Retail energy markets
Retail energy markets are the final link in the energy supply chain. Retailers enter into contracts with consumers (such as households and small businesses) to supply energy for an agreed price. The agreed price is used by the retailer to pay for energy it has purchased, as well as the cost of transporting the energy and other system costs.

Retailers purchase electricity and gas either from direct contracts with suppliers or from wholesale markets that use spot pricing based on bids received from energy suppliers. Retailers are exposed to financial risk through spot price volatility in the wholesale electricity and gas markets. To manage this risk, most retailers purchase hedging contracts that limit part, or all of the wholesale price they pay. This is discussed more in section 2.4. Hedging lets retailers offer stable annual prices to consumers, so that consumers have more predictable energy bills instead of bearing the financial risk of energy prices themselves.

A retailer’s level of exposure to the very high electricity and gas prices during 2022, and the extent to which these prices will be passed on to its customers, will depend on different factors. These include the sufficiency of the retailers’ hedging contracts to protect against the high prices, and expectations around the prices it expects to pay in the future for electricity and gas, including for further hedging or risk mitigation techniques. Contract markets show sharply increased prices for energy derivatives, as well as reduced liquidity in the market. This creates further challenges for retailers to manage their price risk and increases their exposure to the high spot market prices. At the same time, their ability to increase their revenue from their customers is limited until retail contract prices are renegotiated.

The impact of higher wholesale prices on consumers’ bills is usually delayed until their energy contract is renewed with new retail prices and the first billing cycle is completed. Many energy contracts (consisting of market offers and standing offers) are determined at the start of the financial year and the billing cycle is usually 90 days. This means that many consumers’ energy bills will likely show the impact around October 2022.

Figure 6.1 Retail energy market supply chain

---

343 Electricity generally must be purchased through the National Electricity Market, but gas is more likely to be purchased directly from suppliers (around 85%) than through the Domestic East Coast Gas Market. See sections 2.3 and 4.3 for more information.
Box 6.1 The AER’s role in retail energy markets

The Australian Energy Regulator (AER) regulates retail energy markets so that energy consumers (particularly residential and small business customers) can participate confidently and effectively in those markets to provide protections and support consumers to participate in their energy. We undertake this work for consumers in Queensland, New South Wales (NSW), South Australia, Tasmania and the Australian Capital Territory (ACT).

We aim to enable consumers to make informed decisions on their energy use and to protect consumer rights in the energy market. As part of this work, we:

- set a price cap on standing offers for electricity in south-east Queensland, NSW and South Australia – this cap also acts as a reference price for market offers
- maintain an energy price comparator website (www.energymadeeasy.gov.au) to help residential and small business customers understand the range of offers in the market, make better choices about those offers and be aware of their rights and responsibilities when dealing with energy providers
- oversee retail market entry and exit by assessing applications from businesses looking to become energy retailers, granting exemptions from the requirement to hold a retailer authorisation and administering a national retailer of last resort scheme to protect consumers and the market if a retailer fails
- monitor and enforce compliance (by retailers and distributors) with obligations in the National Energy Retail Law, Rules and Regulations
- report on the performance of the market and energy businesses (including information on the cost of energy and its impact on consumers)
- develop hardship guidelines and approve customer hardship policies that energy retailers offer to consumers who are facing financial hardship and seeking help to manage their bills.

6.1 Retail market snapshot

Retail markets have entered a period of significant change:

- As the impacts of high wholesale prices during 2022 flow through to retail markets, retail prices are likely to increase the cost of energy, which had been improving through the end of 2021 (section 6.3.3) based on subdued wholesale market conditions.
- These pressures are reflected in higher default market offers for 2022–23 (section 6.3.2), which mean that standing offers could be revised upwards from 1 July 2022.
- Market offers are typically reset in July each year and these offers will also increase to accommodate the higher wholesale prices, with bills potentially increasing from August (monthly billing cycles) to October 2022 (quarterly billing cycles).
- Through the end of 2021, both electricity and gas retail markets continued to attract new entrants and Tier 2 retailers had maintained market share (section 6.6.1). In 2021 the proportion of small customers on market contracts also increased (section 6.6.5) and an increase in customer switching rates (section 6.6.9) suggests small customers were more engaged in the market. However, prolonged high wholesale prices may exert strain on retail market participants and adversely impact the level of retail competition.
- As of 1 August 2022, 8 retailers have entered the Retailer of Last Resort scheme since 1 May 2022. The combined customer base of these retailers is around 22,000 customers, including almost 20,000 small customers.344
- The impact of higher retail prices will flow through to debt levels. We expect to see escalation of consumers’ debt levels from late 2022 to early 2023. Worsening of debt levels and other indicators of financial difficulties have already been observed in early 2022 data, demonstrating that consumers are not well placed to absorb further increases in energy costs.
- Recent reforms to retail regulation continue to focus on effective competition – for example, supporting consumers to understand how their bills are calculated and enable them to shop around for a better energy

---

contract. These reforms include the release of the AER’s Better Bills Guideline (Better Bills)\textsuperscript{345} and preparing for greater penetration of consumer energy resources in the NEM through the Energy Security Board’s (ESB’s) implementation plan for consumer energy resources as part of the Post-2025 Electricity Market Design Project.

The AER is concerned about the impact of these market developments on consumers experiencing vulnerability, recognising that as of March 2022 consumers are already facing higher average levels of debt (section 6.5.3). Consumers experiencing vulnerabilities are also less able to adopt technology and modify their energy use in response to higher prices, or to shop around for a cheaper energy contract. Our strategy focusing on consumers experiencing vulnerabilities will be published this year and will guide our work in responding to these challenges as they emerge.

### 6.2 Energy market regulation

Five jurisdictions – Queensland, NSW, South Australia, Tasmania and the ACT – apply a common national framework for regulating retail energy markets. The framework applies to electricity retailing in all 5 jurisdictions and to gas retailing in Queensland, NSW, South Australia and the ACT.

The Retail Law operates alongside the Australian Consumer Law to protect small energy consumers in their electricity and gas supply arrangements. It sets out protections for residential consumers and small businesses.\textsuperscript{346} Victoria does not apply the national framework but applies similar regulatory provisions.\textsuperscript{347}

The Retail Law and equivalent arrangements in Victoria focus on consumer protections related to the traditional retailer–customer relationship. Protections are generally stronger for consumers supplied through an authorised retailer than consumers in embedded networks or entering solar power purchase agreements.

State and territory governments regulate electricity prices in regional Queensland, Victoria, Tasmania and the ACT. Since 1 July 2019 the AER has set caps on ‘standing offer’ prices\textsuperscript{348} for electricity in jurisdictions without state-based price regulation (section 6.4).

This chapter focuses on the 5 jurisdictions where the AER has regulatory responsibilities, but also covers the Victorian market where possible. Western Australia and the Northern Territory apply separate regulatory arrangements and are not covered in this report.

#### 6.2.1 Sellers and resellers of energy services

Market participants that sell and resell energy and services to consumers are classified into:

- those authorised as retailers under the Retail Law
- those exempt from the requirement to be authorised\textsuperscript{349}
- those offering energy products and services beyond the scope of the Retail Law – such as energy management services, solar and storage products and off-grid energy systems.

Only customers of authorised retailers enjoy the full protections in the Retail Law. Other consumers may be covered by the broader Australian Consumer Law.

#### 6.2.2 Authorised energy retailers

Authorised energy retailers must comply with consumer protection and other obligations under the Retail Law. An authorisation covers energy sales to consumers in all 5 participating jurisdictions.


\textsuperscript{346} The thresholds for who meets the criteria of a residential customer or small business varies between jurisdictions. For example, in jurisdictions where the Retail Law applies, it includes those consuming fewer than 100 megawatt hours (MWh) of electricity or 1 terajoule (TJ) of gas per year. For electricity, in South Australia, small electricity customers are those consuming fewer than 160 MWh per year. In Tasmania, the threshold is 150 MWh per year.

\textsuperscript{347} Changes to the Victorian framework, including recommendations adopted from the Thwaites Independent review into the electricity & gas retail markets in Victoria (August 2017), have seen greater divergence between the Victorian and national frameworks.

\textsuperscript{348} Standing offers apply where a customer does not enter a market contract. The terms and conditions of standing offers are prescribed in the National Energy Retail Rules and include consumer protections not required in market retail contracts, such as access to paper billing, minimum periods before bill payment is due, a set period for reminder notices, and no more than one price change every 6 months.

\textsuperscript{349} In Victoria, where the Retail Law does not apply, retailers must hold a licence issued by the Essential Services Commission or seek an exemption from this requirement.
The AER and the Essential Services Commission (ESC) (Victoria) are responsible for authorising new retailers into the energy market.

6.2.3 Exempt energy sellers
An energy seller may apply to the AER or the ESC (Victoria) for an exemption from authorisation if it only intends to supply energy services to:

› a limited customer group (for example, at a specific site or incidentally through a relationship such as a body corporate)
› supplement its customers’ primary energy connection
› sell or supply electricity ancillary to telecommunication services, such as data centres.

At August 2022 over 3,600 businesses were registered in the AER’s public register of exemptions, typically to onsell energy within an embedded network (that is, a small private network whose owner sells electricity to other parties connected to the network). Shopping centres, retirement villages, caravan parks and apartment complexes are examples of entities that might run an embedded network. Solar power purchase agreement providers are also covered by the AER’s and ESC’s exemptions frameworks.

The Australian Energy Market Commission (AEMC) cited stakeholder estimates that up to 500,000 consumers purchase energy through embedded networks.

Exemption holders must follow strict conditions and meet a range of obligations to their customers (detailed in the AER’s guidelines). Conditions are based on the obligations that apply to authorised retailers and distribution network businesses, but are a lighter, less prescriptive form of regulation.

6.3 Energy bills
The main source of communication between a retailer and a customer is the energy bill. Energy bills set out a customer’s energy consumption over a period of time and then how the retailer is charging the customer for that consumption based on the terms of their retail contract. Consumers use bills to understand their energy usage, costs and how to get help. The information in bills also helps consumers to make more confident decisions, such as making sure they are on the best deal for them or shopping around for a better deal.

Finding the best deal or shopping around for a better one can be complicated. Retail contracts or ‘offers’ can vary significantly, and hundreds of retail offers may be available to customers at any one time. Advertised offers frequently change, as do the terms and charges attached to an offer over time. Customers who regularly change their energy contract usually pay lower prices, reflecting that lower priced market offers often revert to higher prices after an initial ‘benefit period’. While energy bills can’t solve these problems, they can help consumers make more confident decisions by providing them with information to help them understand and compare their energy contract.

6.3.1 Better Bills Guideline
Consumers expect bills to be simple, easy to understand and a source of information about how and when to pay. However, energy bills can be cluttered, complex and confusing, which burdens consumers with cognitive overload and reduces bill comprehension.

In March 2022, the AER released the Better Bills Guideline setting out how retailers must prepare their bills, making it easier for consumers to:

› pay their energy bills
› understand the bill calculation and ensure their bill conforms to their contract
› query their bill
› access interpreter services and seek financial assistance
› report a fault or emergency
› understand their usage to help them use energy efficiently, compare offers and consider new types of energy services.

---

The guideline restricts the amount of content allowed on the first page, so it is clean and simple. This will give consumers the essentials at first glance and improve comprehension.

Consumers will now find information on the first page about whether a better offer from their retailer might be available, under the heading ‘Could you save money on another plan?’. Elsewhere on the bill, consumers will also find a simple plan summary that sets out the key features of their plan, including when any benefits are due to expire.

Retailers must comply with the new requirements in the guideline by 31 March 2023. The AEMC is currently consulting on whether the compliance date should be extended by 6 months.

6.3.2 Components of electricity bills

A typical residential electricity retail bill comprises:

- retailers' wholesale costs of buying electricity in spot and hedge markets
- network costs for transporting electricity through transmission and distribution networks, and metering
- the costs of environmental schemes for promoting renewable generation, energy efficiency and reducing carbon emissions
- the retail costs of servicing customers (including meeting regulatory obligations) and acquiring and retaining customers
- the retailer’s margin (profit).

The contribution of each cost component varies by jurisdiction (Figure 6.2).

Figure 6.2 Composition of a residential bill – electricity

Note: Cost components for the average residential customer in 2021–22, excluding GST. Calculated using trends in supply chain components for each jurisdiction and national trends.

6.3.3 Wholesale costs

Retailers purchase energy in wholesale markets for sale to customers. Retailers generally charge their customers fixed prices for energy but need to purchase energy at variable prices in wholesale markets. This means that retailers are exposed to price risk, where they may need to purchase energy at higher prices than they charge their customers. Retailers generally manage this risk by taking into account price volatility when setting retail contract prices and by entering hedge contracts that lock in prices for their future wholesale purchases (section 2.3). Alternatively, they might own generation assets or enter demand response contracts to manage risk (discussed in sections 6.6.4 and 6.7.4).

Wholesale costs typically make up around 32% of the bill. During 2022, wholesale spot prices have increased sharply across all NEM regions. Contract prices for 2022 and 2023 also increased in line with spot prices, particularly in Queensland and NSW. It is expected that spot and contract prices will remain high due to the unknown impact and timing of further coal closures and international pressures.

6.3.4 Network costs

The AER regulates network charges, which cover the efficient costs of building and operating electricity networks and provide a commercial return to the network’s financiers. Distribution networks account for the majority of network costs (around 76% across the NEM). Transmission networks account for up to 18% of network costs, with metering accounting for the balance.

Regulated network costs are expected to increase over the 4-year period ending 2023–24, driven by increases in distribution and transmission costs. This will include expenditure to improve the networks’ ability to handle higher levels of consumer energy resources, intending to lead to savings for consumers in the longer term.

Customer type (central business district (CBD), urban or rural), area density and local terrain affect network costs. In jurisdictions with multiple distribution networks (Queensland, NSW and Victoria), costs are generally higher in regional networks based on these factors.

Network productivity levels also partly explain cost differences across networks and jurisdictions. Productivity was historically lower for government-owned or recently privatised networks in Queensland, NSW, Tasmania and the ACT than in Victorian and South Australian networks, although this difference has narrowed in recent years (section 3.15.1).

6.3.5 Environmental costs

Environmental costs include payments to fund renewable energy targets, feed-in tariffs for solar PV installations and state government operated energy efficiency schemes. Costs associated with the Australian Government’s Renewable Energy Target account for over 70% of environmental costs across the NEM (comprising both large-scale and small-scale components of the scheme).

Environmental costs are expected to decrease over the 4-year period ending 2023–24. This forecast is driven by a decrease in Large-scale Renewable Energy Target (LRET) costs, stemming from a reduction in the cost of large-scale generation certificates (LGCs) across several jurisdictions.

ACT and South Australian customers face the highest environmental costs (on a per unit of electricity basis). ACT costs are largely related to the government’s feed-in tariff scheme for large-scale solar developments, which accounts for more than 70% of environmental costs. South Australian costs flow from the state’s premium distributor feed-in tariff scheme for residential solar PV systems, given the high uptake of solar PV while that scheme was open.

Environmental costs were lowest in Victoria, where the primary cost component was the jurisdictional Small-scale Renewable Energy Scheme (SRES).

6.3.6 Retail costs and margin

Retail costs fall into 2 main categories:

› Costs of servicing customers include managing billing systems and debt, handling customer enquiries and complying with regulatory obligations. These costs do not vary significantly across jurisdictions.

› Customer acquisition and retention costs relate to marketing and other activities to gain or retain customers. These costs tend to be higher in jurisdictions with high rates of customer switching. In theory, these costs should
be offset by reduced retailer profit margins that are driven down due to competition, but there is a risk that competition may increase energy bills for customers if the costs of competing outweigh competition benefits from efficiency and innovation.

Retailers’ margins in 2020–21 were slightly higher than in the previous year, which marked the lowest level we have observed. The default market offer (DMO) (Box 6.2) and Victorian Default Offer (VDO) reforms are likely to have been significant factors in reducing retail margins.354

The AEMC estimates that retailer costs and margin made up almost 22% of a customer bill in Tasmania in 2021–22, compared with around 2% in south-east Queensland.355 Some of the differences between jurisdictions is due to the different methodologies used to set prices by the different regulators.

6.3.7 Components of gas bills

The composition of a retail gas bill is less transparent than it is for electricity due to the absence of a regulatory responsibility to regularly analyse the different cost components. Estimates from the most recent comprehensive data (published in 2017) show that gas pipeline charges made up over 40% of a residential gas bill in that year, on average.356

Victoria had the cheapest residential gas prices per unit of gas, largely because the state had lower network costs due to a higher level of gas use per residential customer and higher connection penetration. In Queensland, South Australia and Tasmania, where gas use is less widespread, network costs accounted for more than half of the average residential gas bill.

Retail costs also varied across jurisdictions, with Queensland reporting 72% higher retail costs (on a per unit basis) than the next highest jurisdiction (South Australia). This may also reflect the absence of economies of scale for retailers servicing a relatively small customer base (Figure 6.3).357

Figure 6.3 Composition of a residential bill – gas

<table>
<thead>
<tr>
<th>Cents per megajoule (MJ)</th>
<th>Queensland</th>
<th>NSW</th>
<th>Victoria</th>
<th>South Australia</th>
<th>Tasmania</th>
<th>ACT</th>
<th>NEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale costs</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Network costs</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Retail costs and margin</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: Data are estimates at 2017. Average residential customer prices excluding GST (real $2018–19).

---

6.3.8 How retail prices are set

Energy retailers in southern and eastern Australia are responsible for setting prices for energy market offers. Market offers are energy contracts advertised by retailers that consumers actively enter into. Alongside this market pricing, government agencies regulate prices for electricity standing offers. Standing offers are energy contracts that consumers are placed on by default if they do not enter into a market contract.\(^{358}\)

Victoria (2009), South Australia (2013), NSW (2014) and south-east Queensland (2016) removed retail price regulation for electricity after the AEMC found markets in those states were effectively competitive. But governments reintroduced forms of price control in July 2019 in response to later market reviews.

In 2019 the Australian Government appointed the AER to set a default market offer (DMO) as a cap on standing offer electricity prices in south-east Queensland, NSW and South Australia.\(^{359}\) The DMO is not intended to mirror the lowest price in the market because this would impede competition among retailers and incentivise consumers to disengage from the market (Box 6.2). Around 7–11% of residential customers and 15–20% of small business customers are on standing offers.\(^{360}\) The DMO also represents a reference point (or ‘reference price’) from which any advertised discounts promoted by electricity retailers must be based, providing consumers with meaningful information they can use to compare offers.

The Victorian Government also introduced price controls from 1 July 2019. The ESC sets the price of standing offers to reflect the efficient costs of a retailer in a contestable market, including an allowance for customer acquisition and retention costs.

Regional Queensland, Tasmania and the ACT have maintained state-based arrangements to regulate retail electricity prices for small customers. Price regulation in these regions is based on a ‘building block’ approach, reflecting the costs of an efficient retailer supplying electricity to its customers. The approach to estimating costs differs across jurisdictions, as does the extent to which the standing offer allows for the recovery of customer acquisition and retention costs (such as advertising). In 2021 the ACT Government announced plans to introduce a reference bill requirement for advertising market offers.

Gas price deregulation occurred along similar time frames to those of electricity price deregulation but was not part of the more recent reintroduction of price controls for electricity. In July 2017 NSW became the last jurisdiction to deregulate retail gas prices for small customers.

In June 2020 the Australian Government introduced further price protections. Under the Treasury Laws Amendment (Prohibiting Energy Market Misconduct) Act 2019, retailers are required to pass on to customers any sustained and substantial decreases in the costs of electricity. The ACCC is responsible for investigating contraventions and published guidelines in May 2020.\(^{361}\) In April 2021, the ACCC published its findings on retailers’ compliance with the legislation and stated they had approached retailers who may not have adequately passed on cost savings to their customers.\(^{362}\)

---

359 The AER’s responsibilities are set out in the Competition and Consumer (Industry Code – Electricity Retail) Regulations 2019.
362 ACCC, $900 million in electricity bill savings available to households [media release], ACCC, 13 April 2021, accessed 15 September 2022.
The default market offer (DMO) is the maximum price an electricity retailer can charge a standing offer customer each year. A customer might be on a standing offer if they have never switched to a retailer’s market offer or for a range of other reasons.

The scheme was introduced in 2019, following concerns raised by the Australian Competition and Consumer Commission (ACCC) that standing offer contracts:

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

The scheme applies in distribution network areas covered by the Retail Law that are not otherwise subject to retail price regulation – NSW (Endeavour, Essential Energy and Ausgrid), south-east Queensland (Energex) and South Australia (SA Power Networks). The AER determines DMO prices each year for residential and small business customers in each of these areas. Victoria operates a separate, but similar, scheme across all its distribution network areas.

The scheme caps how much retailers can charge in their standing offers, but it does not cap customers’ bills. Energy bills will vary based on the customer’s energy consumption and the specific terms of their retail contract.

The default prices also act as a reference against which retailers must compare their market offers in advertising, on their websites and elsewhere. This requirement aims to make it easier for consumers to compare energy offers across different providers.

The DMO scheme provides a fallback for those who do not engage in the market, rather than providing a lower-priced alternative to a market offer. It aims to reduce unjustifiably high standing offer prices while allowing retailers to recover their costs in servicing customers and providing customers and retailers with incentives to participate in the market.

We initially set default prices for 2019–20 at the mid-point (50th percentile) between the median standing offer and median market offer in each distribution zone at October 2018. The default price has been updated in each subsequent financial year, with adjustments for:

› forecast changes in environmental, wholesale and network costs
› changes in consumer price index (CPI) for residual costs (which includes retail costs).

In determining the prices in our 2022–23 DMO (DMO 4) review we considered stakeholder feedback and undertook a holistic review of our price setting methodology. The outcome of our review was to adopt a cost build-up approach for the DMO 4 determination.

We consider a cost build-up approach best achieves the DMO policy objectives. Under this approach we will update the retail operating costs on a yearly basis as new cost information becomes available. This approach addresses retailer concerns with the step-change framework because actual changes in retail costs will be included in future DMO determinations. We expect to continue using this approach in DMO 5 (2023–24) and DMO 6 (2024–25).

Note: a AER, Final determination, Default market offer prices, April 2019.

6.4 Retail energy prices

Retail energy prices fell in 2021, primarily driven by a decrease in wholesale costs. However, retail prices are expected to rise in 2022 and 2023 in response to this year’s sharply increased wholesale costs and forward contract prices.

Electricity and gas prices have demonstrated broadly similar trends over time because some key underlying price drivers apply to both fuels (Figure 1.1).
Electricity retail prices fell for the third consecutive year in 2021, dropping by 9% from the previous year and reaching their lowest level since 2012. However, there has been a reversal of this trend in the first half of 2022 due to recent wholesale price increases.

Decreases in market offer prices were most evident in 2020 and 2021 as a lagged response to sharply falling wholesale costs over the previous years 2019 and 2020. Cost reductions were driven by a range of factors, including new low-cost wind and solar farms, low demand due to moderate weather conditions and increased rooftop solar output, and lower coal and gas fuel costs. Lower network costs also contributed to retail price falls in some jurisdictions.

Market offers and standing offers were lower in 2021–22 than they were 3 years ago in every jurisdiction except the ACT, where they increased due to environmental costs (Figure 6.4).

The cheapest market offers in 2021 were typically offered by smaller Tier 2 retailers rather than by one of the ‘big 3’ retailers (Origin Energy, AGL Energy and EnergyAustralia). The lowest price offer by a small retailer was typically more than $100 cheaper than the lowest offer from one of the ‘big 3’ retailers (and up to $270 cheaper).

Figure 6.4  Electricity bills for customers on market and standing offers
New South Wales & ACT

Estimated annual bill ($)

<table>
<thead>
<tr>
<th>Year</th>
<th>Ausgrid (NSW)</th>
<th>Endeavour Energy (NSW)</th>
<th>Essential Energy (NSW)</th>
<th>Evoenergy (ACT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016–17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017–18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018–19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019–20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020–21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021–22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Victoria

Estimated annual bill ($)

<table>
<thead>
<tr>
<th>Year</th>
<th>AusNet Services (Vic)</th>
<th>CitiPower (Vic)</th>
<th>Jemena (Vic)</th>
<th>Powercor (Vic)</th>
<th>United Energy (Vic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016–17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017–18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018–19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019–20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020–21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021–22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Ergon Energy’s standing offer prices are set by the Queensland Competition Authority (QCA). TasNetworks’ are set by the Office of the Tasmanian Economic Regulator (OTTER). Standing offer prices on the Victorian distribution networks are set by the Essential Services Commission (ESC). Evoenergy’s are set by the Independent Competition and Regulatory Commission (ICRC). Energex, SA Power Networks, Ausgrid, Endeavour Energy and Essential Energy’s standing offer prices are set by the retailers (capped at DMO).

Based on single rate offers for residential customers and average consumption in each distribution area. Average consumption for 2020–21 has been applied to all periods. Some offers listed may not be available to all customers in a distribution area.

The AER will update its analysis on more recent offers for the Annual Retail Performance Report 2022.

On Ergon Energy’s network there are few market offers available and some offers are restricted to specific geographic areas.

6.4.2 Gas price movements from 2018 to 2021

In 2021 gas retail prices fell by 5% from the previous year, reaching the lowest level since 2016. Gas retail prices had been trending down since 2018 in most jurisdictions, driven largely by lower wholesale gas costs. This was similar to the price reductions in electricity, but price reductions were less pronounced in gas (Figure 6.5).

After easing in 2019 and 2020, gas wholesale costs increased significantly over 2021. As a result, average wholesale gas prices in 2021 were 80% higher than they were in 2020 (section 4.3). As in electricity, wholesale cost increases take time to flow through to retail prices, as longer-term contract positions are adjusted, and they may not yet be fully reflected in retail prices observed over 2021. Gas wholesale costs have increased further in 2022 and we expect to see further upward movement in retail prices to reflect this.

Market offers for gas were lower than they were 3 years ago in every jurisdiction, except in South Australia and the ACT (Figure 6.5). Estimated annual customer bills in 2021–22 ranged from $560 in Queensland to $1,369 in the ACT. Standing offer prices for gas followed a different trend to market offer prices, with the median price remaining stable or increasing in all jurisdictions between June 2018 and February 2021. Unlike electricity, there is no price regulation of standing offer gas prices.

As at March 2022, the lowest Tier 2 gas market offers in Queensland, SA and the Jemena Gas zone in NSW were $35 to $107 cheaper than the lowest offer from the ‘big 3’ retailers. In contrast, in the ACT and the AGN and Allgas zones in NSW, one of the ‘big 3’ retailers had gas market offers that were $17 to $70 cheaper than the lowest offer from Tier 2 retailers. However, with international gas prices increasing sharply over 2022, those retailers offering the cheapest offers may change in future periods.

Figure 6.5 Gas bills for customers on market and standing offers

---

363 Estimated annual customer bills for generally available flat rate offers, by distribution company.
6.4.3 Electricity price forecasts

The AER’s final DMO determination for 2022–23 estimates that future retail prices will increase across all DMO regions for all customer types (residential and small business customers). This was mainly due to higher expected wholesale costs in all regions, especially NSW and Queensland. Factors contributing to this include unplanned generator outages, higher coal and gas costs, and increasingly ‘peaky’ demand driving up the cost of energy contracts for retailers. Analysis in section 2.3 and the AER’s Q2 2022 wholesale quarterly report includes more recent market events and confirms even higher than expected wholesale costs in all regions.

As part of our DMO determination, we forecast the cost components of future retail prices such as wholesale costs and network costs. Due to a change in methodology ahead of the 2022–23 determination, the DMO determinations for 2021–22 and 2022–23 are not directly comparable. However, adjusting for the changed approach, our final determination increases the price cap on standing offer prices for residential customers across all DMO regions in 2022–23 by between 1.7% and 12.1% in real terms.\(^\text{364}\)

Recent surges in wholesale electricity prices are putting immediate upward pressure on retail prices available to consumers. These surges reflect the combined impacts of:

- reduction in thermal generation resulting from unplanned outages and higher costs
- impacts from the ongoing war in Ukraine, which has led to significant pressure on coal and gas prices globally
- extreme weather in NSW and Queensland, which has affected coal supplies and electricity demand
- increasingly ‘peaky’ demand driving up the cost of hedging for retailers.

In coming years, high inflation outcomes will flow-through to network costs, and we are seeing evidence of increasing interest rates that may translate to higher required costs for network capital raising. In combination, they will pose continued pressures on electricity prices.

Looking beyond 2022–23, it is difficult to forecast retail costs but they are expected to remain relatively high over the next 2 years. Changes in wholesale costs will depend on the timing and impact of coal closures, international and coal prices, new renewables coming online, additional long-term storage and transmission investment. Higher network costs are forecast to put upward pressure on retail prices in all jurisdictions.

\(^{364}\) AER, ‘Default market offer prices 2022–23 – Final determination’. 
6.4.4 Energy use

Usage charges (charges accrued per unit of electricity consumed) represent the largest component of energy bills for most households. A consumer's energy use significantly impacts energy affordability (section 6.5). Energy use varies with household size, housing and appliance quality, heating and cooling needs, and lifestyle.

Residential customers in Tasmania and the ACT use the most electricity (per customer) in the NEM. Conversely, residential customers on CitiPower’s (Victoria) and Jemena’s (Victoria) networks use the least. Key drivers of electricity use are climate (with greater heating and cooling requirements in some jurisdictions) and the penetration of gas as an alternative fuel. Customers in colder climates such as Victoria and the ACT tend to use the most gas. This largely reflects the use of gas for space heating — gas use in these jurisdictions is 6–7 times higher in winter than over summer. Tasmania has low gas penetration for households so, although it is a colder climate, it uses comparatively less gas than Victoria and the ACT. Conversely, most households in Victoria have both electricity and gas connections, resulting in it having the lowest average household electricity consumption. Benchmark data shows that average electricity use in a Victorian household with gas can be up to 25% lower than for a non-gas household.

Overall, the amount of energy residential consumers are using has reduced across jurisdictions over the past 10 years. This has helped to moderate the impact on consumers of significantly higher retail energy prices compared with 2012, although average household electricity use has remained stable over the past 3 years in some jurisdictions. The longer-term trend of lower electricity use has been largely driven by the uptake of rooftop solar PV systems. Improving energy efficiency of new homes and appliances also contributed. In addition to these changes in consumer behaviour, switching from gas to electricity means that average gas use has trended downwards (Figure 6.7).

Given these drivers of lower energy use, the reported average outcomes likely obscure a widening gap between use for those households with the capacity to adopt new technology or modify energy use and those unable to do so (due to cost or residential tenancy laws). The former group is likely experiencing a substantial reduction in electricity use, while electricity use among other households has likely remained relatively consistent over time, and these customers are likely spending more on electricity compared with 10 years ago. Figure 6.6 and Figure 6.7 show the differences in energy consumption in different regions up to 2021. The AER’s Annual retail market report 2022 will include more detailed analysis of energy use across different demographics and is due to be released in November 2022.

Figure 6.6 Energy use per residential customer – electricity

![Energy use per residential customer – electricity](chart)

MWh: megawatt hour.
Source: Regulatory information notices (RIN) responses.

365 Most energy offers include usage charges as well as a fixed supply charge. Some offers also include membership fees or additional charges for metering.


Energy affordability

Energy affordability relates to customers’ ability to pay their energy bills. A customer’s energy use, energy contract and prices, income and other living costs affect affordability. Energy bills can be a significant burden for households even in times of relatively low electricity prices.

Figure 6.8 Energy prices and income

Note: Inflation adjusted.

Source: Electricity and gas index – ABS, Consumer Price Index, various years; income index – ABS, Household Income and Wealth, Australia, various years.
Subdued wholesale market conditions over the past few years (prior to 2022) did flow through to retail prices, which had a positive impact on affordability across all jurisdictions in 2020–21 (Figure 6.9). However, consumers are still recovering from the economic impacts of COVID-19 and slow wage growth since the early 2000s. This means that consumers are not well-placed to absorb the current sharp increases in wholesale energy prices, as well as the forecast increases in network costs to fund the necessary longer-term investments. We expect to observe worsening outcomes for consumers regarding energy affordability for the foreseeable future.

Retail energy prices paid by consumers depend on where a customer lives, the network services required to supply their energy, competition between retailers in their area, the customer’s ability to identify an appropriate energy plan, and whether the customer is eligible for a concession or rebate to help manage their energy costs.

This means that affordability challenges are not split evenly across all consumer types. The evidence suggests that affordability differs substantially across consumers based on differences in both retail energy prices and energy use. For example, energy bills are typically higher for customers in regional and remote areas (where network costs tend to be higher and can be recovered from fewer customers) than for urban customers.

On the mainland, estimated annual customer electricity bills in 2021–22 ranged from $1,243 for a customer in urban Victoria to $1,951 for a customer in rural NSW. This is likely driven by both electricity prices and the different energy use profiles.

Figure 6.9 Affordability of median market offer – electricity

Note: Based on offers for residential customers in each jurisdiction. Average household consumption for the financial year ending June of each period was used in annual bill calculations. Proportion refers to mean disposable income. Use of average incomes across jurisdictions may overstate affordability in regional areas, where average incomes are typically lower than across the jurisdiction more broadly.


While the DMO and VDO provide price protections, other recent reforms to improve affordability focus on price competition at the retail level, such as rules on conditional discounting, and the role of the DMO as a reference price, which helps consumers more easily compare offers by different retailers.

368 Estimated annual customer bills for generally available flat rate offers by distribution company.
Nonetheless, electricity affordability remains a top cost of living issue for households. Many households can achieve savings simply by switching to a cheaper offer, but the range of offers and the pricing structure can be too complex and a barrier to consumers. Recent regulatory reforms have focused on improving Energy Made Easy, switching processes and the creation of the Better Bills Guidelines to better support consumers’ ability to switch.

Autonomy and resources to address energy use also plays an important role in energy affordability. For example, customers on hardship programs in 2021 consumed on average over 60% more electricity than a typical customer (Figure 6.11). This likely reflects 2 aspects:

- consumers who don’t have access to energy saving or self-generating measures, such as solar PV systems, have high consuming appliances and live in less energy efficient dwellings face higher bills – therefore, they are more likely to experience financial hardship
- consumers who live in rental properties may be reliant on property owners to make the needed property improvements before they can reduce their energy use, and property owners may lack incentives to make these improvements, leading to a waste of energy resources that could be absorbed back into the system.

---

369 In a survey of households by Energy Consumers Australia (ECA), 86% said that they were highly or moderately concerned that electricity and gas will become unaffordable for them in the next 3 years. ECA, ‘Pulse Survey June to August 2022’, ECA Website, August 2022, accessed 15 September 2022.
To effectively improve energy affordability, measures need to be targeted at increasing the efficient use of energy and lowering energy prices, with a focus on measures that can be accessed by low-income households.

State and territory governments have implemented initiatives to help low-income households improve their energy efficiency or install solar PV systems:

- In Victoria, the Household Energy Savings Package offers energy efficiency heating and cooling systems for low-income households and energy upgrades of social housing properties. The program also includes a one-off $250 Power Saving Bonus to help households that have at least one resident receiving payments under an eligible concession program.
- In the ACT, the free ActSmart Household Energy Efficiency Program, delivered by St Vincent de Paul, offers practical ways for people in lower-income households to reduce their energy and water bills. Energy efficiency assessors visit homes to help consumers find ways to reduce energy and water use and save money.
- South Australia’s Retailer Energy Productivity Scheme offers free or discounted energy efficiency and energy productivity activities, but it is not specifically targeted at low-income households. The South Australian Government has also supported a virtual power plant project that supplies, installs and maintains solar and home battery systems on Housing SA tenants at no cost to the tenant.\(^370\)

The AER’s *Annual retail markets report* provides more in-depth assessments of affordability.

In addition to targeted measures for low-income households, the AER’s strengthened focus on the broader population of consumers experiencing vulnerability is also intended to improve energy affordability for the consumers that will benefit most.

### 6.5.1 Improving our approach to consumer vulnerability

The AER is broadening its focus on consumers experiencing vulnerability and continues to engage with energy retailers on their hardship policies. The AER has developed a strategy that focuses on consumers experiencing vulnerability, to better inform our work and how we consider consumer issues.
Our strategy envisages 4 overarching outcomes for the energy market:

› Barriers to consumers engaging in the market are reduced and consumers can access the products and services that best meet their needs.
› Consumers facing payment difficulty receive effective, tailored assistance.
› The transitioning and future energy market meets the needs of consumers.
› Energy affordability is improved, including by reducing the cost to serve where possible.

In addition to income levels, experiences of vulnerability can also be due to other factors that prevent consumers from participating fully in the energy market, leading to unnecessarily expensive energy costs. These experiences of vulnerability will only grow as the market transitions to a variable renewable energy model, with a more dynamic approach to energy costs.

The AER anticipates publishing the strategy later in 2022.

6.5.2 Impact of COVID-19

The economic impact of the COVID-19 pandemic has increased financial stress on many energy consumers. To support households impacted by the pandemic, the AER introduced temporary assistance measures provided by energy businesses (Box 6.3). These measures were developed in consultation with energy businesses, consumer organisations and market bodies. The ESC introduced similar measures in Victoria. These measures were phased out in 2022, when stay-at-home orders reduced across NEM jurisdictions.
Box 6.3 Responses to COVID-19

In March 2020 the Australian Energy Regulator (AER) released a statement of expectations on how energy businesses should respond to the COVID-19 pandemic, recognising that energy is an essential service. The AER’s priorities for supporting consumers over the COVID-19 pandemic period included:

› ensuring that retailers met the needs of customers in vulnerable circumstances and that customers could access the energy they need
› protecting consumers who would benefit from advocacy and support, including customers requiring life support equipment or who were experiencing financial difficulty
› taking actions to ensure the safety and reliability of energy supply
› being responsive to the rapidly evolving pandemic situation and preparing for our recovery.

Reflecting these priorities, the Statement of Expectations set out principles for energy retailers to follow to avoid imposing unnecessary hardship on the community, including that a retailer must:

› offer a payment plan or hardship arrangement to all residential and small business customers that indicate they may be in financial stress
› be ready to modify an existing payment plan if a customer’s changed circumstances make this necessary
› not disconnect any residential or small business customer in financial stress – initially this was a blanket ban on disconnection, but since August 2020 retailers can disconnect customers for non-payment if the customer does not engage with the retailer
› for any customer disconnected for non-payment, reconnect the customer immediately following contact and waive disconnection, reconnection and contract break fees
› defer any referrals of customers to debt collection agencies for recovery actions and credit default listing
› prioritise clear communications with customers about the availability of retailer and other support.

The AER’s Statement of Expectations evolved as we moved through the COVID-19 pandemic, with updates released in August and November 2020 and in April and June 2021. From July 2021 a standby Statement of Expectations is available in the event jurisdictions are subject to extended stay-at-home orders. The standby Statement of Expectations applies to specific Local Government Areas (LGAs) and automatically comes into effect when an LGA is subject to stay-at-home orders that last for 7 days or more. The standby Statement of Expectations will continue to apply for 14 days after stay-at-home orders are lifted.

The standby Statement of Expectations is applied at the AER’s discretion to all National Energy Customer Framework (NECF) jurisdictions – Queensland, NSW, South Australia, Tasmania and the ACT.

Victorian energy consumers come under the separate protections of the Essential Services Commission, while Western Australia and the Northern Territory have their own separate retail energy market regulation.

Several state and territory governments also introduced COVID-19 support packages for households. For example, in Queensland, households received a $200 utility payment to assist with their electricity and water bills. In the ACT, holders of a utilities concession received a $200 rebate on their electricity bill. The Tasmanian Government capped price increases in energy bills for 12 months.

6.5.3 Assisting customers in energy debt

Energy affordability issues can lead customers into energy debt that, if not managed, may result in disconnections. A household’s energy debt refers to amounts owing to a retailer for 90 days or more. The COVID-19 pandemic had a significant impact on customers debt levels and their ability to pay their energy bills.

› Both the proportion of residential customers in energy debt and the average debt of residential customers increased during the COVID-19 pandemic.
› Informal bill deferment arrangements, introduced at the start of the pandemic, resulted in fewer customers on payment plans at the end of 2019–20. The number of payment plans has slowly returned to pre-pandemic levels over 2020–21.
The number of customers on hardship programs dropped at the start of the pandemic because many customers deferred payment of their bill rather than pursuing formal payment assistance. Customers entered hardship programs with higher levels of debt in 2020–21. Average debt of hardship customers also increased, suggesting customers are accumulating more debt while on a hardship program, meaning that some customers on hardship programs are not even meeting their ongoing energy usage costs.

South Australia and Tasmania have the highest proportion of electricity hardship customers and customers on payment plans, and South Australia has the highest proportion of gas hardship customers. Tasmanian customers were the most likely to be on electricity payment plans in 2020–21 and South Australian customers were the most likely to be on gas payment plans, reflecting lower energy affordability in these jurisdictions.

Since then, as of March 2022, 2.7% of residential customers were in energy debt (Figure 6.12).

Figure 6.12 Residential customers in energy debt

Along with increases in the number of customers in energy debt, the value of debt held by those customers has also increased across all jurisdictions. The national average value of energy debt at March 2022 was around $1,060 (up $39 (or 3.9%) from the previous year and $131 (or 14%) more than in March 2018).

Energy debt in some jurisdictions is seasonal, particularly for gas customers. For example, in the ACT, gas debt often grows larger after winter because customers may have difficulty in paying off larger winter heating bills. As at March 2022, Tasmania had the highest proportion of residential energy customers in debt (4.3%), while Queensland had the lowest proportion (1.9%).

6.5.4 Payment plans

Payment plans allow settlement of overdue amounts in periodic instalments. They are typically the first assistance offered to customers who show signs of payment difficulties. The AER’s Sustainable Payment Plans Framework guides retailers on negotiating affordable payment plans with customers needing assistance to manage debt.\footnote{371 AER, ‘Sustainable payment plans, a good practice framework for assessing customers’ capacity to pay, Version 1’, AER Website, July 2016, accessed 15 September 2022.}

The framework sets out good practice principles of engagement based on trust, respect and empathy to promote constructive, long-term customer relationships. The framework has been adopted by retailers that account for around 90% of small customers. The total number of customers on payment plans at March 2022 was around 5% higher than the previous year, despite retailers also offering other types of COVID-19 support.
6.5.5 Hardship programs

Referral to a hardship program may be warranted for customers facing payment difficulties. The Retail Law requires energy retailers in Queensland, NSW, South Australia, the ACT and Tasmania to develop and maintain a customer hardship policy that underpins how they identify and assist customers facing difficulty paying their energy bills. The AER’s Customer Hardship Policy Guideline requires retailers to ensure their programs are easily accessible and include a standard statement explaining how they will help customers. It puts greater onus on retailers to identify who may need assistance.372

Assistance under a retailer’s hardship program can include:
› extensions of time to pay a bill and tailored payment options
› advice on government concessions and rebate programs
› referral to financial counselling services
› review of a customer’s energy contract to ensure it suits their needs
› energy efficiency advice, such as an energy audit, and help to replace appliances to help reduce a customer’s bills
› waiver of late payment fees.

As part of their hardship policies, retailers must take into consideration a customer’s capacity to pay.

In 2019 the Victorian Government introduced its payment difficulty framework – a series of rules that provide strong and more consistent hardship assistance for Victorian energy consumers. These rules ensure minimum entitlements to all customers (known as ‘standard assistance’) and further minimum entitlements to customers with arrears (‘tailored assistance’).

In 2020–21 the number of residential electricity customers on hardship programs in jurisdictions other than Victoria decreased by 10% over the previous year. The number of Victorian customers on a tailored assistance program increased by 21% (Figure 6.13) but this reflects some retailers offering payment deferrals during March and September 2020 due to COVID-19, temporarily lowering the number of customers on tailored assistance.373

The general decrease in hardship customers may reflect the positive effect of increased government supports during the COVID-19 pandemic and a greater ability for some customers to pay off debt. It may also be because of government financial support, such as COVID-19 disaster payments, being offered to households.374

However, the reduction in hardship customers may also have negative implications. The increasing value of customer debt (Figure 6.12) may also reflect changing approaches to debt management, stemming from informal debt management arrangements offered to consumers in response to the COVID-19 pandemic. Retailers have now resumed normal debt management practices and we expect to see the number of customers in hardship increase.

6.5.6 Disconnecting customers for non-payment

Disconnection for non-payment of bills should be viewed as a last resort and only occur after the strict processes set out in the Retail Rules have been followed.

Disconnection is not permitted in certain circumstances – such as when a customer’s premises are registered as requiring life support equipment, a customer on a hardship program is meeting their payment obligations or a customer’s debt is below $300.

In 2020–21 disconnections were significantly lower than in previous years, reflecting the AER’s Statement of Expectations directing retailers not to disconnect small customers who had been in contact with their retailer or were accessing retailer support (Box 6.3). Where disconnection did occur, customer debt levels at the time of disconnection were higher than in the previous year. Over 2022, disconnections have remained low but are starting to increase again as stay-at-home orders stop applying (Figure 6.14).
Figure 6.14 Disconnection for failure to pay – electricity

Proportion of electricity customers disconnected for non-payment

Residential

Queensland  |  NSW  |  Victoria

Small business

Queensland  |  NSW  |  Victoria  |  South Australia  |  Tasmania  |  ACT

Note: Based on customers with an amount owing to a retailer that has been outstanding for 90 days or more, at 31 March 2022 for all states except Victoria, which is at June 2021.


Figure 6.15 Disconnection for failure to pay – gas

Proportion of gas customers disconnected for non-payment

Residential

Small business

Queensland  |  NSW  |  Victoria  |  South Australia  |  Tasmania  |  ACT

Note: Based on customers with an amount owing to a retailer that has been outstanding for 90 days or more, at 31 March 2022 for all states except Victoria, which is at June 2021.

6.6 Competition in retail energy markets

The purpose of facilitating competition in the retail market is to encourage retailers to innovate and compete for consumers through lower prices and offering better quality products and services. Monitoring the effectiveness of competition is critical to ensure that the market is delivering real, tangible benefits to consumers.

Retail electricity markets in south-east Queensland, NSW, Victoria and South Australia have several key characteristics that are reflective of competitive markets. These include a diversity of sellers making offers, intensive marketing activity and evidence of customer switching. Barriers to entry are considered low, as evidenced by regular new entry (although weaker contract market liquidity means barriers are higher in South Australia). Standalone retailers have identified that access to comparatively priced hedging is a barrier to entry and expansion that impacts them more than it does retailers that own generation. These issues in accessing hedging instruments may be exacerbated by recent market events. The AER has raised concerns regarding instances of retailers actively shedding customers as a way of avoiding incurring losses from high wholesale costs, possibly obtaining windfalls from selling lucrative energy contracts that are no longer needed.

However, competition is less effective in electricity retail markets in regional Queensland, Tasmania and the ACT. The smaller scale of these markets and continued price regulation may have deterred entry by some retailers. In regional Queensland, a subsidy paid to Ergon Energy through the Queensland Government’s Uniform Tariff Policy (which other retailers are not able to access) also deters new entry.

Gas markets are generally less competitive than electricity markets, given their smaller scale and persistent issues in sourcing gas and pipeline services in some jurisdictions. Gas markets in all jurisdictions are more concentrated than electricity markets.

Regulatory reforms since 2018 reflect concerns that competition has not delivered sufficient benefit to consumers. The reforms have sought to encourage customers to engage more closely with the market and make it easier to compare retail offers (section 6.7.7) so that existing retailers compete more aggressively on prices.

Despite the reforms, not all consumers can access the benefits of competition. For example, embedded network customers often lack retail choice and cannot switch away from a supplier that fails to meet their needs. In June 2019 the AEMC proposed new arrangements that would shift embedded networks into the national regime, improving protections and access to retail market competition for their customers. In May 2021 the AER began consultation on the Retail Exempt Selling and Network Exemptions Guidelines in response to concerns raised by stakeholders and published its final Retail Exempt Selling Guideline in July 2022. Key amendments to this guideline include the introduction of a hardship policy condition and other measures to improve customers’ access to ombudsman schemes. The Network Exemptions Guideline remains under review.

6.6.1 Market concentration

Origin Energy, AGL Energy and EnergyAustralia (the ‘big 3’) are the largest energy providers in Australia. The big 3 retailers have a significant share in the residential electricity and gas markets of NSW and South Australia and a lesser but still substantial portion of the Queensland and Victorian markets. Although their market share has declined in recent years, the big 3 still served more than 60% of residential and small business customers at the start of 2022 (Figure 6.17 and Figure 6.18).

Growth in the number of alternative retailers (Tier 2 retailers) supports effective retail competition because it provides more options for consumers, which in turn applies downward pressure on both retail costs and margins. Over 2021 the retail energy market continued to attract new entry – the number of active electricity and gas retailers increased in most jurisdictions in 2020–21. In 2020–21 small energy customers in southern and eastern Australia were served by over 200 retailers. In regional Queensland, a subsidy paid to Ergon Energy through the Queensland Government’s Uniform Tariff Policy (which other retailers are not able to access) also deters new entry.

However, in 2022 the sharp increases in wholesale energy costs have caused some strain for retailers and will likely subdue interest from new market entrants until wholesale prices stabilise. The market may also experience some decrease in competition from consolidation, where struggling retailers’ surrender their licences and customers are

380 Tier 2 retailers include any retailer that is not Origin Energy, AGL Energy, EnergyAustralia, nor one of the primary regional government-owned retailers – Ergon Energy (Queensland), ActewAGL (ACT) and Aurora Energy (Tasmania).
transferred to existing retailers. This could lead to Tier 1 retailers increasing their market share because they are the default Retailer of Last Resort retailer in some jurisdictions.

**Figure 6.16 Energy market – number of retail brands**

![Graph showing number of retailers serving customers]


Regional Queensland, Tasmania and the ACT – which have had continuous retail price regulation – are heavily concentrated. The primary regional retailers in these jurisdictions are typically government-owned (or part-owned) businesses with little activity outside their home jurisdiction and were previously the sole regulated provider of retail electricity in that jurisdiction. In 2020–21:

- Ergon Energy (Queensland Government owned) served electricity to 31% of Queensland's total small customers, most of which are in regional Queensland.
- In Tasmania, Aurora Energy (Tasmanian Government owned) served electricity to 97% of Tasmania’s total small customers. Before 2019 Aurora Energy was the only retailer offering electricity to households in Tasmania. Customers now have 4 alternative retailers – including 1st Energy, which increased its small customer market share from 1.5% to 2.8% in 2020–21.
- ActewAGL (a joint venture between the ACT Government and AGL Energy) serves 76% of ACT electricity and gas customers.

From January 2021 to March 2022, very few retailers entered and exited the small customer market. However, since May 2022, 8 retailers have exited the market through the Retailer of Last Resort scheme.

The ESC (Victoria), in its Victorian Energy Market Report 2020–21, noted the significant market share of larger retailers.\(^{381}\) The ESC found customer preference to be ‘both persistent and striking’, given survey responses indicated price is the most important factor when switching and that large energy retailer offers are generally more costly than small and medium retailer offers. This issue is explored further in section 6.6.6.

### 6.6.2 Electricity

In March 2022 Origin Energy, AGL Energy and EnergyAustralia (the ‘big 3’) were serving almost 4.7 million (64% of a total 7.4 million) residential and small business customers (‘small customers’).\(^{382}\) At the same time, Tier 2 retailers were serving more than 1.5 million (20%) small customers.

---

\(^{381}\) Large retailers in Victoria include the big 3 plus Lumo Energy, Red Energy and Simply Energy.

\(^{382}\) Includes customers in Queensland, NSW, South Australia, Tasmania and the ACT. Does not include Victoria.
In the 9 months from June 2021, the big 3 retailers' share of the small customer market decreased by 1.2 percentage points. Conversely, over the same period Tier 2 retailers increased their share of the market by 1.3 percentage points.

Tier 2 retailers have increased their share of small customers in each year since at least 2016–17. Over that period each of the big 3 retailers has lost ground, with Origin Energy the most impacted, falling from 31% in 2016–17 to 27% in March 2022. AGL Energy has seen the smallest decrease, but this was largely driven by the transition of customers following its acquisition of Tier 2 retailer Click Energy (which in 2019–20 served around 150,000 small customers) in October 2020 (Figure 6.17).

**Figure 6.17 Energy retail market share – electricity**

![Energy retail market share graph]

Note: All data at 31 March 2022. Data includes customers in Queensland, NSW, South Australia, Tasmania and the ACT. Some differences may occur between annual and quarterly data to account for retailers revising their data when making their annual submission.

Source: AER, Retail markets quarterly, Q3 2021–22, June 2022.

In NSW, the big 3 retailers serve 80% of small electricity customers, making it the most concentrated jurisdiction. Snowy Hydro (owned by the Australian Government and trading as Red Energy and Lumo Energy) serves 7% of small customers, with the remaining 13% served by other Tier 2 retailers.

### 6.6.3 Gas

As with electricity, AGL Energy, Origin Energy and EnergyAustralia are the dominant retailers in the gas market, serving more than 1.9 million (82% of a total 2.4 million) small customers.

In the 9 months from June 2021, the big 3 retailers’ share of the small customer market decreased by 0.7 percentage points. Conversely, over the same period Tier 2 retailers increased their share of the market by 0.8 percentage points. The big 3 retailers have lost 6.8 percentage points of their small customer market share to Tier 2 retailers since 2016–17 (Figure 6.18).

---

383 Retail customer numbers are not available prior to 2016–17.
384 Click Energy was a subsidiary of Amaysim Australia Limited.
385 Use of state-wide data masks levels of market concentration within some parts of regions with multiple distribution zones (Queensland and NSW). Market concentration is likely to be higher in regional NSW than in Sydney, for example.
386 Includes customers in Queensland, NSW, South Australia and the ACT. Does not include Victoria.
In the electricity sector, many generators and retailers have integrated to become ‘gentailers’. Operating at either end of the energy supply chain is referred to as ‘vertical integration’, which provides benefits to energy retailers and generators by enabling them to manage price volatility in wholesale markets, with less need to hedge their positions in futures (derivatives) markets. These savings could then be passed through to consumers through lower retail prices. However, this strategy can reduce liquidity in derivatives markets, posing a barrier to entry or expansion for ‘independent’ retailers that are not vertically integrated.

The big 3 retailers are all gentailers and each have significant market share in generation across NSW, Victoria and South Australia (Figure 6.19). Most other retailers with a significant retail customer base are also aligned with an electricity generation business – Snowy Hydro (retailing as Red Energy and Lumo Energy), ENGIE (Simply Energy), Alinta Energy, Hydro Tasmania (Momentum Energy), Shell Energy (retailing as Shell Energy Australia and Powershop) and Pacific Hydro (Tango).

Despite collectively owning more generation than needed to service their retail load, the profiles of gentailers varies significantly. Of the 6 largest gentailers:

- AGL Energy and Alinta Energy have more heavily weighted generation portfolios
- Origin Energy and Snowy Hydro’s share of the retail market is greater than its generation market share, but they have significant flexible generation, which helps them manage the risk of high wholesale prices
- EnergyAustralia and ENGIE have relatively balanced generation/load portfolios.

The NEM’s largest standalone electricity retailer (without links to a generation business) to small customers is M2 Energy (trading as Dodo Power and Gas) with less than 1% of small customers across the NEM.

---

387 In March 2021 AGL Energy announced plans to reduce its level of vertical integration by separating out its coal-fired generators into a separate business – PrimeCo. However, on 30 May 2022 the company announced they would withdraw the proposal on the basis that it would not receive sufficient support to meet the needed approval threshold.
Vertical integration also occurs in gas, but to a lesser extent. Interests in upstream gas production or storage can complement gas retailing or gas-powered electricity generation.

### 6.6.5 Customers with market contracts

Most energy consumers can enter a market contract with their retailer of choice. Market contracts allow retailers to tailor their energy products, offering different tariff structures, discounted prices, carbon offsets, non-price incentives, billing options, fixed or variable terms and other features. Contracts may be subject to fees and charges, such as establishment or exit fees. Retailers must obtain a customer’s explicit informed consent before entering them into a market contract. Most consumers are currently on a market contract (except small consumers in regional Queensland).

Customers without a market contract are placed on a standing offer with the retailer that most recently supplied energy at their premises (or, for new connections, with the retailer designated for that area). Standing offers provide a safety net for customers unable or unwilling to engage in the market, with prescribed terms and conditions and a suite of consumer protections that the retailer cannot change. Standing offer contracts are generally more expensive than market retail contracts and prices are either set annually under regulation or can be changed no more than once every 6 months. Since 1 July 2019 standing offer electricity prices have been set or capped by regulators in all jurisdictions (section 6.3.8) in response to excessively high standing offer prices observed by the ACCC in its 2018 Retail Electricity Pricing Inquiry (REPI). Standing offer prices for gas contracts are not regulated and the prices are set by retailers.

Although customers on market contracts pay less on average than those on standing offers, customers on market contracts do not necessarily receive the best price available. Contracts with expired benefits may be priced close to the standing offer, meaning consumers need to continuously renegotiate or switch market contracts to maintain better prices.

Primary regional retailers – Ergon Energy (Queensland), Aurora Energy (Tasmania) and ActewAGL (ACT) – account for more than 60% of all electricity standing offer customers. These partially government-owned retailers maintain strong market positions in jurisdictions with limited retail competition. In the other jurisdictions, most electricity and gas standing offer customers have contracts with a big 3 retailer. This reflects the position of these retailers as

---

388 While full retail contestability applies in all regions, not all customers can access offers from a retailer other than their host retailer. Further, many customers within embedded networks are still limited to energy supply through their embedded network operator.
incumbents – the retailer that purchased the customer base at the time retail contestability was introduced – allowing them to retain customers that have never taken up a market contract.

Regional Queensland, Tasmania and the ACT have the highest proportion of consumers on standing offer contracts.

› Nearly all small energy customers in regional Queensland are on standing offers.
› The ACT continues to see significant increases in the proportion of small customers on market contracts, in large part due to Origin Energy’s increasing share of the market.
› In Tasmania, new entrant retailers have offered market contracts to residential customers since early 2019, but the proportion of customers on market contracts remains comparatively low – the Tasmanian Government set standing offer prices that attracted Aurora Energy’s market customers to switch back to the standing offer (Figure 6.20).

Figure 6.20 Small customers on market contracts

![Graph showing the proportion of small customers on market contracts over time for different regions.]

Note: Standing and market offer shares are based on the number of small customers at 31 March 2022 except Victoria (June 2020). Queensland electricity numbers exclude customers in regional Queensland, who largely remain on standing offers.


6.6.6 Customer awareness and engagement

Retail competition drives innovation to bring a wider range of products and services to the market to satisfy different customer preferences and demands, but it can also increase complexity. Customers can find it difficult to compare retail offers or understand the risks and benefits of different pricing structures, which can cause them to disengage from the market.

The ESC discussed the challenges of customers shopping around for the best deal in their Victorian Energy Market Report 2020–21. The ESC found that while price was indicated as the most important factor when switching, this did not align with customer behaviour in practice as large energy retailer offers are generally more costly than small and medium retailer offers. For example:

› most large retailer customers are not on their current retailer’s ‘best offer’
› based on customer retention rates, large retailer customers are more loyal despite being presented with more costly offers
› customers who do switch from a large retailer mostly move to another large retailer despite lower prices being offered by small and medium retailers.
Potential explanations for customers’ demonstrated preference for large retailers included:

- customers may (incorrectly) believe the lights will go out with a smaller retailer (‘supply risk’)
- potentially better customer service quality offered by large retailers
- customers’ individual experiences in the market
- the economies of scale and broader scope offered by large retailers for ‘bundled’ electricity and gas (and in some cases, telecommunications) contracts
- brand recognition.

Retailers have added to this complexity by adopting marketing strategies that make it difficult for customers to directly compare offers. Customer surveys regularly report that customers find the energy market difficult to navigate. These difficulties impose transaction costs (including time) that customers face when comparing offers, reinforcing a lack of trust and contributing to low levels of engagement.

Reforms in 2019 sought to make it easier for customers to compare offers by simplifying and standardising how retailers must present offers. The reforms require advertised discounts to be quoted against a ‘reference bill’, being the default market offer set by the AER (section 6.3.8).

The Better Bills Guideline, which commenced in August 2022, also seeks to make it easier for consumers to engage with the energy market by providing information to help them understand and compare their plan, identify whether their retailer may be able to provide a better offer, or consider options for new types of energy services (section 6.3.1):

These reforms may improve customer engagement, but other inclusion considerations for some customers remain – English as a second or other language; cultural practices; lived experience of disability; low levels of literacy combined with levels of complexity in energy markets, concepts and terms; and status quo bias for consumers to stay with their default retailer or plan. Improving outcomes for all consumers, in particular consumers experiencing vulnerability will need further targeted measures. The AER’s strategy that focuses on consumers experiencing vulnerability draws from research by the Consumer Policy Research Centre on understanding experiences of vulnerability and how different regulatory approaches can support consumers experiencing vulnerability.

### 6.6.7 Customer understanding of the market

Market developments – including the rollout of smart metering and cost-reflective tariffs – are adding additional layers of complexity to the market, making it harder for consumers to confidently engage. Increasingly, more tools are assisting to address the complexity of the market. For example, customers are more widely using price comparator websites. Use of an independent comparator website to find a better offer ranged from 9% of residential customers looking to switch in Tasmania to 26% of customers in Victoria.

The AER and Victorian Government operate comparator websites – Energy Made Easy (www.energymadeeasy.gov.au) and Victorian Energy Compare (compare.energy.vic.gov.au) – to assist users to compare retail offers. Commercial switching websites and services also allow customers to access better offers with minimal engagement but there are risks to consumers in relying on commercial services to navigate energy retail markets (section 6.6.15).

The Australian Government (Treasury) is extending the Consumer Data Right (CDR) to cover the energy sector. This will allow consumers to require their energy retailer to share their data with an accredited service provider such as a comparison site. Giving consumers the right to safely transfer their energy data (such as their current energy deal and consumption patterns) to third parties of their choice should make it easier for them to make good product choices. It should also promote competition between retailers. The government is implementing the CDR for energy in 2 phases – the big 3 retailers will need to comply by October 2022 and the other retailers will need to comply by October 2023.

### 6.6.8 Customer satisfaction

Customers’ level of satisfaction with retail energy markets depends on several factors, including price, perceived value for money, reliability, customer service, confidence in engaging with the market, technology uptake and ability to switch.

---


The behaviour of retailers can have a positive or negative impact on customers’ trust and confidence in the market. For customers, an adverse experience with a retailer can create, or increase, barriers between themselves and retailers.

Energy Consumers Australia’s consumer sentiment surveys indicate consumer satisfaction and confidence has slightly improved since 2019. Results from the June 2022 survey indicated that the cost of supply was consumers’ primary concern, with ‘dissatisfaction with value for money’ being one of the main reasons for customer switching (Figure 6.21). A majority of respondents (60%) were concerned that electricity and gas will become unaffordable for some Australians over the next 10 years.

Figure 6.21 Responses from energy consumer sentiment survey

![Figure 6.21: Responses from energy consumer sentiment survey](image)

Source: Energy Consumers Australia, Energy consumer sentiment survey, June 2022

### 6.6.9 Customer switching

The rate at which customers switch retailers can be used to indicate the level of engagement in the market. But switching rates should be interpreted with care – switching may be low in a competitive market if retailers deliver good-quality, low-priced services that give customers no reason to change. Data on switching rates fails to adequately capture customer movements to new contracts with the same retailer, so it understates customer activity in the market. Conversely, switching data captures when an existing customer moves house and signs a new contract, even if it is with the same retailer (thus overstating customer activity).

Reforms introduced in December 2019 make it easier for customers to switch retailer by allowing them to transfer within 2 days of a cooling-off period expiring.391 This process limits retailer ‘save’ activity (retailers contacting customers who try to switch and giving them a better offer to encourage them to stay) and allows customers faster access to prices and products they want.

Switching rates are typically lower in gas than in electricity. This may reflect fewer retailers participating in gas, meaning less choice and fewer potential customer savings. As a secondary fuel, gas is also typically a lower cost for consumers, so it may not receive the same attention. Overall, the level of switching activity indicates relatively engaged customers – almost half of the surveyed customers have switched retailer at some stage (Figure 6.22).

---

The ESC (Victoria), in its *Victorian energy market report 2020–21*, noted that customers of large retailers are incentivised to search for better offers because large retailers’ offers are generally higher than their smaller competitors. The report also referred to ‘sticky’ customers, who tend to stay with, or return to, particular products or services. This activity can lead to higher customer retention.

In many markets, engagement by even a limited number of customers can drive lower prices and product improvements that benefit all consumers. This is less true for energy markets, where retailers can easily identify and price discriminate against inactive customers. Many market offers include benefits that expire after one or 2 years – customers who do not switch regularly may find themselves paying higher prices than necessary. As a result, a critical part of the AER and other regulators’ reform agenda is regulatory reforms to support consumers understanding impending changes in their energy contract and helping them find better offers either with the same or an alternative retailer.

The National Energy Retail Rules require retailers to notify small electricity and gas customers before any change in their benefits and provide advance notice of any price change. In Victoria, retailers must also prominently display their ‘best offer’ on customers’ bills – every 3 months for electricity and every 4 months for gas – along with advice on how to access it. The Better Bills Guideline will bring this requirement to the rest of the NEM jurisdictions.

At the end of a fixed-term contract, retailers must inform customers in writing about their options, such as setting up a new contract or moving to another retailer. Retailers must ensure consumers are aware that they will be put onto a standing offer if they choose not to enter a new market contract with their current retailer.

---

393 AEMC, ‘*National Energy Retail Amendment (Notification of the end of a fixed benefit period) Rule 2017 No. 2*’, 7 November 2017; AEMC, ‘*National Energy Retail Amendment (Advance notice of price changes) Rule 2018 no. 3*’, 27 September 2018.
394 Using a customer’s past usage and comparing what they pay on their current offer against the cheapest generally available offer.
6.6.10 Retailer activity and barriers to entry

Changes in retailer marketing activity can affect the level of customer switching, most notably through digital acquisition channels, including retailers’ websites and price comparison websites (section 6.6.15). Low retailer activity in some markets may reflect barriers to entry or expansion.

Other barriers to entry that retailers have noted include:

› reintroduction of standing offer price caps (section 6.3.8) as a barrier to activity
› limited access for retailers to competitive risk management contracts as a barrier to entry or expansion in South Australia, with almost half of all retailers in 2020 considering that contract market liquidity in South Australia was too low.
› application of multiple regulatory frameworks – particularly in Victoria, which has a separate Energy Retail Code – due to the compliance costs this imposes. Retailers considered the divergence of Victorian regulations from other jurisdictions has widened since 2019.
› access to reasonably priced gas and pipeline capacity as barriers to entry and expansion, especially in Victoria. The Pipeline Capacity Trading and Day Ahead Auction reforms that commenced in March 2019 sought to reduce these barriers by increasing transparency in the gas market and improving access to unused pipeline capacity through a day-ahead auction and a capacity trading platform.

6.6.11 Product differentiation

In a competitive market, retailers offer a range of products and services to attract and retain customers. Energy retailers compete primarily on price. But with the introduction of standing offer price caps and restrictions around discounting (section 6.6.12), retailers are looking to differentiate their products in other ways.

Retailers can differentiate products by offering more price certainty or, alternatively, rewarding customers who are willing to be flexible in how and when they use energy. As technology improves, more products offering energy management services or linking to batteries, solar PV output or electric vehicles, including delivering additional revenue to consumers through virtual power plants, are becoming more common (section 6.7).

Some retailers also offer other incentives, such as carbon offsets, sign-up discounts and product add-ons and rewards, or they partner with other businesses. Bundling of products such as phone and internet alongside energy has also increased.

6.6.12 Conditional discounts

Until recently, price competition between energy retailers tended to play out through ‘headline’ discounts, often requiring the customer to meet conditions such as paying on time, e-billing or paying by direct debit. Overall, the use of these discounts was not delivering effective outcomes for consumers. The size of a ‘discount’ was often misleading because retailers applied discounts off a range of price bases. Customers were also exposed to much higher prices if the conditions were not met.

Reforms in 2019 require retailers to now base any discount advertising off the default price and prohibits them from including conditional discounts in their most prominent advertised price for a market offer. The reform covers retailers in south-east Queensland, NSW and South Australia. Equivalent provisions also apply in Victoria.

Further reforms in 2020 cap conditional discounts at a level reflecting the reasonable cost savings a retailer would expect if a consumer satisfied the conditions attached to the discount.

The proportion of offers with conditional discounts has been trending downwards since 2018. As of March 2022, only 17% of electricity offers contain conditional discounts (Figure 6.23).

In 2021 around 9% of residential customers on offers with conditional discounts did not meet the conditions required to receive the discounted price. Customers in financial difficulty were more likely to miss out on the discounts, with 14% of hardship customers and 12% of customers on payment plans not meeting the required conditions.

---

395 AEMC, ‘2020 Retail Energy Competition Review’.
396 AEMC, ‘2020 Retail Energy Competition Review’.
398 Some customers will still be receiving them if they are rolling over an existing contract.
The size of discounts being offered has reduced over this period. In 2019, 45% of market offers advertised discounts of greater than 10% off the average bill, with some retailers offering discounts of around 40%. But large-scale discounting has now all but gone, with only around 1% of offers advertising discounts of greater than 10% in September 2021.

Although the reforms only apply to electricity, discounting practices in gas have also changed. At March 2021 over 73% of gas offers did not contain conditional discounts.
6.6.13 Offer structures

Electricity retailers typically use one of 3 tariff structures in their offers:400

› Single-rate or ‘flat’ tariffs apply a daily (fixed) supply charge plus a simple usage charge for the electricity that a consumer uses.

› Time-of-use tariffs apply different pricing to electricity use at peak and off-peak times. Lower prices at off-peak times encourage consumers to shift their energy use to those times. It is intended to better reflect the prices retailers pay for electricity and encourage consumption during cheaper time periods.

› Demand tariffs charge a consumer based on their maximum point-in-time demand at peak times. Consumers can reduce their energy costs by shifting demand to off-peak periods. But even one day of high use at peak times will lead to higher charges for the whole billing period. This structure is intended to encourage consumers to stagger their energy use and reduce congestion on the network at peak times, also reducing system costs.

Retailers vary the levels of fixed and variable tariff components to appeal to different consumers. For example, consumers with low energy use may prefer an offer with lower fixed charge but higher usage charges, while a consumer with flexibility around when they use energy may prefer an offer with lower off-peak charges or free weekend energy use.

Some retailers are trialling other price structures. Fixed-price or subscription tariffs, where customers pay a (yearly or monthly) fee based on their typical electricity use, focus on simplicity and bill certainty. At the other end of the pricing spectrum, tariffs that pass-through wholesale market spot prices allow consumers to dynamically interact with the wholesale market. These tariffs are best suited to consumers with battery storage who can adjust their use of grid-supplied electricity during high price periods.

New dynamic products are emerging as battery storage systems and electric vehicles become more affordable and as accessibility to consumer energy data improves (section 6.7). Some of these products have a time-of-use pricing structure but with rates set to encourage charging/discharging of batteries or electric vehicles at specific times. These products may also come with ‘add-on’ services, such as automated systems that learn consumers’ electricity use patterns and charge/discharge batteries to maximise value. Some offers allow consumers to become part of a virtual power plant that aggregates multiple household solar and battery systems to provide power for network support or frequency control ancillary services or to engage in wholesale price arbitrage.

Similar to conditional discounting, dynamic products could cost consumers much more if they are unable to conform their energy use to the terms of the agreement.

6.6.14 Non-price competition

In addition to competing on price and tariff structure, many retailers offer other incentives to entice customers. Financial incentives may include credit for continuing with a plan for a minimum period, for signing up online or through a partnering business or for referring a friend to the retailer.

Several retailers offer reward schemes that provide deals and discounts on a range of products and services. Non-financial benefits include carbon offsets for electricity use and product add-ons such as digital subscriptions. Retailers sometimes partner with another business to provide these additional benefits (for example, Alinta Energy partners with Kayo Sports to offer new customers a complimentary subscription to its online streaming service, and Origin Energy partners with Woolworths’ Everyday Rewards program).

Retailers increasingly offer products or services alongside electricity and gas to appeal to customers looking for the convenience of a single service provider. Internet and phone services, as well as solar PV and battery products, are offered by a number of energy retailers. AGL Energy also offers an electric vehicle subscription service.

6.6.15 Price comparison websites and switching services

The variety of product structures, discounts and other inducements can make it difficult for energy customers to compare retail offers. Some customers use comparator websites to manage the complexity and range of offers in the market and due to the fundamental role shopping around has in delivering savings to consumers. Two independent price comparator websites are run by the AER and Victorian Government.

---

400 Gas offers have less variability in tariff structure, with flat tariffs typically applied. Usage charges may vary based on the overall volume of gas consumed and the time of year.
The AER operates an online price comparator – Energy Made Easy (www.energymadeeasy.gov.au) – to help small customers compare market offers. The website shows all generally available offers and has a benchmarking tool that allows consumers to compare their electricity use with similar sized households in their area. The website is available to consumers in jurisdictions that have implemented the Retail Law (Queensland, NSW, South Australia, Tasmania and the ACT).

The Victorian Government operates a similar online price comparator – Victorian Energy Compare (compare.energy.vic.gov.au) – enabling Victorian consumers to compare market offers.

Various commercial entities also offer online price comparison services. The AEMC identified 19 separate comparison websites in 2018. Brokers are also active in the market for larger consumers.

Comparison websites and brokers can provide consumers with a quick and easy way of engaging in the market, but some services may not provide customers with the best outcomes. For example, commercial comparator websites may only show offers of retailers affiliated with the site. Commercial comparators also typically require retailers to pay a commission per customer acquired or a subscription fee to have their offers shown. These arrangements are opaque to the customer. Commissions may vary across listed retailers, creating incentives for websites to promote offers that will most benefit the comparator business rather than show the cheapest offer for the customer. Government-operated comparison sites avoid this bias by listing all generally available offers in the market.

The ACCC and the AEMC have recommended that the government prescribe a mandatory code of conduct to ensure price comparator and broker services act in the best interests of consumers. The code would require the disclosure of commissions from retailers, show results from cheapest to most expensive, disclose the number of retailers and offers considered and provide a link to government comparator websites. A voluntary code was developed by the Energy Charter that partly addresses the ACCC and AEMC recommendations. For example, while the code does provide for disclosures of commercial interests and other factors that could mislead consumers, it does not provide for sanctions for non-compliance or an independent dispute resolution process.

6.7 The evolving electricity market

Advances in metering and electricity generation, management and storage technologies are changing how the retail market works.

Recent improvements in technology (particularly in the electricity market), high energy prices and environmental concerns are driving some consumers to be more active in the market and to take greater control over their energy use (Figure 6.1). There is also widespread recognition that new technology has a significant role in offsetting system costs and making more efficient use of existing energy generation. New technologies also support more efficient use of longstanding consumer energy resources like rooftop solar photovoltaic (PV) systems, by enabling energy consumers to self-generate electricity and sell excess energy to their retailer or a third party. Technological improvements relating to energy services include:

› smart meters, which provide information on energy use that gives retailers scope to offer more innovative products and ‘add-on’ energy management services, and helps consumers better understand their energy costs and opportunities to reduce them

› batteries, load control devices and similar technologies, which allow consumers greater control over their electricity use and the ability to further engage in the market (for example, by storing electricity and entering demand response contracts)

› electric vehicles, which may significantly increase consumer electricity demand, but can also offer electricity stored in the battery back into the market and could be used to smooth energy demand by charging during times of oversupply of rooftop solar output.

The Power of Choice reforms (section 3.8) and the more recent ESB’s Post-2025 NEM Market Design Project aim to provide consumers with opportunities to benefit from these changes. Reforms include rolling out smart meters, introducing cost-reflective network pricing (section 3.8.1), making it easier for consumers to access their energy data and to compare and switch retailers, enabling wider use of demand response, and better integrating consumer energy resources into the NEM.

---

In December 2019 industry bodies developed a code of practice on standards of consumer protection when businesses offer new energy products and services.\(^{404}\) The New Energy Tech Consumer Code covers all aspects of supply, including marketing, finance, installation, operation, customer service, warranties and complaints handling. The Australian Competition Tribunal authorised the code in September 2020.

In July 2021 the ESB’s Post-2025 Market Design set out recommendations for energy ministers. It included an implementation plan for consumer energy resources, setting out the market, regulatory and technical reforms needed to fully integrate consumer energy resources into the NEM. Reforms include:

- updating technical standards for inverters and meters to ensure the technology can integrate with the NEM and with different retailers so retailers can compete to offer consumers different energy products and services
- providing policy direction and advice on the implementation of flexible export limits, which allow export limits on consumer energy resources to be varied based on available network capacity
- introducing changes to the regulatory framework to allow consumers to engage a separate provider for their consumer energy assets (such as EV charging, solar panels and/or battery devices), and facilitate the active participation of consumer energy resources and flexible demand in the provision of market services
- undertaking a review of the retailer authorisation and exemption framework to ensure it remains fit for purpose in a transitioning retail energy market.

### 6.7.1 Smart meters

Smart meters frequently measure electricity use in up to 5-minute intervals and allow for remote reading and connecting/disconnecting. The information about a consumer’s energy use throughout the day provides scope for innovative offers from retailers and for improved energy management services from third parties or self-management by the consumer.

Victoria was the first jurisdiction to progress metering reforms, with electricity distribution businesses rolling out smart meters to around 98% of Victorian consumers between 2009 and 2014. Elsewhere, the rollout has occurred on a market-led basis. Outside of Victoria, responsibility for metering transferred from network businesses to retailers in December 2017. All new and replacement meters for residential and small businesses consumers must now be smart meters.

Smart meters are key to enabling a more connected, modern and efficient energy system that supports future technologies, services and innovation. Many of the issues addressed in the ESB’s Post-2025 Electricity Market Design Project rely on critical upgrades to the energy system through smart meters.\(^{405}\)

Current arrangements are not supporting the timely roll out of smart meters. Outside Victoria less than 25% of consumers had a smart meter at December 2021. Another 5% of consumers (mostly in NSW) had access to an interval meter providing 30-minute consumption readings but without remote reading and connection capabilities. In addition, retailers in Victoria are not yet making use of smart meters for innovative products. In Energy Consumers Australia’s October 2021 Consumer Behaviour Survey, only 67% of respondents in Victoria knew they had a smart meter, despite Victoria installing smart meters in more than 97% of households through a targeted installation scheme.\(^{406}\)

In December 2020 the AEMC initiated a review of the regulatory framework for metering services. In September 2021 the AEMC published an issues paper proposing several options to improve the current arrangements and increase the penetration of smart meters in jurisdictions outside of Victoria. The AEMC paused this review in November 2021 to focus on the delivery of other priority projects. This review recommenced in April 2022 and the AEMC plans to release a draft report later this year.\(^{407}\)

### 6.7.2 Rooftop solar PV and batteries

Many energy consumers partly meet their electricity needs through rooftop solar PV and sell excess electricity into the grid. At January 2022 over 2.6 million households and businesses in the NEM had installed rooftop solar PV systems.

---

404 ACCC, ‘Determination: Application for authorisation AA1000439 lodged by Australian Energy Council (AEC), Clean Energy Council (CEC), Smart Energy Council (SEC) and Energy Consumers Australia (ECA) (together the Applicants) in respect of the New Energy Tech Consumer Code’, ACCC Website, December 2019, accessed 15 September 2022.


There were over 316,000 new installations of solar PV systems in 2021 (Figure 6.24). Ongoing subsidies provided by the Australian Government and some state governments, combined with falling costs of solar PV systems, have helped to sustain the growth in new installations. The average size of solar PV systems has also grown. Total solar capacity installed in 2021 (2,687 megawatts (MW)) set a new record – 9% higher than the previous record set in 2020 (2,470 MW) and more than 3 times the capacity installed in 2011 (750 MW).

When installed with solar PV systems, battery storage and smart appliances allow consumers to better match their electricity requirements over time, reducing the amount of power they need to withdraw from (and inject into) the network. However, batteries are comparatively more expensive than solar PV systems. Of the 316,000 solar PV systems installed in the NEM in 2021, a little over 3% had an attached battery system.

Solar PV systems can be purchased outright by consumers or installed under a power purchase agreement. Under a power purchase agreement, an energy provider installs, owns, operates and maintains a solar PV system at a consumer’s home and sells the generated energy to that consumer. In return, the consumer pays for the electricity produced by the system, typically at a cheaper rate than an energy retailer would charge for supplying electricity through the grid.

Excess electricity produced by solar PV systems is typically sold by the consumer to their retailer. Consumers are paid a feed-in tariff for this excess electricity. This tariff is generally a flat per kilowatt hour value and is not linked to the actual value of the excess electricity to the NEM. This means that these consumers are not incentivised to time their exports to when additional energy is needed. The recent influx of solar PV capacity has created network constraints that have led to some networks limiting the amount of excess electricity that some consumers can export to the grid. In August 2021 the AEMC made a rule change to integrate consumer energy resources, such as small-scale solar and batteries, more efficiently into the electricity grid. The rule change allows network businesses to charge consumers for any electricity they export at times of network congestion. These charges would act as price signals to encourage consumers to export electricity at times of need and not times of excess electricity supply.409

---

408 Clean Energy Regulator, ‘Solar PV systems with concurrent battery storage capacity by year and state/territory’, Clean Energy Regulator Website, Data at 1 January 2022, accessed 15 September 2022.

6.7.3 Electric vehicles

Electric vehicles, like dedicated batteries, have the potential to draw electricity from, and inject it into, the electricity grid. Electric vehicle uptake in Australia has been slower than in other developed countries, but the number of electric vehicles is expected to grow as costs fall and charging infrastructure is expanded. There were around 21,000 electric vehicles sold in Australia in 2021, up from 6,900 in 2020.410

Although electric vehicles are still a small part of the market, electricity retailers are beginning to develop offers that reflect the specific needs of electric vehicles, including price incentives to encourage charging and discharging of batteries or electric vehicles at specific times. The ESB is considering how to integrate electric vehicles into its implementation plan for consumer energy resources on the expectation that electric vehicle uptake will increase. In July 2022 the ESB published an electric vehicle smart charging issues paper to seek stakeholder input on effective arrangements for electric vehicle smart charging in both domestic and public settings.411

6.7.4 Demand response

Smart meters provide consumers with opportunities to participate in demand response programs run by retailers, distribution network businesses or third-party energy providers. Demand response refers to a temporary shift or reduction in electricity use by consumers to support power system stability.

The simplest demand response programs offer consumers financial incentives to reduce electricity consumption when they receive an alert from their retailer or network service provider. More sophisticated programs include technologies that optimise solar PV and storage systems; and load control devices that automatically reduce power consumption from appliances such as air conditioning, hot water systems or pool pumps if required. Automating consumer participation in these programs is likely to result in increased uptake.

The Australian Renewable Energy Agency (ARENA) is funding several ‘virtual power plant’ trials that coordinate output from small-scale solar and battery systems to provide services equivalent to a large-scale generation plant.

These opportunities provide a new source of competition across the supply chain. Demand response can be deployed in the wholesale or frequency control ancillary service (FCAS) markets to manage or limit price spikes and can also be used by networks to manage system constraints, for example. A demand response mechanism that allows consumers to directly offer demand response into the wholesale market commenced in the NEM in October 2021 but is restricted to large customers. Small customers are limited to offering wholesale demand response through programs offered by their retailer.

As the supply of electricity shifts towards variable renewable energy resources, demand needs to shift to become more dynamic to enable us to make efficient use of our electricity resources, reducing the costs of both generation and transmission. However, dynamic demand also increases complexity and puts a heavier burden on retailers and consumers to behave responsively, rather than to passively receive electricity prices set by AEMO and the NEM Dispatch Engine (NEMDE). Research shows that consumers already have a low level of engagement in the energy market and many do not have the energy literacy to make informed choices that best suit their needs. This then puts further reliance on retailers and other energy service providers to create and innovate energy products and services that either help consumers manage their energy use in response to price signals or make these decisions on behalf of consumers. Where the benefits rely on consumers purchasing different forms of technology, this will exacerbate equity gaps between consumers, for example between consumers who own their home and consumers who rent.

The benefits of integrating consumer energy resources are significant, with potential savings estimated to be up to $6.3 billion over 20 years, which are intended to flow through to consumers through lower system costs and lower electricity prices.412 The AER is participating in the ESB’s working groups to implement the reforms needed to deliver benefits through to consumers. We will be guided by the research on consumers experiencing vulnerability to look at mitigating equity gaps in energy costs and leading a review of the retailer authorisation and exemption framework. This review will consider whether the current consumer protection framework is still fit for purpose in a changing energy market where consumers are offered a variety of new products and services to support consumer energy resources.413

411 ESB, ‘Electric vehicle smart charging issues paper – for consultation’.
413 AER, ‘Retailer authorisation and exemption review’, AER Website, 22 April 2022, accessed 15 September 2022.
6.7.5 Customers in embedded networks and standalone power systems

Many customers are supplied energy through embedded networks – where a group of customers are located behind a single connection point to the main distribution network. Energy is supplied on a similar basis to customers directly connected to a distribution network. However, the customer experience in embedded networks can be significantly different. Many customers cannot buy energy from a provider of their choice other than their network operator or can only do so at significant cost.

Embedded network customers have less access to the competitive market than customers supplied through a distribution network, despite reforms implemented in 2017. Gaps in consumer protection occur in areas such as connection services, disconnection and reconnection obligations, and life support arrangements. To address these gaps, in June 2019 the AEMC recommended a new regulatory framework for embedded electricity networks to address these issues. The AER’s retailer authorisation and exemption review will build on the AEMC’s embedded electricity networks findings and consider the appropriateness of the embedded electricity networks in the context of new products and services supporting consumer energy resources.

Standalone power systems or microgrids – where a community primarily uses locally sourced generation and does not rely on a connection to the main grid – are also becoming increasingly prevalent in some areas. These arrangements have mainly developed in regional communities that are remote from existing networks to avoid significant transmission costs. Improvements in energy storage and renewable generation technology may lead more customers to take up this form of energy supply.

These supply arrangements are generally not covered by the Retail Law and Rules. Regulatory and pricing frameworks are being implemented to support the growth of off-grid arrangements. In early 2021 energy ministers began consulting on regulatory changes to make it easier for distribution network businesses to offer standalone power systems (SAPS) (where economically efficient to do so) while maintaining appropriate consumer protections and service standards.

In November 2021 the AER updated its electricity distribution ring-fencing guideline, which provides the regulatory frameworks and controls to support 2 key emerging markets in Australia’s transitioning energy sector – the deployment of batteries, including community-scale batteries, and SAPS.

The AER’s ring-fencing reforms also support the new rule to allow network businesses to move customers from a grid connection to a regulated SAPS, improving connection and reliability for customers, particularly those in remote areas. SAPS are fast becoming a cheaper option than waiting for the replacement of aging distribution lines. The updated guideline allows distribution networks to play a greater role in providing standalone generation services and paves the way for faster deployment of regulated SAPS.

6.8 Customer complaints

Customer complaints can cover issues such as billing discrepancies, wrongful disconnections, the timeliness of transferring a customer to another retailer, supply disruptions, credit arrangements and marketing practices.

Customers can lodge a complaint directly with their retailer in the first instance. If a customer is unable to resolve an issue with their retailer, they can then take the complaint to the jurisdictional energy ombudsman scheme, which offers free and independent dispute resolution.

Except for the ACT, the number of electricity and gas complaints received by energy retailers decreased across all jurisdictions in 2020–21, down 30% on the previous year (Figure 6.25). The number of electricity and gas complaints received by energy ombudsmen also decreased in 2020–21, down 19% on the previous year (Figure 6.26).

Retailers with effective customer service generally resolve complaints without the need for escalation to energy ombudsman schemes. This means that when viewed together, the data on electricity and gas complaints received by energy retailers and by jurisdictional ombudsmen is useful for assessing the quantity and types of complaints that were not able to be promptly resolved by a retailer.

---

414 AEMC, ‘Updating the regulatory frameworks for embedded networks’.
Billing concerns continued to be the most common cause of complaint, constituting more than half of the total complaints received by both retailers and ombudsmen in 2020–21. Unexpectedly high bills are the primary billing issue. Other billing issues include errors, incorrect tariff, estimation of energy use, fees and charges, and back billing.

The numbers of complaints received has decreased markedly since the introduction of stronger consumer protections in response to the COVID-19 pandemic. The AER’s Statement of Expectations (and the equivalent Victorian response) prevented disconnection, debt collection and credit default listing for customers experiencing financial stress. However, as retail energy prices rise, the AER expects to see customer complaints increase.
6.9 Enforcement action in retail markets

The AER's enforcement activity in retail markets recently targeted areas including behaviour towards customers in vulnerable circumstances. Additionally, the ACCC has taken enforcement action against retailers under the Australian Consumer Law, with a focus on marketing practices. In Victoria, the ESC is responsible for enforcement action.

Recent reforms to the civil penalties regime under national energy laws now enable the AER to seek penalties of up to $10 million (potentially more for large companies) for alleged breaches of the energy laws.

The AER's compliance and enforcement priorities for 2021–22 focused on protecting consumers experiencing vulnerability, effectively regulating competitive markets and delivering efficient regulation of monopoly infrastructure.

The priorities were:

- effective identification of consumers who experience difficulty to pay and offer of payment plans that consider the consumer's capacity to pay
- ensure exempt seller compliance with exemption conditions, including consumer access to ombudsman schemes
- focus on registered generators' compliance with AEMO dispatch instructions and their ability to comply with their latest offers at all times
- ensure service providers meet information disclosure obligations and other Part 23 National Gas Rules obligations
- ensure timely and accurate gas auction reporting by registered participants.

Significant compliance and enforcement outcomes, including substantially higher penalties under the new penalty regime, have been delivered in 2021–22. As our energy market transitions, it is more important than ever that the AER remains vigilant and takes timely and proportionate enforcement action when harms arise.
6.10 Consumers experiencing vulnerability

6.10.1 Customers in hardship

The AER instituted proceedings in the Federal Court against Origin Energy for systemic failures in implementing its hardship policy and assessing consumers' capacity to pay. Origin Energy was ordered to pay penalties of $17 million in respect of over 90,000 customers. This is the highest civil penalty ordered under national energy laws to date.

The AER investigated concerns that, from September 2019 to March 2020, Alinta Energy may have required consumers experiencing vulnerability to make upfront payments or seek financial counselling, when it should have offered consumers access to payment plans or assistance to join Alinta's hardship program. Following the AER investigation, Alinta Energy waived more than $1 million in customer energy debt and substantially improved its systems.

The AER also undertook a range of compliance activities to improve behaviours in the industry to ensure retailers meet their obligations to consumers experiencing vulnerability, as required under the Retail Law and Retail Rules, and offer individualised assistance where appropriate.

In 2021–22 the AER assessed and approved 6 new and amended retailer hardship policies.

In November 2021, the AER wrote to 19 retailers requesting information on their practices for consumers experiencing financial hardship or payment difficulty, and the steps retailers will take to support these consumers. Responses from retailers identified some positive practices in the way retailers are assisting consumers in financial difficulty to manage their debt, as well as a number of practices that could be modified or improved. The learnings from both the audits and the information requests were shared by the AER during a panel discussion with energy retailers in June 2022. At this panel discussion, it was emphasised to retailers that, now more than ever, they need to adhere to the hardship and payment plan obligations in the Retail Law and Rules as consumers face higher prices. Retailers were also reminded that former customers are still entitled to hardship and payment plan protections.

6.10.2 Embedded networks

The AER focused on ensuring consumers in embedded networks, who are sold energy by exempt sellers, are not disadvantaged and can access dispute resolution services through ombudsman schemes. This included:

- contacting various industry associations for caravan parks, retirement villages and similar (as well as contacting exempt sellers directly) to share compliance messaging
- formalising a referral process between ombudsman schemes and the AER to ensure non-member exempt sellers are efficiently identified and notified of the requirement
- following up non-member exempt sellers that continued to fail to join the relevant scheme and successfully ensured compliance
- updating its Retail Exempt Selling Guideline to increase protections for consumers living in embedded networks as well as to make exempt sellers' obligations clearer – key changes include:
  - introducing a new condition to require exempt sellers to have a hardship policy
  - introducing a new information provision condition for exempt sellers to provide their customers with an AER fact sheet
  - clarifying our expectations on customer consent for conversions to embedded networks
- introducing a requirement to provide evidence of steps taken to obtain ombudsman scheme membership, as part of the individual exemption application process.

These activities have resulted in a significant increase in the number of exempt sellers that are members of an ombudsman scheme, ensuring the consumers they sell energy to have access to this important dispute resolution service.

The AER decided to defer its release of the draft Network Exemptions Guideline (version 7) while further changes are made to streamline and simplify this guideline. The review of the Network Exemptions Guideline is ongoing and is planned for final release in late 2022.

6.10.3  Life support

The Retail Rules establish critical protections for customers who rely on life support equipment. Failure to deliver these protections could have dangerous and even fatal consequences. All retailers and distributors operating under the Retail Law and Retail Rules are required to comply with these obligations.

The AER has updated the Life support registration guide to reflect new obligations that commenced on 1 August 2021. This follows a rule change published by the AEMC in February 2021, which aims to reduce barriers for life support consumers who switch retailers or move premises by enabling consumers to reuse a previously submitted medical confirmation form. These new rules are designed to allocate clear responsibilities between retailers and distributors to ensure life support registers are accurate and up to date.

› On 1 June 2022 EnergyAustralia was ordered by the Federal Court to pay penalties totalling $12 million for failing to comply with life support obligations for its customers who rely on life-saving health equipment. This conduct occurred over a number of years from 2018.

› Endavour Energy paid 7 infringement notices totalling $474,600 to the AER on 24 June 2022 for alleged breaches of life support obligations under the Retail Rules. The AER has also accepted a court enforceable undertaking from Endavour Energy, with Endavour Energy committing to implement new IT systems and to engage an independent expert to conduct an end-to-end review of its life support processes, controls and systems.

6.10.4  Compliance and enforcement priorities for 2022–23

The AER has settled its compliance and enforcement priorities for 2022–23, which sees the current priorities continued for a further 12 months and some updates to areas of focus:

› effectively identify residential consumers experiencing difficulty to pay and offer payment plans that consider the consumer’s capacity to pay

› improve outcomes for consumers in embedded networks, including by enabling access to ombudsman schemes

› focus on registered generators’ compliance with offers, dispatch instructions, obligations relating to bidding behaviour and provide accurate and timely capability information to the Australian Energy Market Operator (AEMO)

› ensure service providers meet information disclosure obligations under Part 23 of the National Gas Rules

› ensure timely and accurate gas auction reporting and demand forecasting in downstream wholesale gas markets by registered participants.

In addition, we will continue to act where there are serious issues impacting consumers experiencing vulnerability, including life support customers. We will also continue to act to help shape new or emerging markets and to implement new guidance such as the Better Bills Guideline.

The AER’s Annual compliance and enforcement report and Mid-year compliance and enforcement update provide in-depth assessments of the compliance of regulated entities.
6.10.5  Retailer marketing conduct

The Retail Law’s marketing provisions protect customers by requiring retailers to obtain the customer’s explicit informed consent before signing them up to a new energy contract. The ESC enforces similar provisions in Victoria. The Australian Consumer Law (enforced by the ACCC) also protects customers from improper sales or marketing conduct relating to unsolicited sales, misleading and deceptive conduct, and unconscionable conduct.

The ACCC also monitors how businesses notify customers of price changes and promote discounts and savings under their energy offers, following concerns that consumers may be misled.

In June 2021 the Federal Court declared that energy retailer Sumo made false or misleading representations in selling electricity plans to Victorian consumers.417

The Court declared that Sumo had offered cheap rates and high ‘pay on time’ discounts to entice consumers to sign up to certain electricity plans and claimed that price increases were solely because of electricity generation costs caused by factors such as climate change, the closure of the Hazelwood power station, network upgrades and fees paid to distributors, when this was not the case.

Sumo was ordered to pay $1.2 million in penalties and to pay consumer redress to 7,700 affected consumers, which on average paid an additional $50 per month. The Court also declared by consent that Sumo had misled consumers by representing that its marketing agents were from an independent company offering a comparison service of electricity plans instead of Sumo.

In January 2022 energy retailer CovaU Pty Ltd paid $33,300 in penalties after the ACCC issued it with 3 infringement notices for alleged contraventions of the Electricity Retail Code. The ACCC alleged that CovaU advertised the prices of 3 residential electricity plans on its website between 27 June and 19 July 2021 without stating a percentage difference to the comparison price set by the government.418 Since 1 July 2019, retailers have been required to include the percentage difference to the default price in electricity offers to residential and small business customers. This provides a more consistent benchmark to see how a plan compares with other offers from a glance.

---

417 ACCC, ‘Sumo Power to pay $1.2 million for misleading electricity plans’ [media release], ACCC Website, 30 June 2021, accessed 15 September 2022.

418 ACCC, ‘CovaU pays penalties for allegedly failing to publish comparison pricing on electricity plans’ [media release], ACCC Website, 12 January 2022, accessed 15 September 2022.
### Abbreviations

<p>| 1P  | proven (gas reserves) |
| 2P  | proved plus probable (gas reserves) |
| 3P  | at least 10 per cent probability of being commercially recoverable (gas reserves) |
| 5MS | 5-minute settlement |
| ABS | Australian Bureau of Statistics |
| ACCC | Australian Competition and Consumer Commission |
| ACT | Australian Capital Territory |
| AEMC | Australian Energy Market Commission |
| AEMO | Australian Energy Market Operator |
| AER | Australian Energy Regulator |
| AFMA | Australian Financial Markets Association |
| AGN | Australian Gas Networks |
| APLNG | Australian Pacific LNG |
| ARENA | Australian Renewable Energy Agency |
| ASX | Australian Securities Exchange |
| BESS | battery energy storage system |
| C&amp;I | commercial and industrial |
| CBA | cost–benefit analysis |
| CBD | central business district |
| CCGT | combined cycle gas turbine |
| CCP | Consumer Challenge Panel |
| CEFC | Clean Energy Finance Corporation |
| CESS | capital expenditure sharing scheme |
| CoAG | Council of Australian Governments |
| COVID-19 | coronavirus disease 2019 |
| CPI | consumer price index |
| CSG | coal seam gas |
| CSIRO | Commonwealth Scientific and Industrial Research Organisation |
| CSIS | customer service incentive scheme |
| DEIP | Distributed Energy Integration Program |
| DER | distributed energy resources |</p>
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMIA</td>
<td>demand management innovation allowance</td>
</tr>
<tr>
<td>DMIS</td>
<td>demand management incentive scheme</td>
</tr>
<tr>
<td>DMO</td>
<td>default market offer</td>
</tr>
<tr>
<td>EBSS</td>
<td>efficiency benefit sharing scheme</td>
</tr>
<tr>
<td>ECA</td>
<td>Energy Consumers Australia</td>
</tr>
<tr>
<td>ENA</td>
<td>Energy Networks Australia</td>
</tr>
<tr>
<td>EOI</td>
<td>expression of interest</td>
</tr>
<tr>
<td>ESB</td>
<td>Energy Security Board</td>
</tr>
<tr>
<td>ESC</td>
<td>Essential Services Commission</td>
</tr>
<tr>
<td>EV</td>
<td>electric vehicle</td>
</tr>
<tr>
<td>FEX</td>
<td>FEX Global</td>
</tr>
<tr>
<td>FCAS</td>
<td>frequency control ancillary services</td>
</tr>
<tr>
<td>GAP</td>
<td>Gas Acceleration Program</td>
</tr>
<tr>
<td>GJ</td>
<td>gigajoule</td>
</tr>
<tr>
<td>GLNG</td>
<td>Gladstone LNG</td>
</tr>
<tr>
<td>GSL</td>
<td>guaranteed service level</td>
</tr>
<tr>
<td>GST</td>
<td>goods and services tax</td>
</tr>
<tr>
<td>GW</td>
<td>gigawatt</td>
</tr>
<tr>
<td>GWh</td>
<td>gigawatt hour</td>
</tr>
<tr>
<td>Hz</td>
<td>Hertz</td>
</tr>
<tr>
<td>HHI</td>
<td>Herfindahl–Hirschman index</td>
</tr>
<tr>
<td>ICT</td>
<td>information and communication technology</td>
</tr>
<tr>
<td>IRENA</td>
<td>International Renewable Energy Agency</td>
</tr>
<tr>
<td>ISDA</td>
<td>International Swaps and Derivatives Association</td>
</tr>
<tr>
<td>ISP</td>
<td>integrated system plan</td>
</tr>
<tr>
<td>km</td>
<td>kilometre</td>
</tr>
<tr>
<td>kW</td>
<td>kilowatt</td>
</tr>
<tr>
<td>kWh</td>
<td>kilowatt hour</td>
</tr>
<tr>
<td>LCOE</td>
<td>levelised cost of electricity</td>
</tr>
<tr>
<td>LNG</td>
<td>liquefied natural gas</td>
</tr>
<tr>
<td>MAIFI</td>
<td>momentary average interruption frequency index</td>
</tr>
<tr>
<td>MJ</td>
<td>megajoule</td>
</tr>
<tr>
<td>MOS</td>
<td>market operator services</td>
</tr>
<tr>
<td>MLF</td>
<td>marginal loss factor</td>
</tr>
<tr>
<td>MLO</td>
<td>market liquidity obligation</td>
</tr>
<tr>
<td>MtCO2-e</td>
<td>million metric tonnes of carbon dioxide equivalent</td>
</tr>
<tr>
<td>mtpa</td>
<td>million tonnes per annum</td>
</tr>
<tr>
<td>MW</td>
<td>megawatt</td>
</tr>
<tr>
<td>MWh</td>
<td>megawatt hour</td>
</tr>
<tr>
<td>NEM</td>
<td>National Electricity Market</td>
</tr>
<tr>
<td>NSW</td>
<td>New South Wales</td>
</tr>
</tbody>
</table>
NT Northern Territory
OCGT open cycle gas turbine
OTC over-the-counter
PJ petajoule
PST pivotal supplier test
PV photovoltaic
QCLNG Queensland Curtis LNG
RAB regulatory asset base
ERT reliability and emergency reserve trader
RET Renewable Energy Target
REZ renewable energy zone
Retail Law National Energy Retail Law
RIN regulatory information notice
RIT regulatory investment test
RIT–D regulatory investment test – distribution
RIT–T regulatory investment test – transmission
RRI Rate of Return Instrument
RRO Retailer Reliability Obligation
SAPS stand-alone power systems
SAIDI system average interruption duration index
SAIFI system average interruption frequency index
STPIS service target performance incentive scheme
STTM short term trading market
TJ terajoule
TJ/d terajoules per day
TW terawatt
TWh terawatt hour
UNGI Underwriting New Generation Investment program
VPP virtual power plants
WACC weighted average cost of capital