

Image courtesy of Pika Energy Island



1 RETAIL ENERGY MARKETS

1.1 Retail products and services

Most energy customers source their electricity and gas through a retailer that buys energy in wholesale markets and packages it with network services to sell as a bundled product. Retailers monitor and bill customers for the energy they use.

But this traditional retail model is evolving as customers become active participants in the market and take greater control over their energy use (figure 1.1). Advances in technology (particularly in the electricity market) and an environment of rising energy prices are driving this change, opening up markets for new types of energy services. Examples include:

- *smart meters* provide scope for retailers to offer more innovative products, and for new sellers to offer 'add-on' energy management services.
- *rooftop solar photovoltaic (PV) systems* enable energy customers to self-generate electricity, and sell any excess back to their retailer or a third party.
- *batteries, load control devices* and similar technologies allow customers greater control over their electricity use and the ability to engage in the market in new ways (for example, by storing electricity and entering demand response contracts).

Established energy retailers and new entrant businesses are driving market opportunities for new services.

More customers are also bypassing the traditional energy supply model, going 'off grid' through self-sufficient solar PV generation and battery storage, community based stand-alone systems or microgrids.

1.2 Energy market regulation

Five jurisdictions—Queensland, New South Wales (NSW), South Australia, Tasmania and the Australian Capital Territory (ACT)—apply a common national framework for regulating retail energy markets. The framework applies to electricity retailing in all five jurisdictions and to gas retailing in Queensland, NSW, South Australia, and the ACT. Victoria has not implemented the framework, but its regulatory arrangements are largely consistent with the national framework.¹

¹ Recent changes to the Victorian framework, including recommendations adopted from the Thwaites *Independent Bipartisan Review into the Electricity and Gas Retail Markets in Victoria* (August 2017), have seen greater divergence between the Victorian and national frameworks. The ACCC's *Retail Electricity Pricing Inquiry* (July 2018) recommended Victoria adopt the Retail Law.

The National Energy Retail Law (Retail Law) sets out the regulatory arrangements, and confers wide ranging regulatory responsibilities on the Australian Energy Regulator (AER) (box 1.1). This chapter focuses on the five jurisdictions where the AER has a regulatory role, and also covers the Victorian market where possible. Western Australia and the Northern Territory operate separate regulatory arrangements and are not covered in this chapter.

The Retail Law operates alongside the Australian Consumer Law to protect small energy customers in their electricity and gas supply arrangements. It sets out protections for residential and small businesses consuming fewer than 100 megawatt hours (MWh) of electricity or 1 terajoule (TJ) of gas per year.² Small customers make up 98 per cent of electricity connections and over 99 per cent of gas connections, though they account for less than 50 per cent of energy sales by volume.

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

State and territory governments regulate electricity prices in the ACT, Tasmania and regional Queensland. The AER does not currently regulate retail energy prices, but from 1 July 2019 it is expected to set a *default price* that caps standing offers³ for electricity in jurisdictions without state based price regulation. This price will also inform a reference bill from which any advertised discounts promoted by retailers must be based.⁴

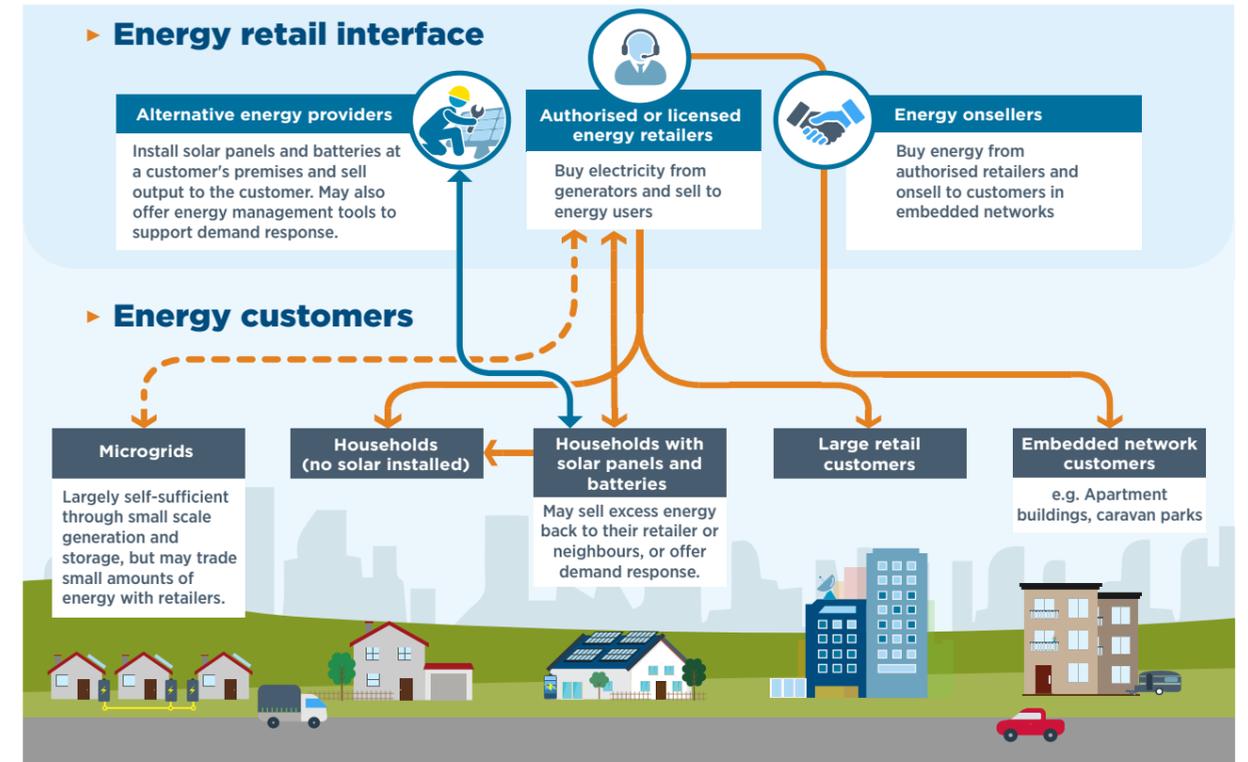
The Australian Energy Market Commission (AEMC) sets the rules for the energy market.

² For electricity, some jurisdictions have different consumption thresholds to that specified in the Retail Law. In South Australia, for example, small electricity customers are those consuming fewer than 160 MWh per year. In Tasmania, the threshold is 150 MWh per year.

³ Standing offers are applied where a customer does not enter into a market contract. The terms and conditions of standing offers are prescribed in the National Energy Retail Rules.

⁴ Commonwealth Treasurer, Josh Frydenberg and Minister for Energy, Angus Taylor, *Introduction of a default market offer*, Letter to the AER, 23 October 2018.

Figure 1.1
An evolving retail energy market



1.3 Energy retailers

Energy sellers include those authorised as retailers under the Retail Law, and those holding exemptions from the requirement to be authorised.⁵ Additionally, some entities offer energy products and services in markets beyond the scope of the Retail Law, such as energy management services, storage products, and off-grid energy systems. Only customers of authorised retailers enjoy the full set of protections in the Retail Law.

1.3.1 Authorised energy retailers

The Retail Law requires an entity to be authorised to operate as an energy retailer. An authorisation covers energy sales to all customers in participating jurisdictions. Authorised retailers must comply with consumer protection and other obligations under the Retail Law.

⁵ In Victoria, where the Retail Law does not apply, retailers must hold a licence issued by the ESC or seek an exemption from this requirement.

In July 2018, 71 businesses held authorisations to retail electricity and 28 held authorisations to retail gas, though not all retailers were active in the market.⁶ Since 2017 15 new retailers were authorised to retail electricity, and one to retail gas. Two new authorised retailers commenced offering electricity contracts since 2017. Four established retailers expanded the markets in which they sell electricity, and eight commenced offering gas in new markets.

While many authorised retailers offer energy services to all customers, some target specific market segments—a retailer may focus on offers for large commercial customers or customers in embedded networks, for example. Some retailers also have offers that have particular value for users with certain characteristics, such as customers with swimming pools or those with flexibility in when they use energy.

In choosing which markets to enter, a retailer considers factors such as price regulation (if it applies), market scale,

⁶ Details of all businesses that hold electricity or gas authorisations can be found in the public register of authorised retailers on the AER website.

Box 1.1 The AER's role in retail energy markets

The AER regulates retail energy markets so energy customers (particularly residential and small business customers) can participate confidently in those markets. We undertake this work in Queensland, NSW, South Australia, Tasmania and the ACT.

We aim to empower customers to make informed decisions on their energy use, and protect them when problems arise. As part of this work, we:

- maintain an energy price comparator website (www.energymadeeasy.gov.au) for residential and small business customers that helps energy users 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
- monitor and enforce compliance (by retailers and distributors) with obligations in the Retail Law, Rules and Regulations
- oversee retail market entry and exit by assessing applications from businesses looking to become energy retailers, grant exemptions from the requirement to hold a retailer authorisation, and administer a national retailer of last resort scheme to protect consumers and the market if a retailer fails
- report on the performance of the market and energy businesses (including information on energy affordability)
- develop hardship guidelines and approve customer hardship policies that energy retailers offer to customers facing financial hardship and seeking help to manage their bills.

From 1 July 2019 we are expected to set a default price that caps standing offers for electricity in jurisdictions without state based price regulation.

competition, the ability to source hedging contracts to manage risk and, for gas retailing, whether wholesale gas contracts and pipeline access are available.

Table 1.1 lists the 36 authorised or licensed retailers selling energy to residential or small business customers in southern and eastern Australia. Around 50 per cent of these retail brands offer both electricity and gas in at least one jurisdiction. Some offer only electricity, while one retailer specialises in just gas. A small number of authorised retailers (not listed in table 1.1) only offer electricity retail services to customers in embedded networks.

Only 15 retail brands offer energy products in all the fully contestable markets without price regulation—south east Queensland, NSW, Victoria and South Australia. The retail brands of three businesses—AGL Energy, Origin Energy and EnergyAustralia—supply over 66 per cent of small electricity customers and 77 per cent of small gas customers in southern and eastern Australia (section 1.7.1).

1.3.2 Exempt energy sellers

An energy seller may apply to the AER for an exemption from the need to be authorised if it intends to supply energy services only (1) to a limited customer group (for example, at a specific site or incidentally through a relationship such as a

body corporate) or (2) in addition to the customer's primary energy connection.

At 1 July 2018 over 3000 businesses held 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). Hospitals, retirement villages, caravan parks and apartment complexes are examples of entities that might run an embedded network. The AEMC estimates there are over 200 000 embedded network customers.⁷ Solar power purchase agreement providers are also covered by the exemptions framework.

Embedded network customers do not enjoy the full set of protections in the Retail Law, and have more limited avenues for dispute resolution.⁸ But energy ombudsman schemes are being widened to allow customers of exempt sellers to lodge complaints (section 1.8.5).

⁷ AEMC, *Review of regulatory arrangements for embedded networks, information sheet*, p. 3.

⁸ The AER's exemption guideline sets out the classes of exemption. The AER sets customer protections under each class. Details of all businesses that hold a registered or individual exemption can be found in the public register of exemptions on the AER website.

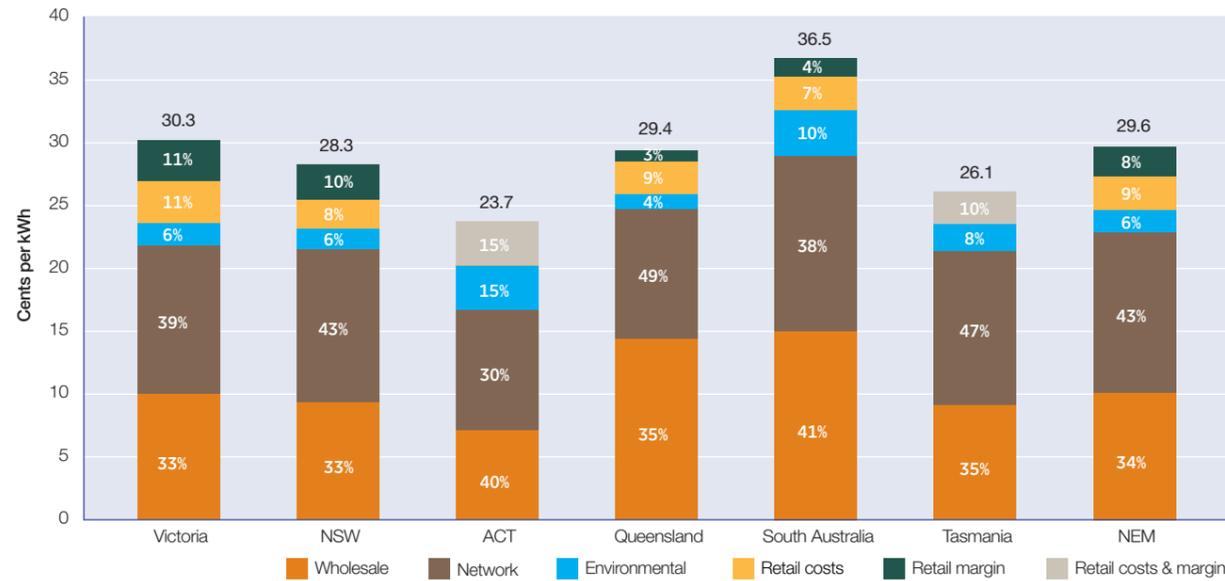
Table 1.1 Retailers offering energy contracts to small customers

Retailer	Ownership	Queensland	NSW	Victoria	South Australia	Tasmania	ACT		
1st Energy	1st Energy								
ActewAGL Retail	AGL Energy (ACT Government)								
AGL Energy	AGL Energy								
Alinta Energy	Alinta Energy								
Amaysim Energy	Amaysim Energy								
Aurora Energy	Aurora Energy								
Blue NRG	Blue NRG								
Click Energy	Amaysim Energy								
Commander Power & Gas	M2 Energy								
Covau	TPC								
Diamond Energy	Diamond Energy								
Dodo Power and Gas	M2 Energy								
EnergyAustralia	CLP Group								
Energy Locals	Energy Locals								
Erova Energy	Erova Community Energy								
Ergon Energy	Queensland Government								
ERM Power	ERM Power								
Flow Power	OPTrust								
Globird Energy	Globird Energy								
Lumo Energy	Snowy Hydro								
Mojo Power	Mojo Power								
Momentum Energy	Hydro-Electric (Tasmanian Government)								
Next Business Energy	Next Business Energy								
Online Power and Gas	Online Power and Gas								
Origin	Origin								
People Energy	People Energy								
Pooled Energy	Efficiency Filters								
Powerdirect	AGL Energy								
Powershop	Meridian Energy								
Genergy	Genergy								
Red Energy	Snowy Hydri								
Sanctuary Energy	Living Choice Australia/Sanctuary Energy								
Simply Energy	ENGIE								
Sumo Power	Sumo Power								
Tango Energy	State Power Investment Corporation								
Tas Gas Retail	Brookfield Infrastructure								
TOTAL	Gas retailer	3	12	16	7	2	3		
	Electricity retailer	22	28	26	20	2	7		
	Host retailer (electricity and gas)								

Note: Includes all retailers with generally available offers at August 2018. Retailers servicing only embedded customers are excluded as well as some retailers servicing only rural and regional areas. A host retailer has obligations to supply new customers in a region that do not take up a market offer.

Source: Energy Made Easy, Victorian Energy Compare.

Figure 1.2
Composition of a residential electricity bill



kWh, kilowatt hour.

Note: Data are estimates for 2017–18. Average residential customer prices excluding GST (real \$2016–17). Retail costs and margin are combined for the ACT and Tasmania due to data availability.

Source: ACCC, *Restoring electricity affordability and Australia's competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, p. 8; ACT data from AEMC, *2017 Residential Electricity Price Trends, final report*, December 2017, p. 111.

1.4 Components of energy bills

Retail customers' energy bills cover the costs of producing and transporting energy, costs related to environmental schemes, and retailers' costs and profit margins.

1.4.1 Electricity bills

A typical residential electricity retail bill in 2017–18 comprised:

- retailers' **wholesale costs** of buying electricity in spot and hedge markets—34 per cent of a bill
- network costs** for transporting electricity through transmission and distribution networks, and metering—43 per cent of a bill
- the costs of **environmental schemes** for promoting renewable generation and energy efficiency, and reducing carbon emissions—collectively 6 per cent of a bill
- the **retail costs** of servicing customers (including meeting regulatory obligations) and acquiring and retaining customers—9 per cent of the bill

- the **retailer's margin** (profit)—8 per cent of the bill (figure 1.2).⁹

The contribution of the different components of retail electricity bills varies across regions (figure 1.2).

Wholesale costs

The energy retailers sell to customers is purchased in wholesale markets. But prices in the wholesale market can be volatile, while the prices retailers charge customers are generally fixed. To manage this risk, retailers lock in firm prices for electricity they need to buy or sell by entering forward contracts (hedges or derivatives). Alternatively, they might own generation assets, or enter demand response contracts to manage these risks (discussed in sections 1.7.2 and 1.8.4).

Wholesale costs in 2017–18 were highest in South Australia. This reflects both the generation portfolio in the state (which is reliant on higher cost gas powered generation and has relatively concentrated ownership), relatively peaky demand and limited interconnection with other regions.

⁹ Based on earnings before interest, taxes, depreciation and amortisation (EBITDA).

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 owner and lenders that fund the business.

Network costs (as a percentage of total retail bills) in 2017–18 were highest in Queensland and Tasmania and also high in NSW. Productivity has been consistently lower for the (largely still government owned) networks in these regions than in the privatised networks in Victoria and South Australia.

Environmental costs

Environmental costs include payments to fund the renewable energy target, feed-in tariffs for solar PV installations, and state government operated energy efficiency schemes. Costs associated with the large scale renewable energy target made up around half of all environmental costs. State government premium feed-in tariff schemes were the next largest contributor to environmental costs in most regions. While these schemes are closed to new entrants, eligible households continue to receive payments under the schemes.

South Australian and ACT customers face the highest environmental costs. South Australian costs flow from the state's premium feed-in tariff scheme, given the high penetration of rooftop solar PV. South Australia's energy efficiency scheme also has the largest per customer cost. ACT costs were largely related to the government's feed-in tariff scheme for large scale solar developments.

Environmental costs were lowest in Queensland, following a state government decision in 2017 to recover premium feed-in tariff costs through the tax base rather than electricity charges. Additionally, Queensland does not operate an energy efficiency scheme targeted at small electricity customers.

Retail costs and retailer's margin

Retail costs fall into two main categories. *Costs of servicing customers* include managing billing systems and debt, handling customer enquiries, and compliance with regulatory obligations. These costs do not vary significantly across regions.

Customer acquisition and retention costs—marketing to gain or retain customers—are highest in Victoria. These costs tend to be higher in jurisdictions with high rates of customer switching. This outcome highlights a risk that competition may increase energy bills for customers if the

costs of competing outweigh the competition benefits of efficiency and innovation.

Retail costs per customer tend to be lower for the big three retailers (AGL, Origin and EnergyAustralia) than other retailers.

Retailers' margins in Victoria and NSW were more than double those in South Australia and south east Queensland (on a dollar per customer basis). The combined retail costs and retailer's margin were lowest in Tasmania (as a percentage of the total bill).

1.4.2 Gas bills

The composition of retail gas bills is opaque. Unlike in electricity, there is no systematic annual reporting of this data. Figure 1.3 shows estimates of the composition of retail gas bills in 2017.

On average, gas pipeline (transportation) charges make up over 40 per cent of a retail gas bill. Distribution charges represent the largest component, at around 35 per cent of retail gas bills, with transmission costs making up around 7 per cent.¹⁰ Wholesale gas prices, which account for around one third of a typical gas bill, have risen sharply since 2015 (chapter 4). Retail costs and margin accounted for the remaining 25 per cent of retail gas bills.

Regional outcomes varied. Victorian residential gas prices were the cheapest on a unit basis—largely due to lower network costs given a high level of gas use per customer and connection penetration. In Tasmania and Queensland, where gas use is less widespread, network costs account for over 60 per cent of gas bills.

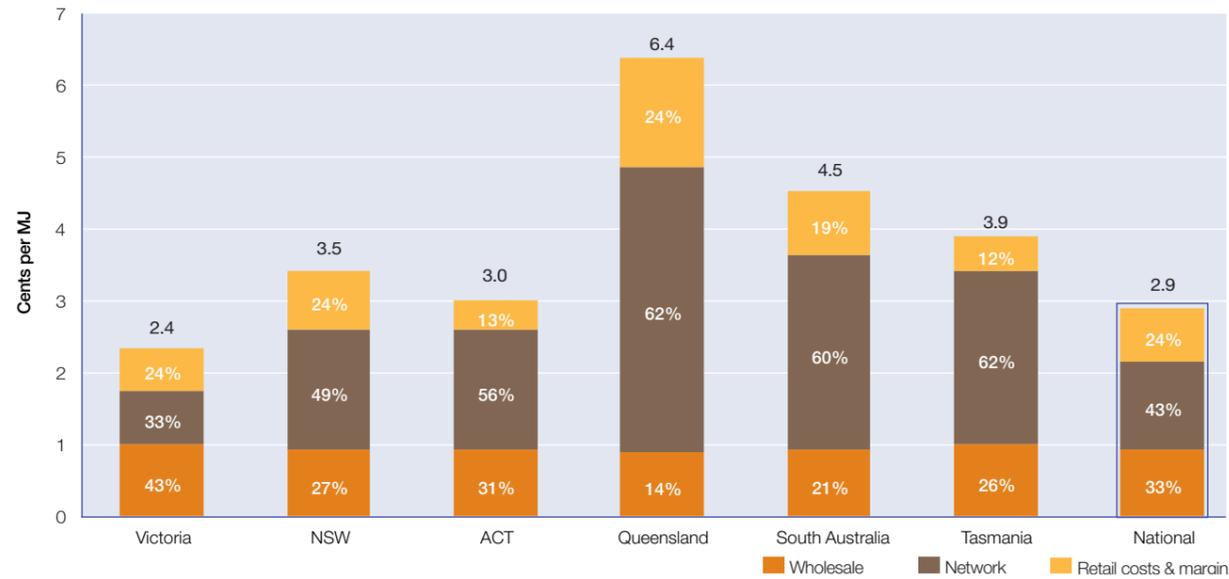
Retail costs also varied across regions. On a unit basis, Queensland retail costs were almost double those elsewhere, which may reflect economies of scale in servicing larger customer bases. Retail margins were highest in Victoria and NSW.¹¹ The Thwaites review found retail costs in Victoria were higher than in an efficient or regulated market.¹² Gas retailers likely face many of the same customer acquisition and retention costs as electricity retailers.

¹⁰ Oakley Greenwood, *Gas Price Trends Review 2017*, March 2018, p. 158.

¹¹ Oakley Greenwood, *Gas Price Trends Review 2017*, March 2018, p. 225.

¹² Thwaites, T, Faulkner, P, and Mulder, T, *Independent Review into the electricity and gas retail markets in Victoria*, August 2017, p. 23.

Figure 1.3
Composition of a residential gas bill



MJ, megajoule.
Note: Data are estimates at 2017. Average residential customer prices excluding GST (real \$2014–15).
Source: Oakley Greenwood, *Gas Price Trends Review 2017*, March 2018.

1.5 How retail prices are set

Energy retailers in southern and eastern Australia offer energy contracts at whatever prices they set. Alongside this deregulated pricing, government agencies in some jurisdictions regulate electricity retail prices for standing offers.

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 in those jurisdictions require retailers to publish standing offer prices that small customers can access. Retailers may adjust these prices once every six months.

Only the ACT, Tasmania and regional Queensland regulate retail electricity prices for small customers. State regulators use a ‘building block’ approach to set a price reflecting the costs of an efficient retailer supplying electricity to its customers. The approach adopted to estimate costs differs across regions, as does the extent to which the standing offer allows for the recovery of customer acquisition and retention costs (such as advertising).

In gas, NSW was the last jurisdiction to deregulate retail prices for small customers at 1 July 2017—following an AEMC finding in 2016 that gas market customers would benefit from the removal of retail price regulation.¹³

Recent reviews of retail energy markets advocated returning to some form of price regulation in all regions.¹⁴ In October 2018, the Australian Government adopted an ACCC recommendation for a default market offer price to be set by the AER. The default price is intended to take effect from 1 July 2019, and act as a cap on standing offer prices in jurisdictions where price regulation does not otherwise exist.

The ACCC recommended the default offer should not mirror the lowest price, or be close to the lowest price in the market, to avoid incentivising consumers to disengage. It recommended the default offer should cover efficient costs, including customer acquisition and retention costs, and a reasonable margin. This default price will also inform a reference bill on which any advertised discounts promoted

¹³ AEMC, *2016 Retail competition review, final report*, June 2016, p. 20.

¹⁴ Thwaites, T, Faulkner, P, and Mulder, T, *Independent review into the electricity and gas retail markets in Victoria*, August 2017; ACCC, *Restoring electricity affordability and Australia’s competitive advantage, Retail Electricity Pricing Inquiry—Final Report*, June 2018.

Figure 1.4
Spread of electricity costs for residential consumers



kWh, kilowatt hour.
Note: Based on effective unit charges paid by residential customers without solar PV systems at June 2017. Data is inflation adjusted, in 2016–17 dollars, and excludes GST. The average is the weighted average unit charge for each region.
Source: ACCC, *Restoring electricity affordability and Australia’s competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, p. 262.

by electricity retailers must be based. This requirement seeks to provide consumers with meaningful information to compare offers.

The Victorian Government also committed to introducing a regulated price from 1 July 2019, to be set by the Essential Services Commission (ESC). Like the default offer adopted by the Australian Government, the regulated price will reflect the efficient costs of a retail business operating in a contestable market, including an allowance for customer acquisition and retention costs.

1.6 Retail prices and customer bills

The amount customers pay for energy services can vary significantly. Customers who regularly change their energy contract usually pay lower prices, reflecting that market offer prices are often cheaper than standing offers (table 1.2).

Energy bills are typically higher for customers in regions with higher average energy use, and in regional and remote areas (where network costs tend to be higher and can be recovered from fewer customers), than for urban customers.

1.6.1 Diversity of customer bills

A customer’s energy bill depends on their use and the terms of their contract with their retailer. Hundreds of retail offers may be available to customers at any time. Advertised offers frequently change, as do the charges attached to an offer over time. A customer’s contract may change even where they do not initiate a change.

The ACCC in 2018 used its inquiry powers to gather information on the bills paid by different electricity customers. In Victoria, NSW and South Australia, electricity customers on the most expensive offers pay more than double what those on the least expensive offers pay, on a per unit basis (figure 1.4). While potential savings exist

for those on expensive offers, it is not always easy for a customer to identify the best contract for their situation.

South Australian customers paid the highest average per unit rates. Victorian customers paid around 10 per cent less than South Australian customers on average, but those on the most expensive offers in Victoria paid more than anyone else in the NEM. ACT customers paid the lowest average per unit rates for electricity, and had the least variation in prices paid.

1.6.2 Headline price movements

Electricity retail prices rose significantly across most regions over the past two years, driven largely by wholesale costs.

In 2017 market offer prices for residential customers rose by 11–17 per cent in NSW, 19 per cent in South Australia and 21 per cent in the ACT. Prices were also affected in South Australia by increasing network costs, and in the ACT by an expansion of the ACT Government's feed-in tariff scheme for large scale solar developments.

In Queensland prices rose by only 1 per cent. While wholesale costs put upward pressure on prices, this effect was partly mitigated by a Queensland Government decision to recover premium feed-in tariff costs through the tax base rather than electricity charges.

In Tasmania, the government capped the wholesale electricity price used to calculate standing offer prices for 12 months from July 2017. A new distribution network determination also took effect with lower allowed revenues for TasNetworks. These changes resulted in stable retail prices in 2017.

Prices rose by 5–9 per cent in Victoria in 2017. While lower than in NSW and South Australia, this outcome reflected the timing of price changes rather than a difference in underlying market conditions (Victorian prices are typically adjusted in January rather than July). Victorian prices rose a further 4–8 per cent in 2018.

Outside Victoria, market offer prices were either stable or fell slightly in 2018. Queensland had the largest price reduction (4.6 per cent) following a fall in network costs.

In gas, retail prices rose in all regions in 2017, with the largest rises in Victoria (13–16 per cent) and the ACT. Victorian prices were affected by rising network costs in both transmission and distribution. Prices were flat in 2018 for NSW and Queensland, but continued to rise in other regions.

In both electricity and gas, prices in standing offers typically rose more (or fell less) than prices in market offers. Table 1.2 (and figure 1 in the Market overview) summarises recent

movements in market and standing offer energy prices for residential customers, and estimated annual customer bills.

Energy wholesale costs

Rising energy wholesale costs were the main driver of higher retail prices in 2017 and 2018.

In electricity, the retirement of large coal fired generators in South Australia (Northern, May 2016) and Victoria (Hazelwood, March 2017) tightened the supply–demand balance in generation. Higher gas and coal fuel prices also fed into wholesale electricity prices. Additionally, liquidity in electricity financial markets has tightened since traditional generators left the market, putting upward pressure on hedging costs. In combination, these factors led to wholesale electricity prices setting new records in several regions (chapter 2).

While wholesale costs eased in the first half of 2018 in some regions, this cost reduction generally did not flow through to retail prices. This outcome may reflect hedging strategies of retailers that typically lock in a portion of their wholesale costs up to a few years in advance, meaning it takes time for cost changes to work their way into retail prices.

In gas, wholesale costs more than doubled in all regions—and tripled in Queensland—from 2015–17, before stabilising (at high levels) in 2018. This increase was largely due to Queensland's liquefied natural gas (LNG) projects linking domestic gas prices to international oil prices and a tighter supply–demand balance. Diversion of gas supplies from the domestic market to LNG projects, moratoriums on onshore gas exploration in some states and declining production in some established gas basins contributed to this tighter supply–demand balance (chapter 4).

1.6.3 Longer term price trends

Retail *electricity* prices rose by 56 per cent in real terms for customers in eastern and southern Australia over the 10 years to 30 June 2018 (figure 1.5). Queensland recorded the highest price rise over the decade (71 per cent) and Tasmania the lowest (39 per cent).¹⁵

However, changes in customer behaviour—switching to energy efficient appliances, meeting some of their energy needs from rooftop solar PV systems, and other changes to reduce their energy use—have moderated the impact of price rises on customer bills. Electricity customer bills rose by a lower (but still significant) rate of 35 per cent over this period, for example.

¹⁵ ACCC, *Restoring electricity affordability and Australia's competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, pp. 10–23.

Table 1.2 Movement in energy bills for customers on market and standing offers

JURISDICTION	WHO SETS STANDING OFFER PRICES?	DISTRIBUTION NETWORK AREA	CHANGE IN MEDIAN OFFER (%)				ESTIMATED ANNUAL CUSTOMER BILL, 2018 (\$)	
			2017 MARKET	2017 STANDING	2018 MARKET	2018 STANDING	MARKET	STANDING
Electricity								
Queensland	Retailers	Energex	1.0	6.7	-3.5	-1.4	1814	2098
	QCA	Ergon Energy		3.8		-1.5		2012
NSW	Retailers	Ausgrid	12.8	16.2	-0.5	0.0	1997	2315
		Endeavour Energy	15.2	17.2	-1.6	-1.3	1928	2264
		Essential Energy	11.1	10.9	-2.1	3.1	2188	2619
Victoria	Retailers	Citipower	7.5	8.4	7.2	12.0	1431	1891
		Powercor	8.8	4.5	6.8	9.3	1619	2070
		AusNet Services	4.9	3.5	2.5	12.5	1651	2269
		Jemena	4.9	6.9	5.5	10.9	1538	2077
		United Energy	5.1	4.8	9.5	11.5	1518	1972
South Australia	Retailers	SA Power Networks	14.3	19.0	-0.1	5.3	2213	2662
Tasmania	OTTER	Aurora Energy		-0.5		2.1		2455
ACT	ICRC	Evoenergy	21.8	20.8	0.1	6.1	1804	2019
Gas								
Queensland	Retailers	AGN	3.3	4.6	-0.1	2.9	645	688
		Allgas Energy	1.9	4.5	1.0	0.3	702	736
NSW	Retailers	Jemena	7.3	7.8	-0.7	1.9	887	1020
Victoria	Retailers	AusNet Services	15.5	13.6	5.9	16.2	1468	1774
		Multinet	12.9	10.1	5.6	16.2	1449	1757
		AGN	13.7	12.6	6.4	16.6	1527	1846
South Australia	Retailers	AGN	1.1	9.2	6.8	5.7	941	1005
ACT	Retailers	Evoenergy	12.7	17.9	2.2	3.4	1573	1735

Note: Analysis includes all generally available offers for residential customers using a 'single rate' tariff structure. Annual bills and price changes based on median market and standing offers at December 2016, December 2017 and August 2018, using average consumption in each jurisdiction: NSW 6130 kWh (electricity), 22 860 MJ (gas); Queensland 5950 kWh, 7870 MJ; Victoria 4810 kWh, 57 060 MJ; South Australia 5100 kWh, 17 500 MJ; ACT 7010 kWh, 42 080 MJ; NEM 5590 kWh, 39 030 MJ. Market offer prices include all conditional discounts.

Source: Energy Made Easy; Victorian Energy Compare.

Retail *gas* prices rose by 46 per cent over the 10 years to 2017 (figure 1.6). On the mainland the increase ranged from 27 per cent in NSW to 51 per cent in Victoria. As in electricity, this impact was partly offset by customers using less gas. Average residential gas use fell by 6–7 per cent in NSW and Victoria, and by around 30 per cent in South Australia.

Electricity

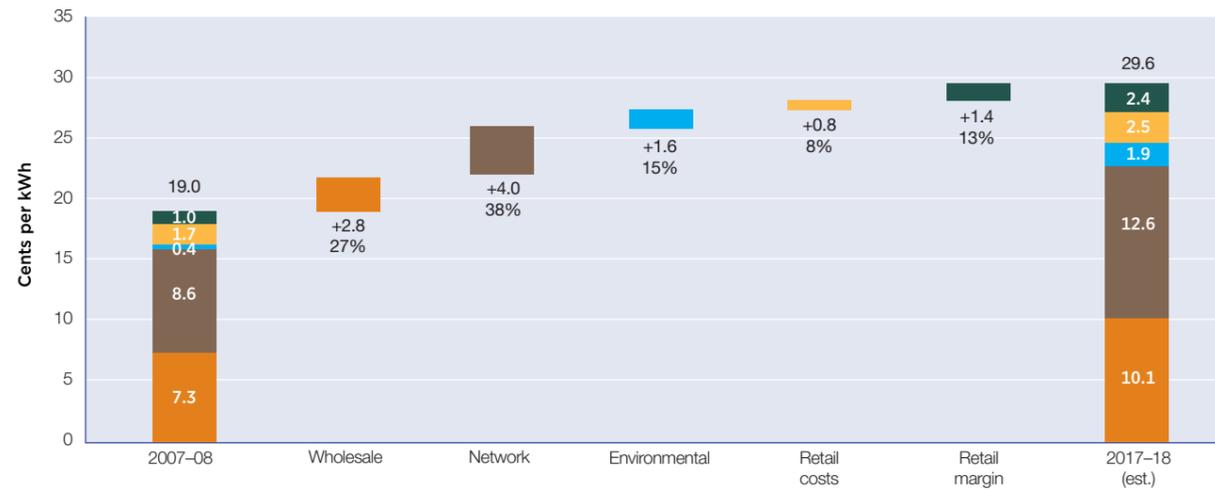
Network costs were the largest driver of retail *electricity* prices over the 10 years to 30 June 2018, accounting for 38 per cent of the growth in retail electricity prices across the NEM. Network costs rose most sharply from 2007–15, when network businesses invested heavily in new assets and financial market instability raised debt costs. In Victoria, the costs of the government led smart meter rollout

and new bushfire safety obligations also contributed to cost increases.

More recently, weaker electricity demand has eased operating costs and delayed network expansions. Improved financial market conditions further moderated cost pressures on the networks. In these conditions, networks require less revenue to operate efficiently, and the impacts on retail bills have moderated accordingly (chapter 3).

Wholesale costs (including hedging costs to insure against spot market volatility) accounted for 27 per cent of electricity price rises across the NEM, and have been the main driver of rising electricity prices since 2016.

Figure 1.5
Change in average residential electricity customer prices in the NEM



kWh, kilowatt hour.

Note: Based on effective unit charges paid by residential customers. Data is inflation adjusted, in 2016-17 dollars, and excludes GST. 2017-18 data are estimates.

Source: ACCC, *Restoring electricity affordability and Australia's competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, p. 7.

Environmental costs contributed 15 per cent to the increase in retail electricity prices over the past decade, for reasons including:

- increases in the price of certificates to meet obligations under the large scale renewable energy target
- the introduction of state based energy efficiency schemes
- the rapid growth in rooftop solar PV—which increased the number of certificates that retailers must acquire under the small scale renewable energy scheme, and the extent of payments under premium feed-in tariff schemes.

Retail costs and margins contributed 8 per cent and 13 per cent to the increase in retail prices respectively. Both are high by world standards, raising questions about whether retail competition is delivering price benefits for consumers. Costs to serve, and acquire and retain, customers made similar contributions to the overall retail cost increase. Retail margins rose most significantly in NSW and Victoria, and fell in South Australia.

Gas

In gas, rising wholesale gas costs contributed around 57 per cent of retail price increases from 2007 to 2017 (figure 1.6). Much of the rise in wholesale costs occurred since 2015.

Retail costs (including margin) were the next largest contributor to price rises, accounting for around 23 per

cent of the national average gas price increase. Increases in these costs are likely to reflect similar drivers to those in the retail electricity market.

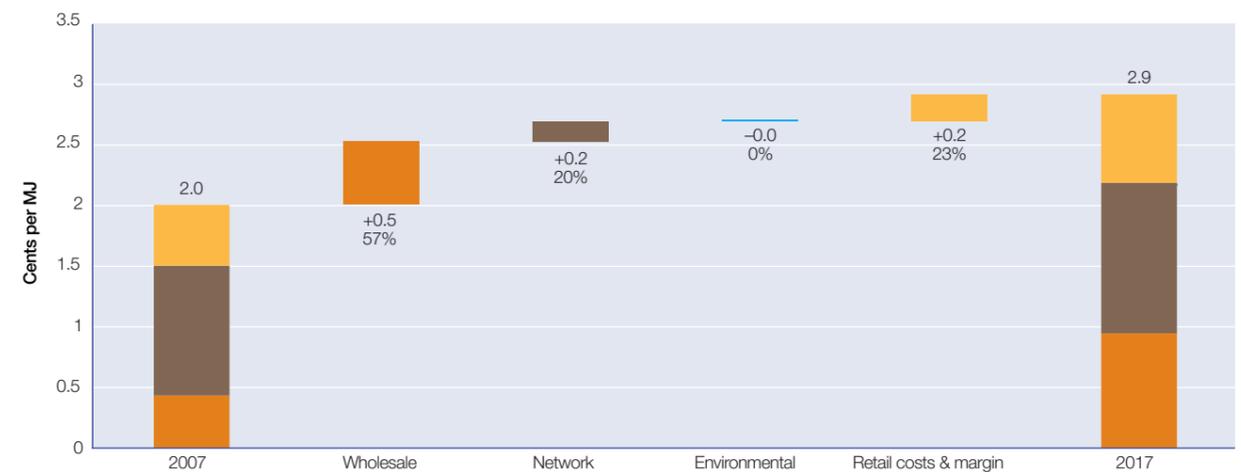
Network costs accounted for around 20 per cent of the increase. They were the largest contributing element in Queensland, South Australia, Tasmania and the ACT. As for electricity networks, increased debt costs due to financial market instability were a significant driver. More recently, gas pipeline charges eased in NSW (2015) and South Australia (2016) (chapter 5).

1.6.4 CPI data on retail energy prices

The ABS tracks movements in energy prices for metropolitan households as an input to the consumer price index (figures 1.7 and 1.8). Electricity prices began to track significantly higher in real terms from around 2008, and rose by around 10 per cent each year (13 per cent in nominal terms) over the five years to June 2013. Prices peaked nationally in March 2014 before easing as a result of falling network costs, an oversupply of generation capacity and the removal of carbon pricing.

Between March 2014 and June 2016, real prices fell by around 6 per cent nationally, with the steepest falls occurring in Canberra and Sydney. Brisbane was the only city to experience price rises over this period, reflecting a delayed

Figure 1.6
Change in average residential gas customer prices in the NEM



MJ, megajoule

Note: Data are estimates at 2017. Average residential customer prices excluding GST (real 2014-15 dollars).

Source: Oakley Greenwood, *Gas Price Trends Review 2017*, March 2018.

pass through of network cost increases, rising gas fuel costs, and costs associated with the Solar Bonus Scheme.

The national trend of declining real prices reversed in 2016, when high electricity wholesale prices began to flow through into retail prices in most cities. A new peak national average retail electricity price level was recorded in June 2018, though prices fell marginally in Brisbane and Hobart.

Retail gas prices rose by an average of 7 per cent per year in real terms over the five years to 2012-13 (10 per cent in nominal terms). Prices continued to rise strongly in Sydney, Adelaide and Canberra until new access arrangements lowered gas pipeline charges (2014-15 in Sydney and 2015-16 in the other cities). But prices in those regions have trended upwards since that time. Gas prices in Melbourne dipped following the removal of carbon pricing in 2014, but have overall trended higher. Retail prices in the small residential markets of Brisbane and Hobart were relatively stable. Gas prices at June 2018 were at record levels in all

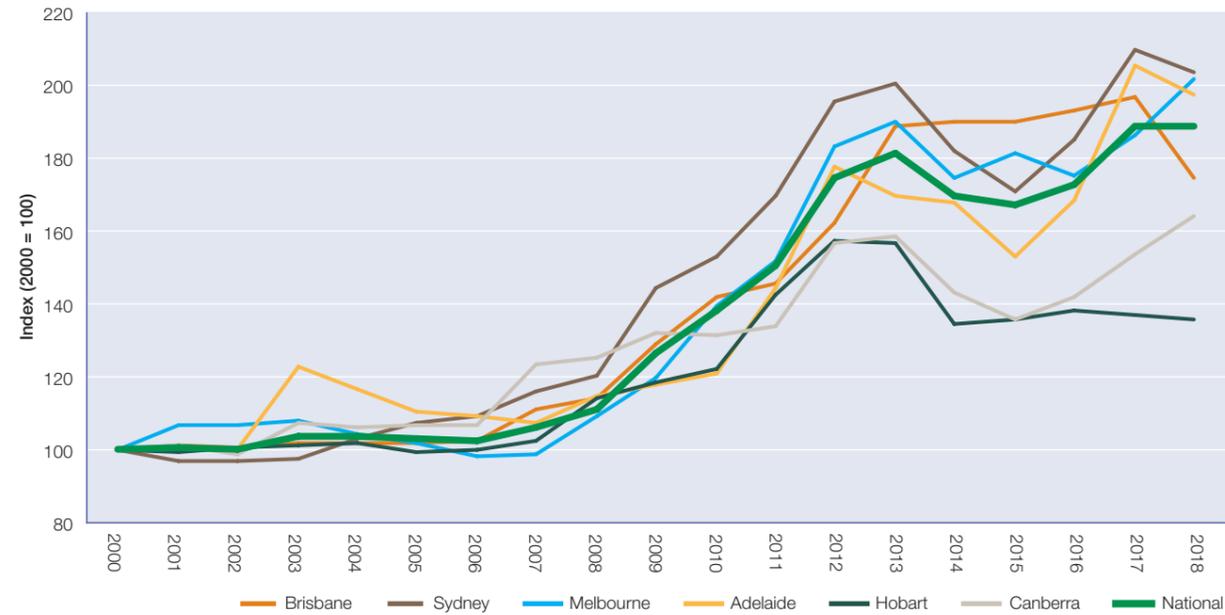
cities except Sydney and Adelaide (which had peak prices in 2015 and 2016 respectively).

1.6.5 International electricity prices

Figure 1.9 compares average Australian household electricity prices with European countries (which historically have had some of the highest electricity prices internationally), based on purchasing power parity. This measure adjusts for differences in the cost of living across countries.

Australian electricity prices were traditionally low by global standards. But increases over the past decade mean average Australian prices are now around 10 per cent above the European average.

Figure 1.7
Electricity retail price index (inflation adjusted)



Note (figures 1.7 and 1.8): Consumer price index electricity and gas series for each region, deflated by the consumer price index for all groups. Data at September quarter each year.

Source (figures 1.7 and 1.8): ABS, *Consumer price index*, cat. No. 6401.0, various years.

Figure 1.8
Gas retail price index (inflation adjusted)

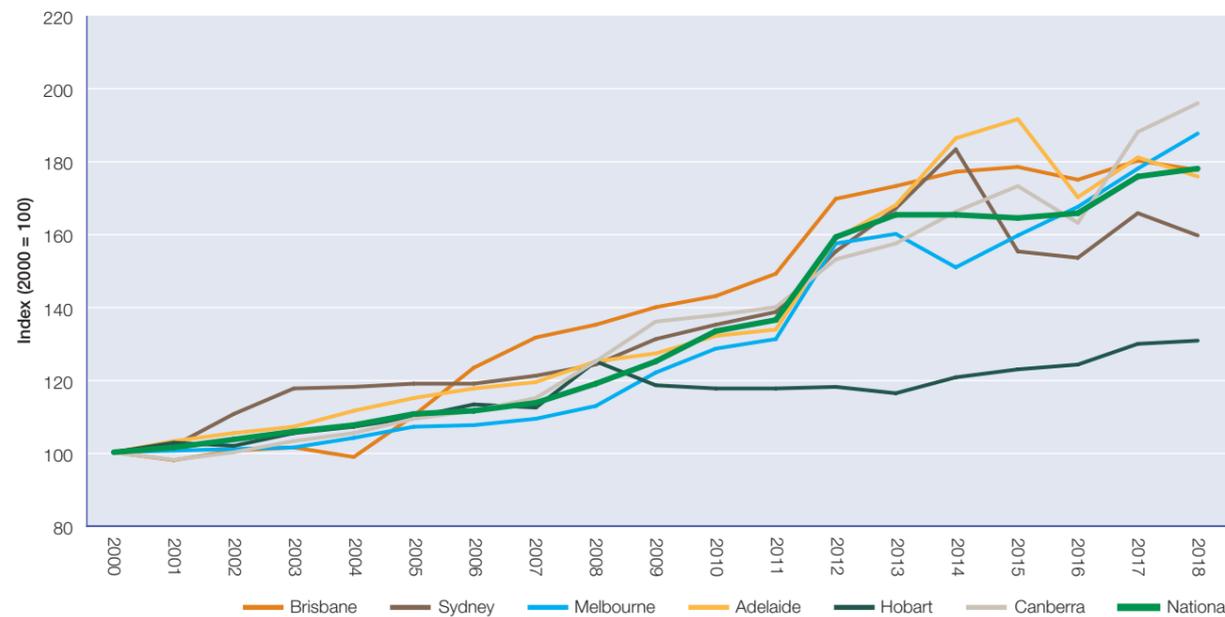
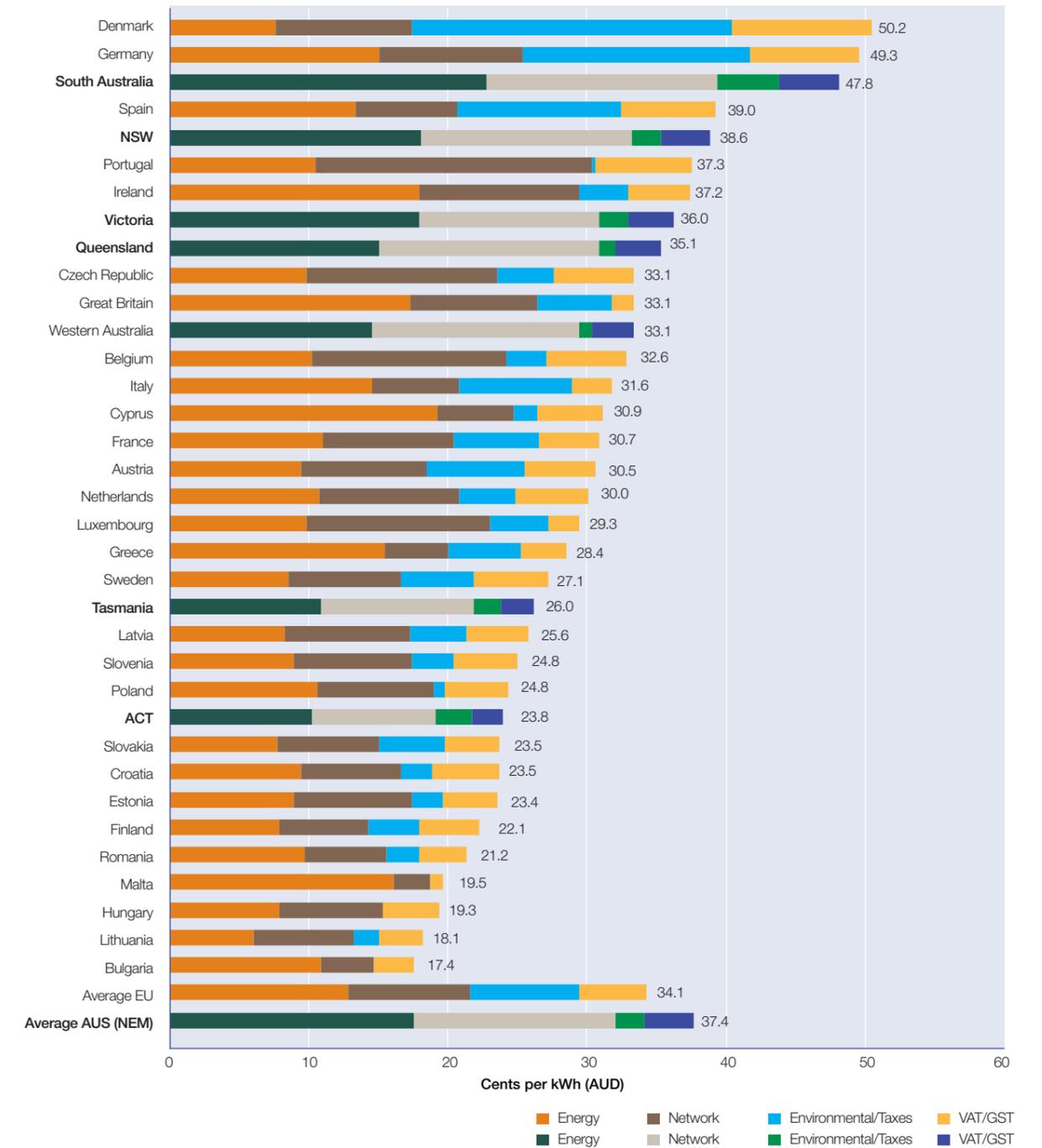


Figure 1.9
International household electricity price comparison



c/kWh, cents per kilowatt hour.

Note: 2018 prices, including GST.

Source: ACCC, *Restoring electricity affordability and Australia's competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, p. 24.

1.7 Competition in retail energy markets

The AEMC found competition is effective for electricity markets in south east Queensland, NSW, Victoria and South Australia. These markets have characteristics consistent with competitive markets, including high levels of offers, marketing, and customer switching. Barriers to entry are considered low, as evidenced by regular new entry (though contract market issues in South Australia mean barriers are higher in that market). Market concentration has also been falling in these regions, albeit slowly.

Effective competition has yet to emerge in electricity retail markets in the ACT, Tasmania and regional Queensland. The small size of these markets and continued price regulation have potentially contributed to the limited entry of new retailers. Further, 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) makes new entry extremely difficult.

Overall, gas markets are less competitive than electricity markets given the smaller market scale, and difficulties in sourcing gas and pipeline services in some regions. Gas markets in each region are generally more concentrated than electricity markets.

Despite findings of effective competition in some regions, recent assessments have found retail energy markets are not delivering the expected benefits for consumers. The ACCC reported in July 2018 that 'the retail market has developed in a manner that is not conducive to consumers being able to make efficient and effective decisions about the range of available offers in the market'.¹⁶ Similarly, the AEMC found 'competition in the retail energy market ... is currently not delivering the expected benefits to consumers'.¹⁷

Customer satisfaction with competition in national energy retail markets declined over the year to April 2018. Consumer trust was 39 per cent (down from 50 per cent), and only 25 per cent of consumers were confident the market was working in their interests (down from 35 per cent).¹⁸

¹⁶ ACCC, *Restoring electricity affordability and Australia's competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, p. 134.

¹⁷ AEMC, *2018 Retail energy competition review, final report*, June 2018, p. i.

¹⁸ AEMC, *2018 Retail energy competition review, final report*, June 2018, p. vii.

Assessments of the state of competition in retail energy markets should account for a range of indicators, including:

- market concentration and vertical integration
- customer engagement and activity in the market
- retailer behaviour
- product and price differentiation
- competitive pricing.

1.7.1 Market concentration

More than 30 authorised retailers supply small energy customers in southern and eastern Australia (table 1.1). But the retail brands of three businesses—AGL Energy, Origin Energy and EnergyAustralia (the 'big three')—supply over 68 per cent of small electricity customers and 75 per cent of small gas customers (figures 1.10 and 1.11).

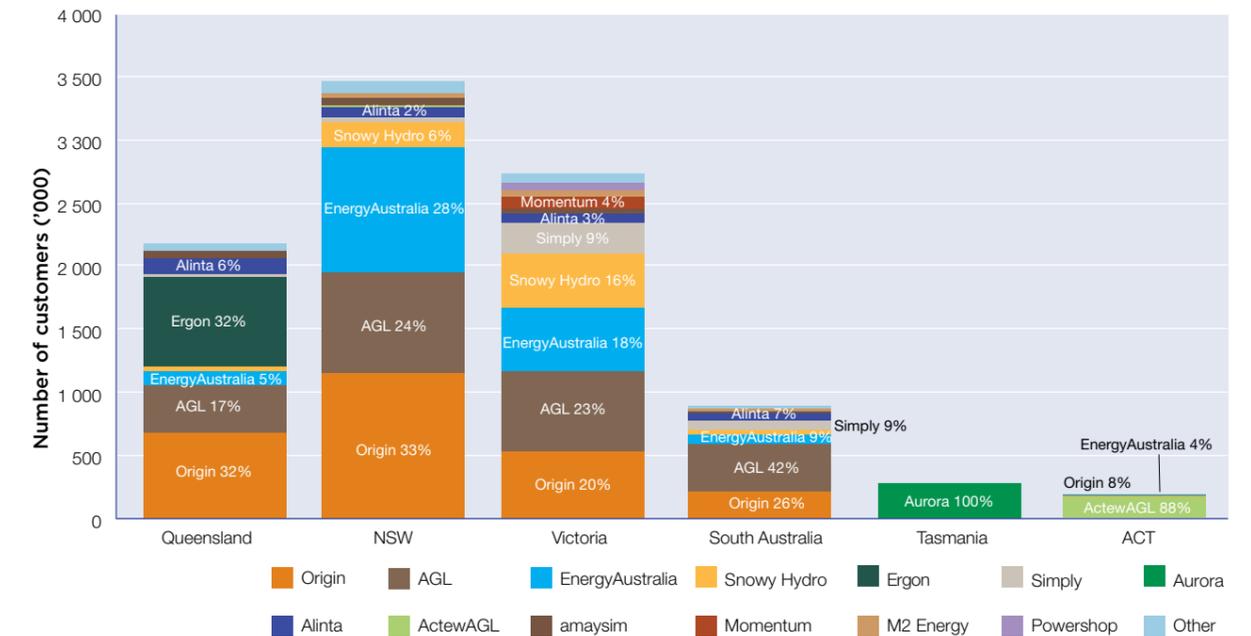
Among the major electricity markets, NSW is the most concentrated. The 'big three' account for 85 per cent of NSW electricity customers. Snowy Hydro (through its Red Energy and Lumo brands) accounts for another 6 per cent of customers. The other 23 retailers competing in NSW have just 9 per cent of the market between them.

Retail markets tend to be more concentrated in gas than electricity, in part because the markets are smaller in scale. In NSW, for example, the 'big three' account for 92 per cent of retail gas customers.

Markets with price regulation are even more concentrated. The dominant retailer in those regions is typically a government owned (or part owned) business with limited operation outside its home region. ActewAGL (a joint venture between the ACT Government and AGL Energy) supplies almost 90 per cent of ACT electricity and gas customers. In Tasmania, Aurora Energy (Tasmanian Government owned) is the only retailer offering electricity to households, but small businesses can also choose ERM Power Retail, which entered the market in 2014. Ergon Energy (Queensland Government owned) supplies most small customers in rural and regional Queensland.

Smaller retailers continue to gain market share from the big three, increasing their market share across the NEM from 28 per cent in 2016 to 33 per cent in 2018. Smaller retailers have had most success in Victoria, where they supply almost 40 per cent of small electricity customers and 32 per cent of small gas customers. This outcome reflects the more mature retail market in Victoria, where prices for gas and electricity were deregulated in 2009.

Figure 1.10
Electricity retail market share (small customers)



Note (figures 1.10 and 1.11): Includes residential and small business customers. All data at June 2018, except Victoria (June 2017). Source (figures 1.10 and 1.11): AER, *Retail energy market performance report*, December 2018; ESC, *Victorian energy market report 2016–17*, November 2017

1.7.2 Vertical integration

Governments structurally separated the energy supply industry in the 1990s into separate wholesale, network and retail businesses. In electricity, however, many retailers and generators have since integrated to become 'gentailers'. Vertical integration has also occurred in gas, but to a lesser extent.

Vertical integration allows retailers and energy producers to manage price volatility in wholesale markets, so they have less need to hedge their positions in futures (derivatives) markets. This strategy may be efficient for the business, but can drain liquidity from derivatives markets, posing a barrier to entry or expansion for retailers that are not vertically integrated.

In the NEM, AGL Energy, Origin Energy and EnergyAustralia each have significant market share in both generation and retail markets (figure 1.12). The three businesses:

- increased their market share in electricity generation from 17 per cent in 2011 to 45 per cent in 2018

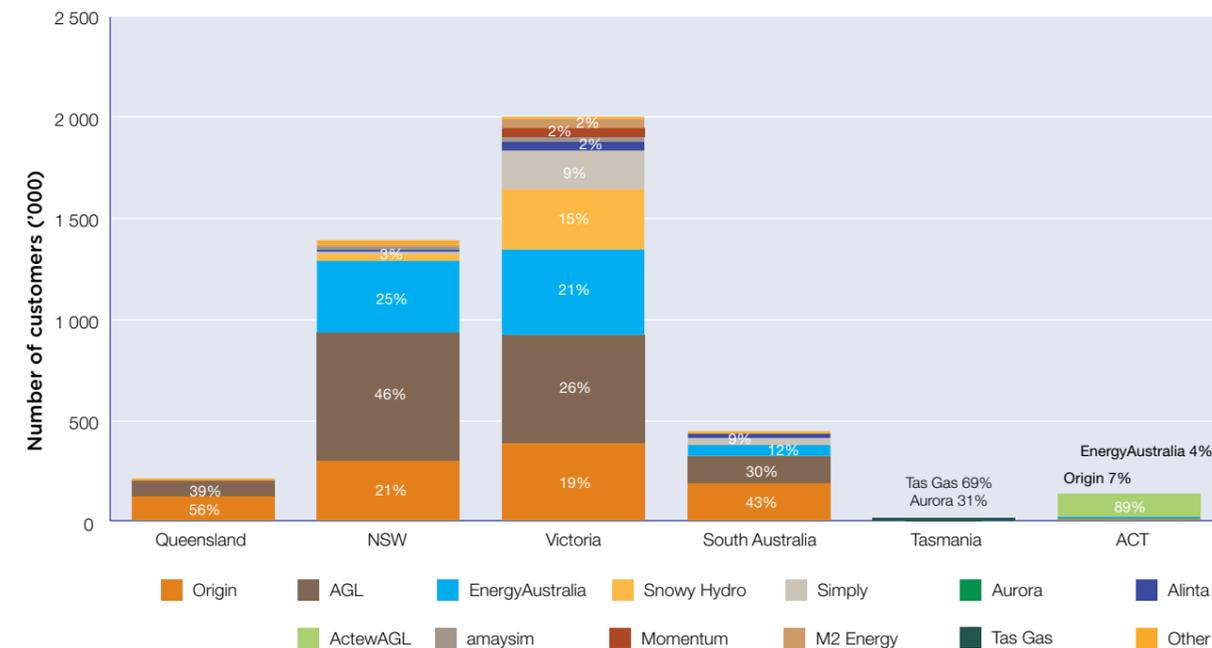
- owned or controlled almost 70 per cent of new generation that entered the market between 2011 and 2017
- supplied over 66 per cent of small electricity customers and 77 per cent of small gas customers in southern and eastern Australia in June 2018.

The businesses also have interests in upstream gas production and storage, complementing their interests in gas fired electricity generation and energy retailing, though some have been scaling back those interests.

Outside the 'big three' retailers, a number of former stand-alone electricity generators established retail arms. The businesses include Engie (which established Simply Energy), Alinta, ERM Power, Meridian Energy (Powershop) and Pacific Hydro (Tango). Government owned generators are also vertically integrated. Snowy Hydro (Australian Government) owns the retailers Red Energy and Lumo Energy, while Hydro Tasmania (Tasmanian Government) owns Momentum Energy.

Few retailers have managed to build a significant electricity customer base without some internal generation capacity. The largest stand-alone electricity retailers operating in the

Figure 1.11
Gas retail market share (small customers)



Note and Source: See figure 1.10.

NEM are amaysim (trading under its own name and as Click Energy) and M2 Energy (trading as Dodo Power and Gas, and Commander Power and Gas) with 1.4 and 1.1 per cent of small customers across the NEM respectively.

1.7.3 Customers with market contracts

Energy customers are free to enter a market contract with their retailer of choice (figure 1.13). Market contracts allow retailers to tailor their energy offers, subject to meeting regulated requirements. A contract may be widely available or only offered to specific customers. Retailers can shape their contracts by offering different tariff structures, discounted prices, 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. They may also include renewable energy offers (as offered by GreenPower). Retailers must obtain explicit informed consent from a customer before entering a market contract.

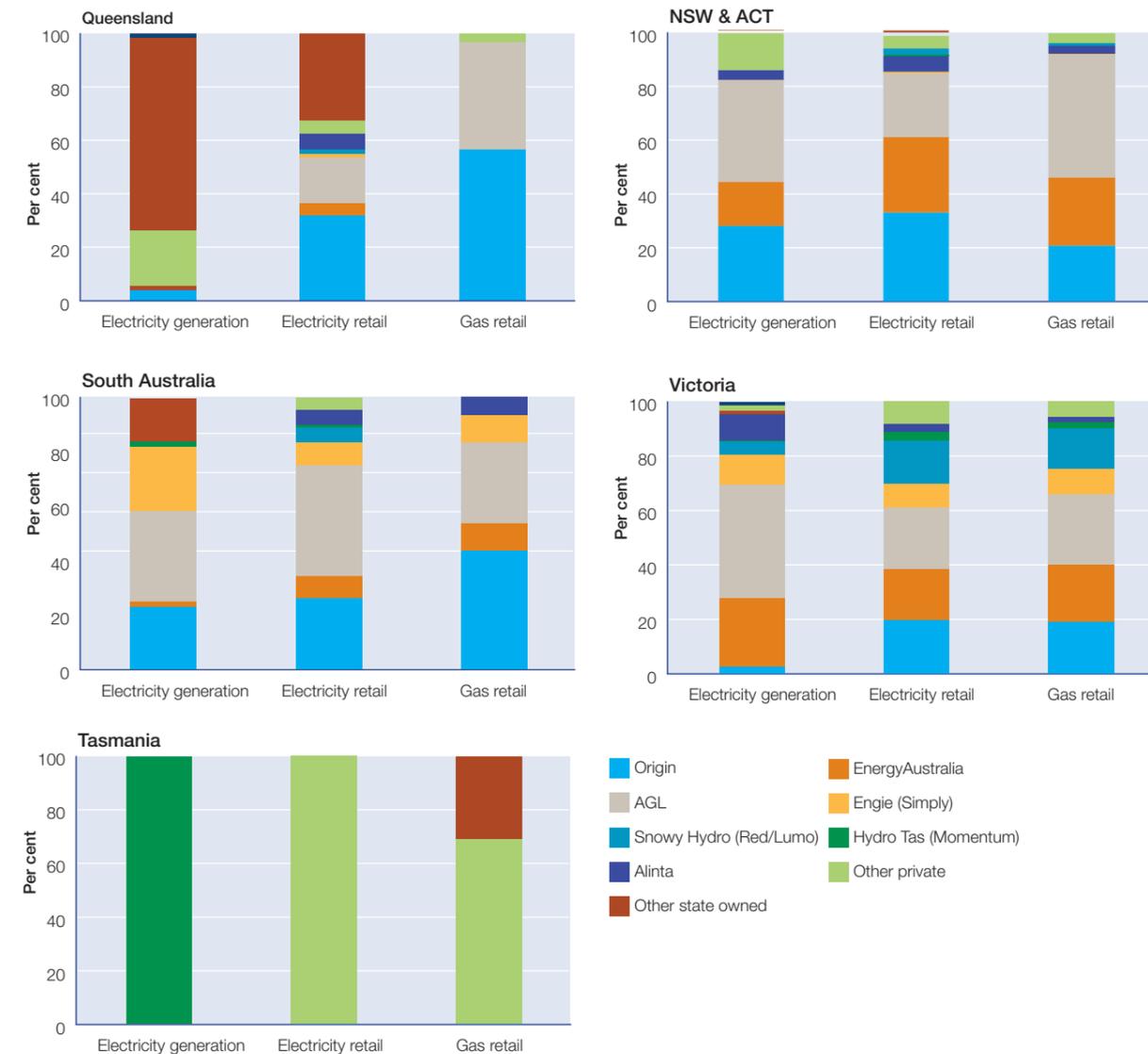
Customers without a market contract are placed on a *standing offer* with the retailer that most recently supplied energy at their premises (or for new connections, with a

retailer designated for that geographic region). A standing offer is a basic contract with prescribed terms and conditions that the retailer cannot change. It provides a full suite of protections to customers and has no fixed term. Standing offer tariffs are generally higher than those offered under market retail contracts, and can be changed no more than once every six months. Standing offers have regulated prices set by state or territory governments for electricity in Tasmania, the ACT and regional Queensland. In other jurisdictions for electricity, and in all regions for gas, retailers can set their own standing offer prices.

Victoria, the first state to fully deregulate its energy market, has the highest rate of energy customers on market contracts at around 93 per cent (figure 1.14). South Australia has almost 90 per cent of customers on market offers, which may reflect customers in South Australia searching for cheaper contracts, given the relatively high price of electricity.

In NSW, the shift towards market contracts accelerated after electricity prices were deregulated in 2014, with around 85 per cent of customers on market contracts (up from 76 per cent in 2016). Similarly, the uptake of

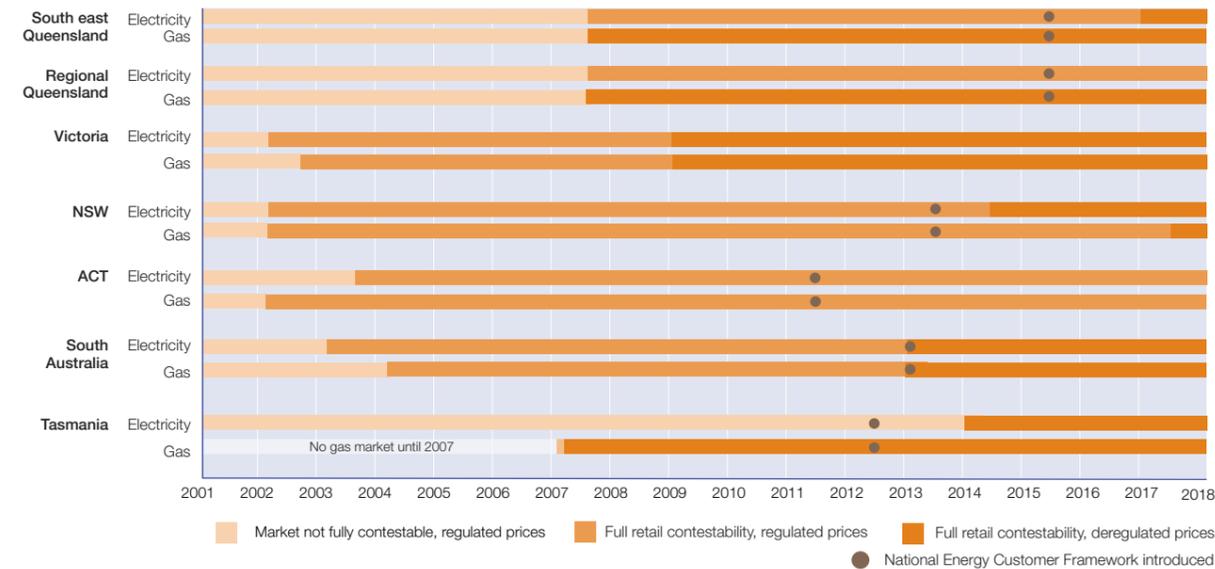
Figure 1.12
Vertical integration in NEM jurisdictions



Note: Electricity generation market shares are based on generation capacity owned or controlled at January 2018. Retail market shares are based on number of small customers at June 2018, except Victoria (June 2017).

Source: Retail: AER, *Retail energy market performance report*, December 2018 and ESC, *Victorian energy market report 2016–17*, November 2017. Electricity generation: AER, *Wholesale electricity market performance report*, December 2018.

Figure 1.13
Progress towards customer choice



market contracts in south east Queensland increased after deregulation. Over 80 per cent of customers have switched to a market offer, up from 70 per cent in 2016.

In regional Queensland, Tasmania and the ACT, a minority of customers are on market contracts. ACT has around 40 per cent of customers on market contracts, with recent increases following EnergyAustralia and Origin entering the market. In Tasmania, less than 10 per cent of electricity customers are on a market contract. This figure is lower than in previous years, with some customers opting to revert to the regulated standing offer electricity price.

1.7.4 Customer awareness and engagement

The AEMC reported in 2017 that over 90 per cent of customers in jurisdictions with retail competition were aware they had a choice of retailer.¹⁹ But many customers do not actively participate in the market because they find it confusing and difficult to compare plans. Research for the ACCC found 14 per cent of customers were on a standing offer for an entire 9–13 months survey period in 2017–18.²⁰

¹⁹ AEMC, 2017 Retail energy competition review, final report, June 2017, p. ii.
²⁰ Colmar Brunton, Consumer outcomes in the National Retail Electricity Market, final report for the ACCC, June 2018, p. 30.

A range of factors can limit a customer's ability to engage in the market. These include language barriers, cultural background, disabilities, and family violence issues. Low income consumers may lack confidence in finding the best deal for them, and face concerns switching retailers will result in loss of benefits, increased debt, and exit or reconnection fees. Around 19 per cent of customers earning less than \$25 000 a year are on a standing offers, compared with 14 per cent across all customers.²¹

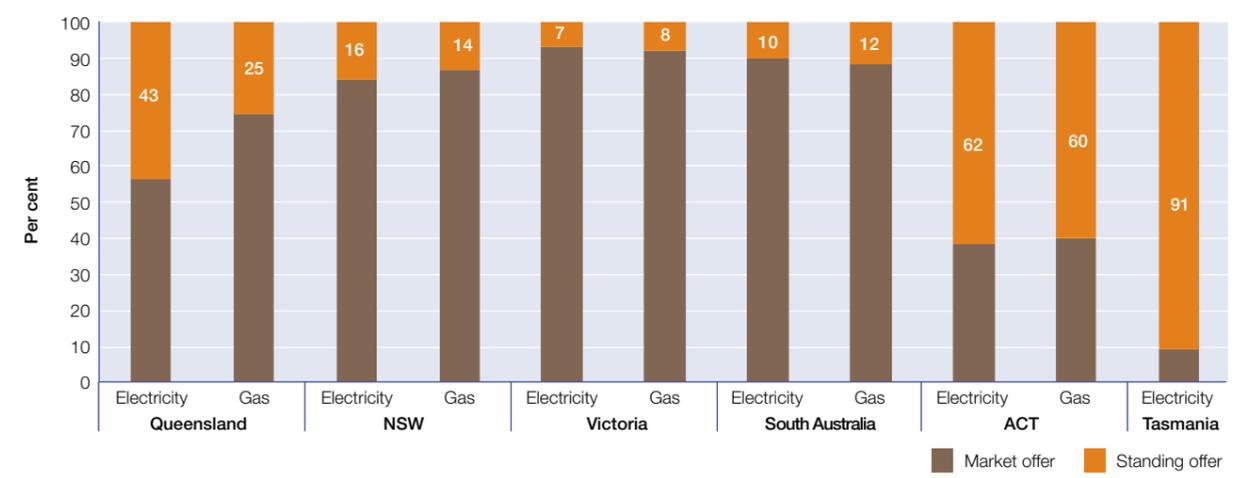
Customers who do switch are often unaware when benefits provided through their market offer—such as price discounts—change or end. Large increases in their bills can occur when discounts or favourable terms end. Reforms introduced in 2018 require retailers to notify small electricity and gas customers before any change in their benefits, to alert them to expired benefits. From September 2018 retailers must also provide advance notice of any price change under an existing contract.

Customers are more widely using price comparator websites to reduce bill shock and manage market complexity. Despite this, awareness of independent government comparator websites Energy Made Easy and Victorian Energy Compare remains low.

Commercial switching websites and services are emerging as a way for customers to access better offers with minimal

²¹ Colmar Brunton, Consumer outcomes in the National Retail Electricity Market, final report for the ACCC, June 2018, p. 10.

Figure 1.14
Small customers on market and standing contracts, 2018



Note: Standing and market offer shares are based on the number of small customers at June 2018, except Victoria (June 2017). Queensland electricity numbers include customers in regional Queensland who largely remain on standing offers. In south east Queensland (where prices are deregulated), we estimate over 80 per cent of electricity customers are on a market contract.
Source: AER, Retail energy market performance report, December 2018; AEMC, 2018 Retail energy competition review, final report, June 2018.

engagement. But there are risks to consumers in relying on commercial services to navigate energy retail markets (section 1.7.8).

Customer understanding of the market

Customer understanding of the market remains low. The AEMC reported residential customers' confidence in their ability to make good choices in the gas and electricity markets fell to 58 per cent in 2018. Customer confidence that easily understood information is available dropped below 50 per cent in all regions except Queensland.²² The Queensland result may reflect significant consumer education following price deregulation in that state.

A lack of confidence inhibits customers from seeking out the best offer for their circumstances. In 2018 reforms to help customers make informed decisions were introduced. The reforms prohibit retailers from discounting off rates above their standing offer, and improve summary contract and pricing information that must be provided to customers (including a requirement to show indicative bills for different household sizes).

Market developments, including the rollout of smart metering and cost reflective tariffs, are likely to make it harder for consumers to confidently engage in the market

²² AEMC, 2018 Retail energy competition review, final report, June 2018, p. 90.

without better tools for comparing offers. The COAG Energy Council and Energy Security Board are developing a framework to increase the availability of and access to electricity data to support customer decision making.²³

Customer satisfaction

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

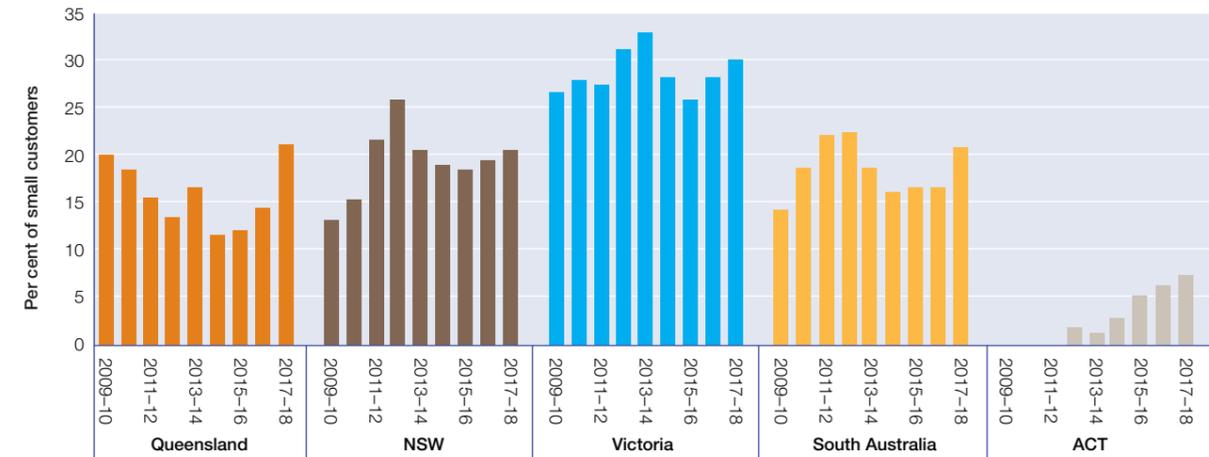
Residential customers' overall satisfaction with their energy supply arrangements fell in Victoria, the ACT and Tasmania in 2018. Satisfaction was around 70 per cent across most regions, but slightly lower in South Australia and Tasmania.²⁴ Satisfaction with the value for money of energy was down across most regions in 2018, at 40–50 per cent for electricity and 50–65 per cent in gas.

These results are well below those for other industries including phone, internet, insurance, water and banking. The drop in satisfaction followed large energy price increases in most regions.

Higher retail energy prices in 2017 and 2018 negatively affected customer views about the state of competition and

²³ COAG Energy Council, Facilitating Access to Consumer Energy Data, consultation paper, March 2018.
²⁴ ECA, Energy consumer sentiment survey, June 2018, p. 14.

Figure 1.15
Small electricity customer switching



Note (figure 1.15 and 1.16): Total annual customer switches in a financial year divided by average customer numbers.
Source (figure 1.15 and 1.16): Customer switches: AEMO, MSATS transfer data to June 2018 and gas market reports, transfer history to June 2018; customer numbers: estimated from energy retail performance reports by the AER and the ESC (Victoria).

operation of the market, which are largely tied to views on value for money. Customer satisfaction with competition fell sharply between 2017 and 2018 in most regions. Satisfaction was highest in south east Queensland (53 per cent) and Victoria (50 per cent). Satisfaction in other regions ranged from 45 per cent in NSW to 9 per cent in Tasmania.²⁵ Customer confidence the market is working in the long term interests of customers also fell in most regions, to an average of 25 per cent in April 2018.²⁶

Customer switching

The rate at which customers switch retailers can indicate their level of engagement in the market. However, these statistics must be interpreted with care. Switching may be low in a competitive market if retailers deliver good quality, low priced service that gives customers no reason to change, for example.

Small customer switching increased in 2017–18 in all regions for both electricity and gas customers, except gas customers in Queensland (figures 1.15 and 1.16). This shift coincides with higher prices and increased media scrutiny of the sector.

Residential customers typically switch retailer because they are dissatisfied with value for money or have searched

for a better plan on a price comparison website. In South Australia, being approached by a retailer is the most common reason for switching.²⁷ For business customers, wanting or being offered a better price is the leading factor driving switching.²⁸

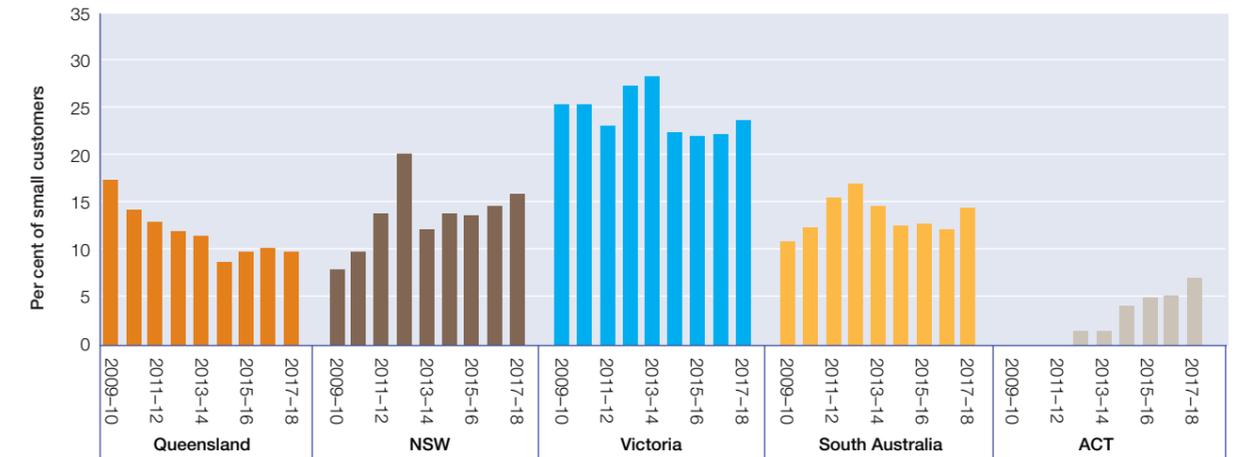
Electricity switching by small customers was around 23 per cent in 2017–18, and has gradually increased across the NEM since 2014–15. Victoria remains the most active region, with 30 per cent of customers switching in 2017–18. Price spreads in energy offers tend to be higher in Victoria than elsewhere, meaning the potential savings from switching are often greater. A 2018 Victorian Government initiative of a \$50 payment to households for visiting the government comparator website, Victorian Energy Compare, will likely drive higher switching activity in 2018.²⁹

The largest rise in consumer switching in 2017–18 was in south east Queensland following Alinta’s entry into the market, with 21 per cent of customers switching (compared with 14 per cent in 2016–17). The ACT continues to have the lowest switching rates, due to the market’s lack of competition, small scale, continued price regulation, and the dominance of the incumbent retailer ActewAGL. But it

27 AEMC, *2018 Retail energy competition review, final report*, June 2018, p. 99.
28 AEMC, *2018 Retail energy competition review, final report*, June 2018, p. 118.
29 Victorian Premier, Daniel Andrews, Busting energy bills with new \$50 power savings bonus, media release, July 2018.

25 ECA, *Energy consumer sentiment survey*, June 2018, p. 18.
26 AEMC, *2018 Retail energy competition review, final report*, June 2018, p. 91.

Figure 1.16
Small gas customer switching



Note and source: see figure 1.15.

recorded its highest switching rates in 2017–18, at 7 per cent of customers. Switching rates are lower in gas (averaging around 15 per cent in 2017–18), though rates rose following several stable years. Less active customers in this market may reflect a lower number of retailers participating in gas, meaning less choice and savings available for customers.

Small business customers switched at a similar rate to residential customers in electricity, but higher rates for gas (around 30 per cent).³⁰

While overall switching activity is strong, activity is uneven across the customer base. A significant number of customers have never switched retailer. These customers may be satisfied with their current supplier and energy prices, lack trust in the market or lack confidence in making good decisions.

The ECA reported in December 2017 that over a third of customers have never switched. Victoria had the smallest number of customers in this category (32 per cent), followed by South Australia (37 per cent) and NSW (42 per cent). Tasmania and the ACT had the most customers who had never switched (91 per cent and 74 per cent respectively).³¹ These outcomes are consistent with other measures of customer engagement.

30 AEMC, *2018 Retail energy competition review, final report*, June 2018, p. 121.
31 ECA, *Energy consumer sentiment survey*, December 2017, p. 32.

In most markets, engagement by even a limited number of customers can drive lower prices and product improvements that benefit all consumers. But in energy markets, retailers can easily identify inactive customers and price discriminate against them. Many market offers include benefits that expire after one or two years, and customers who do not switch regularly may find themselves paying higher prices than necessary.

1.7.5 Retailer activity

Changes in retailer marketing activity can impact the level of customer switching. Around 39 per cent of residential customers were directly approached by a retailer in 2017, well down from the peak of 53 per cent in 2014.³² This outcome reflects a move away from door-to-door sales by larger retailers, following enforcement in this area. However, retailers have been more active in approaching businesses, with a 30 per cent increase in contact in 2018 from 2017.³³ Most of these contacts were in the form of a phone call by the retailer.

Retailers appear to be focusing more on retaining existing customers than expanding their customer base. This strategy—referred to as ‘saves’ and ‘win backs’—involves

32 AEMC, *2018 Retail energy competition review, final report*, June 2017, p. 89.
33 AEMC, *2018 Retail energy competition review, final report*, June 2018, p. 112.

a retailer offering better deals specifically to customers that have initiated or recently completed a switch to another retailer. The big three retailers have been prominent in making retention offers, which are often cheaper than other available offers.³⁴ These retailers have relatively large numbers of ‘sticky’ customers (those who rarely switch), and so have an incentive to retain those customers they consider to be high value. However, the AEMC found smaller retailers are also using this strategy.³⁵

The use of digital acquisition channels, including retailers’ own websites and price comparison websites, is also growing (section 1.7.8).

While most retailers operate across multiple regions, less than half of electricity retailers operating in south east Queensland, NSW, Victoria and South Australia are active in all four regions. The gas market is even more segregated, with most retailers concentrating on the NSW and Victorian markets.

Since 2017 two new retailers began selling energy, and 10 existing retailers expanded in to new regional markets. The most prominent was Alinta’s entry into south east Queensland through a joint venture with the state owned generator CS Energy.

Minimal retailer activity in some markets may reflect perceived barriers to entry or expansion. Retailers commonly cite price regulation and the dominance of incumbent retailers as barriers to entry in some jurisdictions. Limited access to competitively priced risk management contracts for electricity is seen as a significant barrier to entry in South Australia in particular. Regulatory risk was identified as a concern in Victoria (whose retail market operates outside the national framework).³⁶

In gas, retailers identified issues with sourcing gas, the small size of the customer base, and the price of gas as barriers to entry and expansion. Other barriers included access to pipeline capacity and state based regulatory issues such as licensing requirements. Recent reforms sought to reduce these barriers by increasing transparency in the gas market, and creating a new a dispute resolution mechanisms to improve access to pipeline capacity (chapter 4).

³⁴ ACCC, *Restoring electricity affordability and Australia’s competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, p. 142.

³⁵ AEMC, *2018 Retail energy competition review, final report*, June 2018, p. 32.

³⁶ AEMC, *2018 Retail energy competition review, final report*, June 2018, pp. 31, 37, 41.

1.7.6 Product differentiation

In a competitive market, retailers offer a range of products and services to attract and retain customers. Energy retailers compete by discounting (section 1.7.7), bundling offers (such as for electricity, gas, phone, internet, pool services), varying contract terms (length and fixed price periods), and offering other incentives (such as sign-up discounts and subscriptions).

Despite the range of offers, most use a basic two-part price structure—a daily supply charge plus a flat consumption charge, though the relative size of these components varies. Most retailers also offer tariffs that charge consumers different prices depending on the time of day or week that electricity is consumed.

Other products offered in the market range from pool pass through arrangements (where the customer takes on the risk of wholesale market volatility) to fixed price contracts (where the customer pays a fixed amount regardless of how much energy they use). Retailers also differentiate their products through ‘add-on’ services, such as systems to allow customers to track and control their energy use (section 1.8).

New service providers are applying some competitive pressure to traditional retailers through product differentiation, with a focus on new products and services. Over 100 energy businesses offer solar power purchase agreements in jurisdictions applying the Retail Law, for example. Further waves of new products and offers may emerge once battery storage systems become more affordable, and as accessibility of consumer energy data improves.

1.7.7 Price differentiation

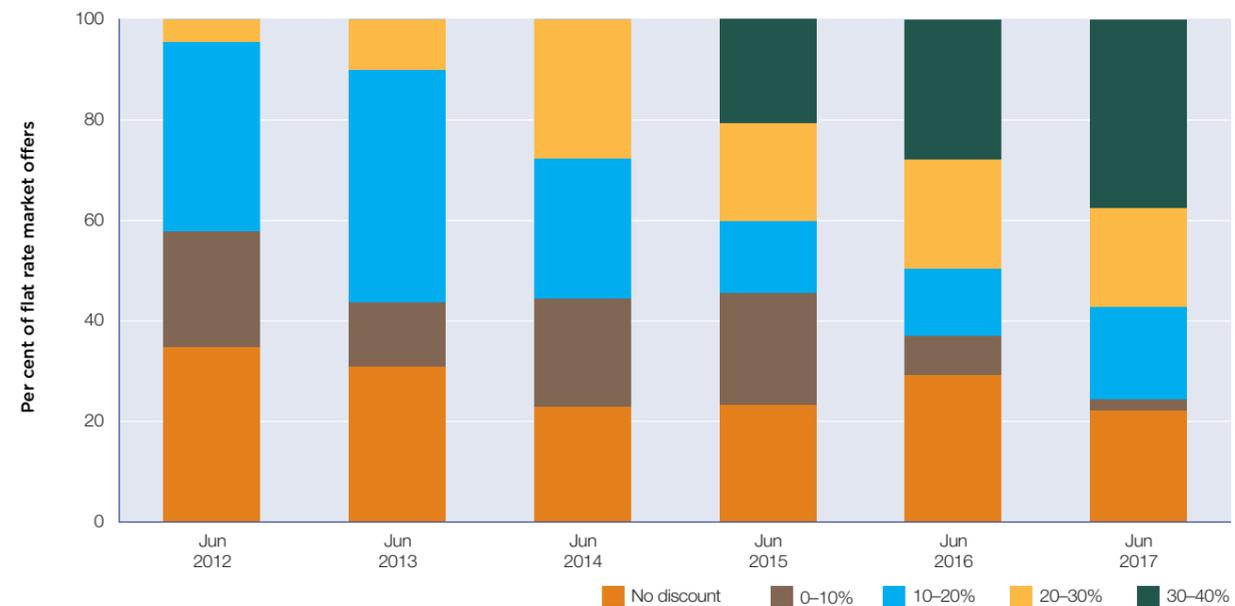
Price competition between retailers generally plays out through ‘headline’ discounts. Across the NEM, 80 per cent of market offers have a discount, around two thirds of which are conditional on the customer meeting terms such as paying on time, e-billing, or paying by direct debit.³⁷

Discounting in market offers has risen. In Victoria, for example, the most common level of discount in 2017 was 30–40 per cent, up from 10–20 per cent in 2012 (figure 1.17). The size of discount offers continued to rise in 2018 for both electricity and gas in most regions.

Discounting has resulted in significant price diversity within individual retailers’ offers and across retailers, and increased

³⁷ AEMC, *2018 Retail energy competition review, final report*, June 2018, p. 54.

Figure 1.17
Conditional headline discounts for single rate residential market offers in Victoria



Note: Advertised discounts in generally available market offers.

Source: ACCC, *Restoring electricity affordability and Australia’s competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, p. 257.

the gap between standing and market offers. While the proportion of customers on standing offers is declining, the extent of discounting highlights the risk that customers who do not engage in the market or switch regularly may pay significantly higher prices.

Figures 1.18 and 1.19 set out prices under market and standing offers for residential electricity and gas customers from 2016–18. In Victoria, a retailer’s market offers averaged 26–31 per cent lower than the same retailer’s standing offer. In NSW, south east Queensland and SA, retailers’ market offers averaged 14–19 per cent lower than standing offers, and in the ACT they were 11 per cent lower. A typical customer switching from an electricity standing offer to the best market offer with the same retailer could save \$634–787 in Victoria, \$416–517 in NSW, \$555 in South Australia, \$529 in south east Queensland, and \$259 in the ACT.

The gap between the least and most expensive offers narrowed in NSW and South Australia in 2018 compared with 2017, but widened in other regions. Victoria had the widest dispersion, with prices under the most expensive standing offer being around 180 per cent higher than the cheapest market offer.

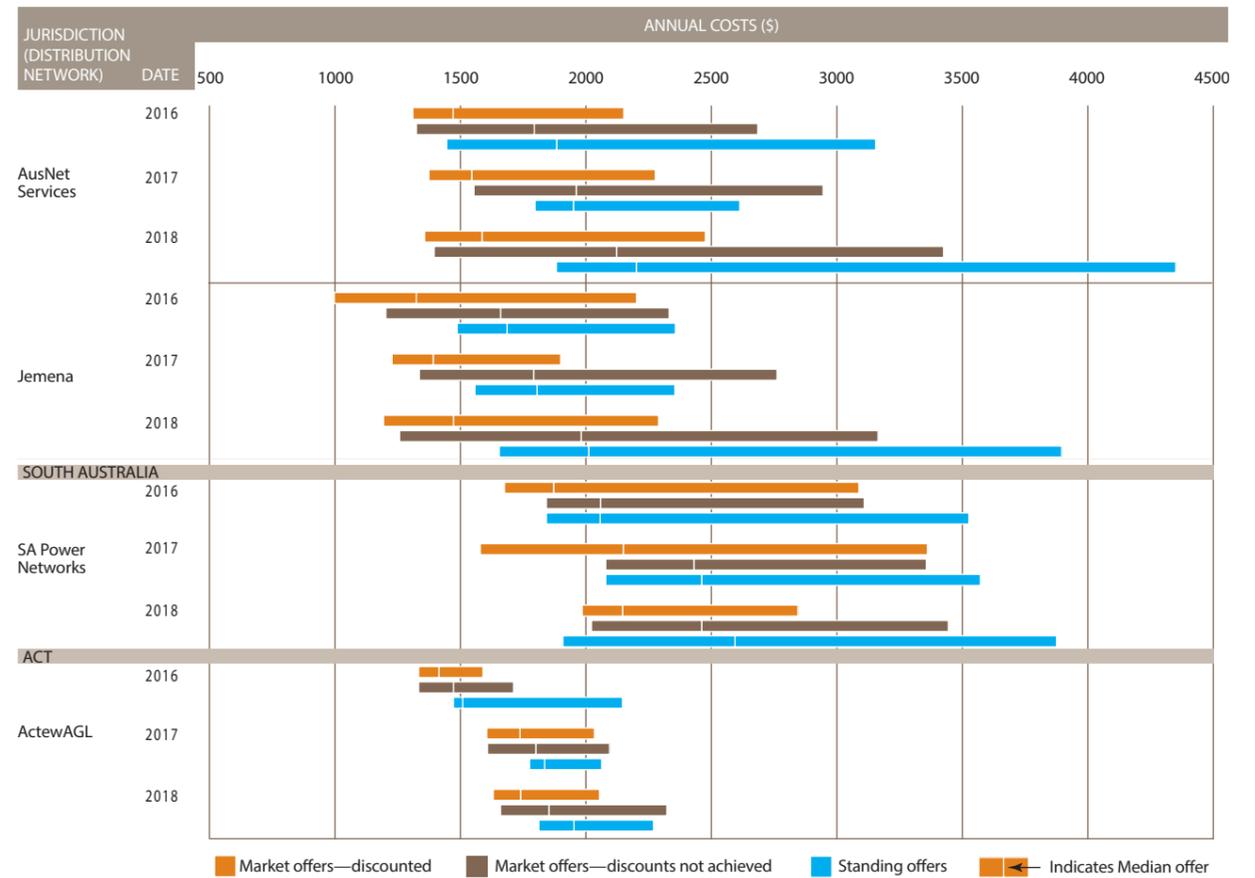
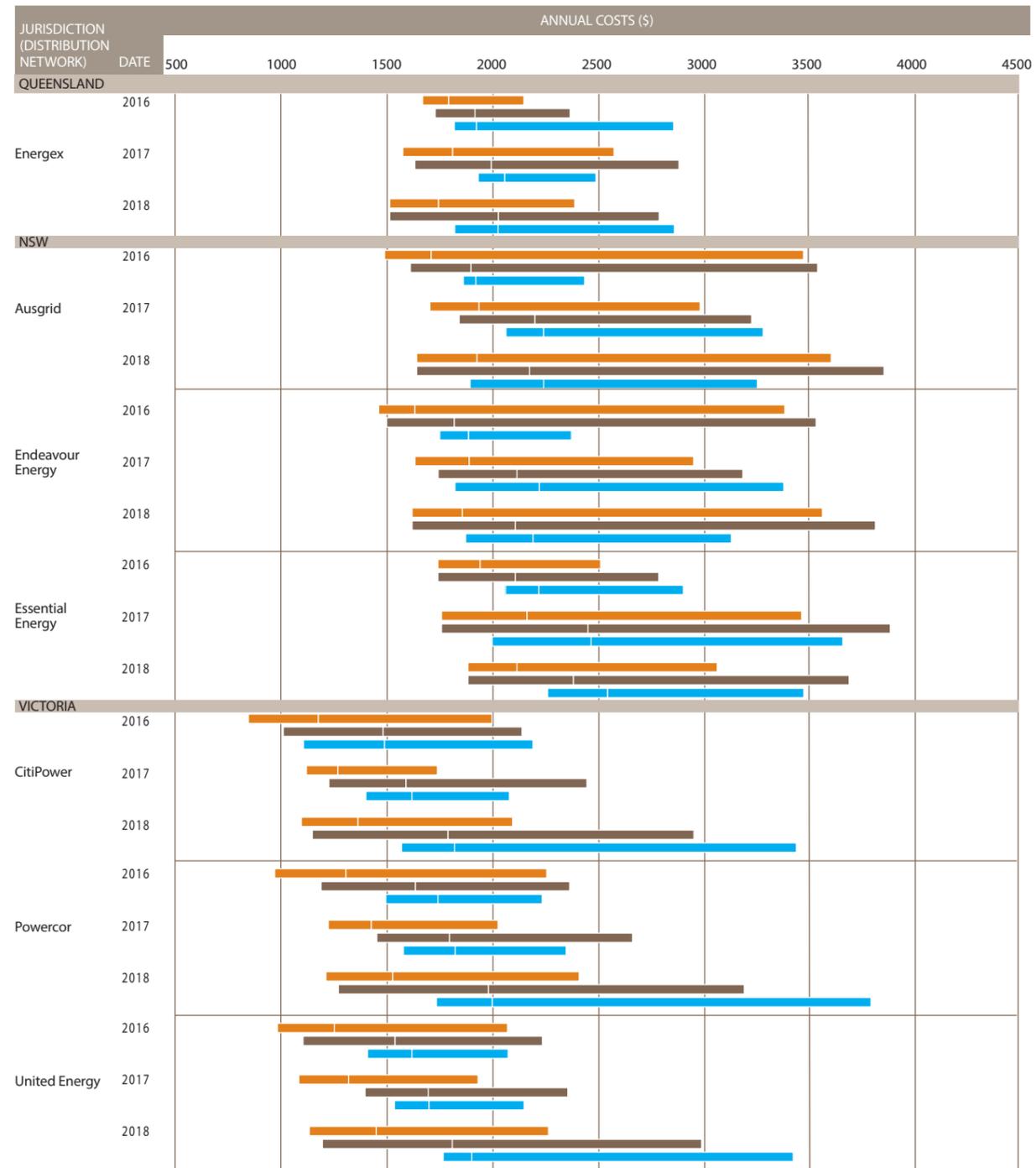
Discounts against standing offers were generally lower in gas than electricity offers in 2018. Gas discounts ranged from 3–7 per cent in Queensland to 18 per cent in Victoria. Annual bill spreads (highest versus lowest offer) ranged from \$100–150 in Queensland to almost \$1400 in Victoria. In NSW and South Australia the range was \$300–350. As in electricity, gas price spreads in 2018 were generally wider than those observed a year earlier, other than in the ACT.

Navigating headline discounts

While price competition across retailers generally plays out through headline discounts, a large discount does not necessarily mean a low electricity price. The size of a discount may be deceiving, because retailers measure and apply discounts in different ways. Retailers set the base rate against which a discount is applied, making it difficult to compare effective prices. Further, some retailers apply discounts off the entire bill, while others only apply it to usage charges.

On average, customers on market contracts pay less than those on standing contracts, and a larger headline discount generally results in cheaper electricity. However, while Victorian customers on all discount tiers paid less than the standing offer price on average, customers on ‘no discount’

Figure 1.18
Price diversity—electricity



Note (figures 1.18 and 1.19): Data includes all generally available offers for residential customers using a 'single rate' tariff structure at December 2016, December 2017 and August 2018. Annual bills based on average consumption in each jurisdiction: NSW 6130 kWh (electricity), 22 860 MJ (gas); Queensland 5950 kWh, 7870 MJ; Victoria 4810 kWh, 57 060 MJ; South Australia 5100 kWh, 17 500 MJ; ACT 7010 kWh, 42 080 MJ.
Source (figures 1.18 and 1.19): AER, Energy Made Easy (www.energymadeeasy.gov.au); Victoria Energy Compare (compare.energy.vic.gov.au).

market offers were typically better off than customers on offers with discounts of up to 20 per cent. And in NSW, customers on market offers with discounts up to 5 per cent typically paid more than those on standing offers.³⁸ These perverse outcomes highlight the often misleading nature of advertised discounts in retail energy market offers.

The range of prices across offers within each discounting tier also varies significantly. Some customers in Victoria on an offer with a 30 per cent or larger discount are paying more than some standing offer customers (figure 1.20), for example, despite the average price of offers in that discount

tier being almost 29 per cent below the average standing offer price.

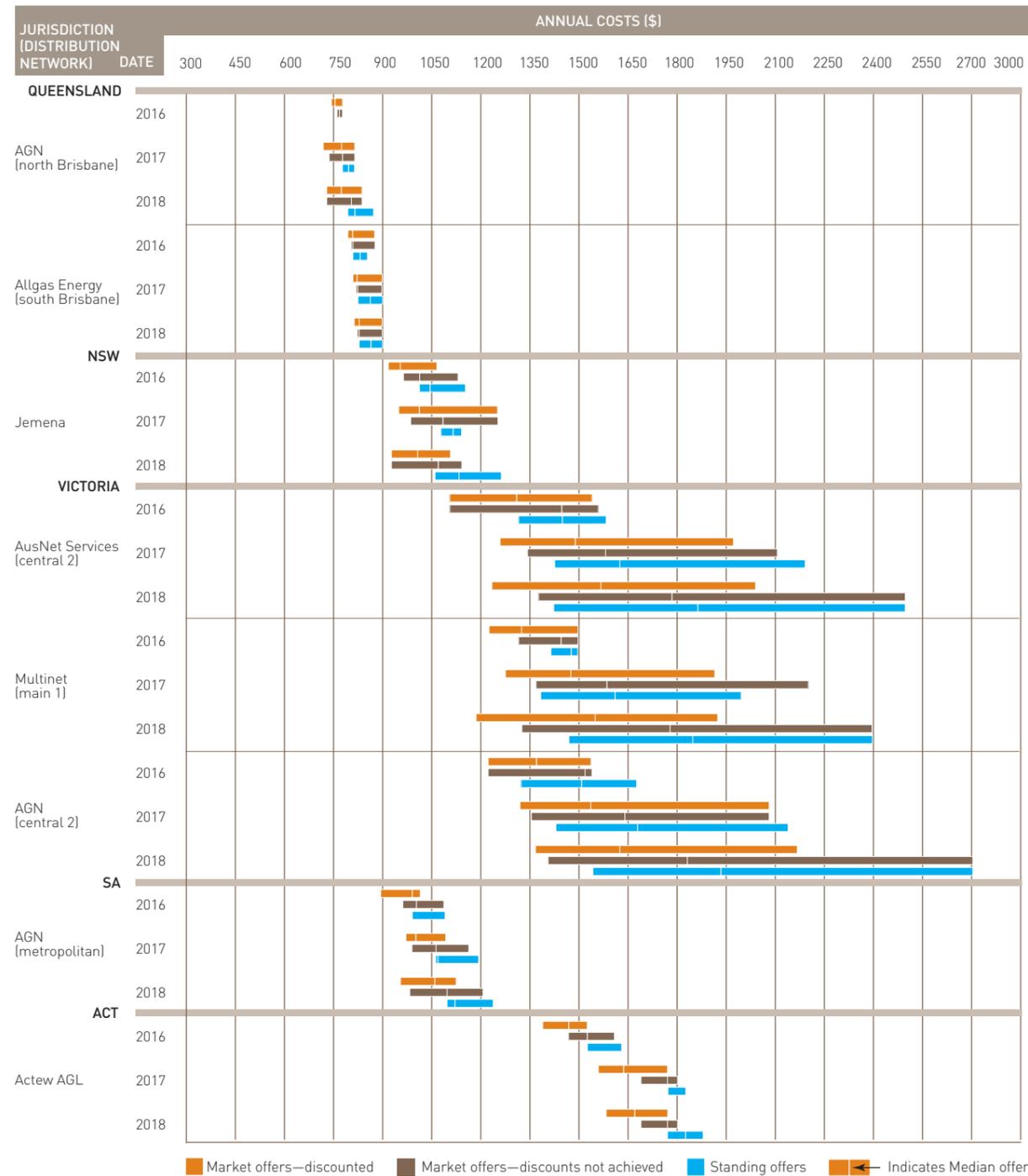
To improve comparability of offers, the ACCC recommended all discounting should be off a common 'reference bill'. The AER is developing a reference bill as part of its role in setting a default market offer price (section 1.5).

Many discounts are conditional on the customer meeting certain terms, the most common being a requirement to pay on time. Over a quarter of residential customers (and over half of hardship customers) do not receive their conditional discounts.³⁹ This outcome often means they end up paying hundreds more dollars than if they had met the

³⁸ ACCC, *Restoring electricity affordability and Australia's competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, pp. 12–20.

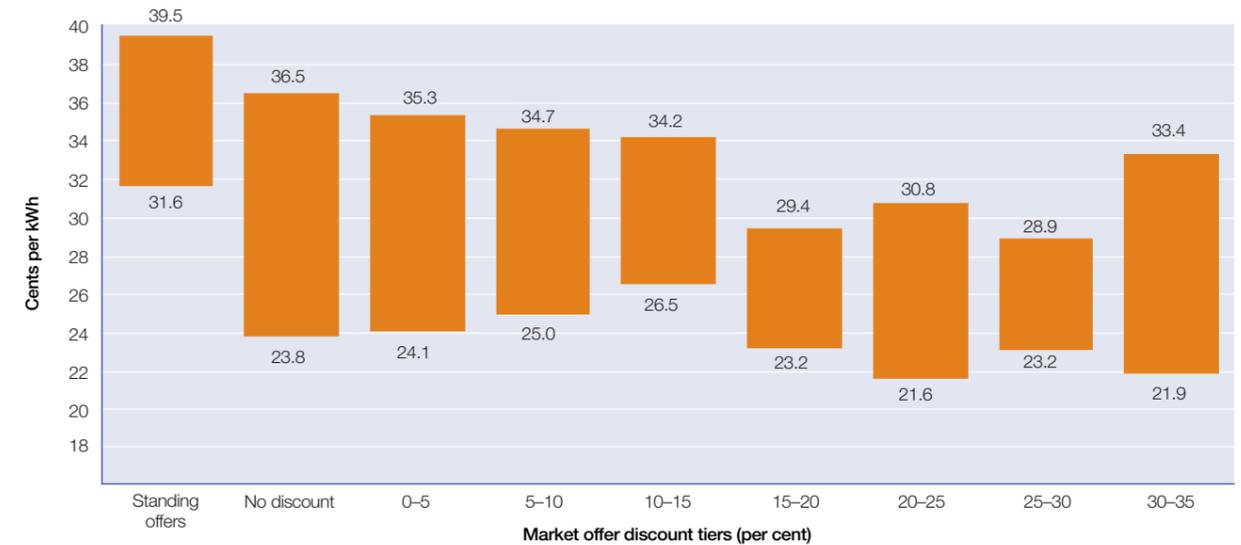
³⁹ ACCC, *Restoring electricity affordability and Australia's competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, p. 29.

Figure 1.19
Price diversity—gas



Note and source: see figure 1.18

Figure 1.20
Range of average unit charges paid by Victorian residential customers



Note: Based on effective unit charges paid by residential customers without solar PV systems in 2016–17. Data is inflation adjusted, in 2016–17 dollars, and excludes GST.
Source: ACCC, *Restoring electricity affordability and Australia’s competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, p. 262.

conditions. The prevalence of conditional discounts means these customers are not seeing the full benefits of price competition in the market.
To protect vulnerable customers being penalised, the ACCC recommended conditional discounts be no greater than the reasonable savings to the retailer from the customer meeting the discount conditions.⁴⁰ If this recommendation leads to more unconditional discounting, these customers will benefit from lower effective prices.

1.7.8 Price comparison websites and switching services

The variety of product structures, discounts and other inducements makes direct price comparisons between retail offers difficult. Customers have begun using comparator websites to manage the complexity and large volume of different offers in the market.

The AER operates an online price comparator—Energy Made Easy—to help small customers compare retail offerings. The website shows all generally available offers, and has an electricity use benchmarking tool that allows

households to compare their electricity use with similar sized households in their area. The website is available to customers in jurisdictions that have implemented the Retail Law (Queensland, NSW, South Australia, Tasmania and the ACT). The Victorian Government operates a website allowing Victorian customers to compare market offers—Victorian Energy Compare.

Various private entities also offer online price comparison services. The AEMC identified 19 separate comparison websites in 2018.⁴¹ Brokers are also active in the market for larger customers.

While comparison websites and brokers can provide customers with a quick and easy way of engaging in the market, some services may not provide customers with the best outcomes. Commercial comparator websites only show offers of retailers affiliated with the site, for example. Of the 19 commercial comparator websites reviewed by the AEMC, 15 websites showed offers for less than half the retail brands in the market.⁴²

Comparison websites also typically require retailers to pay a commission per customer acquired or a subscription fee to

⁴⁰ ACCC, *Restoring electricity affordability and Australia’s competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, p. 269.

⁴¹ AEMC, *2018 Retail energy competition review, final report*, June 2018, p. viii.

⁴² AEMC, *2018 Retail energy competition review, final report*, June 2018, p. 103.

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 the cheapest offer for the customer.

To address these issues, the ACCC recommended the government prescribe a mandatory code of conduct to ensure price comparator and broker services act in the best interests of the consumer.⁴³ 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.

Government operated comparison sites avoid these issues by listing all generally available offers in the market. However, knowledge about independent government comparator sites is low, with only 9 per cent of customers being aware of Energy Made Easy.⁴⁴ The AER in 2018 upgraded Energy Made Easy to improve its usability and add value to customers. It also campaigned to increase awareness of the website. In 2018 the Victorian Government ran an awareness campaign for its comparison site, offering households \$50 to visit the website.⁴⁵

New business models are emerging to help consumers find and switch to better energy offers. In 2018 CHOICE launched an automatic switching service—Transformer. For a fixed annual fee, Transformer compares all generally available offers to a customer's current energy plan, and switches the customer where a better price is identified. In addition to offer comparison services, new services offer to arrange energy connections for customers moving into a new property.

1.8 The evolving electricity market

Advances in metering and electricity generation, management and storage technologies are changing how the retail market works. 'Power of choice' reforms aim to provide customers with opportunities to benefit from these changes. Reforms include a market led rollout of smart meters, introducing cost reflective network pricing, making it easier for consumers to switch retailers, and enabling

⁴³ ACCC, *Restoring electricity affordability and Australia's competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, p. 282.

⁴⁴ AEMC, *2018 Retail energy competition review, final report*, June 2018, p. 89.

⁴⁵ Victorian Premier, Daniel Andrews, *Busting energy bills with new \$50 power savings bonus*, media release, July 2018.

wider use of demand response. The COAG Energy Council in 2017 requested industry bodies form a working group to develop a code of practice to support consumer protections for new energy products and services. The working group released a draft code in November 2018.⁴⁶

1.8.1 New price structures

Most energy customers pay a daily (fixed) supply charge plus a simple usage charge. These *single-rate* or *'flat'* tariffs apply the same charge for all electricity used by a customer, regardless of how and when they use energy. Some customers—such as those with airconditioners or solar PV systems—are not exposed to their full network costs under these tariff structures, resulting in other customers paying more than they should.

Power of choice reforms introduced in 2017 require electricity distribution businesses to move customers onto network tariffs more closely reflecting the efficient costs of providing the services they use. The reforms make charges higher at times of peak demand when the networks are most under strain. Charging in this way creates incentives for customers to minimise energy use at times of high system cost, and results in a more equitable allocation of costs across customers.

Different pricing structures can meet this requirement, including:

- *time-of-use tariffs* that apply different pricing to electricity use in peak and off-peak times. Higher prices in peak times encourage customers to minimise their use at those times. Customers can reduce their energy costs by reducing use, or by shifting use to off-peak times
- *demand tariffs* that charge a customer based on their maximum point-in-time demand at peak times. Customers 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
- *critical peak tariffs* factor in a low electricity usage charge for most of the year but much higher tariffs during a few short 'critical peaks' each year. Customers get prior notice of critical peak periods, which typically are when electricity networks forecast they will need to operate at, or near, full capacity.

Each tariff structure reflects a trade-off between cost reflectivity and simplicity. Both elements are needed to

⁴⁶ BTM working group, *Behind the meter distributed energy resources provider code, consultation draft*, November 2018.

ensure customers face appropriate incentives around their energy use, and understand how these incentives work.

Distributors are phasing in the new tariff structures over time. For the initial pricing period, most networks adopted a form of demand tariff. The NSW distribution businesses Ausgrid and Endeavour Energy, however, introduced time-of-use tariffs.

Retailers initially pay the new network charges, then decide whether to pass on those costs to customers and in what form. Most networks are offering the new cost reflective structures on an opt-in basis (that is, a customer may choose to adopt the new pricing). But some networks are making the tariffs mandatory for new customers, or those with smart meters. Retailers generally mirror the network tariff structure in their retail tariff, as doing so removes any price risk for the retailer.

At August 2018 most retailers offered a range of flat and time-of-use tariffs to customers across all regions. Demand tariffs were available from a small number of retailers across the NEM. Victoria had the highest number of demand tariff offers. Five retailers offered demand tariffs under market contracts, while other retailers only offered demand tariffs under standing offer contracts. This outcome indicates there is little interest on the part of retailers to promote these tariff structures to customers.

At June 2018 30 per cent of customers in the NEM had metering capable of supporting cost reflective tariffs (including smart meters and manually read interval meters). Despite this, only around 12 per cent of small customers were on new tariff structures (mostly time-of-use tariffs),⁴⁷ Very few small customers have elected to voluntarily opt-in to a new tariff structure.

Distributors are required to progress towards full cost reflective pricing through their tariff structure statements, which the AER vets within the network revenue determination process. They can meet this requirement by:

- simplifying tariff offerings
- designing tariffs that more closely reflect how customer use affects the network's costs
- implementing an opt-out approach requiring customers to move to a new tariff unless they elect not to
- integrating network pricing with broader management policies (such as network planning and demand management).

⁴⁷ ACCC, *Restoring electricity affordability and Australia's competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, p. 177.

1.8.2 Smart meters

The rollout of smart meters is fundamental to changes to more cost reflective pricing structures. Smart meters measure electricity use in half hour blocks, and allow for remote reading and connection/disconnection. The detailed information about a customer's energy use throughout the day provides scope for more innovative offers from retailers, and for new energy management services from third parties.

Victoria was the first jurisdiction to progress metering reforms, with its electricity distribution businesses rolling out smart meters across 2009–14. Over 97 per cent of Victorian customers now have a smart meter.⁴⁸

In other jurisdictions, the rollout of smart meters is occurring on a market led basis. Responsibility for metering was transferred from network businesses to retailers in December 2017. All new and replacement meters installed for residential and small businesses consumers must now be smart meters, and other customers can negotiate for a smart meter as part of their electricity retail offer.

Responsibility for metering was transferred to retailers so they could use meter functionality to develop new energy services for customers. But apart from an initial push to install smart meters in NSW for residential customers with solar PV systems, most retailers have shown little interest in driving a rollout beyond new or replacement meters.

Outside Victoria, only around 5 per cent of customers had access to a smart meter in June 2018. A further 6 per cent of customers in these regions (mostly in NSW) had access to an interval meter providing half hourly consumption readings but without remote reading and connection capabilities.

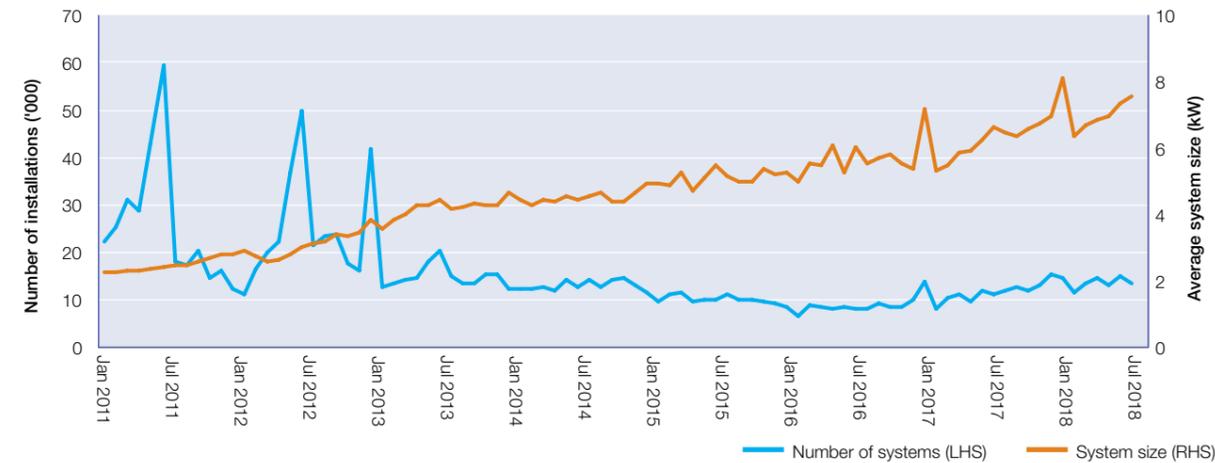
The transition to retailer responsibility for metering coincided with large delays in meter installations in some regions. The AEMC in August 2018 noted there had been 'customer complaints in some regions about delays in installing meters ... [and] instances where the customer service from retailers and metering businesses has been poor'.⁴⁹

Customers in South Australia have been most affected. The South Australian Energy and Water Ombudsman found the average time taken to provide meters at new connections under the new arrangements was four weeks in metropolitan areas, with delays of up to four to six months for rural and regional customers.

⁴⁸ Victorian Department of Economic Development, Jobs, Transport and Resources, *Smart meters: End of rollout, fact sheet*, March 2015.

⁴⁹ AEMC, *Smart meter installations across the national electricity market update*, media release, August 2018.

Figure 1.21
Growth of solar PV installations



KW, kilowatts.

Note: Data at 31 October 2018.

Source: Clean Energy Regulator, Postcode data for small scale installations, Small generation units—solar.

This outcome compares to requirements under the previous framework for meter installations to occur within six days. Causes of the delays identified by market participants include:

- poor coordination and data provision between network businesses, retailers and metering coordinators
- inadequate retailer systems, processes and controls
- poor resourcing leading to a backlog of jobs.

In September 2018 the AEMC released a draft rule change requiring retailers to provide customers with new electricity meters within six business days after a property has been connected to the network, or replacement meters within 15 days.⁵⁰

1.8.3 Rooftop solar PV and batteries

Many customers now partly meet their electricity needs through rooftop solar PV, and sell excess electricity back into the grid. At June 2018 almost 2 million rooftop solar PV systems had been installed throughout Australia, the majority of which were on residential households. Over 12 per cent of customers in the NEM received some of their electricity supply through a solar PV system, compared with less than 0.2 per cent of customers in 2007–08.

⁵⁰ AEMC, *National energy retail amendment (metering installation timeframes) rule 2018, draft rule determination*, September 2018.

New installations of residential solar PV systems peaked in 2011 (figure 1.21) due to attractive premium feed-in tariffs offered by state governments. Despite the closure of these schemes, ongoing subsidies provided through the Australian Government's small scale renewable energy scheme, combined with falling costs of solar PV systems, has seen continued strong demand for new installations. The average size of installations has also grown. Total solar capacity installed in 2017 (870 MW) exceeded the capacity installed in 2011 (750 MW), despite less than half of the number of systems being installed.

While energy from solar PV systems is available for use only at the time it is generated, battery storage and smart appliances allow customers to better match their electricity generation and use over time. The amount of power that customers withdraw from and inject into the network throughout the day is, therefore, reduced.

Of the 332 000 solar PV systems installed since 2017, 2.6 per cent have had an attached battery system.⁵¹ Though still low, penetration of battery installations is expected to increase due to declining battery costs.

Solar PV systems can be purchased outright by customers, or installed under a power purchase agreement. Under these agreements, an energy provider installs, owns, operates and maintains a solar PV system at a customer's

⁵¹ Clean Energy Regulator, *Solar PV systems with concurrent battery storage capacity by year and state/territory*. Data at 31 October 2018.

home, and sells the generated energy to that customer. In return, the customer 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. Some agreements transfer ownership of the solar PV system to the customer at the end of a contract.

Excess electricity produced by solar PV systems is typically sold back to the customer's retailer. However, some retailers offer customers the ability to on-sell excess electricity to other customers.

Increasing rates of rooftop solar PV generation pose significant challenges for the traditional retail model. Households with solar PV systems typically do not usually produce enough energy to meet all their requirements, and buy the balance from a retailer. But the lower volumes that they require make these customers less profitable for the retailer. Battery storage may further reduce energy purchases by these users.

1.8.4 Demand response

Smart meters provide customers with opportunities to participate in demand response programs run by retailers, distribution network businesses or third party energy providers (box 1.2). A retailer might offer customers a financial incentive to lower their energy consumption on a peak demand day to limit the retailer's exposure to peak energy costs, for example.

The simplest approach to demand response is for a customer to switch off or not use appliances after receiving an alert from their energy provider. More sophisticated approaches include technologies that optimise solar PV and storage systems, and automated load control devices that reduce power consumption from appliances such as air conditioning, hot water systems or pool pumps when required. Automating customer participation is likely to see greater uptake of these programs, and allow customers to provide electricity back to the grid, rather than just reducing their load.

These opportunities provide a new source of competition across the supply chain. Demand response can be deployed in the wholesale market to manage or limit price spikes, and can also be used by networks to manage system constraints. These products and services can also reduce or defer the need for new investment in both network and large scale generation.

1.8.5 Customers in embedded networks

An increasing number of customers are being supplied energy through embedded networks (where a group of customers are located behind a single connection point to the main distribution network). The supply of energy in embedded networks occurs on a similar basis to that for customers directly connected to a distribution network. The customer experience in an embedded network, however, can be significantly different. In particular, these customers may not have the same access to the competitive market or to customer protections as customers supplied through a distribution network.

Many embedded network customers currently cannot buy energy from a provider other than their network operator, or can only do so at significant cost. New energy rules took effect in December 2017 to give embedded network customers better access to retail market offers from electricity retailers. These changes require embedded networks to have an embedded network manager, authorised by the AEMC, who can link customers to the Australian Energy Market Operator's (AEMO) electricity market systems. This is a necessary first step for customers to access retail market offers.

These new rules only apply in jurisdictions where embedded networks customers are able to access a competitive retail market and for networks with over 30 customers. Despite these changes, there remain very few retailers who are willing to serve customers on embedded networks.

Customers in embedded networks typically have access to a reduced level of consumer protections, and more limited avenues for dispute resolution, than customers of energy retailers. However, energy ombudsman schemes in NSW, Victoria and South Australia now require exempt sellers to become scheme members and allow customers of exempt sellers to lodge complaints. The Queensland Government is considering a similar arrangement.

1.8.6 Beyond the grid

It is becoming increasingly viable to bypass the traditional energy supply model altogether, by going 'off grid' through self-sufficient solar PV generation and battery storage.

Stand-alone systems or microgrids—where a community is primarily supplied by locally sourced generation and does not rely on a connection to the main grid—are also starting to gain traction in some areas. These arrangements have largely been limited to regional communities a long distance

Box 1.2 Demand response in the NEM

Retailers including Mojo Power and Powershop are trialling demand response programs with their customers. These programs offer customers financial incentives to reduce consumption when wholesale prices are forecast to reach the price cap and the Australian Energy Market Operator notifies a risk of power cuts.

Network operators are also engaging in demand response programs with their customers. United Energy's 'Summer Saver' program operates in the same way as the retailer programs discussed above. Under Energex's 'PeakSmart' program, a signal receiver is attached to appliances such as air conditioners. The appliance can then be switched to economy mode during peak demand, which might only be a few times a year. Customers receive an upfront rebate on installation of approved devices.

New entrants that were not traditionally part of the energy market are also engaging in this area. Reposit offers technology solutions to manage electricity demand for customers with solar panels and batteries. Batteries can be recharged during off-peak times (when electricity is cheaper) and run down to sell energy to retailers at peak times when prices are higher.

from the electricity network. But improvements in energy storage and renewable generation technology are likely to see more customers take up this form of energy supply.

Current regulatory and pricing frameworks are possible impediments to the growth of these energy supply arrangements. Geographically averaged (postage stamp) network prices, for example, mean price signals that would encourage high cost customers to explore alternative supply arrangements don't exist. Consumer protections under the Retail Law also do not extend to these supply arrangements.

1.9 Energy affordability

Energy affordability relates to customers' ability to pay their energy bills. It depends on their energy use, the energy prices they pay, their incomes and their other living costs.

A customer's energy use depends on how many people they live with, housing and appliance quality, their heating and cooling needs, their lifestyle, and whether they also

have access to gas. Energy prices depend on where a customer lives, the network services required to supply their energy, competition between retailers in their area, and whether they are eligible for a concession or rebate to help manage their energy costs.

The AEMC undertook research to identify customers likely to be vulnerable to energy affordability issues. Low income customers (12 per cent of customers) face clear risks associated with energy affordability. However, these customers tend to be familiar with support services to help them manage energy costs. The most vulnerable group tends to be middle income households overwhelmed by financial and family commitments, and out of touch with how to access support services such as concessions and payment plans (8 per cent of customers).⁵²

The AER publishes an annual affordability report on energy bill trends, with a focus on low income households. Figure 1.22 provides an energy affordability snapshot for a typical low income household.

In the year to July 2018, the AER found electricity affordability worsened for low income households in all jurisdictions except Queensland and Tasmania.⁵³ Gas affordability for low income households deteriorated over the same period in NSW, the ACT and Victoria. These changes mainly reflect higher retail prices for gas and electricity.

For a typical low income household receiving energy bill concessions, at July 2018:

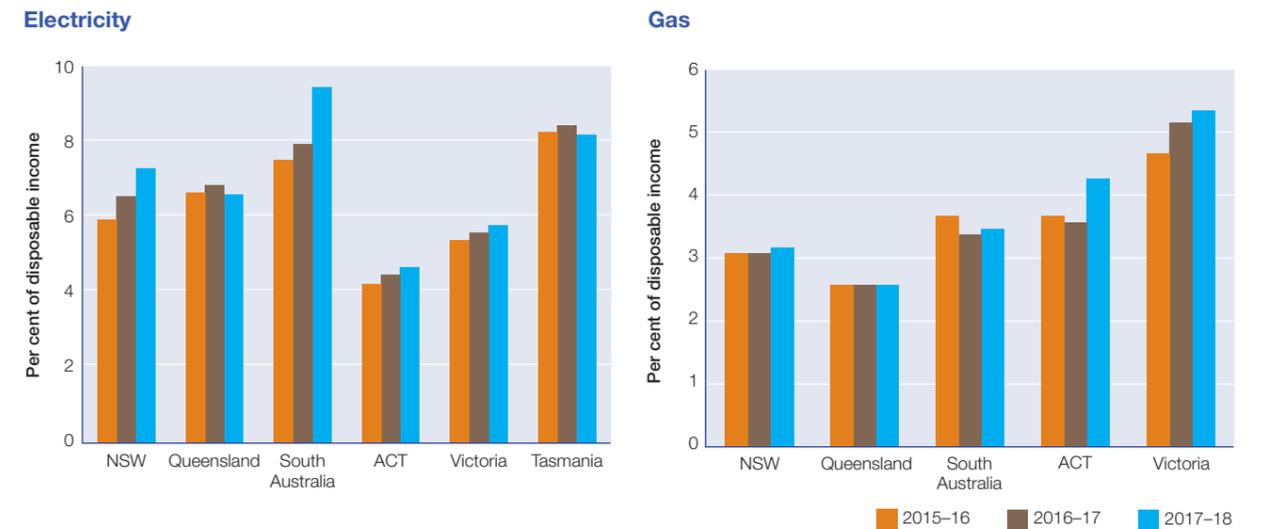
- electricity costs accounted from 4.7–9.5 per cent of disposable income on the mainland (up from 3–5 per cent in 2016), and around 8 per cent (up from 6.4 per cent) for Tasmanian households.
- gas costs accounted for around 2.6–5.4 per cent of disposable income for low income households.

South Australia had the highest electricity bill to income ratio in low income households, despite having the second lowest electricity use in the NEM. This outcome reflects the high costs of electricity in that state. Tasmanian customers also experienced relatively high electricity bill to income ratios. This reflects Tasmania having the highest average use of electricity—due to a cold climate creating a high demand for heating, and low gas penetration. However, high concessions and relatively low electricity charges partly offset this factor.

⁵² Newgate Research, *Understanding vulnerable customer experiences and needs, consumer research report prepared for the AEMC*, June 2016.

⁵³ Based on the percentage of household disposable income spent on the median retail offer.

Figure 1.22
Energy bill burden on low income households



Note: Based on average household consumption data for each state. Energy costs based on the median of generally available single rate offers (inclusive of discounts) at June each year. The data accounts for available concessions and rebates. Income data is equivalised disposable income (adjusted lowest income quintile) as reported by the ABS in 2015–16, adjusted to 2016–17 and 2017–18 dollars using CPI.

Source: AER, *Annual Report on Compliance and Performance of the Retail Energy Market 2017–18*, December 2018.

Despite the ACT having the second highest electricity use, it had the most affordable electricity bills as a percentage of disposable income—a result of relatively low electricity charges and high incomes.

In gas, the high use jurisdictions of Victoria and ACT had the highest bills (across market and standing median offers) as a percentage of disposable income.

Low income households in all jurisdictions often paid more than double (as a share of income) what households on higher incomes paid for their energy.

State and territory governments offer energy concessions to eligible low income households, which can significantly improve energy affordability. Most jurisdictions also offer emergency bill support. The potential savings vary by jurisdiction and depend how the concession is applied, but can be several hundred dollars a year for each fuel.

In the past year, there has been a renewed focus on concessions to help manage the increasing bill burden of energy prices on consumers, with jurisdictions increasing help to vulnerable customers. Most jurisdictions offer concessions as a fixed annual dollar amount. Victoria, however, applies the concession as a percentage of a customer's energy bill.

The ACCC found the way concessions are applied may reduce their effectiveness in helping customers reduce their energy costs.⁵⁴ In South Australia, for example, a customer must reapply for a concession each time they change retailer. This may discourage customers from switching to cheaper offers. Emergency bill support varies across states by amount, eligibility requirements and administration, but usually cannot be accessed more than once every 1–3 years.⁵⁵

While concessions represent an important saving for eligible households, many households can achieve significant savings simply by switching to a cheaper offer. Price differentiation across offers is discussed in section 1.7.7.

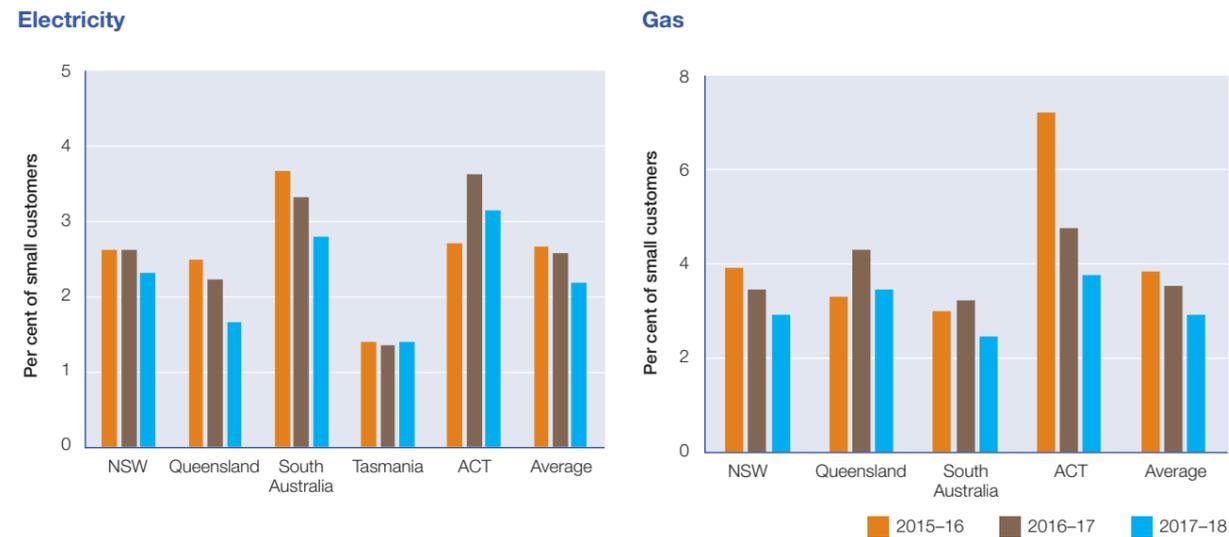
1.9.1 Assisting customers in debt

Energy affordability issues can lead customers into debt. A household's energy bill debt is measured as amounts owing to a retailer that has been outstanding for 90 days

⁵⁴ ACCC, *Restoring electricity affordability and Australia's competitive advantage, Retail Electricity Pricing Inquiry—Final report*, June 2018, pp. 297–303.

⁵⁵ Information on these schemes is available from government departments and ombudsmen websites.

Figure 1.23
Small customers in debt



Note: Based on customers with an amount owing to a retailer that has been outstanding for 90 days or more, at 30 June 2018.
Source: AER, *Annual Report on Compliance and Performance of the Retail Energy Market 2017–18*, December 2018.

or more. Average electricity and gas debt increased for residential customers in 2017–18.

Despite having the lowest electricity costs as a percentage of income, the ACT had the highest percentage of residential electricity customers in debt at June 2018—3.8 per cent of customers (figure 1.23). Queensland and Tasmania had the lowest number of electricity customers in debt at around 2 per cent. The ACT also had the highest percentage of gas customers in debt (6.1 per cent). South Australia had the lowest rate of gas customer debt, at around 2.8 per cent of residential customers.

The number of electricity customers in debt in 2017–18 was up from recent years in the ACT and Tasmania, but lower elsewhere. In gas, the percentage of customers in debt in 2017–18 was lower in all regions except the ACT.

Debt numbers in some jurisdictions are seasonal, particularly for gas customers. In the ACT, for example, gas debt worsens in the December and March quarters as winter heating bills are paid off.

The AER introduced a voluntary Sustainable Payment Plans Framework in 2016 to guide retailers in negotiating affordable payment plans with customers needing

assistance to repay debt.⁵⁶ The framework sets out good practice principles that encourage open, clear and ongoing engagement based on trust, respect and empathy. The principles promote constructive, long term customer relationships. Eighteen retailers have signed on to the framework, covering over 90 per cent of customers.

Payment plans allow settlement of overdue amounts in periodic instalments, and are typically the first assistance offered to customers showing signs of payment difficulties. The number of customers on payment plans has steadily risen in both gas and electricity, despite a slight fall in 2017–18.

Referral to a hardship program may be warranted if a customer's payment difficulties are chronic or severe. The Retail Law requires energy retailers to develop and maintain a customer hardship policy that underpins how they identify and assist customers facing difficulty paying their energy bills.

⁵⁶ AER, *Sustainable payment plans, a good practice framework for assessing customers' capacity to pay*, July 2016.

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
- a review of a customer's energy contract to ensure it suits their needs
- energy efficiency advice to help reduce a customer's bills, such as an energy audit and help to replace appliances
- a waiver of any late payment fees.

Among jurisdictions in which the Retail Law applies, South Australia continues to have the highest proportion of residential customers on hardship programs—2 per cent of electricity customers and 1.3 per cent of gas customers at June 2018.

The ACT had the smallest proportion of customers on hardship programs—around 0.5 per cent for electricity and gas—despite having a relatively high percentage of customers with electricity debts. There was, however, a large increase in the number of ACT customers on hardship programs compared with the previous year.

Facilitating entry into a hardship program is an important role for retailers. But not all customers on hardship programs appear to be receiving the support they require. There is a trend towards excluding (removing) customers from hardship programs and transferring them to another retailer, for example. Excluding customers from hardship programs for not meeting their payment obligations rose from 54 per cent in 2014–15 to 65 per cent in 2017–18. Successful completion of hardship policies (customers clearing their debt) is low, averaging 21 per cent across all retailers.

The AER identified deficiencies in how retailers implement their hardship policies and in 2018 proposed a rule change that would enable it to develop a new hardship policy guideline, enforceable by civil penalties.⁵⁷ The AEMC in November 2018 amended the rules, and the AER will publish new guidelines in 2019.

Victoria operates a state-based hardship program. In 2019 new minimum standards of assistance will be introduced for customers who anticipate or face payment difficulties.⁵⁸ Hardship protections under the Victorian framework are more prescriptive than those in the Retail Law

⁵⁷ AER, *Strengthening protections for customers in financial hardship*, media release, March 2018.

⁵⁸ ESC, *Amendments to the energy retail code: payment difficulties*, October 2017.

1.9.2 Disconnecting customers for non-payment

Energy retailers are required to help customers in financial hardship before considering disconnecting them for non-payment of a bill. Additionally, disconnection is not permitted in certain circumstances—such as when a customer's premises are registered as requiring life support equipment, when a customer on a hardship program is meeting their obligations, or when a customer's debt is below \$300.

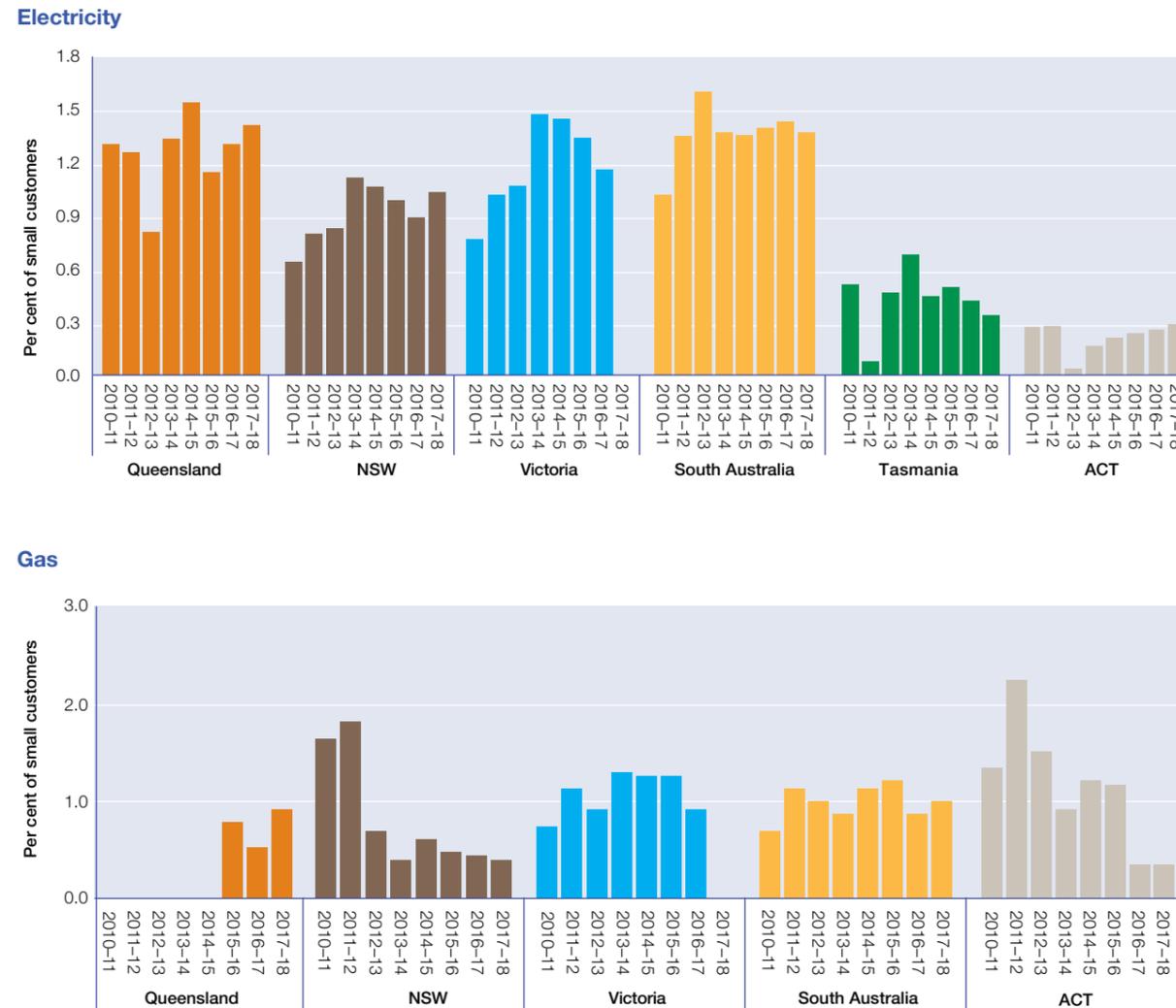
The AER reports on disconnection rates resulting from failure to pay an energy bill. Queensland and South Australia had the highest rates of electricity disconnections in 2017–18, at around 1.4 per cent of customers. Around 1 per cent of NSW customers were disconnected, and 0.4 per cent of customers in the ACT and Tasmania (figure 1.24). Queensland and NSW had the highest rates of gas disconnections at around 1 per cent. South Australia and the ACT had gas disconnection rates of 0.4 per cent. Victoria typically has disconnection rates of around 1 per cent of electricity and gas customers.

Disconnection rates have been relatively stable over recent years, with the exception of gas disconnections in the ACT. Disconnection rates in the ACT averaged 1.2 per cent until 2015–16, before falling below 0.4 per cent over the past two years. This shift reflected a policy change by a retailer in that jurisdiction.

Less than 0.1 per cent of *hardship* customers in electricity and gas were disconnected in 2017–18 following a failure to meet the terms of their hardship program, compared with 1 per cent of all customers. This illustrates the benefit of customers raising payment difficulties with their retailer and negotiating a sustainable approach to repaying debt. In many cases, disconnection occurs because customers are unwilling or unable to engage with retailers about their financial difficulties.

Repeated disconnection of the same customers has become more common. In 2017–18, 39 per cent of disconnected electricity customers and 33 per cent of disconnected gas customers had been disconnected in the previous 12 months. This suggests customers experiencing long term or severe financial difficulties are not being adequately supported through hardship programs.

Figure 1.24
Disconnection of residential customers for failure to pay amount due



Note: Data not available for Victoria for 2017–18.
 Source: AER, *Annual Report on Compliance and Performance of the Retail Energy Market 2017–18*, December 2018.

1.10 Customer complaints

Consumer trust in the energy sector reached new lows in 2017–18, driven by high prices and lack of transparency in the market. This level of dissatisfaction is reflected in the number of customer complaints to energy retailers.

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

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

Some customer complaints relate to issues outside the retailer’s control. Complaints about price rises due to wholesale and network costs may reflect unfairly on energy retailers, for example. For this reason, the manner in which complaints are handled can be a more meaningful measure of retailer performance than the number of complaints received.

Retailers with effective customer service generally resolve complaints without the need for escalation to energy ombudsman schemes.

The number of complaints to ombudsman schemes rose in NSW, South Australia and Victoria in 2017–18, to around 1 per cent of customers (figure 1.25). Rates are typically lower in Queensland, and fell in 2017–18 to 0.3 per cent of customers.

Gas complaints are generally lower than in electricity. NSW and Victoria have the highest complaint rates at around 0.5 per cent of customers. Gas complaints fell in NSW and South Australia in 2017–18, but rose in Victoria and Queensland.

The ombudsman schemes in Victoria and South Australia saw less complaints from 2013–14, with levels halving by 2017–18. Performance in those regions now aligns with outcomes in NSW, but remains higher than in Queensland.

Billing issues drove 40 per cent of all complaints in 2017–18. Credit issues—including disconnection following a non-payment, and the collection of outstanding charges—accounted for another 15 per cent of complaints, but were a larger issue in Victoria than elsewhere. Retailers’ customer service was another prominent issue (less than 10 per cent of complaints in most regions, but around 30 per cent in NSW).

1.11 Enforcement action in retail markets

Poor conduct by a number of energy retailers and their agents relating to marketing and signing up customers has contributed to low levels of customer satisfaction and trust in retail energy markets. 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 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 AER issued multiple infringement notices against retailers since 2017 for alleged breaches relating to failure to obtain explicit informed consent from new customers. Simply Energy was issued three notices in 2017 and Alinta was issued two notices in 2018. The penalty for each infringement notice was \$20 000.

The ESC regulates the Victorian energy market. The ESC took action against Alinta in 2018 for transferring customers onto contracts on 15 separate occasions without their explicit informed consent. Alinta paid penalties of \$300 000.⁵⁹

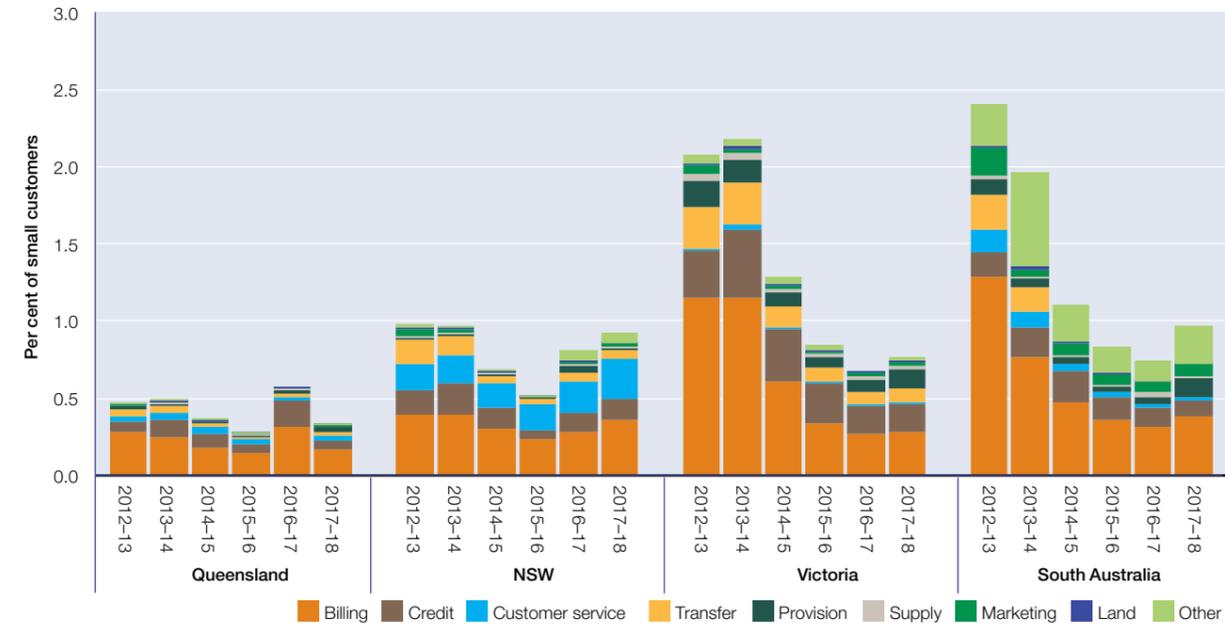
The ACCC monitors how businesses promote discounts and savings under their energy offers, following concerns that consumers have been misled about the extent of savings available. Action taken by the ACCC since 2017 includes:

- requiring Alinta to compensate customers who switched based on misleading price comparisons
- issuing an infringement notice to Lumo Energy for a false or misleading representation about the size of energy discounts
- instituting proceedings in the Federal Court against Amaysim (trading as Click Energy) for misleading marketing claims about discounts and savings that customers could obtain
- issuing two infringement notices against One Big Switch, a service negotiating better energy offers for its registered members, for false and misleading price representations relating to advertised discounts and savings.

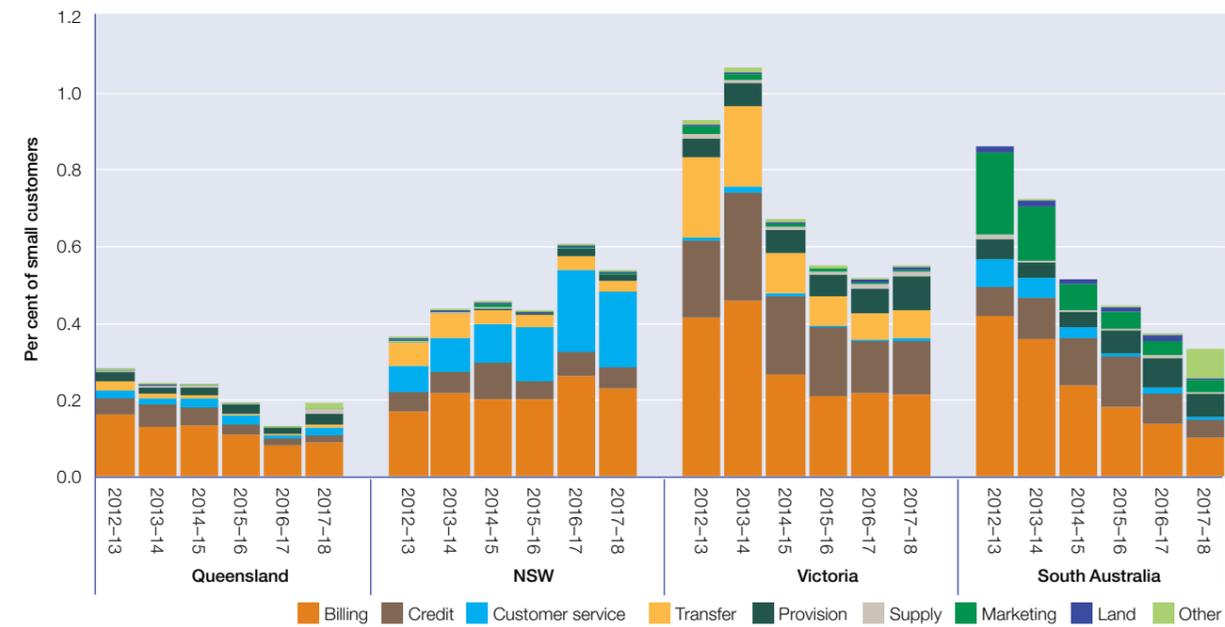
⁵⁹ ESC, *Alinta Energy pays \$300 000 for allegedly failing to obtain consent to switch*, media release, August 2018.

Figure 1.25
Complaints to ombudsman schemes

Electricity



Gas



Source: Annual reports by ombudsman schemes in Queensland, NSW, Victoria and South Australia.

The AER also monitors and enforces broader compliance with the Retail Law. Action taken by the AER for alleged breaches of the Retail Law since 2017 includes:

- three infringement notices to Taplin for selling energy without an appropriate authorisation or exemption
- three infringement notices to AGL for failing to inform more than 1000 customer that their fixed term contract was about to end. Retailers must disclose to a customer what happens if they choose not to enter into a new contract
- two infringement notices to Origin Energy for allegedly failing to offer hardship assistance to a residential customer experiencing payment difficulties, and wrongfully disconnecting that customer. Retailers must implement their hardship policies, and use best endeavours to contact a customer before disconnecting their energy supply
- two infringement notices to Alinta, one to EnergyAustralia and one to Origin Energy for failing to submit correct performance reporting data.