THE UMPIRE STRIKES BACK



DECEMBER 2019

Disclaimer

The energy offers, tariffs and bill calculations presented in this paper and associated workbooks should be used as a general guide only and should not be relied upon. The workbooks are not an appropriate substitute for obtaining an offer from an energy retailer. The information presented in this paper and the workbooks is not provided as financial advice. While we have taken great care to ensure accuracy of the information provided in this paper and the workbooks, they are suitable for use only as a research and advocacy tool. We do not accept any legal responsibility for errors or inaccuracies. The St Vincent de Paul Society and Alviss Consulting Pty Ltd do not accept liability for any action taken based on the information provided in this paper or the associated workbooks or for any loss, economic or otherwise, suffered as a result of reliance on the information presented. If you would like to obtain information about energy offers available to you as a customer, go to the relevant regulator's website or contact the energy retailers directly.

The NEM - The umpire strikes back

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Melbourne, December 2019

St Vincent de Paul Society

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The views expressed in this document do not necessarily reflect the views of Energy Consumers Australia.

We also wish to thank and acknowledge the efforts of the various retailers and other stakeholders that review and provide feedback on these reports. While any errors that may occur are our own, we appreciate their views, suggestions and cooperation.

Interactive online map

Key findings from the Vinnies' Tariff-Tracking project are also presented as an interactive online map. The updated map is available at the St Vincent de Paul Society's website: https://www.vinnies.org.au/page/Our_Impact/Incomes_Support_Cost_of_Living/Energy/Map/

Interactive online application

The data for the Tariff-Tracking project goes back to 2009 and this means we now have 10 years of Tariff-Tracking data. We have produced a web application that looks at electricity price changes over this period as well as some key events and developments that have had an impact on prices. The web application is available at: www.alvissconsulting.com/10-years-tariff-tracking.

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Background: Tariff-Tracking Project

The St Vincent de Paul Society, in conjunction with Alviss Consulting, has been tracking changes to residential energy tariffs and reporting on household impacts since 2010. Initially the Tariff-Tracking project only covered Victoria but has since expanded to include New South Wales, Queensland, South Australia, Tasmania and the Australian Capital Territory.

The rationale for tracking changes to domestic energy prices has been to document price changes, analyse market developments and inform the broader community about bill impacts and potential savings to be made.

In our view, there is still a limited knowledge and understanding in the community of the various energy tariffs available, how they are changing, and how tariff changes impact on households' energy bills and energy affordability more broadly.

Only by improving this awareness and understanding can we ensure that the regulatory framework (for example, in relation to price information and disclosure) is adequate, to and promote a competitive retail market. Furthermore, this increased knowledge will allow for close monitoring of the impact price and tariff changes have on households' bills, and the affordability of this essential service.

In addition, a key aim of this project has been to document and analyse price and product developments arising from government policies and industry innovations, including the deregulation of retail prices, 'green policies', smart meter rollouts and transitions towards other smart grid developments.

With the introduction of the Default Market Offer (DMO) in NSW, South East Queensland and South Australia and the Victorian Default Offer (VDO) in Victoria from 1 July 2019 all the previously deregulated electricity retail markets are again regulated. The DMO and the VDO is a significant development that the Tariff-Tracking project will monitor and analyse the impact of.

The data for the Tariff-Tracking project goes back to 2009 and this means we now have 10 years of Tariff-Tracking data. The appendix attached to this report looks at electricity price changes over this period as well as some key events and developments that have had an impact on prices. We have also developed a web application where price changes can be explored in more detail. The web application is available at: www. alvissconsulting.com/10-years-tariff-tracking.

To date we have developed five workbooks for each of the National Electricity Market (NEM) jurisdictions. The workbooks allow the user to enter consumption levels and analyse household bills for standing or regulated gas and electricity offers, as well as

¹ Tasmania does not have regulated/standing offers for gas, only four workbooks have been produced for this jurisdiction.

published electricity and gas market offers.² The workbooks, as well as associated reports, can be accessed at the St Vincent de Paul Society's website: www.vinnies.org.au/energy.

This report is the result of a comparison of the state by state-based analyses undertaken as part of the Tariff-Tracking project, as well as reflections on the public debate on energy market developments and reasons for price increases over the last year.

² The Victorian workbooks contain regulated/standing offers from July 2008 to July 2019 and market offers from July 2010 to July 2019. The NSW workbooks contain regulated/standing offers from July 2009 to July 2018 and market offers from 2011 and 2019. The Queensland and South Australian workbooks contain regulated/standing offers from July 2009 to July 2019 and market offers from July 2012 to July 2019. The ACT workbooks contain regulated/standing offers from July 2009 to July 2018 and market offers from July 2013 to July 2019. The Tasmanian workbooks contain regulated electricity offers from July 2009 to July 2019, market (pay as you go) electricity offers from July 2009 to July 2019 and gas market offers from July 2019. From 2016, we have also developed workbooks containing solar offers available to new customers in all of the jurisdictions.

Preamble

In October 2018 the Australian Treasurer and the Minister for Energy requested the Australian Energy Regulator (AER) to develop a Default Market Offer (DMO) for each electricity network area in NSW, South Australia and South East Queensland.3 This request was in response to recommendations outlined in the Australian Competition and Consumer Commission's (ACCC) Retail Electricity Pricing Inquiry. The regulated DMOs took effect on 1 July 2019 and have replaced the retailer determined standing offers previously available in these networks.

Importantly, the AER's DMO is expressed as an annual bill for a set consumption level and retailers are still able to "translate the annual amount into different tariff structures".4 The Regulations stipulate that retailers must structure their prices to not exceed the annual DMO price for that consumption level.5

The Victorian Default Offer (VDO) took effect on 1 July 2019 and all customers previously on a retailer's standing offer have been moved to the VDO. The VDO is a Victorian Government initiative that aims to make the electricity market simpler and more affordable for all consumers.⁶ This new arrangement requires the Essential Services Commission (ESC) to set a VDO for basic metering types (single rate and controlled load tariffs) in each network area. All retailers are required to offer the VDO but they can, and still do, offer other market contracts.

As the Tariff-Tracking project aims to monitor and assess changes to energy prices over time, the analysis presented in this report will be based on the same consumption levels (6,000 kWh and 30,000 Mj per annum) as in previous national comparison reports produced by the Tariff-Tracking project. The DMO, on the other hand, is set for households using between 3,900 and 4,900 kWh/annum in NSW (depending on network area), 4,600 kWh/annum in South East Queensland and 4,000 kWh/annum in South Australia. This means that the bills produced by the DMOs offered by retailers will vary for households using 6,000 kWh/annum as the retail offers have different supply charges and/or usage charges.

See www.aer.gov.au/system/files/Letter%20to%20the%20AER%20Chair%20-%20default%20pricing.pdf.

⁴ AER, Default Market Offer Prices 2019-20, Final Determination, April 2019, 9.

⁵ Ibid., 9.

⁶ See https://www.energy.vic.gov.au/victoriandefaultoffer.

⁷ For households with single rate metering.

Overview

This report is comprised of four sections.

Section 1 'How energy prices are tracking' analyses changes to electricity and gas prices across Australia from July 2009 to July 2019 in order to explore where and when prices have increased or decreased.

In relation to electricity, the base rates for electricity (regulated/standing offers) have decreased in Queensland, New South Wales, Victoria and South Australia compared to last year, whereas in the ACT, Tasmania, Western Australia and the Northern Territory base rates have slightly increased. For gas, prices increased by 2.5% on average. The highest prices in the country continue to be in South Australia for Electricity and Queensland for gas.

Section 2 'The electricity bill-stack' focuses on the various cost components of electricity bills (the bill-stack) by exploring the cost of each component for each jurisdiction.

For electricity market offers (including pay on time discounts), we estimate that the retail component is negative in the ACT⁸ and as high as 25% in Tasmania. In Victoria the retail component is between 12-17% (depending on network area), in South Australia it is 5%, in South East Queensland it is 23%, in NSW it is 14-16% (depending on network area). the retail component is significantly lower in some jurisdictions, most notably South Australia and Victoria, compared to one year ago (July 2018). The estimated network component is greatest in NSW's Essential network (47%) while it is lowest in Victoria's Citipower network (31%). The Green scheme component is significantly greater in the ACT (16%) than in the other jurisdictions.

Section 3 'Solar offers' compares solar offers available to new customers across the NEM as well as examining the various bill components of solar bills.

Since last year, annual bills for solar customers in Victoria has decreased the most (approximately by \$50 - \$100, depending on network area) while there were more modest decreases in Tasmania, NSW and Queensland (Energex). In the ACT (EvoEnergy) on the other hand, solar bills have increased by \$200. In South Australia (SAPN), solar bills have remained stable. Compared to non-solar customers, average annual solar customer bills are \$1,255 less than average market offer bills (including discounts) in South Australia (SAPN). In Tasmania (TasNetworks) the difference is more modest at \$680.

Section 4 'Impact of DMO and VDO' analyses price changes and price dispersion in relation to the regulated offers and market offers, price dispersion between the "big 3"

⁸ We note that this calculation is based on ActewAGL's market offer which includes a 25% pay on time discount. If customers are unsuccessful in obtaining this discount, however, the retail component of the bill would be similar to that of the standing offer (7%).

retailers⁹ and changes to all retailers' discounts, as well as, base rates.

While standing offers, on average, decreased by 13% in South Australia, 12% in South East Queensland, 14% in NSW and 27% in Victoria after the DMO/VDO took effect¹⁰, the reduction to average market offer bills has been lower - especially for bills inclusive of conditional pay on time discounts. In NSW, the average market offer bill inclusive of conditional pay on time discounts has increased by 1% while it reduced in South Australia (4%), South East Queensland (3%) and Victoria (4%). This means that customers previously on highly discounted market offers may not experience the price reduction that standing offer customers have post July 2019.

Importantly, the best value offers, as of July 2019, in each network area are market offers (both with guaranteed and conditional discounts) and not DMO/VDO offers. That said, some market offers produce significantly higher bills than the best DMO, or the VDO, in each of the network areas.

The difference between the "big three" retailers' offers have reduced. As of July 2019, the maximum price-spread (difference to annual bill) is approximately \$60 in South Australia, \$70 in Victoria, \$90 in South East Queensland and \$115 in NSW. The lack of price dispersion between the "big three" retailers also highlights the importance of having 2nd tier retailers that can put downward pressure on prices.

Many retailers have moved away from offering conditional discounts after the DMO/VDO took effect. In NSW, for example, only five retailers offer conditional pay on time discounts as of July 2019 compared to 13 in July 2018.

Section 5 'Final observations' highlights that while the bill reductions would have been significant for households previously on standing offers, it is important to note that relatively few customers were on standing offers compared to market offers in these retail markets. As such, the impact of the DMO/VDO on bills post 1 July 2019 would have been negligible for many customers.

In our view, policy makers and regulators should now focus on delivering overall benefits, as well as minimising detriments, to all energy consumers rather than initiatives that are designed to help specific groups. In order to do so, regulators must ensure that competitive pressures play their role in driving market efficiencies. Market transparency, accessible and accurate information and low search costs are integral to competitive markets.

This section provides examples of seemingly trivial matters, such as broken web links and poor website design, that can easily become a barrier to consumers benefiting from recent regulatory changes.

⁹ The "big three" retailers are AGL, Energy Australia and Origin Energy.

¹⁰ Comparison of average bills (across all retailers/network areas) for household using 6,000 kWh/annum as of July 2019 to the bills from the previous data collection (January 2019 for Victoria and July 2018 for other jurisdictions).

We conclude that the re-regulation of retail markets has had a clear, immediate impact on bringing down standing offer prices. Furthermore, it has also resulted in fewer offers being available, fewer conditional discounts being offered and a reduction in price dispersion. The impact on prices, price dispersion, offer features and conditions in the medium to longer term, however, remains to be seen.

We will continue to monitor market developments and outcomes for consumers and we strongly recommend that regulators continue to address issues pertaining to lack of transparency as well as confusing, or misleading, offerings. If regulators now change focus and take a "done and dusted" approach to electricity retail markets, the outcomes for consumers could quickly deteriorate.

In addition, we seek clarity around the interplay between these recent reforms and Distributed Energy Resources. As shown in section 3 of this report, non-solar households clearly subsidise solar households. The DMO and the VDO have improved outcomes for yesterday's losers (households on standing offers) but a vision for how to address inequities between tomorrow's winners and losers is still needed.

1. How energy prices are tracking

Key findings

- The base rates for electricity (standing offers) have decreased in Queensland, New South Wales, Victoria and South Australia compared to last year, whereas in the ACT, Tasmania, Western Australia and the Northern Territory base rates have slightly increased.
- In Queensland, New South Wales, Victoria and South Australia, electricity prices have decreased by 16.4% on average this year, compared to a 4.1% increase last
- In the ACT, Tasmania, Western Australia and the Northern Territory, electricity prices have increased by 1.1% on average this year, compared to 6.3% increase last vear.12
- Compared to 2009, electricity prices have increased by 60% on average, with South Australia and Western Australia experiencing the greatest increases (85% and 79%, respectively).¹³
- On average, gas prices increased by 2.5% this year compared to 3.3% last year.¹⁴
- Compared to 2009, gas prices have increased by 69% on average, with Victoria experiencing the greatest increases (95%).¹⁵

This section analyses changes to electricity and gas prices across Australia from July 2009 to July 2019 in order to explore where and when prices have increased or decreased.

1.1 Electricity prices

In comparison to July 2018, regulated and standing offer prices (the base-rate) have decreased in Queensland, New South Wales, Victoria and South Australia. The size of the decrease, however, decrease does vary between the jurisdictions. Prices in the ACT, Tasmania, Western Australia and the Northern Territory have slightly increased since July 2018. Chart 1 shows estimated annual bills for households consuming 6,000kWh per annum (single rate) from July 2009 to July 2019. The dotted lines represent electricity bills in the Northern Territory and Western Australia, the two non-NEM jurisdictions.

Looking at longer-term changes, chart 1 also shows the increasing differences in electricity prices between NEM jurisdictions between 2019 and 2018. While South Australia had the highest prices in both July 2009 and July 2019, and ACT had the lowest (in the NEM), the difference between the annual bill for South Australian and ACT households (with this consumption level) was just \$350 in 2009 compared to

¹¹ Based on increases in all 8 jurisdictions.

¹² Ibid.

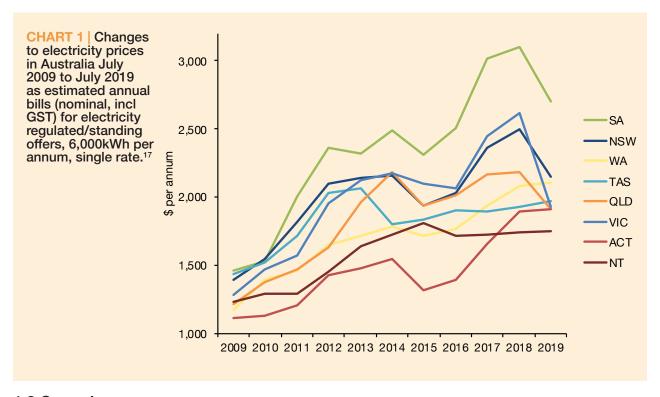
¹³ These are nominal price increases.

¹⁴ Based on increases in all 7 jurisdictions (Northern Territory is not included in the gas analysis due to low penetration).

¹⁵ For Tasmania, the comparison is based on 2018 and 2013 prices. All other jurisdictions are based on prices as of 2009 and 2018. These are nominal price increases.

¹⁶ Note that Tasmania introduced carbon exclusive prices from 1 July 2014 (rather than backdating new prices after the repeal) and Tasmania's July 2014 price is therefore carbon exclusive.

approximately \$800 in 2019. That said, this year's price decrease in South Australia and price increase in the ACT have significantly narrowed the gap. Last year (July 2018) the difference between annual bills in South Australia and the ACT was as high as \$1,200.

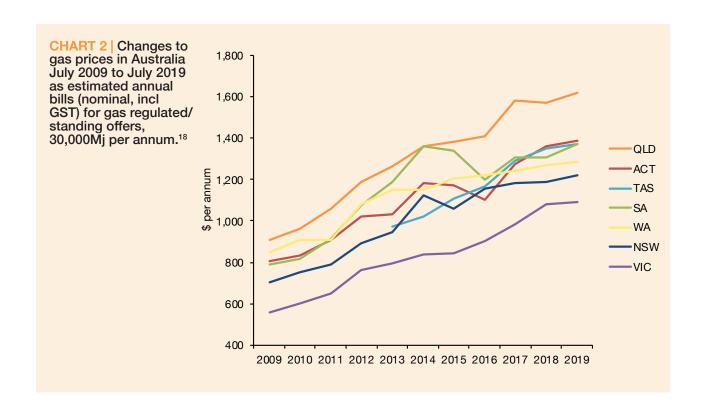


1.2 Gas prices

Typical household gas consumption varies significantly between jurisdictions. In Victoria, for example, typical household consumption is over 60,000Mj per annum. In Queensland, on the other hand, household consumption is typically less than 10,000Mj per annum. Chart 2 below compares annual gas bills across Australia (except the Northern Territory) from July 2009 to July 2019 for households consuming 30,000Mj per annum. It shows that gas prices are greatest in Queensland and lowest in Victoria. However, if we assume a more representative consumption level for each jurisdiction, Victorians will have greater gas bills than Queenslanders. Gas prices have increased slightly in all jurisdictions since July 2018.

Chart 2 also shows that the price difference between the jurisdictions has not increased by much since 2009. Unlike in the case of electricity, the difference between the jurisdiction with the highest annual bill (Queensland) and the jurisdiction with the lowest (Victoria) was \$350 in 2009 and it is currently around \$530 for this consumption level.

¹⁷ In Victoria and NSW the standing offer price is based on the average retail standing offer in each network area. For July 2019 it is based on the VDO in Victoria. As the prices differ between network areas in NSW and Victoria, the estimated bills in these two states are based on the average across network areas. In South Australia, the price is based on the average retail standing offer from July 2015 to July 2019, and AGL's regulated/standing offer prior to that. In Queensland, the price is based on the average retail standing offer (Energex network) from July 2016 to 2019, and the regulated/standing offer prior to that. The regulated rate has been used for ACT, Tasmania, Western Australia and the Northern Territory. Note that the transitional tariffs previously available in SA and NSW are not included in this chart.



¹⁸ In Victoria the standing offer price is based on the incumbents' average retail standing offer across the eight main gas zones. In NSW the standing offer price is based on the regulated retail offer across the eleven gas zones until July 2016. In July 2019 it is based on the incumbent retailer's standing offer in each gas zone. In Queensland it is based on the average AGL and Origin standard retail gas offers in the North Brisbane and South Brisbane gas zones. In South Australia it is based on Origin's regulated/standing offers across five gas zones. In the ACT it is based on ActewAGL's standard gas offer. In Tasmania (data from 2013 to 2019 only) it is based on Aurora and Tas Gas' average standard offer. In Western Australia it is based on the government's price cap for customers in the southwest region.

2. The electricity bill-stack

Electricity bills are made up of several components, including generation (wholesale market) costs, network costs (distribution and transmission), "green schemes" and costs associated with other public policy initiatives, and retail costs. As retail prices were deregulated in Victoria, South Australia, NSW and Queensland until July 2019, effective competition was required to ensure that households did not pay more than necessary for both generation (wholesale) and retail services (including retail margins). With the recent re-regulation of retail markets, however, the regulatory decisions impact on the bill-stack for standing offer (DMO and VDO) while the market offers still reflect the competitive pressures. This section therefore seeks to explore the cost of each component for each jurisdiction, as well as differences between the types of offers.

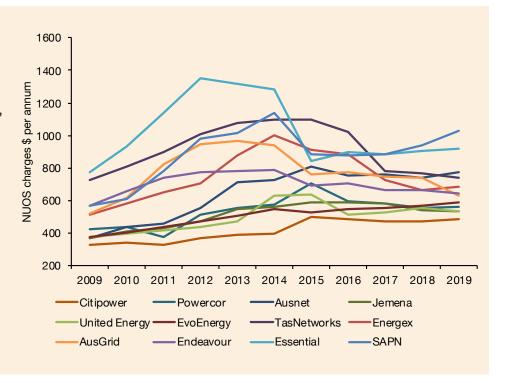
As shown by chart 1 above, electricity bills increased significantly from July 2009 to July 2014 (prior to the repeal of the carbon tax) before declining, to various extents, post the repeal and with new network tariffs taking effect in July 2015. In July 2016, 2017 and 2018, however, electricity bills increased in most jurisdictions. With the introduction of the DMO/VDO in NSW, South East Queensland, South Australia and Victoria in July 2019, however, prices decreased significantly in these jurisdictions.

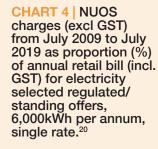
Chart 3 below shows that Network Use of System (NUOS) charges increased in all of the NEM electricity networks between July 2009 and July 2014, before decreasing in most jurisdictions (NSW, Queensland, South Australia and the ACT) in July 2015. In 2016 it also decreased in the Victorian networks and Tasmania, and again (slightly) in South Australia. In 2019, the decreases have been significant in NSW's Ausgrid network. Decreases have also occurred in Victoria's United Energy and Jemena networks, as well as in Tasmania and in NSW's Endeavour network. In South Australia, however, NUOS charges have increased for the third year in a row.

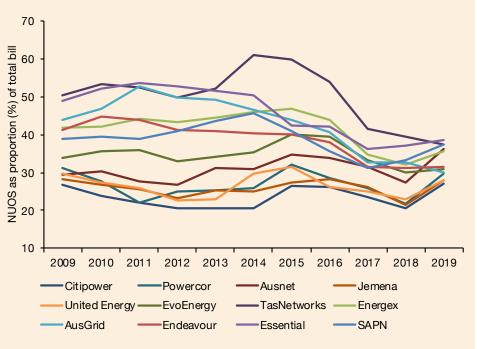
Chart 3 also shows that the NUOS price changes, vary significantly between the networks. Households in South Australia (SAPN) and rural NSW (Essential) pay the highest NUOS charges in the NEM. The NUOS charges are lowest in Victoria's Citipower, United Energy, Jemena and Powercor networks and the ACT (EvoEnergy's network). The difference between NUOS costs in the various networks has slightly increased since last year. Currently an annual "NUOS bill", for this consumption level, is \$543 more in SA Power Networks compared to Citipower. In 2012, on the other hand, the difference was \$987.

Chart 4 below looks at NUOS charges as a proportion of total bill. It shows that the NUOS proportion of electricity bills is still highest in Tasmania (TasNetworks). Since last year, all of the Victorian networks have had an increase in the NUOS proportion, as well as South Australia (SAPN) and Queensland (Energex). In the ACT (EvoEnergy) and NSW (Endeavour and Essential), the proportion is similar to last year. In Tasmania, the NUOS accounts for 37% of electricity bills, whereas in Melbourne (Citipower), the NUOS component of bills is as low as 27%.

CHART 3 | NUOS charges from July 2009 to July 2019 as estimated annual cost (GST exclusive) for households using 6,000kWh per annum, single rate.19



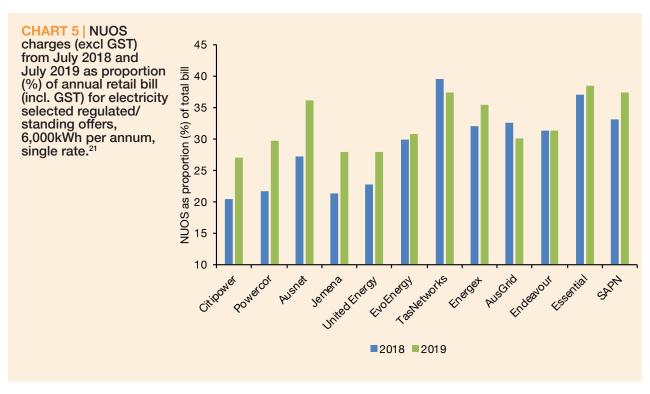




¹⁹ The annual NUOS charges have been calculated by allocating 1,500kWh per quarter (again based on annual consumption of 6,000kWh) to the step charges stipulated in the NUOS. The annual NUOS cost also includes fixed charges. Note that as United Energy's NUOS charge has been a seasonal tariff over the last four years, the United Energy consumption used in these calculations is thus based on a proportional allocation of a 5-month summer tariff and a 7 month non-summer (off-peak) rate.

²⁰ In Victoria the standing offer bill is based on the average incumbent (AGL, Origin and Energy Australia) standing offer as of July every year and the VDO as of July 2019. In NSW the retail bill is based on the regulated rate from 2009 to 2013 and the incumbent retailer's standing offer in each of the network areas (Origin or Energy Australia) since July 2014. In South Australia the retail bills are based on the regulated rates as well as AGL's standing offer post retail deregulation. In Queensland the retail bills are based on the regulated rates as well as AGL and Origin's average standing offer post retail deregulation (July 2016). In all other jurisdictions the retail bills are based on the regulated rates. Note that as United Energy's NUOS charge has been a seasonal tariff over the last three years, the United Energy consumption used in these calculations is thus based on a proportional allocation of a 5 month summer tariff and a 7 month non-summer (off-peak) rate.

Chart 5 compares the NUOS proportion of bills in July 2018 to July 2019. It shows that the biggest decreases occurred in Tasmania and in NSW's Ausgrid network (around -3%). The largest increases occurred in all of Victoria's networks, ranging from 5-9% increases.



In order to examine what households actually pay for the various goods, services and policies that are costed by the supply chain and passed on to consumers in a retail bill, we deduct estimated cost components from the average annual retail bill for households using 6,000kWh per annum as of July 2019.²²

While we do not know exactly what retailers pay for wholesale energy we have relied on the AEMC's latest annual price trend report and based the wholesale cost component on the 2018/19 and 2019/20 average.²³

TABLE 1 | Estimated electricity wholesale costs (\$/MWh)

	AEMC calculation for 2018/19	AEMC calculation for 2019/20	Estimated cost per MWh
Queensland	\$88.8	\$66.4	\$78
Tasmania	\$85.5	\$72.8	\$79
ACT	\$116.3	\$99.2	\$108
NSW	\$116.8	\$99.2	\$108
Victoria	\$114.1	\$103.7	\$109
South Australia	\$171.1	\$150.7	\$161

²¹ Ibid.

²² Note that consumption levels applied to the analysis in this report may differ from analyses presented in various jurisdictional Tariff-Tracking up-date reports in 2018. These differences can have significant impact on the size of the various bill components.

²³ Based on AEMC, 2018 Residential Electricity Price Trends, Databook 2018, EPR 0064.

The AEMC's Residential Electricity Price Trends report has also been used as a source to estimate "green scheme" costs.24 Table 2 below shows the cost of "green schemes" used for this analysis.

TABLE 2 | Estimated "Green scheme" costs (c/kWh)

	AEMC calculation for 2018/19	AEMC calculation for 2019/20	Estimated cost (cents/kWh)
Queensland	1.62	1.47	1.55
NSW	1.99	2.02	2.01
Tasmania	2.03	2.29	2.19
Victoria	2.33	2.17	2.25
South Australia	3.13	3.07	3.10
ACT	3.05	4.19	3.62

In order to examine what households actually pay for the various services (and policies) that are costed by the supply chain and passed on to consumers in the form of a retail bill, tables 3 and 4 below estimate the retail component of bills for standing offer customers and market offer customers. Both tables are based on households consuming 6,000 kWh per annum at a single rate tariff.

By deducting GST, NUOS costs, wholesale costs, the cost of environmental policies ("green schemes") and the cost of rolling out smart meters (Victoria only), the residual retail component of a residential standing offer bill (final column) is as low as \$279 (in Victoria's Citipower network) and as high as \$507 (in Queensland's Energex network).²⁵

TABLE 3 Deduction of bill components for regulated/standing offers, average annual bill based on offers taking effect post July 2019 (6,000kWh per annum, single rate)²⁶

	Retail bill incl. GST^	Retail bill excl. GST	Retail bill excl. GST and NUOS*	Retail bill excl. GST, NUOS and whole- sale^^	Retail bill excl. GST, NUOS, wholesale and "green scheme"	Retail bill excl. GST, NUOS, wholesale, "green scheme" costs and smart meter costs***
Citipower	1,797	1,634	1,148	495	360	279
Powercor	1,891	1,719	1,156	503	380	316
Ausnet	2,139	1,945	1,169	515	380	316
Jemena	1,894	1,722	1,192	539	409	349
UE	1,904	1,731	1,197	544	409	349
EvoEnergy	1,909	1,735	1,147	500	283	

²⁴ See AEMC. 2018 Residential Electricity Price Trends, Databook 2018, EPR 0064.

²⁵ Note that other charges such as market fees and ancillary service fees as well as losses have not been accounted for in this bill-stack.

²⁶ This table is based on the same offers used for July 2019 in chart 4 above. Note that the cost of the smart meter rollout is not accounted for in the NUOS charges due to the AMI Cost Recovery Order-In-Council that ensures that the distributors are able to recover expenditure associated with the AMI program from consumers on a cost pass-through basis.

	Retail bill incl. GST^	Retail bill excl. GST	Retail bill excl. GST and NUOS*	Retail bill excl. GST, NUOS and whole- sale^^	Retail bill excl. GST, NUOS, wholesale and "green scheme"	Retail bill excl. GST, NUOS, wholesale, "green scheme" costs and smart meter costs***
Tasnetworks	1,969	1,790	1,054	579	449	
Energex	1,923	1,748	1,065	600	507	
Ausgrid	2,090	1,900	1,272	624	504	
Endeavour	2,033	1,848	1,209	561	441	
Essential	2,383	2,166	1,249	601	481	
SAPN	2,747	2,497	1,469	503	317	

[^] As per chart 4 above

Chart 6 below is based on the same calculations presented in table 3 above but shows the various bill components as a percentage of the total bill. Our estimates show that between 13-29% of the bills paid by households goes to the retailer, which is a narrower range compared to last year (15-41%).²⁸ The retail component is now proportionally lower than the network charges (NUOS) in all network areas. In Victoria's Ausnet network, Tasmania, Queensland's Energex network, NSW's Essential network and South Australia, the NUOS is the largest bill component. The ACT (EvoEnergy) has the highest "green scheme" costs, accounting for 13% of the total bill.

^{*} As per chart 3 above

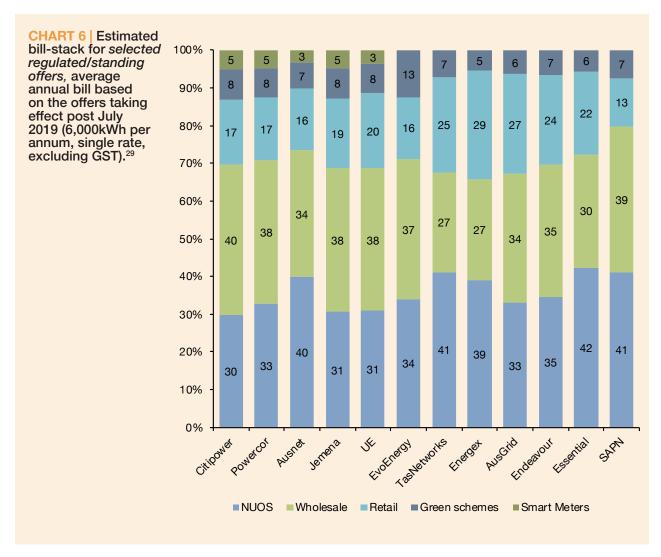
^{^^}As per table 1 above

^{**} As per table 2 above

^{***}Based on AER estimated AMI charges for 2019²⁷

²⁷ To estimate the impact of the Victorian smart meter rollout on the bill-stack, we used AER's indicative average annual metering bill for 2019. See table 1-2 in AER, *Advanced Metering Infrastructure, Transition charges applications*, Final Decision (December 2016)

²⁸ Cost of retail includes both retail costs and margins (profits) and we stress that some of the cost components are based on estimates rather than actual known costs.



As the calculations for the charts above are based on standing and/or regulated prices, a bill-stack analysis for market offers is included below. A longstanding feature of market offers in the NEM retail markets have been to offer a discount on the published rates. After the introduction of the DMO/VDO, however, the number of offers with additional discounts, and especially conditional pay on time discounts, have reduced significantly. Instead, many retailers now apply different base rates to their market offers.

Table 4 below deducts estimated cost components from the annual retail market offer bill (including pay on time discounts) for households using 6,000kWh per annum post July 2019.30 After deducting GST, NUOS costs, wholesale costs, the cost of environmental policies ("green schemes") and the cost of rolling out smart meters (Victoria only), amounts in the final column are as low as minus \$60 in the ACT (EvoEnergy) and as high as \$445 in Tasmania (Tasnetworks).31 By comparing these figures to the regulated/standing offers examined in table 3 above, we can see that the retail component of bills still varies between regulated/standing offers and market offers (including pay on time discounts) in most network areas. We do note, however, that the difference is significantly less compared to a year ago (July 2018).

²⁹ This chart is based on the calculation used for table 3 above

³⁰ These market offers were collected in mid-July 2019.

³¹ Note that other charges such as market fees and ancillary service fees as well as losses have not been accounted for in this bill-stack.

TABLE 4 | Deduction of bill components for selected market offers (including pay on time discounts), average annual bill based on offers taking effect post July 2019 (6,000kWh per annum, single rate)³²

0		- J		(-)	. ,	5
	Retail bill incl. GST^	Retail bill excl. GST	Retail bill excl. GST and NUOS*	Retail bill excl. GST, NUOS and whole- sale^^	Retail bill excl. GST, NUOS, wholesale and "green scheme"	Retail bill excl. GST, NUOS, wholesale, "green scheme" costs and smart meter costs***
Citipower	1,714	1,558	1,073	419	284	203
Powercor	1,808	1,644	1,081	427	292	212
Ausnet	2,045	1,859	1,084	430	295	231
Jemena	1,818	1,653	1,123	470	335	251
UE	1,827	1,661	1,127	473	338	278
EvoEnergy	1,530	1,391	802	156	-61	
Tasnetworks	1,969	1,790	1,054	579	449	
Energex	1,779	1,617	934	468	376	
Ausgrid	1,818	1,653	1,025	377	257	
Endeavour	1,830	1,663	1,024	376	256	
Essential	2,145	1,950	1,032	384	264	
SAPN	2,527	2,298	1,269	304	118	

[^] Based on market offers available post July 2019 (including guaranteed and pay on time discounts) offered by the same retailers included in the analysis of standing/regulated offers (table 3)

Chart 7 below is based on the same calculations presented in table 4 above but shows the various bill components as a percentage of the total bill. Again, we stress that some of the cost components are based on estimates rather than actual, known costs.³⁴

Chart 7 shows that the retail component of bills is smaller for market offers (if customers pay on time and thus receive a discount) compared to standing/regulated offers in most jurisdictions (see chart 6). Furthermore, the retail component is significantly lower in some jurisdictions, most notably South Australia and Victoria, compared to one year ago (July 2018). That said, the size of the retail component of the total market offer bill is still high in some network areas (i.e. Tasnetworks and Energex). As the retail component in the ACT is estimated to be negative, we note that this calculation is based on ActewAGL's market offer which includes a 25% pay on time discount. If customers are unsuccessful in obtaining this discount, however, the retail component of the bill would be similar to that of the standing offer (7%).

^{^^}As per table 1 above.

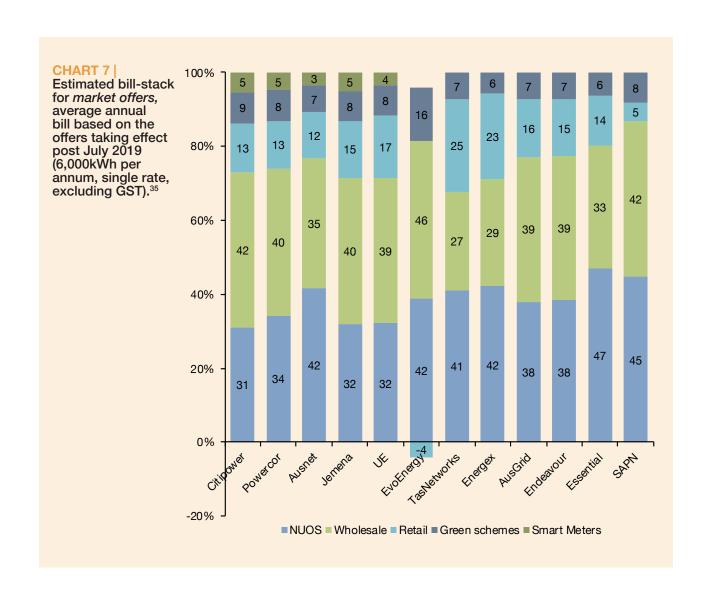
^{**}As per table 2 above

^{***}Based on AER estimated AMI charges for 201933

³² Note that the cost of the smart meter rollout is not accounted for in the NUOS charges due to the AMI Cost Recovery Order-In-Council that ensures that the distributors are able to recover expenditure associated with the AMI program from consumers on a cost pass-through basis.

⁵³ To estimate the impact of the Victorian smart meter rollout on the bill-stack, we used AER's indicative average annual metering bill for 2019. See table 1-2 in AER, *Advanced Metering Infrastructure, Transition charges applications*, Final Decision (December 2016)

³⁴ Cost of retail includes both retail costs and margins (profits).



³⁵ This chart is based on the calculation used for table 4 above

3. Solar offers

This year was the fourth year the Tariff-Tracking project covered offers available to solar customers and compared offers based on both electricity bought and feed-in-tariff (FIT) rates for electricity sold. The online workbooks allow users to compare offers for 3 kW and 1.5 kW capacity systems, based on nominated consumption levels and location (network and urban or non-urban setting). The analysis presented below is based on 3 kW systems in urban locations and the assumptions applied are shown in table 5.

TABLE 5 | Assumptions: Generation capacity and export (%) in capital cities, 3 kW systems³⁶

Capital cities	Annual generation per kW installed	Export rates (%)
Adelaide	1.680 MWh	51.8%
Brisbane	1.736 MWh	53.4%
Melbourne	1.539 MWh	47.4%
Hobart	1.185 MWh	47.4%
Canberra	1.801 MWh	55.1%
Sydney	1.614 MWh	49.9%

Chart 8 shows average annual bills for solar customers (3 kW systems installed) in metropolitan areas using 6,000 kWh (imported as well as generated) per annum.³⁷ It shows that the average annual bills (calculations based on all retailers' solar market offers) are significantly lower than those for non-solar standing and market offer customers analysed in section 1 and 2 above.

³⁶ The export rates and generation capacities (Except for Hobart and Canberra) are based on Melbourne and were used for the analysis presented in a report for the Alternative Technology Association (ATA) by Alviss Consulting (Alviss Consulting, Retail Offers and Market Transparency for New Solar Customers, June 2013). The Tasmanian 1.185 MWh generation capacity is based on small-scale technology certificates (STC) for zone 4. The Export rate is based on Melbourne assumptions and may therefore be slightly higher than the Tasmanian average. The Canberra assumptions are based on non-metropolitan NSW rates and will therefore be somewhat high for ACT housing experiencing overshadowing.

³⁷ Based on average market offer (all retailers) including guaranteed discounts, pay on time discounts, FIT credits and GST. NSW's Essential network is not included as it covers rural NSW only.

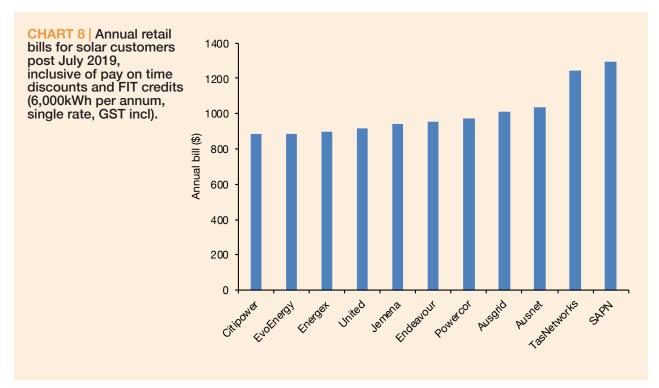


Chart 9 compares annual bills for non-solar customers and solar customers. It shows that the greatest bill difference is in South Australia (\$1,255) while the smallest difference is in Tasmania (\$680).

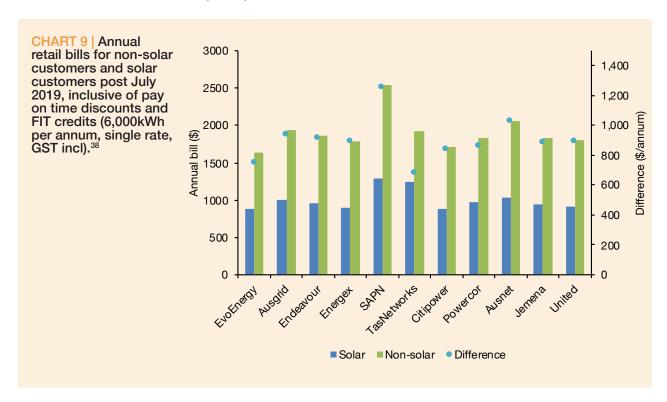
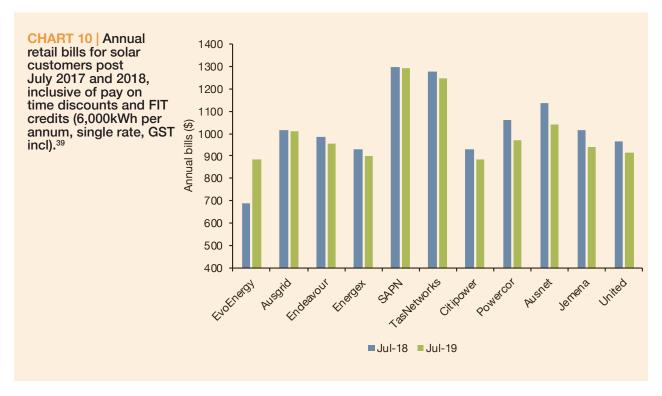


Chart 10 below compares solar bills as of July 2018 to bills as of July 2019. It shows that the annual bills for solar customers in Victoria have decreased the most (approximately by \$50 - \$100, depending on network area) while the decreases were more modest in Tasmania, NSW and Queensland (Energex). In the ACT (EvoEnergy),

³⁸ The average market and solar offer bills in this chart are based on all retailers with an offer in each network area. In section 2 above, on the other hand, market offers were based on selected retailers in order to compare against relevant regulated/standing offers.

however, solar bills have increased by \$200. In South Australia (SAPN), solar bills have remained relatively stable.



The difference in South Australia is partly explained by retailers, on average, offering higher FIT rates compared to other jurisdictions (see table 6 below) but also because solar customers avoid kWh (because of their own generation) that non-solar customers do not. This generation/avoided purchase becomes even more valuable when the tariff applied is an inclining block tariff where the price per kWh increases significantly with increase in overall consumption.

TABLE 6 | Assumptions: Generation capacity and export (%) in capital cities, 3 kW systems

, , ,	
Jurisdiction	Average annual FIT credit (\$)
SA	\$340
ACT	\$240
QLD	\$335
NSW	\$285
Vic	\$285
TAS	\$200

Table 7 below deducts estimated cost components from the annual retail market offer bill (including pay on time discounts) for households with 3kW systems installed and using 6,000kWh per annum post July 2019.⁴⁰ After deducting GST, NUOS costs, wholesale costs, the cost of environmental policies ("green schemes") and the cost of rolling out smart meters (Victoria only), amounts in the final column are negative

³⁹ The average market and solar offer bills in this chart are based on all retailers with an offer in each network area. In section 2 above, on the other hand, market offers were based on selected retailers in order to compare against relevant regulated/standing offers.

⁴⁰ These market offers were collected in mid-July 2019.

in all network areas except Tasmania (Tasnetworks).41 This indicates that there is a significant cross subsidy in the retail component from non-solar households to solar households.

TABLE 7 Deduction of bill components for selected market offers (including pay on time discounts), average annual bill based on offers taking effect post July 2019 (6,000kWh per annum, single rate)42

	Retail bill incl. GST^	Retail bill excl. GST	Retail bill excl. GST and NUOS*	Retail bill excl. GST, NUOS and whole- sale^^	Retail bill excl. GST, NUOS, wholesale and "green scheme"	Retail bill excl. GST, NUOS, wholesale, "green scheme" costs and smart meter costs***
Citipower	852	775	450	61	-2	-101
Powercor	950	864	476	87	7	-73
Ausnet	1,041	946	472	84	3	-61
Jemena	923	839	504	115	34	-50
UE	915	832	504	115	35	-25
EvoEnergy	808	735	338	-48	-177	
Tasnetworks	1,292	1,175	610	283	194	
Energex	850	773	294	16	-40	
Ausgrid	860	782	353	-33	-105	
Endeavour	782	711	276	-111	-182	
SAPN	1,157	1,052	382	-193	-304	

[^] Based on market offers available post July 2019 (including guaranteed and pay on time discounts) offered by the same retailers included in the analysis of standing/regulated offers (table 3)

^{^^}As per table 1 above.

^{**}As per table 2 above

^{***}Based on AER estimated AMI charges for 201943

⁴¹ Note that other charges such as market fees and ancillary service fees as well as losses have not been accounted for in this bill-stack.

⁴² Note that the cost of the smart meter rollout is not accounted for in the NUOS charges due to the AMI Cost Recovery Order-In-Council that ensures that the distributors are able to recover expenditure associated with the AMI program from consumers on a cost pass-through basis.

⁴³ To estimate the impact of the Victorian smart meter rollout on the bill-stack, we used AER's indicative average annual metering bill for 2019. See table 1-2 in AER, Advanced Metering Infrastructure, Transition charges applications, Final Decision (December 2016)

4. Impact of DMO and VDO

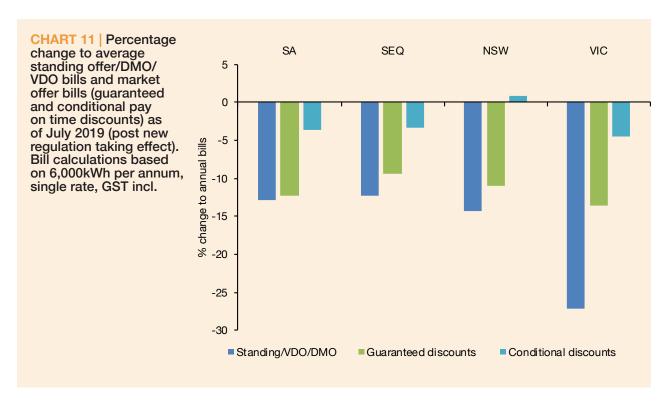
The re-regulation of the retail markets in NSW, South East Queensland, South Australia and Victoria have had an immediate impact on price dispersion and market offer features such as discounting. This section looks at price dispersion in relation to the regulated offers and market offers, price dispersion between the "big 3" retailers and changes to retailers discounting, as well as base rates.

4.1 Price dispersion – regulated vs. market offers

This section compares the regulated DMO/VDO bills to market offer bills including guaranteed discounts as well as conditional discounts. It also shows changes to standing and market offers as the new regulations took effect.

Chart 11 below shows that standing offers, on average, decreased by 13% in South Australia, 12% in South East Queensland, 14% in NSW and 27% in Victoria after the DMO/VDO took effect.⁴⁴ The reduction to average market offer bills, however, has been lower, especially for bills inclusive of conditional pay on time discounts. In NSW, the average market offer bill inclusive of conditional pay on time discounts has increased by 1% while it reduced in South Australia (4%), South East Queensland (3%) and Victoria (4%).

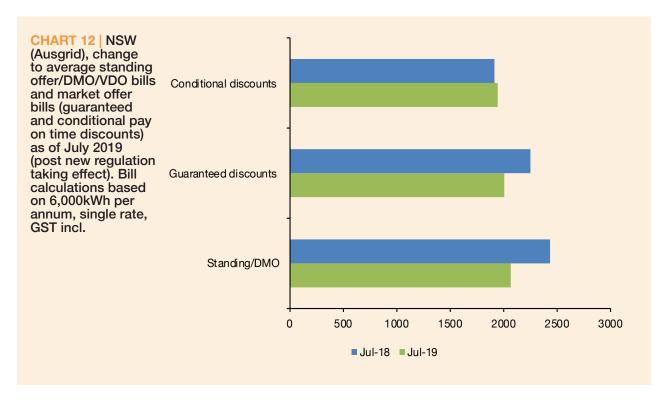
This means that customers previously on highly discounted market offers may not experience the price reduction that standing offer customers have post July 2019.

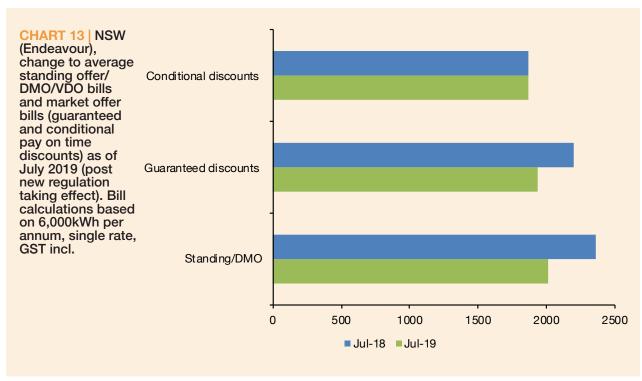


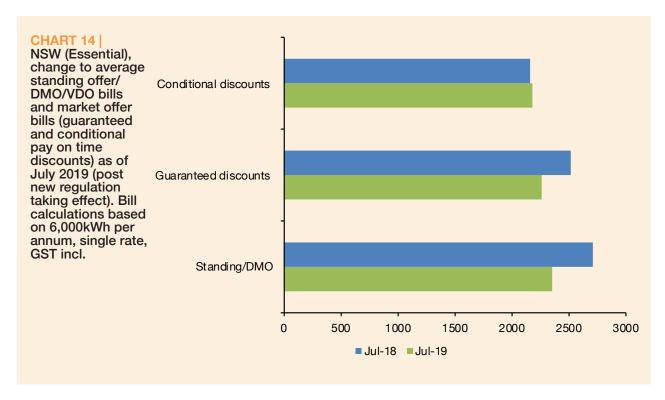
⁴⁴ The chart compares average bills (across all retailers/network areas) for household using 6,000 kWh/annum as of July 2019 to the bills from the previous data collection (January 2019 for Victoria and July 2018 for other jurisdictions) .

New South Wales

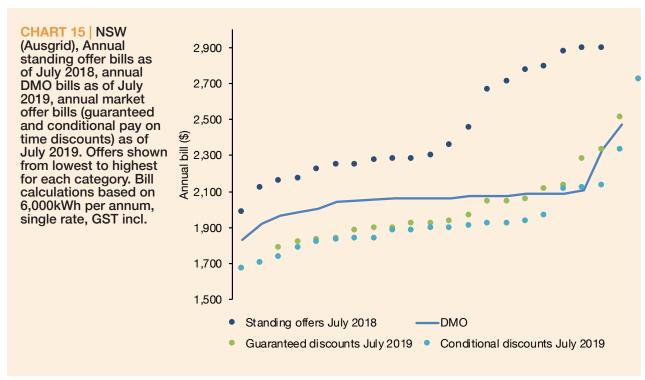
In NSW, the average DMO bill for households using 6,000 kWh per annum is 13-15% less (depending on network area) than the average standing offer bill in July 2018. For market offers inclusive of conditional pay on time discounts, however, the average bill has increased by 1% in Ausgrid and Essential while it has remained unchanged in Endeavour. See charts 12 - 14.

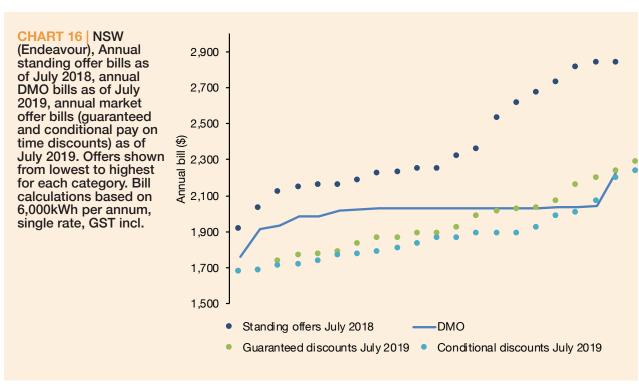


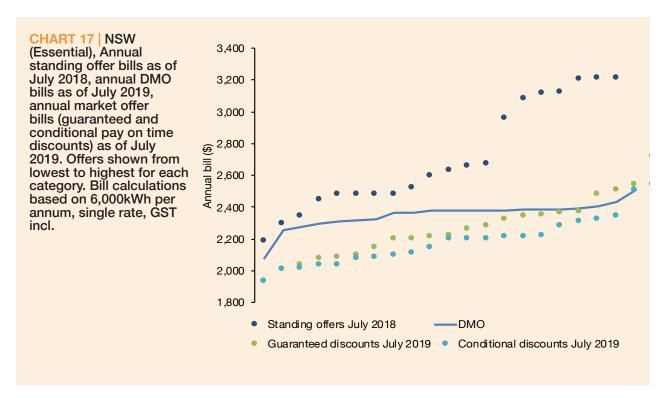




Charts 15 - 17 below show standing offers as of July 2018, DMO offers as of July 2019, market offers inclusive of guaranteed discounts as of July 2019 and market offers inclusive of conditional pay on time discounts as of July 2019 for each network area. They show that the vast majority of the DMO offers produce annual bills that are lower than the best standing offers as of July 2018. Furthermore, they show that as of July 2019, the best value offers in each network area are market offers (both with guaranteed and conditional discounts) and not DMO offers. That said, some market offers produce significantly higher bills than the best DMO in each of the network areas. In Ausgrid, households on the worst market offer would be \$885 per annum better off on the best DMO, in Endeavour they would be \$515 better off and in the Essential network, the difference between the worst market offer and the best DMO is around \$640.







Queensland

In Queensland's Energex network, the average DMO bill for households using 6,000 kWh per annum is 12% less than the average standing offer bill in July 2018. For market offers inclusive of conditional pay on time discounts, however, the average bill has decreased by 3% only. See chart 18.

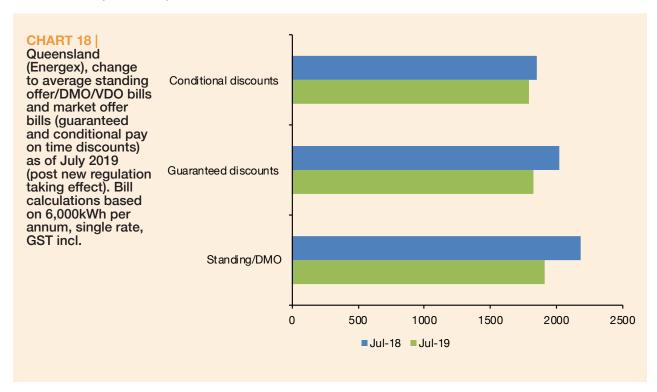
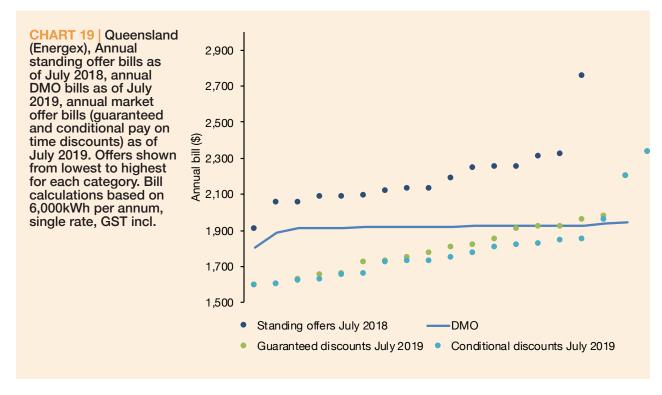


Chart 19 below shows that all but one of the DMO offers produce annual bills that are lower than the best standing offers as of July 2018. Furthermore, it shows that as of July 2019, the best value offers are market offers (both with guaranteed and conditional discounts) and not DMO offers. However, as in NSW, some market offers produce

significantly higher bills than the best DMO. Households on the worst market offer would be \$530 per annum better off on the best DMO. Finally, we note that the price dispersion is significantly lower for the DMO compared to last year's standing offers.



South Australia

In South Australia, the average DMO bill for households using 6,000 kWh per annum is 13% less than the average standing offer bill in July 2018. For market offers inclusive of conditional pay on time discounts, however, the average bill has decreased by 4% only. See chart 20.

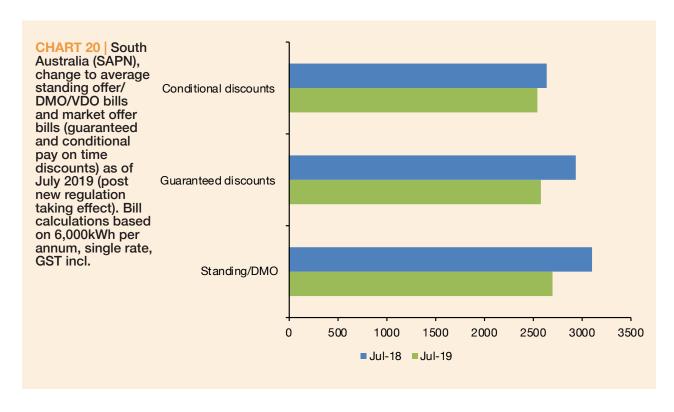
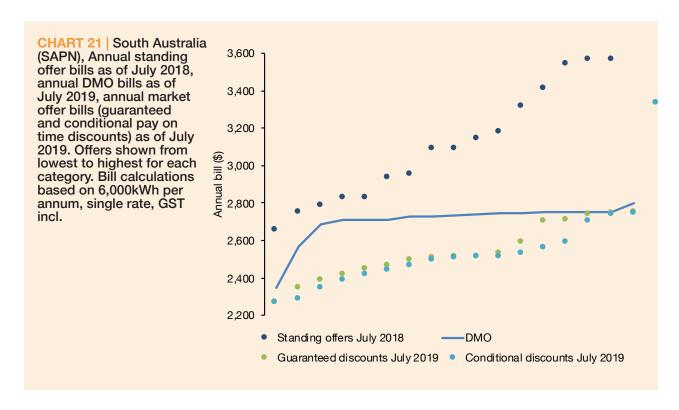
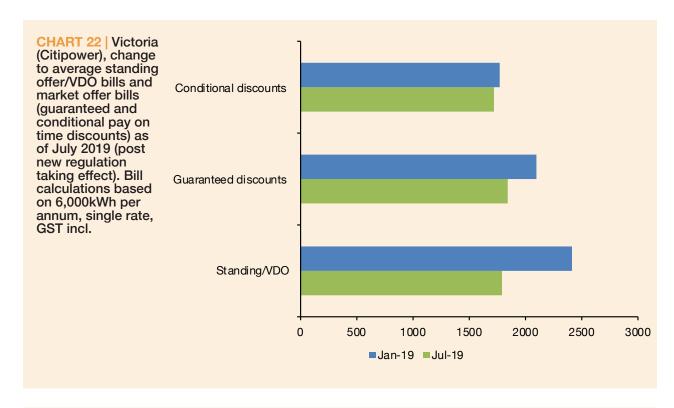


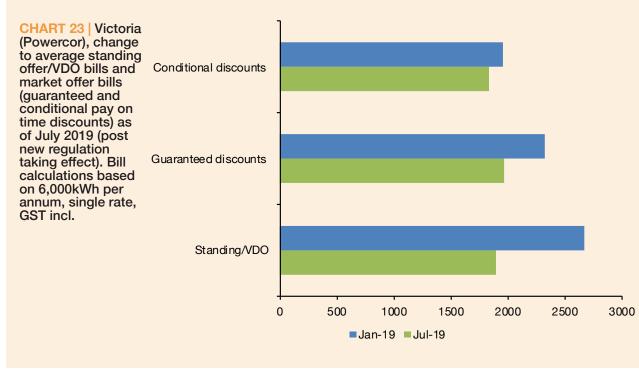
Chart 21 below shows that the vast majority of the DMO offers produce annual bills that are lower than the best standing offers as of July 2018. Furthermore, it shows that as of July 2019, the best value offers are market offers (both with guaranteed and conditional discounts) and not DMO offers. However, as in NSW and Queensland, some market offers produce significantly higher bills than the best DMO. Households on the worst market offer would be \$990 per annum better off on the best DMO. Finally, we note that the price dispersion is significantly lower for the DMO compared to last year's standing offers in South Australia as well.

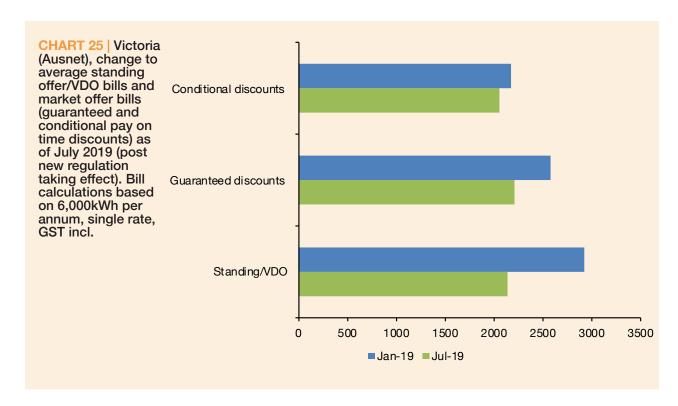


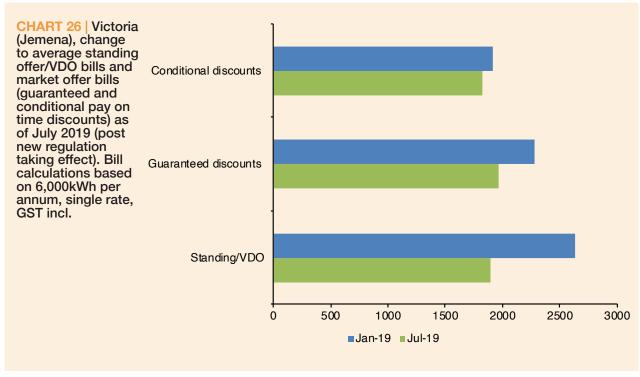
Victoria

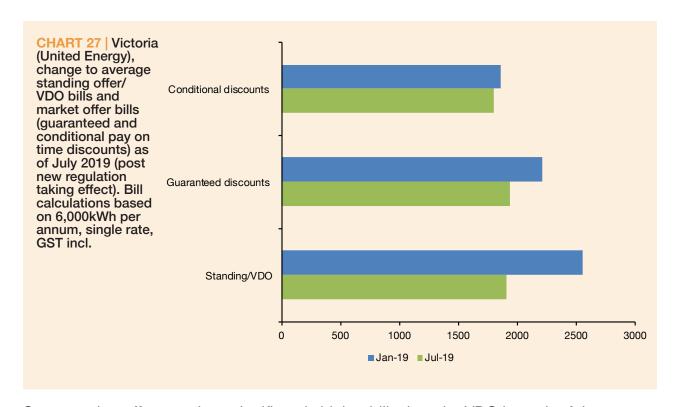
In Victoria, the VDO bill for households using 6,000 kWh per annum is 25-29% less (depending on network area) than the average standing offer bill in January 2019. For market offers inclusive of conditional pay on time discounts, however, the average bill has decreased by 3% in Citipower and United Energy, 5% in Ausnet and Jemena, and 7% in Powercor. See charts 22 - 27.





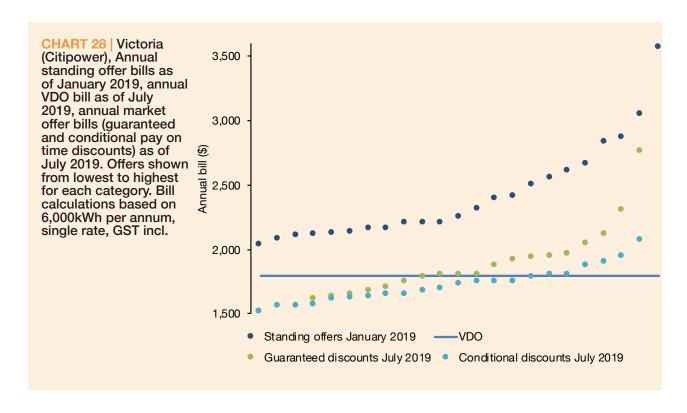


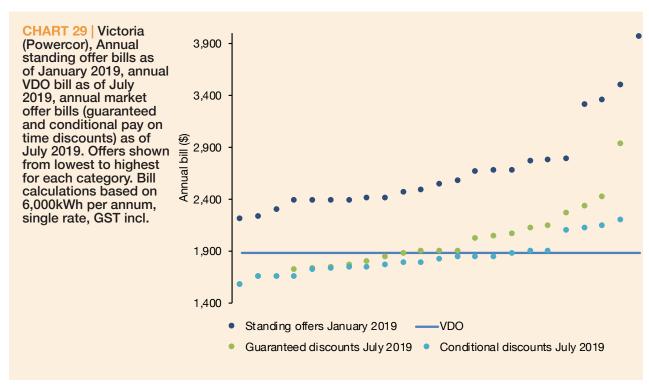


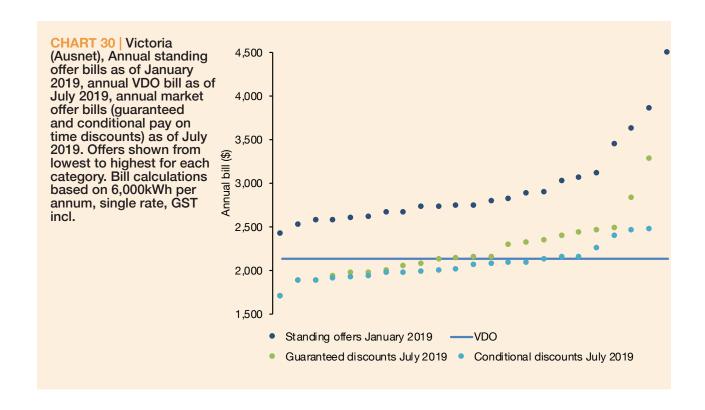


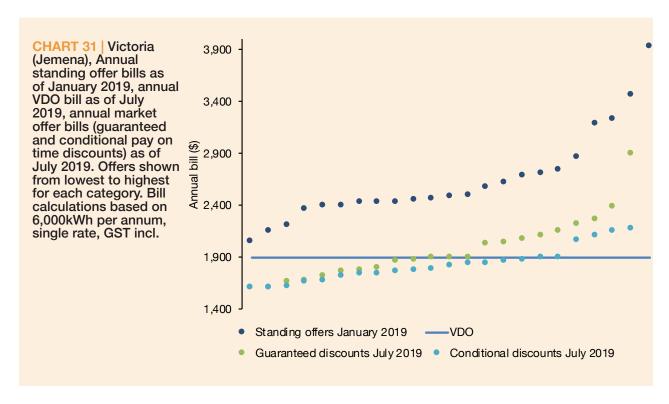
Some market offers produce significantly higher bills than the VDO in each of the network areas. In Citipower, households on the worst market offer would be \$960 per annum better off on the VDO, in Powercor and United Energy they would be \$1,030 better off, in the Ausnet network they would be \$1,140 better off and in the Jemena network the difference is \$1,000. That said, the best value offers in each network area are market offers (both with guaranteed and conditional discounts) and not the VDO.

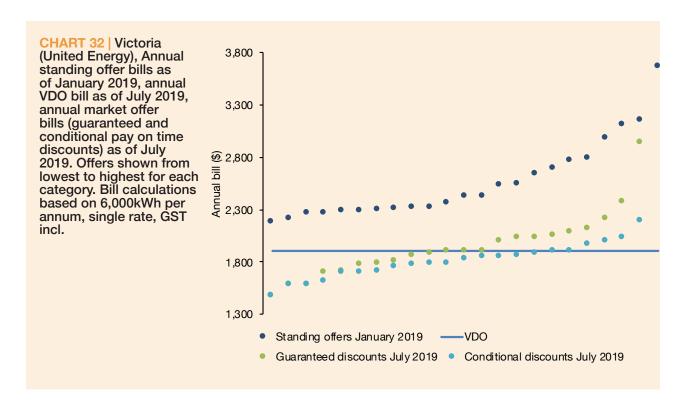
In all five network areas, around half of the market offers inclusive of guaranteed discounts produce annual bills that are lower than the VDO while approximately three quarters of market offers inclusive of conditional pay on time discounts do. See charts 28 - 32.











4.2 Price dispersion - the "big three"

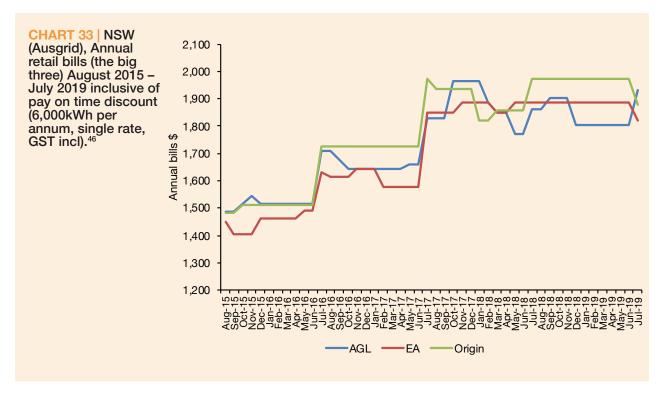
This section analyses monthly changes to the "big three" retailers' (AGL, Energy Australia and Origin) electricity market offers and maximum price dispersion from August 2015 to July 2019 in NSW, Queensland, South Australia and Victoria.⁴⁵ It shows that the difference between the big three retailers' offers is remarkably low in some jurisdictions and/or months.

Over the last four years, the maximum difference between the annual bills produced by the "big three" has been as high as \$165 in NSW (Ausgrid), \$185 in Queensland (Energex), \$265 in Victoria (Citipower) and \$385 in South Australia. In both Queensland and South Australia the maximum price-spread occurred in July 2018. In Victoria the maximum price-spread of \$265 occurred in January 2019 while the NSW maximum was as recent as June 2019.

New South Wales

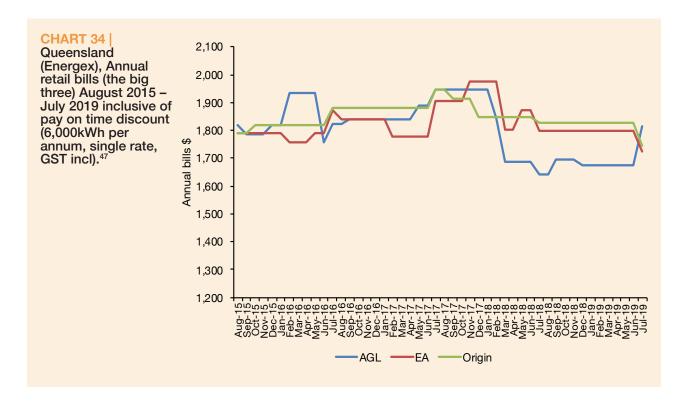
In NSW's Ausgrid network area, the average maximum price-spread over the last year was approximately \$135. The difference was lowest in September – November 2018 (\$85) and highest in December 2018 – June 2019 (approximately \$165). As of July 2019 the difference was around \$115.

⁴⁵ In NSW the comparison is based on offers in the Ausgrid network and in Victoria it is based on offers available in Citipower's network. The offers compared are Energy Australia's 'Flexi Saver', AGL's 'Savers' and Origin's 'Daily Saver Plus' until it was discontinued in October 2015 and Origin's 'Saver' product was introduced. .



Queensland

In Queensland's Energex network area, the average maximum price-spread over the last year was around \$145. The difference was lowest in July 2019 (approximately \$90) and highest in August 2018 (approximately \$185).

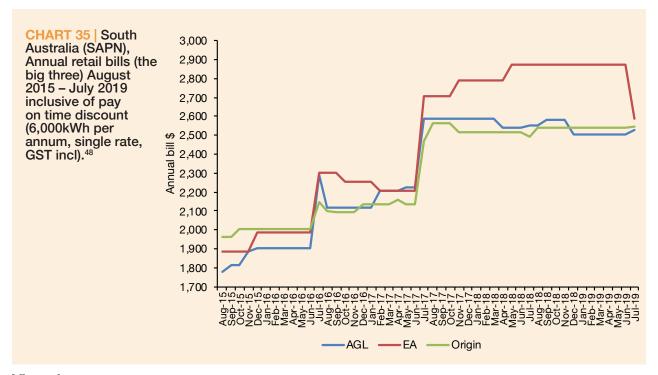


⁴⁶ Note that as of July 2019, discounts are guaranteed off bill. Prior to July 2019, discounts were pay-on-time discounts off usage.

⁴⁷ Ibid.

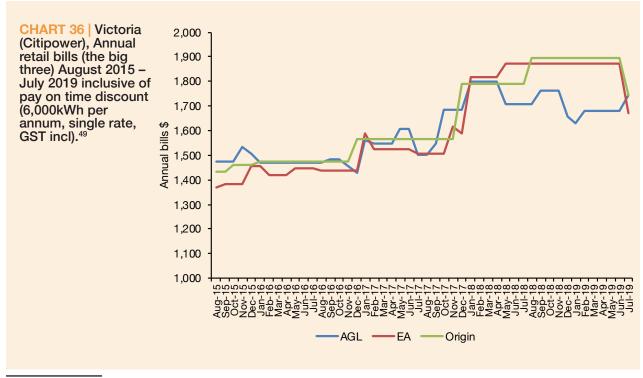
South Australia

In South Australia, the average maximum price-spread over the last year was \$335. The difference was lowest in July 2019 (approximately \$60) and highest in December 2018 – June 2019 (approximately \$370).



Victoria

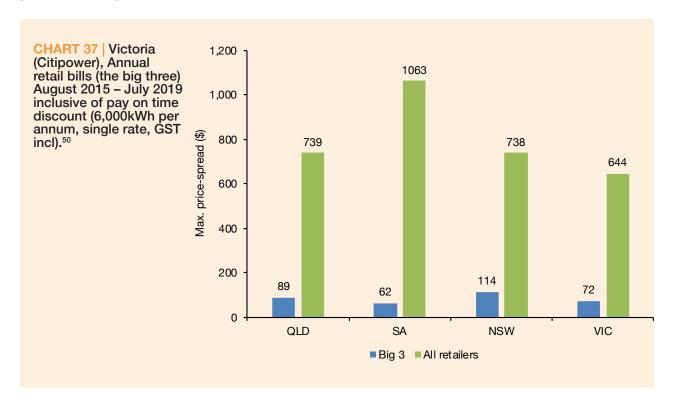
In Victoria's Citipower network, the average maximum price-spread over the last year was approximately \$185. The difference was lowest in July 2019 (around \$70) and highest in January 2019 (approximately \$265).



⁴⁸ Note that as of July 2019, discounts are guaranteed off bill. Prior to July 2019, discounts were pay-on-time discounts off usage.

⁴⁹ Ibid

The above charts have analysed price-spread for the "big three" retailers only. Chart 37 below compares the maximum price-spread for all retailers to that of the "big three" for each jurisdiction as of July 2019, and it shows that the price-spread between the "big three" is much lower than the market overall. Moreover, it shows that the price-spread is greatest in South Australia based on all retailers and greatest for the "big three" in NSW. The lack of price dispersion between the "big three" retailers also highlights the importance of having 2nd tier retailers that can put downward pressure on prices.



4.3 Changes to market offer base rates and discounts

As mentioned above, many retailers have moved away from offering conditional discounts after the DMO/VDO took effect. In NSW only five retailers offer conditional pay on time (POT) discounts as of July 2019 compared to 13 in July 2018. In South East Queensland, three retailers offer these discounts as of July 2019 (down from 9 in the previous year) and in South Australia two retailers still offer conditional discounts compared to 11 previously. In Victoria, the VDO has had a similar impact and eight retailers offer conditional discounts as of July 2019 compared to 14 in January 2019.

Tables 8 to 11 below show changes to additional discounts (guaranteed as well as conditional pay on time discounts) and percentage changes to base rates. In most cases the base rates have reduced where discounts have reduced or been removed.

⁵⁰ Based on offers in the Energex network in Queensland, SAPN in South Australia, Ausgrid in NSW and Citipower in Victoria.

TABLE 8 | NSW electricity market offers⁵¹

Retailer	July 2018 discount	July 2019 discount	% change to average base rate^
Energy Locals	No	No	14%
AGL	20% POT off usage	7% guaranteed off bill	-7%
Alinta Energy	27% POT off usage	No	-19%
Click Energy	35% POT off bill	No	-33%
Commander	20% POT off usage	No	-25%
CovaU	25% POT off bill	25% POT off bill	4%
Diamond Energy	7% POT off bill	7% POT off bill	0%
Dodo Power & Gas	No	No	-22%
EnergyAustralia	28% - 32% guaranteed off usage^^	13% guaranteed off bill	-10%
Mojo Power	No	No	0%
Momentum Energy	No	No	-19%
Origin Energy	13% POT off usage	10% guaranteed off bill	-4%
Powerdirect	25% POT off usage	12% guaranteed off bill	-7%
Powershop	12% POT off bill	15% POT off bill	0%
Red Energy	10% POT off bill	10% POT off bill	1%
Simply Energy	18% POT off usage	No	-8%
1st Energy	22% POT off usage	7% POT off bill	-16%
Amaysim	40% POT of bill	No	-27%

[^] Average change (across all network areas) in base rates (supply and usage charges) from July 2018 to July 2019 for households using 6,000 kWh per annum, single rate

TABLE 9 | QLD electricity market offers⁵²

Retailer	July 2018 discount	July 2019 discount	% change to average base rate^
AGL	26% POT off usage	6% guaranteed off bill	-7%
Click Energy	15% POT off bill	No	-27%
Diamond Energy	7% POT off bill	7% POT off bill	0%
Dodo Power & Gas	No	No	-19%
EnergyAustralia	28% guaranteed off usage	11% guaranteed off bill	-9%
Energy Locals	No	No	-3%

⁵¹ Note that only retailers that had published market offers both years have been included in this comparison. Also, as most retailers have renamed their market offers since 1 July 2019 (e.g. Energy Locals' offer is now 'Super Saver' instead of 'Simple Saver', AGL's offer is 'Smart Saver' instead of 'Savers', EnergyAustralia's offer is now 'Total Plan Home' instead of 'Anytime Saver') the comparison is based on the retailers' "best but basic" market offer from each year. By taking a "best but basic" approach we do not include offer features such as direct debit discounts, fixed price products, dual fuel products etc.

^{^^28%} in Ausnet and Endeavour and 32% in Essential.

products, dual fuel products etc.

52 Note that only retailers that had published market offers both years have been included in this comparison. Also, as most retailers have renamed their market offers since 1 July 2019 (e.g. AGL's offer is now 'Smart Saver' instead of 'Savers', EnergyAustralia's offer is now 'Total Plan Home' instead of 'Anytime Saver', Origin's offer is now 'Flexi' instead of 'Bill Saver') the comparison is based on the retailers' "best but basic" market offer from each year. By taking a "best but basic" approach we do not include offer features such as direct debit discounts, fixed price products, dual fuel products etc.

Retailer	July 2018 discount	July 2019 discount	% change to average base rate^
Origin Energy	12% guaranteed off bill	9% guaranteed off bill	-6%
Powerdirect	24% POT off usage	11% guaranteed off bill	-7%
Simply Energy	18% POT off usage	No	-17%
Mojo Power	No	No	0%
Powershop	12% POT off bill	15% POT off bill	0%
Red Energy	10% POT off bill	10% POT off bill	-1%
Amaysim	5% POT off bill	No	-13%
Alinta Energy	28% POT off usage	No	-23%
Q Energy	No	No	1%

[^] Change (Energex network) in base rates (supply and usage charges) from July 2018 to July 2019 for households using 6,000 kWh per annum, single rate

TABLE 11 | SA electricity market offers⁵³

Retailer	July 2018 discount	July 2019 discount	% change to average base rate^
AGL	11% POT off usage	8% guaranteed off bill	-3%
Alinta Energy	25% POT off usage	No	-20%
Click Energy	25% POT off bill	No	-24%
Commander	20% POT off usage	No	-19%
Diamond Energy	7% POT off bill	7% POT off bill	0%
Dodo Power & Gas	No	No	-22%
EnergyAustralia	20% guaranteed off usage	6% guaranteed off bill	-14%
Lumo Energy	15% POT off bill	No	-15%
Momentum Energy	No	No	-15%
Origin Energy	10% POT off usage	12% guaranteed off bill	1%
Powerdirect	17% POT off usage	12% guaranteed off bill	-3%
Red Energy	10% POT off bill	10% POT off bill	-6%
Simply Energy	18% POT off usage	No	-7%
Amaysim	9% POT off bill	No	-23%

[^] Change (SAPN network) in base rates (supply and usage charges) from July 2018 to July 2019 for households using 6,000 kWh per annum, single rate

⁵³ Note that only retailers that had published market offers both years have been included in this comparison. Also, as most retailers have renamed their market offers since 1 July 2019 (e.g. AGL's offer is now 'Smart Saver' instead of 'Savers', EnergyAustralia's offer is now 'Total Plan Home' instead of 'Anytime Saver', Origin's offer is now 'Flexi' instead of 'Bill Saver') the comparison is based on the retailers' "best but basic" market offer from each year. By taking a "best but basic" approach we do not include offer features such as direct debit discounts, fixed price products, dual fuel products etc.

TABLE 12 | VIC electricity market offers54

Retailer	July 2018 discount	July 2019 discount	% change to average base rate^
1st Energy	20% POT off usage	15% POT off usage	-3%
AGL	33% POT off usage	No	-21%
Alinta Energy	30% guaranteed off usage	No	-20%
Click Energy	27% POT off bill	No	-19%
Commander	20% POT off usage	No	-34%
CovaU	30% POT off usage	30% POT off usage	6%
Diamond Energy	7% POT off bill	7% POT off bill	0%
Dodo Power & Gas	No	No	-34%*
EnergyAustralia	32% guaranteed off usage	7% guaranteed off bill	-24%
GloBird	34% POT off bill	32% POT off bill	-19%
Lumo Energy	3% POT off bill	3% POT off bill	2%
Momentum Energy	No	No	-18%
Origin Energy	20% POT off usage	3% guaranteed off usage	-22%
Tango Energy	No	No	7%
Powerdirect	41% POT off usage	No	-25%
Powershop	20% POT off bill	23% POT off bill	0%
Red Energy	10% POT off bill	10% POT off bill	3%
Simply Energy	40% POT off usage	No	-20%
Sumo Power	43% POT off usage	6% POT off usage	-23%
Amaysim	No	No	0%

[^] Average change (across all network areas) in base rates (supply and usage charges) from January 2019 to July 2019 for households using 6,000 kWh per annum, single rate

^{*} Dodo previously offered a discount conditional upon customers paying bills by direct debit. This discount is no longer available, and the base rates have thus been reduced but the current offer still requires customers to pay by direct debit.

⁵⁴ Note that only retailers that had published market offers both years have been included in this comparison. Also, as most retailers have renamed their market offers since 1 July 2019 (e.g. AGL's offer is now 'Smart Saver' instead of 'Savers', Alinta's offer is 'No Fuss' instead of 'Fair Saver') the comparison is based on the retailers' "best but basic" market offer from each year. By taking a "best but basic" approach we do not include offer features such as direct debit discounts, fixed price products, dual fuel products etc.

5. Final observations

It is evident that the introduction of price regulation on 1 July 2019 has reduced electricity prices in the relevant jurisdictions (NSW, Victoria, South East Queensland and South Australia). The bill reductions would have been significant for many households previously on a standing offer. It is, however, important to note that relatively few customers were on standing offers compared to market offers in these retail markets. In NSW and South East Queensland, around 13-14% of customers were on standing offers prior to the DMO taking effect and in South Australia 9% of customers were on standing offers.⁵⁵ In Victoria, the ESC estimated that approximately 5% of residential customers were on standing offers prior to the VDO taking effect.⁵⁶ For many market offer customers the impact of the DMO/VDO on their bills post 1 July 2019 would have been negligible.

Policy makers and regulators should now focus on delivering overall benefits, as well as minimising detriments, to all energy consumers rather than initiatives that are designed to help specific groups. In order to do so, regulators must ensure that competitive pressures play their role in driving market efficiencies. Market transparency, accessible and accurate information and low search costs are integral to competitive markets.

The introduction of the DMO and VDO was also accompanied by other regulatory changes. In Victoria, for example, retailers are now required to inform customers in their bills of their best offer once every three months. This was introduced so customers would be up to date about whether they are on their retailer's best offer for their situation.⁵⁷ Another Victorian initiative is the requirement for retailers to have fact sheets that estimate how much the plan will cost small, medium and high consumption households per annum. The consumption levels used for these estimates vary between climate zones.

Additionally, all prices and bill calculations (in all four jurisdictions) must be presented inclusive of GST post 1 July 2019.

While the intent of these regulatory changes may be beneficial to consumers the execution is equally important in order to actually deliver these benefits.

In relation to the retailer obligation to inform customers of more suitable plans, for example, it is crucial that customers can easily obtain information about the suggested plan and readily switch if they deem it appropriate. As such, relatively trivial matters such as broken web links and poor website design can easily become a barrier to customers acting upon this information. Origin Energy, for example, included a bill message to one of its customers that they can save \$90 per annum by switching to a different plan (see screenshot 1).

⁵⁵ AER, Schedule 2, Retail Performance Data, Quarter 3 2018-19

⁵⁶ ESC, Victorian Default Offer to apply from 1 July 2019, Draft Advice, March 2019

⁵⁷ See https://www.esc.vic.gov.au/electricity-and-gas/information-consumers/getting-best-energy-offer

Could you save money on another plan?

Based on your past usage, our Origin Max Saver plan may cost you up to \$90.11 less per year than your current plan.

Cost estimated at this bill's issue date. Plans are subject to change at any time.

Switch to this plan at

originenergy.com.au/plans. If our plans have changed, you can check out what else is available on our website.

Screenshot 1

An annual saving of \$90 by clicking on a link should be an incentive to switch due to the potentially low search costs this involves. However, when the customer clicked on the offer on <u>originenergy.com.au/plans</u> website they were requested to search their postcode again and upon doing so they received the following message (screenshot 2).

Screenshot 2

Sorry, looks like no plans are returned for this postcode. Please check the postcode or enter your address instead to see our energy plans.

The customer therefore decided to enter their address instead, but this only resulted in a slightly different message (screenshot 3).

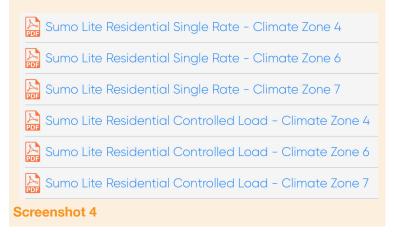
Sorry, looks like we can't help you at this time. Please call us on 13 24 61 to talk about energy plans for your address.

Screenshot 3

By this stage the customer gave up and continued with the same plan despite Origin Energy having informed them that a different offer would save them \$90 per annum.

In relation to the requirement for retailer fact sheets to include an estimated annual bill for low, medium and high consumption households in each climate zone, retailers' websites have to include a postcode search in order for customers to access fact

sheets relevant to them. If there is no postcode search involved customers may have to identify their own climate zone in order to determine which fact sheet is relevant to them. See for example screenshot 4 from Sumo's website showing offers for the Victorian Powercor network.



Other retailers, such as Momentum, do not estimate bills based on various climate zones. Momentum's website simply lists offers by network and while the fact sheets state that the estimated costs are "based on typical usage in your postcode", the same consumption levels are applied to all of the postcodes (approximately 300) in the large Powercor network.⁵⁸ For a large household (4 or more people) in northern Victoria where there are hot dry summers and cool winters (climate zone 4), Momentum's bill estimate for their offer is \$1,800 per annum while Sumo estimates a much higher bill of \$2,460 per annum.⁵⁹ Momentum's bill however is based on a large household using 5,658 kWh per annum while Sumo's is based on a large household using 8,395 kWh per annum.⁶⁰ If Momentum had used the same consumption level as Sumo, however, its bill estimate would have been very similar to that of Sumo's.

Making postcode searches a necessity in order for consumers to obtain fact sheets also adds another level of complexity in the search process that can easily create errors (some postcodes, for example, are shared between networks). We therefore question whether the inclusion of the bill estimates on the fact sheets actually can cause more confusion, and be potentially misleading, rather than useful to consumers.

A more crucial improvement would have been to make sure that retailers clearly name and list the various offers. In our view, references pertaining to network metering codes are not something most consumers will understand. Momentum's Smile Power Flexi offers in Ausgrid (see screenshot 5 below), for example, make no reference to terms such as single rate, controlled load or time of use tariffs. Instead, they list the Ausgrid metering code and the offer ID generated by Energy Made Easy.

Other retailers, such as Origin Energy, do not even try to make the different metering types identifiable. A search on

Smile Power Flexi

- Ausgrid Smile Power Flexi_EA010 MOM992717MR
- Ausgrid Smile Power Flexi_EA010EA030 MOM992720MR
- Ausgrid Smile Power Flexi_EA010EA040 MOM992723MR
- Ausgrid Smile Power Flexi_EA011 MOM992934MR
- Ausgrid Smile Power Flexi_EA011EA030 MOM992935MR
- Ausgrid Smile Power Flexi_EA011EA040 MOM992936MR
- Ausgrid Smile Power Flexi_EA025 MOM992937MR
- Ausgrid Smile Power Flexi_EA025EA030 MOM992938MR
- Ausgrid Smile Power Flexi_EA025EA040 MOM992939MR
- Ausgrid Smile Power Flexi_EA111 MOM993302MR
- Ausgrid Smile Power Flexi_EA115 MOM993305MR
- Ausgrid Smile Power Flexi_EA116 MOM993308MR

Screenshot 5

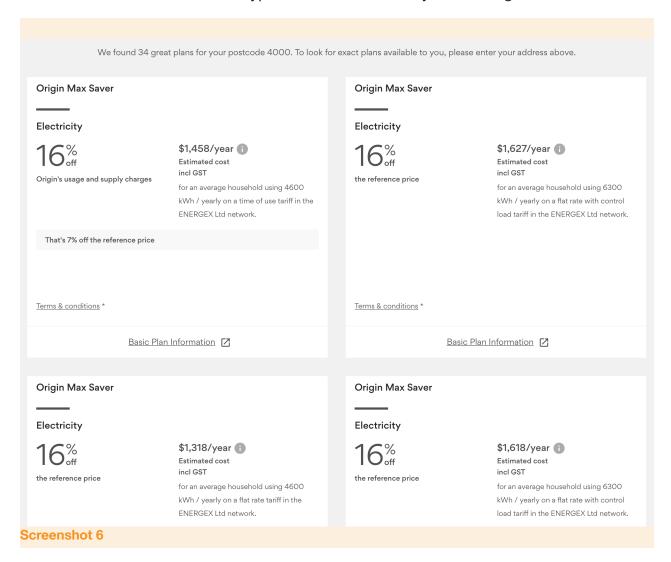
the Brisbane postcode 4000, for example, simply throws up 34 plans (see screenshot

⁵⁸ See, for example, Momentum's fact sheet at https://www.momentumenergy.com.au/docs/default-source/price- sheets/Elec-RESI-Powercor-Smile-Power-Flexi D2-MOM119922MR.pdf

⁵⁹ Both bill estimates are based on the single rate tariff

⁶⁰ See fact sheets at https://sumo-epfs.s3-ap-southeast-2.amazonaws.com/vefs/Victorian_Energy_Fact_Sheet_Description SPA116054MR Electricity CZ 4.pdf and https://www.momentumenergy.com.au/docs/default-source/price-sheets/ Elec-RESI-Powercor-Smile-Power-Flexi D1-MOM120038MR.pdf

6 below) and a potential consumer would have to click on the link to the "basic plan information" and then re-enter their postcode on the Energy Made Easy website just to find out whether this is a meter type relevant to what they are looking for.⁶¹



As all fact sheets/product information statements are now GST inclusive it can be difficult to ascertain whether additional discounts are applied to bills/usage charges excluding GST or including GST. Most retailers tend to apply discounts to the exclusive amount while some appear to apply them to the inclusive amount. In screenshot 7 Powershop appears to apply its discount to bill inclusive of GST. In screenshot 8 Energy Australia states that the discount is applied to the charges excluding GST but the header (top right) states "incl. GST". The AER's product information statement for Energy Australia's offer in NSW (screenshot 9), however, makes it clear that it is applied to charges excluding GST. In our view, this confusion is completely unnecessary after having implemented major reforms. The regulators should simply have stipulated whether discounts are to be applied to amounts including or excluding GST rather than requiring retailers to make confusing statements.

⁶¹ We note that the first offer listed turned out to me a time of use tariff and that a very low proportion of Brisbane households are on this tariff type.

Conditional discounts

(incl. GST)

Mega Pack

Percentage of bill amount: 23.17%

You'll have access to up to a 23.2% discount if you buy specials (an average of 9% off the Victorian Default Offer) - see powershop.com.au/help for more info.

Screenshot 7

Guaranteed discounts

(incl. GST)

Guaranteed Whole of Bill Discount

Percentage of bill amount: 6.00%

Guaranteed total energy bill discount. Discount applies to GST exclusive usage and supply charges, and not to fees and other charges such as late payment fees or Greenpower

Screenshot 8

Discounts

Discounts only apply during the benefit period

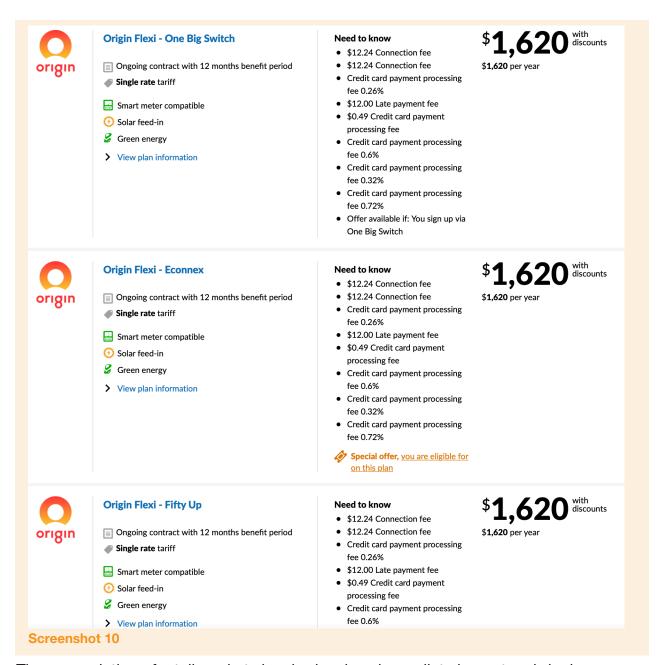
Guaranteed discount on total bill

13%

Guaranteed. Discount applies to GST exclusive usage and supply charges, and not to fees and other charges such as late payment fees or Greenpower.

Screenshot 9

There may be a view that accessibility and presentation on individual retailers' website are less important as consumers can access the AER's Energy Made Easy website or the Victorian Government's energy compare website. However, many consumers are unlikely to be aware of these websites and the requirement for retailers to be transparent and ensure their offers are easily accessible should therefore be a priority. We are also confused about Energy Made Easy's decision to include retail offers sold by third parties on the Energy Made Easy website. A search for Origin Energy offers in Sydney (postcode 2000), for example, shows a long list of 'Origin Max Saver' offers available from switching sites such as One Big Switch, Econnex, Fifty Up, Energy Watch, Electricity Wizard, iSelect, Split It, Compare & Connect, Compare the Market and CIMET before it lists Origin's own offer (see screenshot 10 below). The estimated bill is exactly the same whether a person sign-up via Origin Energy or one of the switching sites and, in our view, this practise makes the Energy Made Easy site more confusing and difficult to navigate without providing any tangible benefits to consumers.



The re-regulation of retail markets has had a clear, immediate impact on bringing down standing offer prices. It has also resulted in fewer offers being available, fewer conditional discounts being offered and a reduction in price dispersion. The impact on prices, price dispersion, offer features and conditions in the medium to longer term, however, remains to be seen. We will continue to monitor market developments and outcomes for consumers and we strongly recommend that regulators continue to address issues pertaining to lack of transparency as well as confusing, or misleading, offerings. If regulators now change focus and take a "done and dusted" approach to electricity retail markets, the outcomes for consumers could quickly deteriorate.

In addition, we seek clarity around the interplay between these recent reforms and Distributed Energy Resources. As shown in section 3 of this report, non-solar households clearly subsidise solar households. The DMO and the VDO have improved outcomes for yesterday's losers (households on standing offers) but a vision for how to address inequities between tomorrow's winners and losers is still needed.

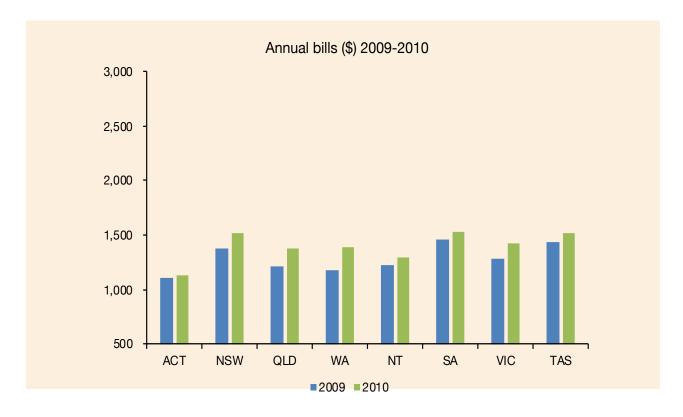
Ten years of Tariff-Tracking data and key changes

The data for the Tariff-Tracking project goes back to 2009 and this means we now have 10 years of Tariff-Tracking data. This appendix looks at electricity price changes⁶² over this period as well as some key events and developments that have had an impact on prices. We have also developed a web application where price changes can be explored in more detail. The web application is available at: http://www.alvissconsulting.com/10-years-tariff-tracking

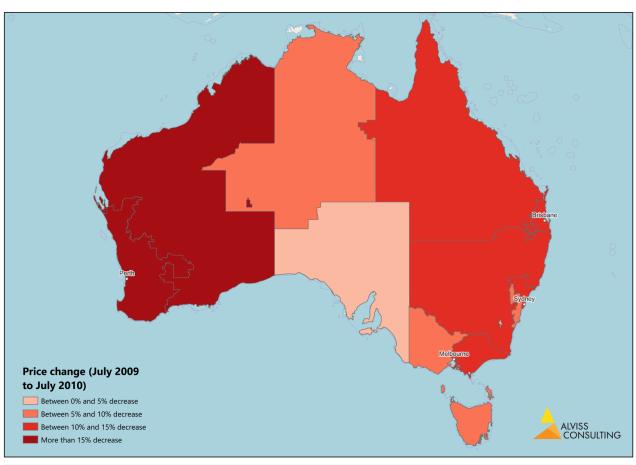
July 2009 to July 2010

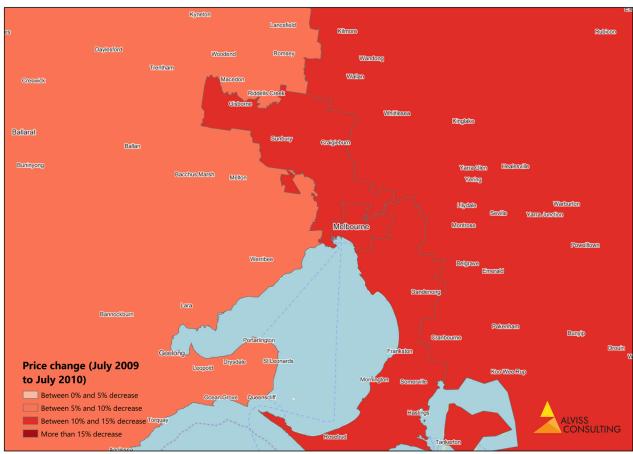
Between July 2009 and July 2010, electricity prices increased across Australia. The largest increase occurred in Western Australia's Horizon Power and Western Power networks, where electricity prices increased by 18%, on average. Prices in Queensland's Energex and Ergon networks also increased by 13%. In Victoria, prices increased the least in the Powercor network (less than 10%) and increased the most in the Ausnet network (12%).

In January 2009, Victoria became the first jurisdiction to deregulate the electricity retail market. The Victorian Government mandated smart meter rollout (and associated costs to consumers) also began in 2019.



⁶² Annual bills were calculated as the average electricity bill for each network area, based on the electricity offers available as of July each year (for households using 6,000 kWh per annum, single rate, including GST and excluding any additional discounts). Bill calculations area based on average market offers except for the following years when they are based on regulated/standing offers: VIC (2009), NSW (2009, 2010), SA (2009-2011), QLD (2009-2011), ACT (2009-2012), TAS (2009-2018), NT (2009-current), WA (2009-current). All price changes are nominal.

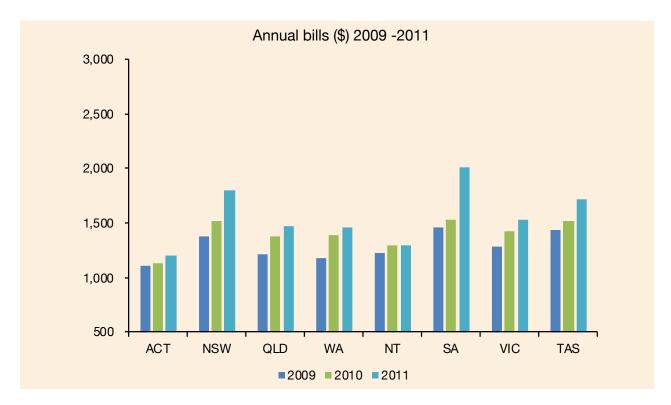


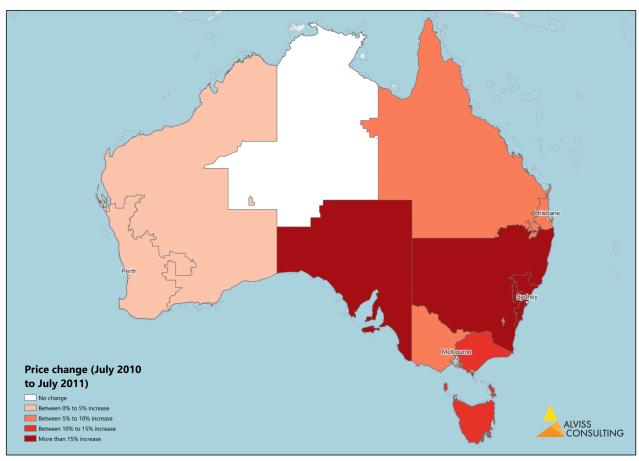


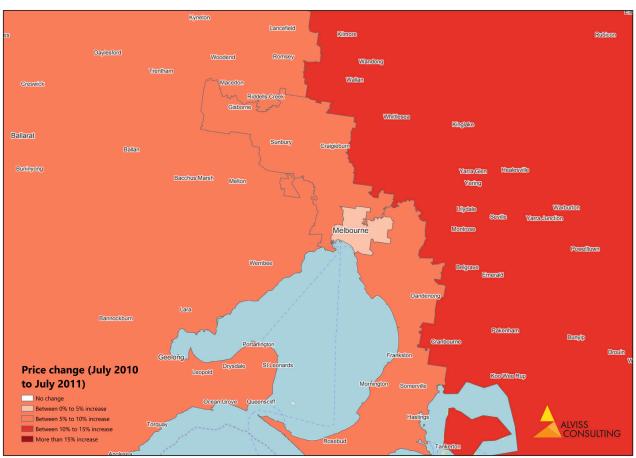
July 2010 to July 2011

Between July 2010 and July 2011, electricity prices increased the most in South Australia, with 31% increase in prices, on average. Prices also increased in NSW's Ausgrid, Essential and Endeavour networks, with average electricity prices increasing between 16% and 20%. Prices in the Northern Territory remained the same. In Victoria, prices increased the least in the Citipower network (3%) and increased the most in the Ausnet network (10%).

During this period, the network proportion of bill was at its highest in NSW (54% in Ausgrid, 53% in Essential and 44% in Endeavour).



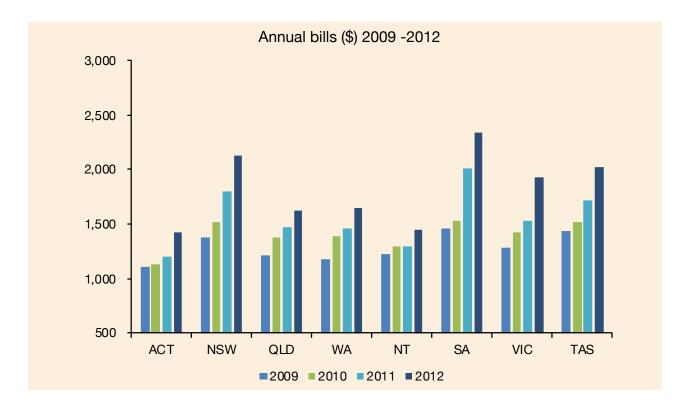


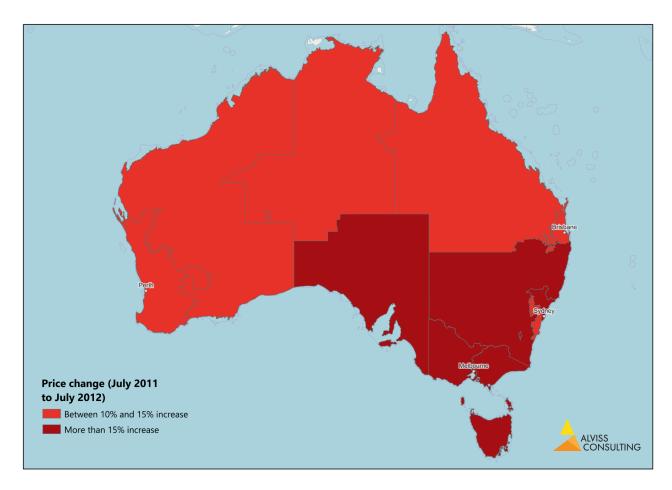


July 2011 to July 2012

Between July 2011 and July 2012, electricity prices increased across Australia. The largest increase was in Victoria's Ausnet, Citipower, Jemena, Powercor and United Energy networks, where average electricity prices increased between 24% (Citipower) and 29% (Ausnet). In NSW, prices increased sharply in the Ausgrid (22%) and Essential (20%) networks, but less so in Endeavour (11%).

During this period, the carbon tax took effect and the Queensland Government introduced a "Tariff-freeze".



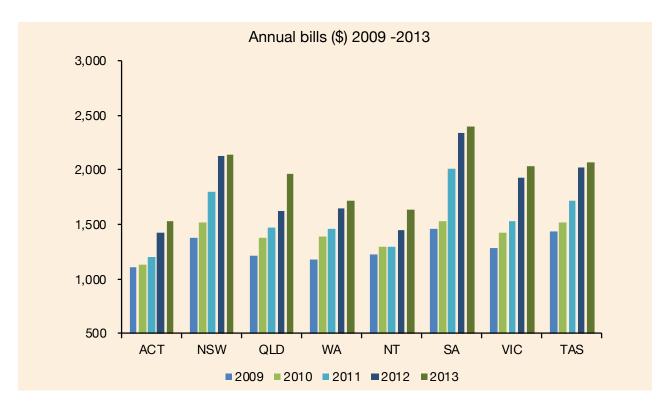


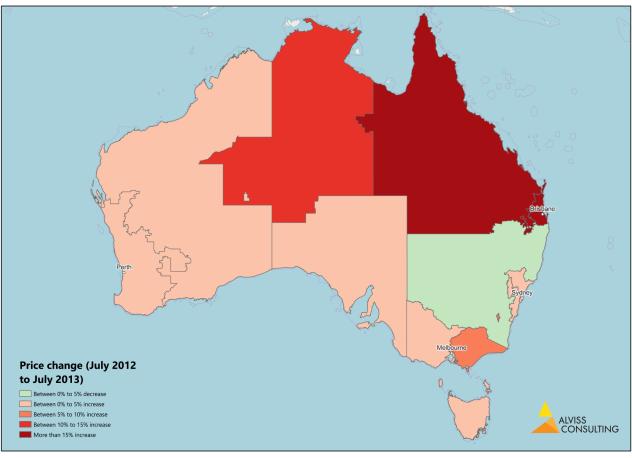
July 2012 to July 2013

Between July 2012 and July 2013, electricity prices increased the most in Queensland's Energex and Ergon networks, by 21% in both. There was also a significant increase in the Northern Territory (13%). In Victoria, prices increased by approximately 5%, except in the Ausnet network, where prices increased by almost 10%.

In NSW's Essential network, prices decreased by -1%, whereas they increased slightly in Ausgrid (2%) and Endeavour (0.5%).

In February 2013, South Australia deregulated the energy retail market and the Queensland Government's "Tariff-Freeze" ended prior to July 2013.







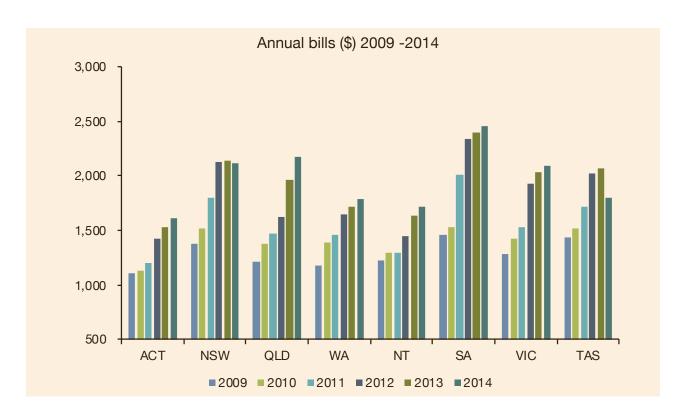
July 2013 to July 2014

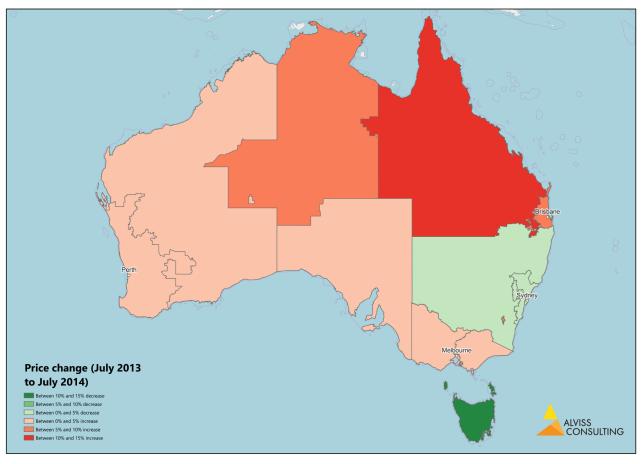
Between July 2013 and July 2014, electricity prices decreased slightly in NSW's Ausgrid, Endeavour and Essential networks, by 0.3%, 0.8% and 1.05%, respectively. Prices decreased the most in Tasmania, by 13%.

Prices increased in Queensland, the Northern Territory, Western Australia, South Australia and Victoria. The greatest increases were in Queensland's Energex and Ergon networks (10 to 11%).

In July 2014, the carbon tax was removed in Tasmania, and NSW deregulated the retail market.

During this period, the network proportion of bill was at its highest in South Australia (46%).





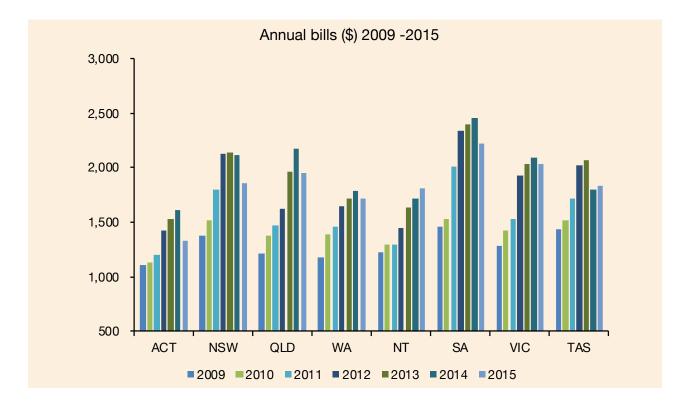
July 2014 to July 2015

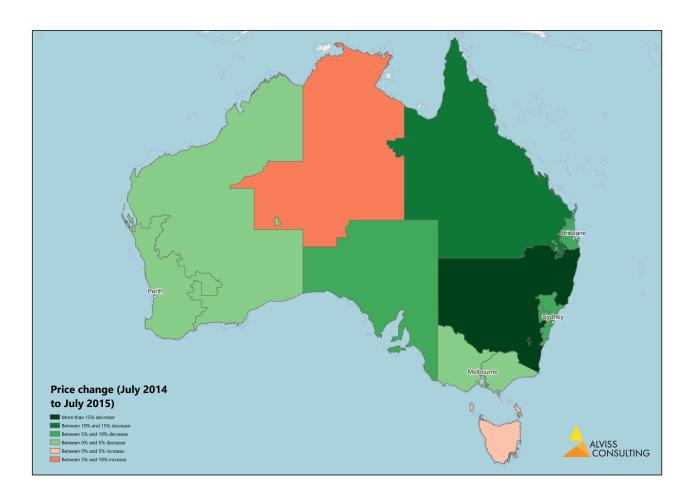
Between July 2014 and July 2015, average electricity prices decreased across Australia, except in Tasmania and the Northern Territory, where prices increased by 5% and 2%, respectively.

Prices decreased the most in NSW's Essential network and in the ACT, by approximately 18%.

Post carbon tax repeal prices were introduced in all jurisdictions during this period (except in Tasmania where they took effect on 1 July 2014).

The network proportion of bill was at its highest in the ACT (40%) and South East Queensland (47%).





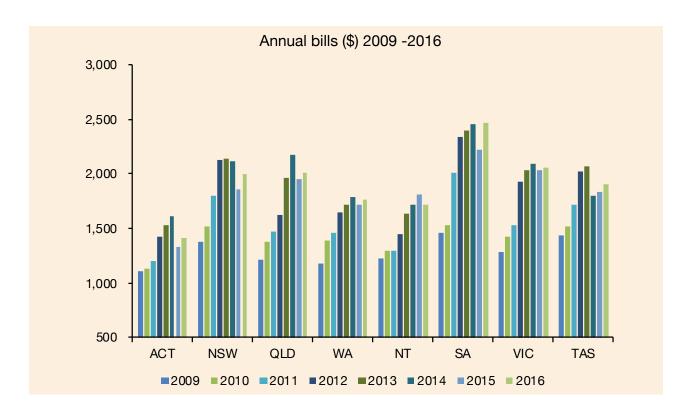
July 2015 to July 2016

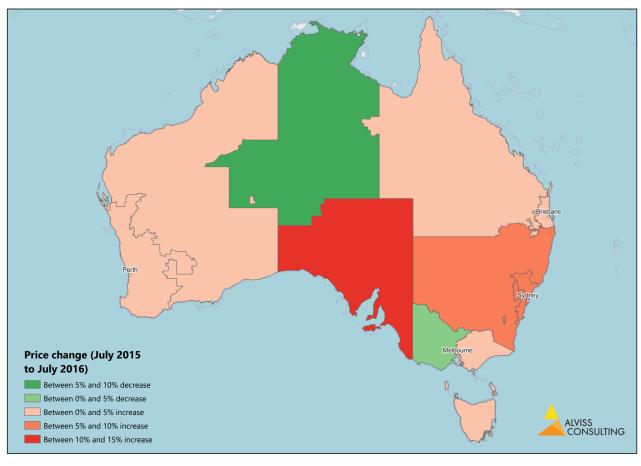
Between July 2015 and July 2016, electricity prices increased the most in South Australia, by 11%. Prices increased by 10% in NSW's Ausgrid network, 8% in Endeavour and 6% in Essential.

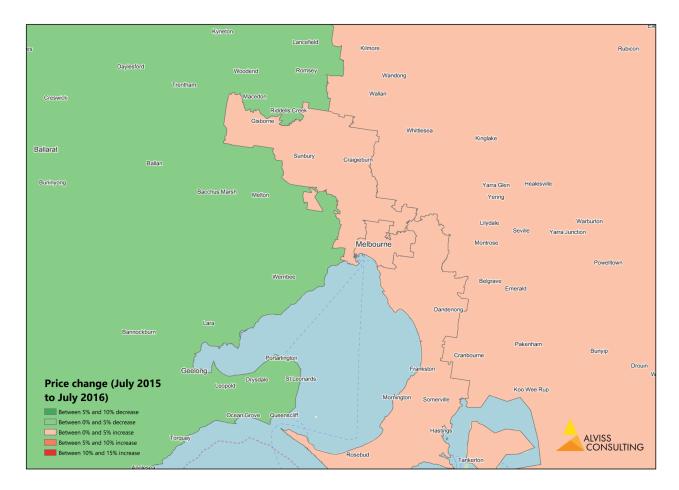
Prices decreased in the Northern Territory (5%) and in Victoria's Powercor network (1%). In the remainder of Victoria's networks, prices increased slightly: by 2% in Ausnet, Jemena and United Energy and by 3% in Citipower.

During this period, South East Queensland deregulated the electricity retail market. The price-spread (difference between the best and worst offer) and pay-on-time discounts increased significantly in South Australia.

In 2016, the drought-inflicted energy crisis developed in Tasmania. In June 2016, the NSW Government sold 50.4% of Ausgrid.





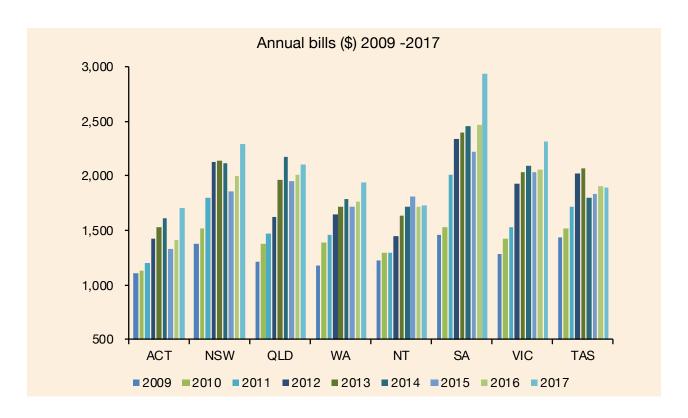


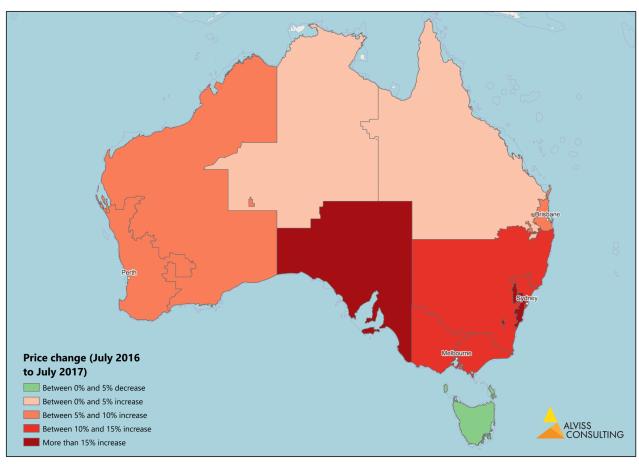
July 2016 to July 2017

Between July 2016 and July 2017, electricity prices increased across Australia, except in Tasmania, where prices decreased slightly.

Prices increased the most in the ACT with an average increase of 21%. Prices in South Australia also increased by 19%.

During this period, the price-spread (difference between best and worst offer) was record high in Victoria, NSW and South Australia.



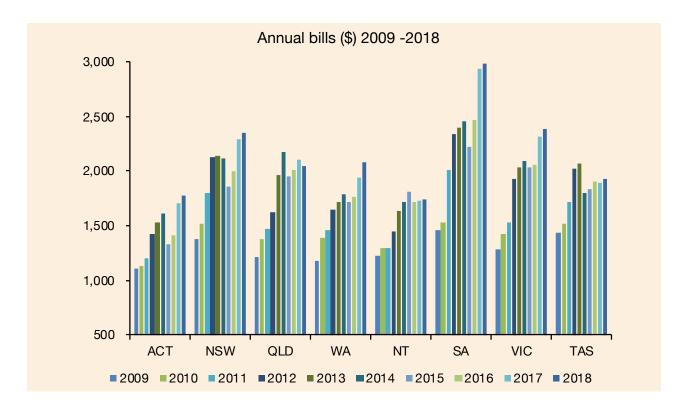


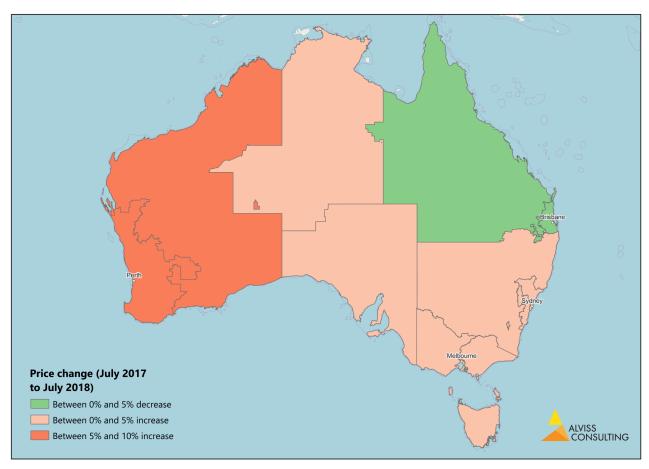
July 2017 to July 2018

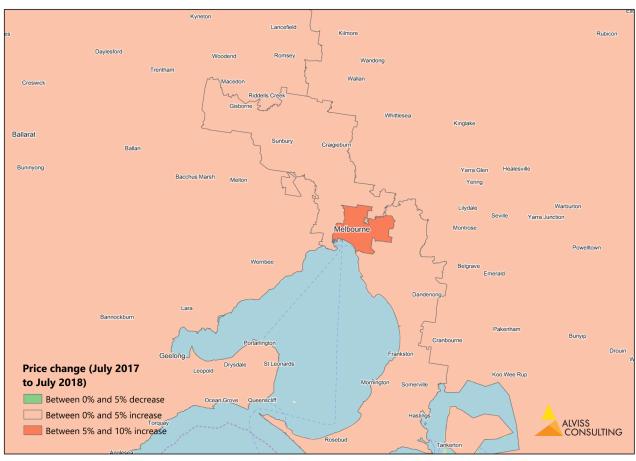
Between July 2017 and July 2018, prices increased across Australia, except in Queensland, where prices decreased slightly. In the Energex network, prices decreased by 4% and in the Ergon network by 1.5%. Prices increased the most in Western Australia, by approximately 8% in both the Horizon Power and Western Power networks.

In Victoria, prices increased the most in the Citipower network (5%) and the least in Ausnet (less than 1%).

In late 2017, the Abolition of Limited Merits Review Bill was passed.







July 2018 to July 2019

Between July 2018 and July 2019, electricity prices increased slightly in the ACT, Western Australia, the Northern Territory and in Tasmania.

Prices decreased the most in Victoria, especially in the Jemena and Powercor networks, where electricity prices went down by 18%, on average. In the Ausnet, Citipower and United Energy networks, prices decreased by 16%. Prices also decreased in NSW, by approximately 10% in all three networks.

In September 2018, the National Energy Guarantee (NEG) was abandoned. On 1 July 2019, the Victoria Default Offer (VDO) was introduced in Victoria. The Default Market Offer (DMO) was introduced at the same time in NSW, South Australia and South East Queensland.

In July 2019, the network proportion of bill is at its highest in Victoria (29% average across all network areas).

