minimise their energy costs. Rather, the premise is that payment plan customers are usually able to pay for their electricity usage, but they require some temporary assistance to manage their debts. There is no requirement for retailers to provide assistance to concession customers.

122 Energy Retail Code (Vic), s 79(1)(e).
124 Energy Retail Code (Vic), s 79(2).
3.4.3. Residential customers who achieved their conditional discounts

Figure 3.26 shows that the overall proportion of residential customers across the four regions who achieved their conditional discounts remained relatively steady at 84 per cent in 2019. However, the much lower achievement rates for hardship and payment plan customers are a concern.

Figure 3.26: Proportion of residential market offer customers who achieved their discounts by customer group, all regions combined

The achievement rate for hardship customers decreased from 74 to 69 per cent between 2018 and 2019. This decrease was the largest across all residential customer groups. For payment plan customers, the achievement rate improved from 48 to 59 per cent, but remained the lowest of all customer groups. Concession customers continued to have the highest achievement rate of all customer groups, though it decreased slightly from 88 to 87 per cent.

It is concerning that around 30 to 40 per cent of hardship and payment plan customers did not achieve their discounts because this likely exacerbated the financial difficulties they already faced. The low achievement rates for payment plan customers is particularly concerning considering our results in figure 3.24 that more than half of all payment plan customers were on offers with conditional discounts. Our results in figure 3.2 show that payment plan customers paid effective prices that were 3 to 4 c/kWh higher than hardship and concession customers.

In contrast, the relatively high achievement rate for concession customers is a positive given that many are likely to be lower income households. One possible explanation for this high achievement rate is that the concessions they received from state and territory governments enabled them to pay their electricity bills on time.

The extent of our concerns with missed conditional discounts may lessen over time in light of new rules on conditional discounts that came into effect on 1 July 2020. In NSW, SA and
SEQ, the rule caps the size of conditional discounts and fees to the ‘reasonable costs’ or loss of potential savings a retailer is likely to incur or experience when a customer does not meet the conditions required for the discount to apply. In Victoria, the rule involves the ESCV setting a cap on pay on time discounts by reference to a retailer’s cost of debt.

These new rules rebalance the risks of conditional discounts by providing opportunities for customers to save on their electricity bills without exposing them to excessive financial penalties if they do not achieve their discounts. We will be closely monitoring how these changes affect customer outcomes in future periods.

SME customers

We compare the proportion of SME customers who were on market offers with conditional discounts in 2018 and 2019. We then look at the proportion of those who achieved their conditional discounts by region.

3.4.4. SME customers with conditional discounts

Figure 3.27 shows that the proportion of SME customers with conditional discounts increased in every region except NSW between 2018 and 2019, resulting in the overall numbers increasing slightly from 15 to 15.4 per cent.

Figure 3.27: Proportion of SME market offer customers who have conditional discounts, each region

Source: ACCC analysis of retailer billing data.

Victoria, SA and SEQ all experienced increases in the proportion of SME customers on market offers with conditional discounts by 1 to 3 percentage points between 2018 and 2019. NSW was the only region that experienced a decrease, where the proportion went from 14 to 12 per cent. NSW also had the lowest proportion of SME customers on offers with conditional discounts.

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126 ESCV, Ensuring energy contracts are clear and fair—Final Decision, 28 February 2020, pp. 55–64.
conditional discounts compared to other regions. Compared to residential customers, there was a much lower proportion of SME customers on market offers with conditional discounts. The overall increase in the proportion of SME customers with conditional discounts contrasts with the decrease in proportion of advertised offers with conditional discounts observed in our November 2019 report. This indicates that the changes to rules around advertising conditional discounts have not led to a significant reduction of SME customers on market offers with conditional discounts. It follows that SME customers may still be finding or at least perceiving value in offers where retailers offered conditional discounts. However, the growing number of SME customers with conditional discounts may not be a significant concern given reductions in the size of conditional discounts advertised by retailers between June 2018 and September 2019.

3.4.5. SME customers who achieved their conditional discounts

Figure 3.28 shows that the proportion of SME customers that achieved their conditional discounts slightly improved between 2018 and 2019, with an overall increase from 79 to 80 per cent.

**Figure 3.28: Proportion of SME market offer customers who achieved their conditional discounts, each region**

<table>
<thead>
<tr>
<th>Region</th>
<th>2018 Q3</th>
<th>2019 Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victoria</td>
<td>79%</td>
<td>80%</td>
</tr>
<tr>
<td>NSW</td>
<td>75%</td>
<td>79%</td>
</tr>
<tr>
<td>SA</td>
<td>85%</td>
<td>86%</td>
</tr>
<tr>
<td>SEQ</td>
<td>82%</td>
<td>83%</td>
</tr>
<tr>
<td>All</td>
<td>79%</td>
<td>80%</td>
</tr>
</tbody>
</table>

Source: ACCC analysis of retailer billing data.

NSW and Victoria had a lower proportion of SME customers who achieved conditional discounts in both 2018 and 2019 compared to other regions. In NSW, it was steady at around 75 per cent, and in Victoria it slightly increased from 78 to 79 per cent. Our concerns with these lower achievement rates in NSW and Victoria relative to other regions are eased to an extent by the relatively small proportion of customers in those states on offers with

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conditional discounts (figure 3.27). The new rules that cap conditional discounts should also mean that missed discounts become less of a concern.\textsuperscript{129}

SA and SEQ both had a higher proportion of SME customers who achieved conditional discount rates compared to the overall results in 2018 and 2019. In SA, there was a slight increase from around 87 to 88 per cent, and for SEQ there was a slight increase from around 85 to 86 per cent. This high achievement rate coincided with an increase in the proportion of customers with conditional discounts. This suggests that most SME customers in SA and SEQ on offers with conditional discounts were making savings on their electricity bills by achieving their discounts.

While the proportion of SME customers that achieved conditional discounts was generally higher than what we found for residential customers, we are concerned that 12 to 25 per cent did not. SME customers do not have access to the same level of assistance from retailers as residential customers if they miss conditional discounts and face payment difficulties. Ordinarily, the highest level of assistance SME customers can access from retailers is payment plans. We have previously advocated for an industry-led approach, where retailers work to improve the accessibility and clarity of information around payment plan options for small business.\textsuperscript{130} Since the release of the AER’s Statement of Expectations for how energy businesses should respond to the COVID-19 pandemic, most retailers have committed to measures to support both residential and SME customers facing financial distress.\textsuperscript{131} We consider this to be a positive move by the industry.


\textsuperscript{130} ACCC, \textit{Restoring electricity affordability and Australia’s competitive advantage}, Retail Electricity Pricing Inquiry—Final Report, June 2018, p. 343.

Appendix A: Terms of reference for the inquiry

COMPETITION AND CONSUMER ACT 2010

INQUIRY INTO ELECTRICITY SUPPLY IN AUSTRALIA

I, Scott Morrison, Treasurer, pursuant to subsection 95H(1) of the Competition and Consumer Act 2010, hereby require the Australian Competition and Consumer Commission (ACCC) to hold an inquiry into prices, profits and margins in relation to the supply of electricity in the National Electricity Market.

Matters to be monitored and taken into consideration in the inquiry include but are not limited to:

i. electricity prices faced by customers in the National Energy Market including both the level and the spread of price offers, analysing how wholesale prices are influencing retail prices and whether any wholesale cost savings are being passed through to retail customers;

ii. wholesale market prices including the contributing factors to these such as input costs, bidding behaviour and any other relevant factors;

iii. the profits being made by electricity generators and retailers and the factors that have contributed to these;

iv. contract market liquidity, including assessing whether vertically integrated electricity suppliers are restricting competition and new entry; and

v. the effects of policy changes in the National Electricity Market, including those resulting from recommendations made by the ACCC in its Retail Electricity Pricing Inquiry report of July 2018.

Where appropriate, the inquiry will make recommendations to government(s) to take any propositional and targeted action considered necessary to remedy any failure by market participant(s) (or the market as a whole) to deliver competitive and efficient electricity prices for customers.

The ACCC should make use of publicly available information, including that published by the Australian Energy Regulator, the Australian Energy Market Commission or the Australian Energy Market Operator, where appropriate.

This is not to be an inquiry into supply by any particular person or persons, or by a State or Territory Authority.

The inquiry is to commence today. The inquiry is to provide its first report to me by 31 March 2019 and no less frequently than every six months thereafter. The first report should focus on setting out the analytical framework for monitoring and provide information about expectations of market outcomes and market participant behaviour. The inquiry should also provide information to the market as appropriate. The inquiry is to conclude and provide its final report by 31 August 2025.

DATED THIS 20TH DAY OF August 2018

SCOTT MORRISON
Treasurer
Appendix B: Methodology for billing data analysis

This appendix describes our methodology for analysing billing data. We describe our approach to data collection, quality assurance, weighting and important rules for our analysis.

Our billing dataset covers residential and SME customers. It does not cover large business (C&I) customers. A customer is defined as residential or SME based on the distributor tariff or the meter installation type.

Data collection

We used our compulsory information gathering powers to obtain billing data from 11 electricity retailers, which collectively supply over 95 per cent of residential customers and 80 per cent of SME customers across Victoria, NSW, SA and SEQ.132 We requested data for every bill issued to customers in the residential, SME and targeted samples (described below) between 1 July 2018 and 31 December 2019.

The type of data requested for each bill included account and plan details, tariff types, solar rebates, discounts, concessions, bill amounts and usage. Retailers were also required to indicate whether the customer was in a hardship program or on a payment plan due to financial difficulties. The full details of data requested is in appendix C, and the template we issued to retailers is in appendix D.

For the residential and SME samples, each retailer was required to provide the data for a random selection of its customer base. The samples were required to represent 5 per cent of the retailer’s customer base in each of the four regions or 10 000 customers, whichever was greater. If a retailer’s customer base in a region was smaller than 10 000 customers, it was required to provide data for all of its customers in that region.

For the targeted sample, each retailer was required to provide data for every customer who was in hardship or on a payment plan due to financial difficulties at any point during the 18-month period. Three retailers were only able to provide data for customers who were in hardship or on a payment plan on 1 October 2018 or 1 October 2019 rather than at any time during the 18-month period. This means that there may be some customers missing from the targeted sample for these three retailers. However, our checks against the customer numbers reported by the AER indicate that the number of missing customers is small.133

Table 1 shows the number of customers and corresponding number of bills that were captured through our data collection. Customer numbers are based on the number of unique accounts for each retailer.

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Table 1: Size of billing data request

<table>
<thead>
<tr>
<th>Sample</th>
<th>Region</th>
<th>Customers</th>
<th>Bills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>Victoria</td>
<td>172,386</td>
<td>1,236,290</td>
</tr>
<tr>
<td></td>
<td>NSW</td>
<td>221,777</td>
<td>1,060,777</td>
</tr>
<tr>
<td></td>
<td>SA</td>
<td>94,303</td>
<td>460,229</td>
</tr>
<tr>
<td></td>
<td>SEQ</td>
<td>108,924</td>
<td>511,011</td>
</tr>
<tr>
<td>SME</td>
<td>Victoria</td>
<td>82,271</td>
<td>650,432</td>
</tr>
<tr>
<td></td>
<td>NSW</td>
<td>62,372</td>
<td>318,544</td>
</tr>
<tr>
<td></td>
<td>SA</td>
<td>47,374</td>
<td>279,740</td>
</tr>
<tr>
<td></td>
<td>SEQ</td>
<td>45,390</td>
<td>261,062</td>
</tr>
<tr>
<td>Targeted</td>
<td>Victoria</td>
<td>211,650</td>
<td>1,445,381</td>
</tr>
<tr>
<td></td>
<td>NSW</td>
<td>293,521</td>
<td>1,510,573</td>
</tr>
<tr>
<td></td>
<td>SA</td>
<td>72,584</td>
<td>377,665</td>
</tr>
<tr>
<td></td>
<td>SEQ</td>
<td>88,408</td>
<td>448,981</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1,500,960</td>
<td>8,560,685</td>
</tr>
</tbody>
</table>

**Quality assurance**

We checked the returned data for inconsistencies and errors to ensure its quality for our analysis. For example, we checked that:

- the size of the residential, SME and targeted samples by retailer and region were consistent with our expectations based on customer numbers reported by the AER and the ESCV\(^{134}\)
- all variables had been provided for all bills
- the postcode, distributor and region were consistent with each other, similarly that the number of supply days was consistent with the invoice dates
- numerical signs made sense, such as positive usage values
- a bill with a discount, concession or solar rebate amount had corresponding details about the type and rates
- a bill with a conditional discount had corresponding information on whether the discount was achieved.

Our checks identified several significant data quality issues for a number of retailers. In each case we contacted the retailers for clarification and in several instances updated data was provided. We repeated checks on any new data provided.

We removed bills from the dataset where we could not resolve quality issues. When we did this, we also removed all other bills related to the same customer. This reduced the number of customers represented in the dataset by 2 per cent for the targeted sample, 3.7 per cent for the residential sample, and 8.7 per cent for the SME sample.

We excluded EnergyAustralia’s data from our payment plan results due to the methodology change that led the AER to exclude the data from the analysis in its 2018–19 Annual retail markets report.135

Weighting

To ensure that our results would be representative of the overall customer base rather than skewed by some retailers being over or under-represented in the sample, we adjusted the residential and SME samples. We created new weighted samples where the share of each retailer’s customer base in each sample was the same as the share of each retailer’s overall customer base. We did not need to do this for the targeted sample as we requested billing data for every hardship and payment plan customer.

To create the weighted samples, we took the following steps:

- determined each retailer’s overall customer base for each region using customer numbers from the AER’s 2018–19 Annual retail markets report and the ESCV’s 2018–19 Victorian energy market report136
- compared these numbers to each retailer’s customer base for each region in each sample, after removal of any customers during the quality assurance process
- determined which retailer in each sample had the smallest percentage share of its customer base, which was 3.7 per cent for the residential sample and 5.6 per cent for the SME sample137
- any retailer found to have a higher percentage share of customers in a region was down-sized in the sample by removing customers and corresponding bills through random selection.

Table 2 shows customer numbers in the weighted samples compared to the overall customer base.

Table 2: Customers at 30 June 2019 in weighted samples

<table>
<thead>
<tr>
<th>Sample</th>
<th>Region</th>
<th>Customers in sample</th>
<th>Customer base</th>
<th>Sample share of base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>Victoria</td>
<td>87 452</td>
<td>2 359 527</td>
<td>3.7%</td>
</tr>
<tr>
<td></td>
<td>NSW</td>
<td>115 165</td>
<td>3 107 226</td>
<td>3.7%</td>
</tr>
<tr>
<td></td>
<td>SA</td>
<td>28 547</td>
<td>770 213</td>
<td>3.7%</td>
</tr>
<tr>
<td></td>
<td>SEQ</td>
<td>46 573</td>
<td>1 256 581</td>
<td>3.7%</td>
</tr>
<tr>
<td>SME</td>
<td>Victoria</td>
<td>13 712</td>
<td>245 238</td>
<td>5.6%</td>
</tr>
<tr>
<td></td>
<td>NSW</td>
<td>16 951</td>
<td>303 169</td>
<td>5.6%</td>
</tr>
<tr>
<td></td>
<td>SA</td>
<td>4 821</td>
<td>86 226</td>
<td>5.6%</td>
</tr>
<tr>
<td></td>
<td>SEQ</td>
<td>5 052</td>
<td>90 360</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

137  These differ from the 5 per cent share of customers in our information request in part because weights are calculated at a single point in time and not across the entire 18-month period.
We used weighted samples to calculate all results for SME and residential customers, with the exception of hardship and payment plan customers. For hardship and payment plan results we used the targeted sample.

Analytic approach

We analysed the data over the 2018–19 financial year (1 July 2018 to 30 June 2019) and over quarters:

- Q1 (1 January to 31 March)
- Q2 (1 April to 30 June)
- Q3 (1 July to 30 September)
- Q4 (1 October to 31 December).

As retailer billing cycles vary and therefore do not align with these quarter periods, we applied rules to quantitative and qualitative variables to enable analysis. We also applied rules where there was only partial coverage of analysis periods, and for year-on-year comparisons given that we had only 18 months of data. These details are outlined below.

Quantitative variables

To calculate the amount paid by a customer in an analysis period, we summed the usage, supply, green energy, demand and other charges for all bills that applied to the analysis period. We then subtracted concessions, rebates (including solar FiT rebates), unconditional discounts, conditional discounts achieved and any other discounts.

If a bill partially overlapped an analysis period, we assigned values based on the number of overlapping billing days. For example, if a bill covered 90 days and 30 of those days overlapped the analysis period, we applied one third of the usage for that bill to the customer’s total usage during the period.

Our analysis of prices paid by customers is based on effective prices rather than bill amounts. This is because bill amounts depend on the amount of electricity used, whereas effective prices take usage into account and therefore provide a better comparison over time and across customer groups.

To calculate the effective price paid by a customer in an analysis period, we divided the amount paid by a customer as described above by the customer’s total usage from the grid during the period.

Qualitative variables

To determine which customer group applied to a customer in an analysis period, we checked the status of each qualitative variable for all bills that applied to the period. A customer group such as standing offer, concession, hardship or payment plan was assigned only if all bills applying to the analysis period had that status. For example, if two bills applied to an analysis period and one showed that the customer was in hardship and the other did not, then we did not assign the customer to the hardship group for that period.

When assigning customers to the ‘other’ customer group for comparison to concession, hardship and payment plan groups, we only assign customers who did not have concession, hardship or payment plan status at any time during the relevant analysis period. To calculate the proportion of customers on standing and market offers for an analysis period, we identify standing offer customers as outlined above and assign any remaining customers to the market offer customer group. Therefore our proportions of market offer customers may
include a small number of customers who were on a market offer for only part of the analysis period.

We took a slightly different approach to determine the share of customers on different tariff types. Our information request asked retailers to indicate whether the tariff type that applied to each bill was a flat rate, time of use, controlled load, demand, or subscription-based tariff. Where multiple bills applied to an analysis period, we assigned the tariff type that applied for the most days during the analysis period.

### Partial coverage of analysis periods

Some customers do not have complete bill coverage of an analysis period. This may be because a customer joined the retailer part way through the analysis period, or because they switched to a different retailer during the period.

The number of customers affected depends on the length of the analysis period (quarterly or yearly). For example, 25 to 30 per cent of residential customers have incomplete coverage for some quarters, and around 40 per cent of residential customers have incomplete coverage for the 2018–19 financial year.

We included these customers in our analysis of the effective price and customer proportions, as many will represent engaged customers who appear for only part of the analysis period because they have actively switched to or from another retailer.

This incomplete bill coverage does, however, artificially lower the usage and bill amounts for the affected customers over the analysis period. In the 2018–19 financial year we estimate that the median usage and bill is underestimated by around 20 per cent if we include customers with incomplete coverage. Therefore, for the purposes of measuring the bill amount and usage, we included only customers with bills covering the entire analysis period. We also included only customers with complete bill coverage for our hardship tenure analysis.

### Year-on-year comparisons

To compare changes between 2018 and 2019 we used a year-on-year comparison between 2018 Q3 and 2019 Q3, taking into account inflation.

Depending on the billing cycle and retailer, bills can be issued over a month after the corresponding invoice period. Our data set includes all bills that were issued up to the end of 2019, and so does not capture all of the bills that relate to the 18-month period. For example, the number of bills in our sample for the last quarter of 2019 is around 50 per cent smaller compared with other quarters in the 18-month period.

Therefore we performed comparisons using 2018 Q3 and 2019 Q3, as all bills in those two periods should be captured in our samples. This also helps limit the influence of any seasonal effects. Where possible, we checked that preliminary results for 2019 Q4 are consistent with any conclusions we draw from the Q3 comparisons.

When performing year-on-year comparisons between dollar amounts we applied an inflation correction. We multiplied both the effective price and account charges for Q3 2018 by the ABS estimate of year-on-year growth in the consumer price index from 2018 Q3 to 2019 Q3 (1.01674). \(^{139}\)

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\(^{138}\) When more than one tariff type applied during a billing period, the retailer provided information for the tariff that applied at the end of the period.

\(^{139}\) ABS, *Consumer Price Index, Australia, June 2020*, Table 1.
Appendix C: Billing data definitions

The table below describes the data for each customer bill that retailers were required to provide in their response to our information request.

<table>
<thead>
<tr>
<th>Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td>retailer name</td>
</tr>
<tr>
<td>Account Number</td>
<td>unique customer identifier for billing purposes</td>
</tr>
<tr>
<td>State</td>
<td>state in which electricity was supplied</td>
</tr>
<tr>
<td>Postcode</td>
<td>postcode in which electricity was supplied</td>
</tr>
<tr>
<td>NMI</td>
<td>National Metering Identifier, the unique identifier for the connection point to the grid</td>
</tr>
<tr>
<td>Bill Issue Date</td>
<td>date the bill was issued</td>
</tr>
<tr>
<td>Invoice Date From</td>
<td>first day of the billing period</td>
</tr>
<tr>
<td>Invoice Date To</td>
<td>last day of the billing period</td>
</tr>
<tr>
<td>Offer Start Date</td>
<td>first day that electricity was supplied to the customer for the offer that applied to the bill</td>
</tr>
<tr>
<td>Offer End Date</td>
<td>last day that electricity was or will be supplied to the customer for the offer that applied to the bill</td>
</tr>
<tr>
<td>From Different Retailer (Y/N)</td>
<td>whether the customer was with a different retailer in the previous billing period</td>
</tr>
<tr>
<td>Distributor</td>
<td>distributor corresponding to the state and postcode in which electricity was supplied</td>
</tr>
<tr>
<td>Smart Meter (Y/N)</td>
<td>whether the customer had a device that digitally measures energy use, also known as an advanced meter or ‘type 4’ meter</td>
</tr>
<tr>
<td>Hardship Customer (Y/N)</td>
<td>whether the customer participated in the retailer’s hardship program at the invoice end date, or received hardship assistance during the billing period</td>
</tr>
<tr>
<td>Payment Plan Customer (Y/N)</td>
<td>whether the customer had an arrangement to pay the retailer in instalments (not including flexible arrangements for convenience or budgeting) at the invoice end date</td>
</tr>
<tr>
<td>Concession Customer (Y/N)</td>
<td>whether the customer received an amount funded by a state or territory government that reduced the amount the customer had to pay for electricity during the billing period</td>
</tr>
<tr>
<td>Solar Customer (Y/N)</td>
<td>whether the customer was on an offer that included a Premium FiT or Negotiated FiT payment</td>
</tr>
<tr>
<td>Offer Type (Market/Standing)</td>
<td>whether the customer was on a market or standing offer during the billing period, as defined by the NERL in NSW, SA and SEQ and the Energy Retail Code in</td>
</tr>
<tr>
<td>Data</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Contract Term (Months)</td>
<td>number of months over which the offer applies</td>
</tr>
<tr>
<td>Plan ID</td>
<td>EME or VEC identifier for the offer</td>
</tr>
<tr>
<td>Other ID</td>
<td>unique identifier for an offer if a Plan ID is not provided</td>
</tr>
<tr>
<td>Plan Name</td>
<td>name of the offer</td>
</tr>
<tr>
<td>Flat Tariff (Y/N)</td>
<td>whether the offer charges the same price for electricity regardless of the time of day</td>
</tr>
<tr>
<td>Controlled Load Tariff (Y/N)</td>
<td>whether the offer charges a separate price that applies to one or more appliances that are separately metered</td>
</tr>
<tr>
<td>Time of Use/Flexible Tariff (Y/N)</td>
<td>whether the offer charges different prices depending on the time of day</td>
</tr>
<tr>
<td>Demand Tariff (Y/N)</td>
<td>whether the offer includes additional demand-based charges on top of any usage charges</td>
</tr>
<tr>
<td>Subscription Plan (Y/N)</td>
<td>whether the offer charges a set amount each period to cover for a specified amount of electricity</td>
</tr>
<tr>
<td>Premium FiT (Y/N)</td>
<td>whether the offer includes a payment to the customer for electricity generated from solar PV systems and fed into the grid at a premium solar scheme rate</td>
</tr>
<tr>
<td>Negotiated FiT (Y/N)</td>
<td>whether the offer includes a payment to the customer for electricity generated from solar PV systems and fed into the grid at a negotiated or state-mandated minimum rate</td>
</tr>
<tr>
<td>Premium FiT Rate (c/kWh)</td>
<td>rate that applied for the Premium FiT</td>
</tr>
<tr>
<td>Negotiated FiT Rate (c/kWh)</td>
<td>rate that applied for the Negotiated FiT</td>
</tr>
<tr>
<td>Conditional Discount Type</td>
<td>description of the condition that must be met for the conditional discount to be applied, such as paying a bill on time or by direct debit</td>
</tr>
<tr>
<td>Conditional Discount Rate (%)</td>
<td>amount of conditional discount that applied to the bill expressed as a percentage</td>
</tr>
<tr>
<td>Unconditional Discount Type</td>
<td>description of the reason that an unconditional discount was applied, such as a special promotion applying at the time of signing up</td>
</tr>
<tr>
<td>Unconditional Discount Rate (%)</td>
<td>amount of unconditional discount that applied to the bill expressed as a percentage</td>
</tr>
<tr>
<td>Total Supply Days</td>
<td>number of days that electricity was supplied to the customer in the billing period</td>
</tr>
<tr>
<td>Total Usage (kWh)</td>
<td>total amount of electricity that the customer consumed from the grid during the billing period</td>
</tr>
<tr>
<td>Total Solar Feed-in Supply (kWh)</td>
<td>total amount of electricity that the customer supplied to the grid during the billing period</td>
</tr>
<tr>
<td>Data</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Opening Balance ($)</td>
<td>total amount charged to the customer in the previous billing period (excluding GST)</td>
</tr>
<tr>
<td>Total Payments Received ($)</td>
<td>total amount of the previous bill paid by the customer as at the bill issue date (excluding GST)</td>
</tr>
<tr>
<td>Balance Carried Forward ($)</td>
<td>total amount of the previous bill not paid by the customer as at the bill issue date (excluding GST)</td>
</tr>
<tr>
<td>Total Supply Charges ($)</td>
<td>total fixed costs charged regardless of the amount of electricity the customer consumed from the grid (excluding GST)</td>
</tr>
<tr>
<td>Total Usage Charges ($)</td>
<td>total variable costs charged based on the amount of electricity the customer consumed from the grid (excluding GST)</td>
</tr>
<tr>
<td>Total Current Charges ($)</td>
<td>total amount charged in the billing period before any adjustments such as discounts, FiT rebates or concessions are applied (excluding GST)</td>
</tr>
<tr>
<td>Total Conditional Discounts ($)</td>
<td>total conditional discounts that could have applied to the bill if all conditions were met (excluding GST)</td>
</tr>
<tr>
<td>Achievement of Conditional Discounts (Y/N)</td>
<td>whether all conditional discounts that could have applied to the bill were applied</td>
</tr>
<tr>
<td>Total Unconditional Discounts ($)</td>
<td>total unconditional discounts that applied to the bill (excluding GST)</td>
</tr>
<tr>
<td>Total Concessions ($)</td>
<td>total concessions that applied to the bill (excluding GST)</td>
</tr>
<tr>
<td>Total Premium FiT Rebates ($)</td>
<td>premium FiT rebates credited to the customer in the billing period (excluding GST)</td>
</tr>
<tr>
<td>Total Negotiated FiT Rebates ($)</td>
<td>negotiated FiT rebates credited to the customer in the billing period (excluding GST)</td>
</tr>
<tr>
<td>Demand Charges ($)</td>
<td>additional charges that applied to the bill in relation to a demand tariff (excluding GST)</td>
</tr>
<tr>
<td>Green Energy Charges ($)</td>
<td>additional charges relating to a green energy scheme, such as GreenPower (excluding GST)</td>
</tr>
<tr>
<td>Other Charges/Discounts ($)</td>
<td>any additional charges or discounts that are not captured by other categories, including credit card fees, paper bill fees and corrections (excluding GST)</td>
</tr>
<tr>
<td>Total Current Balance ($)</td>
<td>total amount owed by the customer as at the bill issue date (excluding GST)</td>
</tr>
</tbody>
</table>