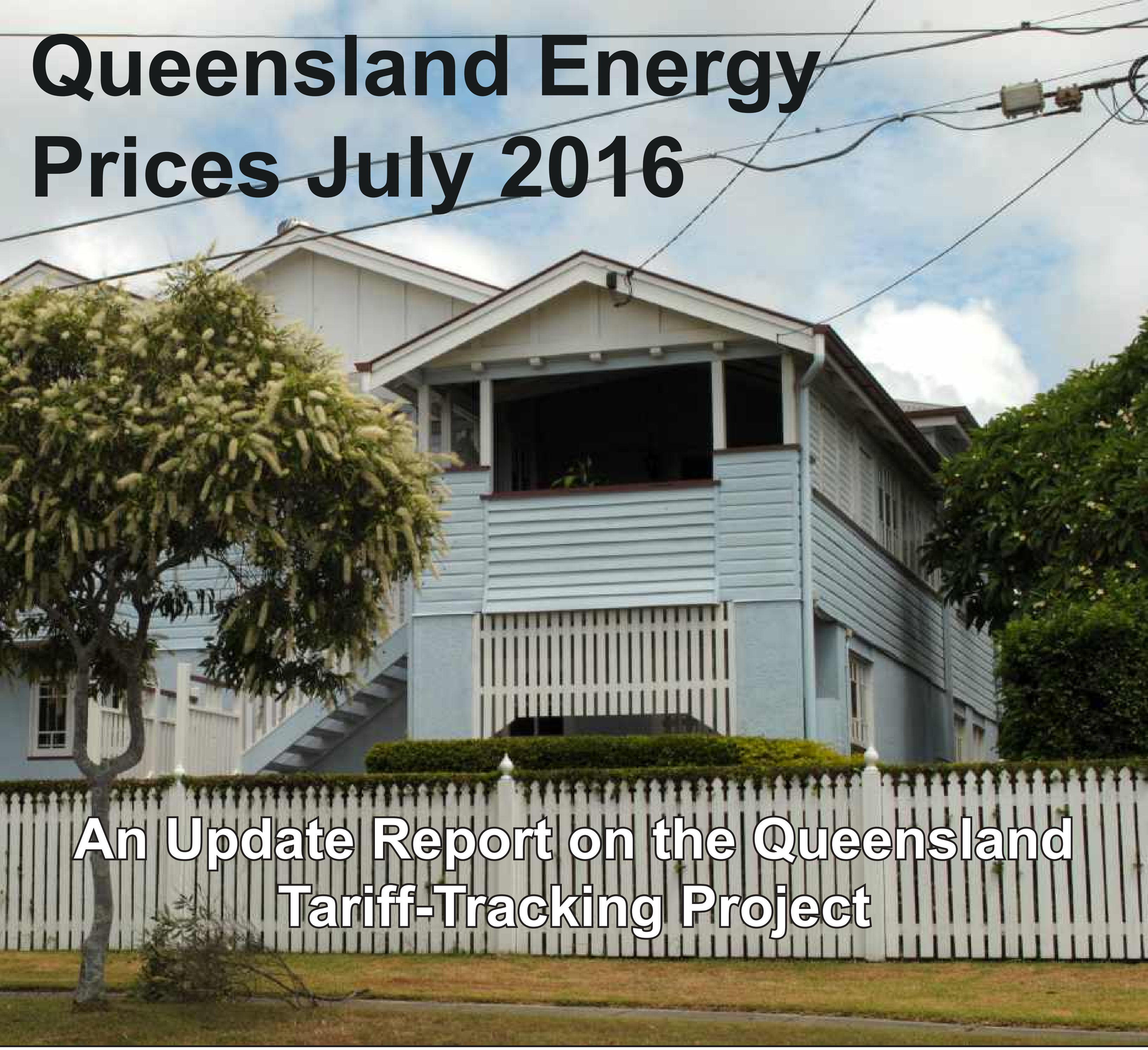
Queensland Energy Prices July 2016



An Update Report on the Queensland Tariff-Tracking Project

St Vincent de Paul Society

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Disclaimer

The energy offers, tariffs and bill calculations presented in this report 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 report and the workbooks is not provided as financial advice. While we have taken great care to ensure accuracy of the information provided in this report 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 report 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 AER's 'Energy Made Easy' website or contact the energy retailers directly.

Amendment: The original version of this report was amended on 25 August 2016 to rectify errors in charts 18 – 21.

Queensland Energy Prices July 2016
An Update Report on the Queensland Tariff-Tracking Project

May Mauseth Johnston, July 2016 (Amended 25 August 2016)
Alviss Consulting Pty Ltd

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Contact: Gavin Dufty
Manager, Social Policy Unit Victoria
St Vincent de Paul Society
Phone: (03) 98955816 or 0439 357 129

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

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The Queensland Tariff-Tracking Project: Purpose and outputs

Under retail price regulation arrangements, tariff tracking and tariff analysis are not usually prioritised activities amongst advocates and consumer representatives. In a deregulated environment, however, it becomes increasingly evident that advocates, as well as consumers themselves, need improved awareness and understanding of changing tariff offers – both in terms of changes to price as well as changes to tariff shapes and product developments. The Queensland Government deregulated electricity retail prices on 1 July 2016 and they are currently running a consumer education campaign.[1] The Queensland Tariff-Tracking tool will hence provide consumer representatives with an opportunity to inform the community about price and market developments, as well as making recommendations to governments and regulators about the adequacy of the consumer protection framework and market information in a deregulated retail market.

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 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.

This project has tracked electricity and gas tariffs in Queensland from July 2009 to July 2016, and developed a spreadsheet-based tool that allows consumer advocates to build on the initial analysis and continue to track changes as they occur. The first report for the Queensland Tariff-Tracking project was published in August 2012 and this is the fourth up-date report focusing on price changes that have occurred over the last year.

We have developed four workbooks that allow the user to enter consumption levels and analyse household bills for regulated gas and electricity offers from July 2009 to July 2016, as well as published electricity and gas market offers post the price resets in July 2012, 2013, 2014, 2015 and 2016.[2] A new addition to the Tariff-Tracking project this year is market offers available to new solar customers. The workbook allows users to calculate annual bills based on retailers' rates, feed in tariffs offered and additional discounts. Again, the user can enter consumption level as well as choosing to run the bill calculation based on 1.5 kW or 3 kW solar systems.

Workbook 1: Standing/Regulated electricity offers July 2009-July 2016

[1] See https://www.dews.qld.gov.au/electricity/energy-save

[2] All market offers are published offers and do not include special offers that retailers market through door-knocking campaigns or brokers. We use the retailers' own websites to collect market offer for the Queensland Tariff-Tracking tool. If the retailer has more than one market offer we use the offer that produces the lowest annual bill and/or the offer the retailer promotes as it's best offer. Prior to July 2016, the Tariff-Tracking tool does not include any additional discounts or bonuses but key market offer features are listed in the spreadsheets. This report contains analysis of some of those features.

Workbook 2: Standard gas retail offers July 2009-July 2016[3]
Workbook 3: Electricity market offers post July 2012, 2013, 2014, 2015 and 2016
Workbook 4: Gas market offers post July 2012, 2013, 2014, 2015 and 2016
Workbook 5: Solar market offers post July 2016

The four workbooks and the reports are available at the St Vincent de Paul Society's website: www.vinnies.org.au/Energy

[3] Note: Queensland does not have regulated gas offers.

1. Energy price changes from July 2015 to July 2016

In terms of general trends, the tariff analysis has found that:[4]

- Annual electricity bills for all-electric households on tariff 11 have typically increased by around $115 (or 5%) since July 2015. See chart 1 below.

- For customers on the Time of Use tariff (tariff 12), the annual bill has typically increased by $130 (or 5%) since July 2015. See chart 1 below.

- Annual gas bills for households in South Brisbane, Gold Coast, Toowoomba and Oakey with average consumption have increased by around $25, or 3%, since July 2015. See chart 2 below.

- Annual gas bills for households in North Brisbane and Ipswich with average consumption, however, have decreased by $15 (2%) since July 2015. See chart 3 below.

- The average annual electricity bill for households using 8,000 kWh per annum is currently around $2,500 for standing offer customers and $2,300 for market offer customers (including pay on time discounts). See chart 5 in section 2.

- A household switching from Origin or AGL's standing offer (Tariff 11) to the best electricity market offer may save around $300 - $400 per annum. See section 2.

- The difference between market offers is also significant. The difference between the best and the worst market offers is between $425 and $485 (depending on tariff type) for customers that always pay bills on time. See section 2.

- As most retailers offer pay on time discounts, and many charge late payment fees, paying late can significantly erode savings available from switching to a better market offer. Customers on Click Energy's offer that receive monthly bills, for example, may pay $550 more per annum if they do not pay their bills by the due date. See section 2.

[4] These calculations are based the regulated/standing offer for all-electric households using 8,000kWh per annum (thereof 15% off-peak for customers on tariff 31 or 33) and the average changes to gas offers based on customers using 10,000Mj per annum. The July 2015 bills are based of the regulated rates while the July 2016 bills are based on Origin and AGL's standing offers. According to the AEMC, 82% of small customers in South East Queensland are AGL or Origin customers (AEMC, Retail Competition Review 2016, Final report, 174).

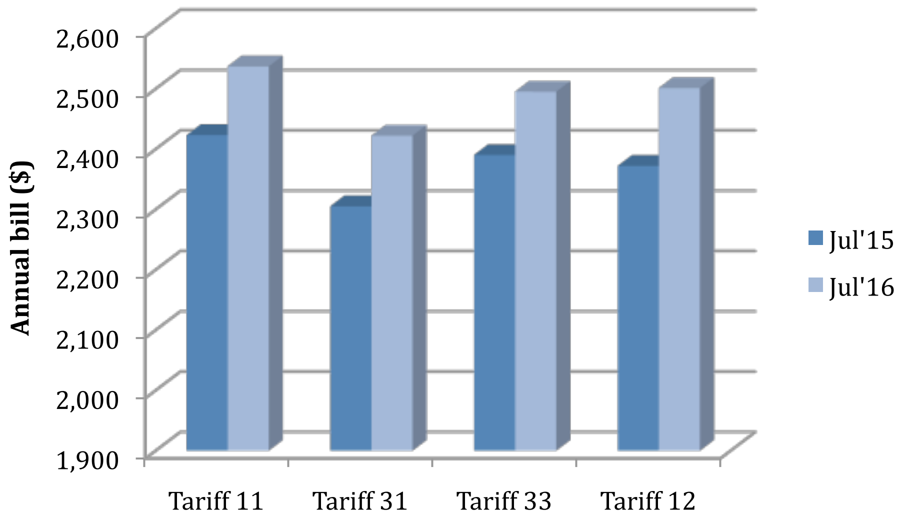
- While most retailers have only made minor changes to the fixed supply charge since prices were deregulated, two retailers (AGL and Lumo) have supply charges that are significantly lower than the others. See section 3.

- The average gas supply charge has again increased in the APT/All Gas zone and it is currently 118 cents per day. This effectively means that South Brisbane households (APT/All Gas zone) pay $430 per annum in order to be connected to natural gas and that the fixed component makes up more than 54% of the bill for households using 10,000 Mj per annum. See section 3.

- As electricity bills typically increased by 4-5% in July 2016 but the network charge decreased slightly, the network charge component of the bill is now lower (44%) compared to last year (47%). See section 4.

- The comparison of market offers available to new solar customers with 1.5 or 3 kW systems installed, shows that solar customers should not simply choose the retailer with the highest feed in tariff (FIT) rate. A solar customer with a 1.5 kW system may save $340 per annum by switching from the retailer with the highest FIT rate (Click) to the retailer with the lowest FIT (Dodo). See section 5.

Chart 1 Changes to annual electricity bills from July 2015 to July 2016, 8,000kWh per annum, GST inclusive[5]



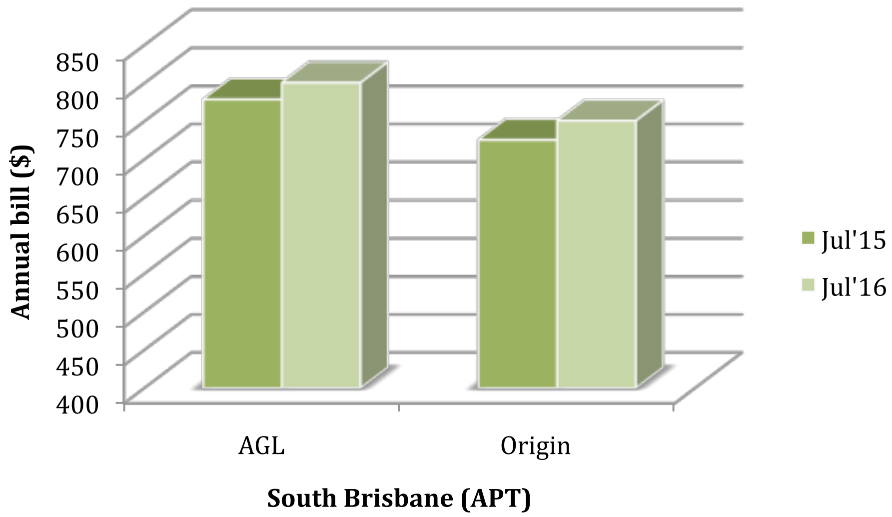
[5] July 2015 is based on the regulated rates while July 2016 is based on Origin and AGL's standing offers. For Tariff 31 and 33, 15% of consumption has been allocated to off-peak rates. For Tariff 12, the allocations are: 20% peak, 55% shoulder and 25% off-peak.

Table 1 Increases to annual bills for electricity by tariff type July 2015 – July 2016[6]

	Tariff 11	Tariff 31	Tariff 33	Tariff 12
$ Increase	$115	$115	$105	$130
% Increase	5%	5%	4%	5%

While electricity prices increased on 1 July, gas prices have remained stable or moderately increased or decreased (depending on the pricing zone).

Chart 2 Changes to annual gas bills from July 2015 to July 2016, 10,000Mj - South Brisbane & South Queensland[7]



[6] Based on household consumption of 8,000kWh per annum. July 2015 is based on the regulated rates while July 2016 is based on Origin and AGL's standing offers. For Tariff 31 and 33, 15% of consumption has been allocated to off-peak rates. For Tariff 12, the allocations are: 20% peak, 55% shoulder and 25% off-peak.

[7] AGL and Origin's standard rates and customers using 10,000Mj per annum.

Chart 3 Changes to annual gas bills from July 2015 to July 2016, 10,000Mj - North Brisbane & Ipswich[8]

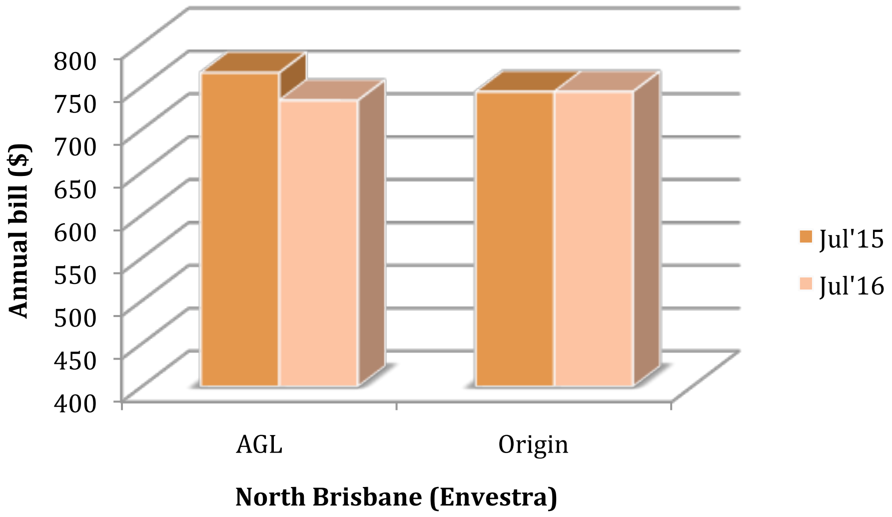
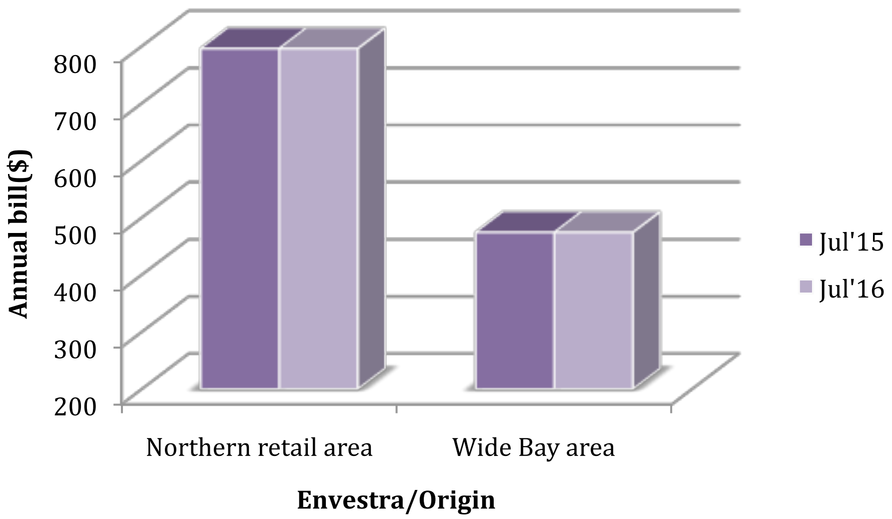


Chart 4 Annual gas bills as of July 2015 and July 2016, 10,000Mj – Origin's rates in the Northern retail area and Wide Bay[9]



[8] AGL and Origin's standard rates and customers using 10,000Mj per annum.

[9] The Northern retail area covers Rockhampton and Gladstone and the Wide Bay area covers Bundaberg, Maryborough and Hervey Bay. Origin is the only retailer with offers for residential customers in these areas. Bill estimates based on customers using 10,000Mj per annum.

Table 2 Difference to annual bills (average) for gas by area July 2015 – July 2016[10]

	APT – South Brisbane, Gold Coast, Toowoomba & Oakey	Envestra – North Brisbane & Ipswich	Envestra – Northern retail area (Rockhampton & Gladstone)	Envestra – Wide Bay area (Bundaberg, Maryborough and Hervey Bay)
$ Difference	$25	-$15	$0	$0
% Difference	3%	-2%	0%	0%

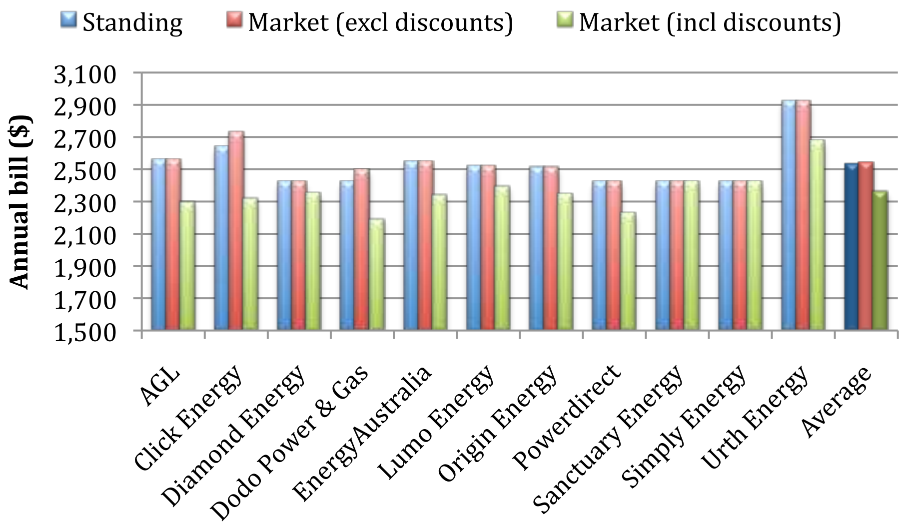
[10] Based on the average gas rates (AGL and Origin) in APT and Envestra North and Origin's rates in the two other Envestra pricing zones. Bill estimates based on customers using 10,000Mj per annum.

2. Market offers post July 2016

2.1 Electricity market offers post July 2016

Chart 5 below shows that the average annual bill for households using 8,000kWh per annum is around $2,500 for standing offer customers and just over $2,300 for market offer customers (including pay on time discounts). Furthermore, it shows that most retailers apply the same rates to their standing offers and their market offers but offer discounts for market offer customers.

Chart 5 Electricity offers as annual bills, July 2016, Single rate (tariff 11) 8,000kWh per annum, GST inclusive[11]



As stated above, many market offers include features such as discounts on consumption rates, vouchers, sign-up credits, loyalty bonuses and discounts if bills are paid on time or paid by direct debit.

Consumers assessing market offers should take these additional features into account and be aware of contract conditions such as late payment fees, the length of the contract and fees for exiting the contract early.

Charts 6-9 below show the difference in annual bills between retailers' standing offers and market offers based on guaranteed discounts (if any), as well as market offers including pay on time discounts (if any) for tariff 11, 31, 33 and 12. Tariff 11 customers on AGL and Origin's standing offers can save $370 and $320 respectively by switching to the best market offer (Dodo's). This is a saving of approximately $100

[11] The retail offers were collected from the retailers' websites between the 1st and the 16th of July 2016 and it must be noted that retailers may change their rates at any time. Also, we note that Diamond has not published new offers since 2015 and Sanctuary's offer was released in January 2016. Annual bill calculations shown as green columns include guaranteed discounts and pay on time discounts.

more compared to last year. If the same standing offer customers switched to Urth Energy, however, they would be $115 and $165 worse off respectively.

The maximum difference, or price spread, between annual bills for market offers (including pay on time discounts) is $485 for tariff 11, $440 for tariff 31 and $425 for tariff 33.

Chart 6 Tariff 11: Annual bills based on guaranteed discounts vs. pay on time discounts as of July 2016 (8,000kWh per annum, including GST).

Chart 7 Tariff 31: Annual bills based on guaranteed discounts vs. pay on time discounts as of July 2016 (8,000kWh per annum, 15% off-peak, including GST).

Chart 8 Tariff 33: Annual bills based on guaranteed discounts vs. pay on time discounts as of July 2016 (8,000kWh per annum, 15% off-peak, including GST).

Chart 9 Tariff 12: Annual bills based on guaranteed discounts vs. pay on time discounts as of July 2016 (8,000kWh per annum, 20% peak, 55% shoulder and 25% off-peak, including GST).

Figure 1 below shows estimated annual bills for market offers post discounts ranked from the lowest annual bill to the highest (for Tariff 11) as well as how they ranked compared to other retailers one year ago (in brackets).

Figure 1 Lowest to highest annual bills (incl GST) for market offers post July 2016, including discounts and pay on time discounts - Households consuming 8,000kWh per annum (Tariff 11) [12]

Dodo	$2,192	(1)
Powerdirect	$2,227	(2)
AGL	$2,300	(5)
Click Energy	$2,322	(6)
Energy Australia	$2,339	(3)
Origin Energy	$2,349	(4)
Diamond	$2,350	(-)
Lumo Energy	$2,396	(7)
Sanctuary Energy	$2,423	(-)
Simply Energy	$2,423	(-)
Urth Energy	$2,676	(-)

The discounts (including pay on time discounts) used to estimate annual bills for Charts 6-8, as well as Figure 1, above are shown in table 3 below. Table 3 also shows other contract terms and features, such as early termination fees, associated with these market offers. Some of the retailers have multiple market offers and may offer higher discounts than those listed here. However, if discounts are higher they are typically tied to other conditions such as payment by direct debit, e-billing or dual fuel contracts.

[12] These bill estimates are based on rates published on the retailers' websites between the 1st and the 16th of July 2016 and it must be noted that retailers may change their rates at any time. Additional discounts for customers choosing to pay by direct debit are not included in these bill calculations. Note that Diamond has not published new offers since 2015 and Sanctuary's offer was released in January 2016.

Table 3 Published electricity market offers, effective as of July 2016: Key additional features and contract conditions

	Guaranteed discounts	Contract term/ fixed benefit period	Early Termination Fee	Late Payment Fee	Pay on time discounts	Other
AGL	No	1 year	No	$12.73	12% off usage	Yes
Origin	No	1 year	No	$12	8% off usage	No
Energy Australia	No	1 year	No	$12	10% off usage	Yes^
Click	No	No	No	$12	15% off bill	No
Lumo	No	2 years	No	No	5% off bill	No
Simply	No	2 years	No	No	No	No
Diamond	No	No	No	No	3% off bill	No
Sanctuary	No	No	No	No	No	No
Urth Energy	No	3 years	No	$12	10% off usage	No
Powerdirect	No	2 years	No	$12.73	10% off usage	No
Dodo	No	No	No	No	15% off usage	No

^Energy Australia offers an addition 2% discount for customers that sign up online and agree to receive all bills and communications via email. Examples of other features include loyalty bonuses, credits to the account upon commencing a contract and shop vouchers.

As many retailers tend to apply the same rates as the regulated rates to their market offer and then offer discounts, it is important that customers are aware that all of these discounts are conditional upon bills being paid on time. Pay on time discounts, combined with late payment fees on market offers, means that Queensland households can be significantly penalised for late payment.[13] Or conversely, Queensland households can be significantly rewarded for prompt payment. It does, however, highlight an issue that negatively impacts on households with cash-flow problems.

Table 4 below shows that paying late can become very expensive on some market offers. Households on Click's market offer, for example, would be approximately $450 worse off if they pay late compared to paying on time. AGL, Dodo and Urth Energy's customers would also be around $300 worse off if they pay their bills after the due date. As most retailers bill customers quarterly, these numbers are based on

[13] The Queensland Electricity Industry Code (clause 4.13.5) does not permit retailers to apply late payment fees to the regulated offer unless the fee is "expressly provided for in the *notified prices*".

four late payment fees (where applicable) per annum. Click Energy, however, issues monthly bills for this offer (Click's People Power offer) and customers can therefore be charged up to $144 per annum in late payment fees alone.[14] In addition, Click only offers customers five business days to pay their bills, starting from the date they issue the bill.[15] This effectively means that a late paying customer could end up with an annual bill that is $550 more than it would have been if they managed to pay all bills on time.

Table 4 Electricity offers as of July 2016: Difference ($) in annual bill between paying all bills on time vs. paying all bills late (based on 8,000kWh and 4 bills per annum)

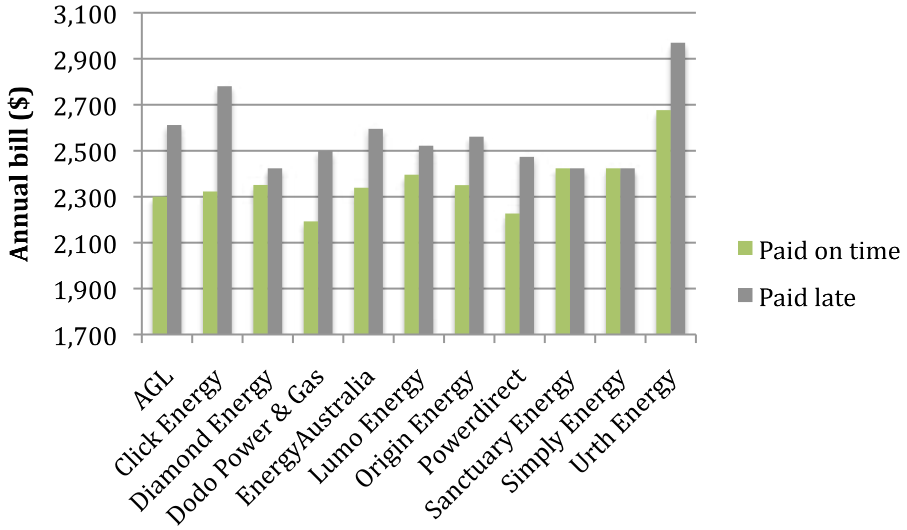
	Tariff 11
AGL	$311
Click Energy	$458
Diamond Energy	$73
Dodo Power & Gas	$306
EnergyAustralia	$256
Lumo Energy	$126
Origin Energy	$212
Powerdirect	$247
Sanctuary Energy	$0
Simply Energy	$0
Urth Energy	$294

As both the size of pay on time discounts and the number of retailers applying them have increased, the difference in electricity bills between customers that pay on time and customers that pay late is at a record high. Chart 10 below shows the estimated annual electricity bill (tariff 11) for customers that always pay on time and for those who always pay late.

[14] Click Energy, Energy Price Fact Sheet, Click People Power, 1 July 2016 at https://www.clickenergy.com.au/energy-price-fact-sheets/energex/click-people-power/263/

[15] Click Energy, Market Retail Contracts, Terms and Conditions, 8 March 2016 at https://www.clickenergy.com.au/pdf/Click_Market_Retail_Terms_and_Conditions.pdf

Chart 10 Tariff 11: Estimated annual bill for customers that pay on time vs. pay late, electricity offers as of July 2016, 8,000kWh per annum (GST inc).

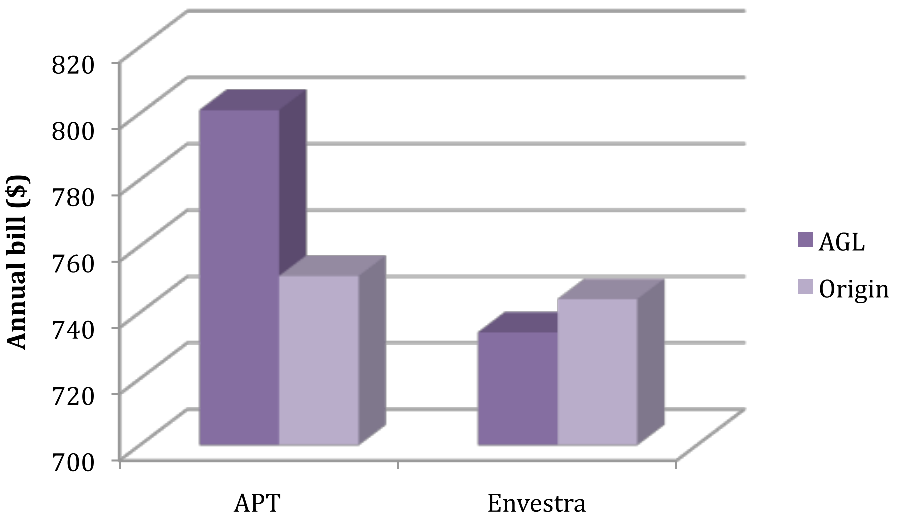


2.2 Gas market offers post July 2016

There are no regulated gas offers in Queensland and currently only Origin and AGL have gas market offers for residential consumers. As only North Brisbane (including Ipswich) and South Brisbane (including Gold Coast, Toowoomba, Oakey) have more than one market offer, this analysis only comprises market offers in these two areas.[16] Chart 11 below shows that there is a small ($10) difference between AGL and Origin's market offer rates (prior to additional discounts) in the Envestra zone (Brisbane North). In the APT zone (Brisbane South) Origin's market offer produces an annual bill that is approximately $50 less than AGL for households with this consumption level. The difference in the APT zone ($50) is the same as it was in July 2015.

[16] Gas customers in Rockhampton, Gladstone, Bundaberg, Maryborough and Hervey Bay only have access to Origin's market offers.

Chart 11 Gas offers as annual bills, Post July 2016 (10,000Mj per annum)



The calculations for the market offers in Chart 11 include their rates only (cost per MJ and fixed charges) and do not include other market offer features such as discounts on consumption rates, vouchers, sign-up credits, loyalty bonuses and discounts if bills are paid on time. Consumers assessing market offers should take these additional features into account and be aware of contract conditions such as late payment fees, the length of the contract and fees for exiting the contract early.

Table 6 Published gas market offers in the APT and Envestra gas zones as of July 2016: Key additional features and contract conditions

	Guaranteed discounts	Contract term/ benefit period	Early Termination Fee	Late Payment Fee	Pay on time discounts	Other
AGL	No	2 years	No	$12.75	6% off usage	Yes^
Origin	No	1 year	No	$12	4% off usage	No

^AGL offers a $25 welcome credit to customers that sign up online
Note: Examples of other features include loyalty bonuses, credits to the account upon commencing a contract and shop vouchers.

The discounts (including pay on time discounts) used to estimate annual bills for Figures 2 and 3, as well as charts 12-13 below, are shown in table 6 above. Table 6 also shows other contract terms and features, such as late payment fees, associated with these market offers.

The difference between the best and the worst market offers is less for gas than electricity. Furthermore, as there is only a small difference between AGL and Origin's discounts, the difference between the two market offers post discounts is similar to the difference prior to discounts (see chart 11 above) for this consumption level. Figures 2 and 3 below show estimated annual bills for gas market offers post discounts in the APT and Envestra gas zones. [17]

Figure 2 APT gas zone: Lowest to highest annual bills (incl GST) for market offers post July 2016, including discounts and pay on time discounts - Households consuming 10,000Mj per annum

Origin Energy	$738
AGL	$778

Figure 3 Envestra gas zone: Lowest to highest annual bills (incl GST) for market offers post July 2016, including discounts and pay on time discounts - Households consuming 10,000Mj per annum

AGL	$707
Origin Energy	$726

Charts 12-13 below show the estimated annual gas bill for customers that always pay on time and customers who do not for published gas offers in the APT and Envestra gas zones. Chart 12 shows that both AGL and Origin's annual bills are $60 - $75 less for prompt payers compared to late payers in the APT gas zone.

[17] These bill estimates are based on rates published on the retailers' websites between the 1st and the 5th of July 2016 and it must be noted that retailers may change their rates at any time.

Chart 12 APT gas zone: Estimated annual bills for customers that pay on time vs. pay late, gas offers as of July 2016 (10,000Mj, GST inc)[18]

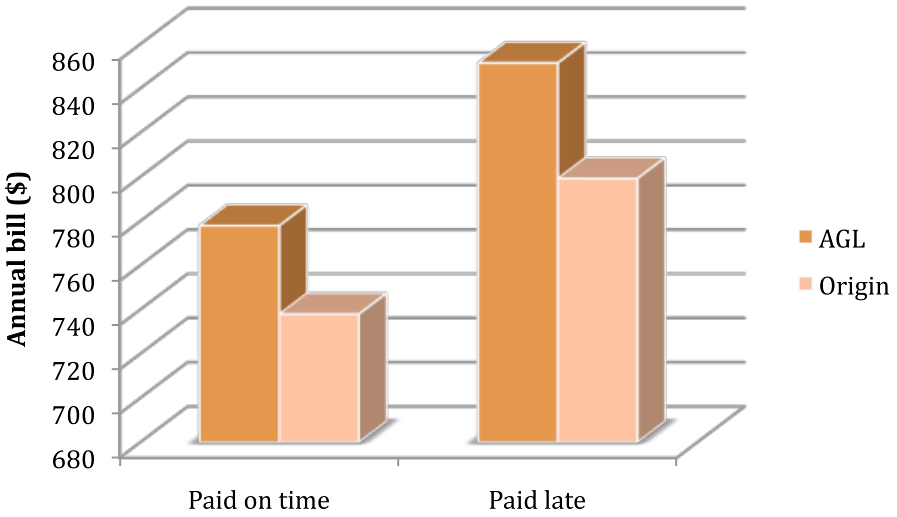
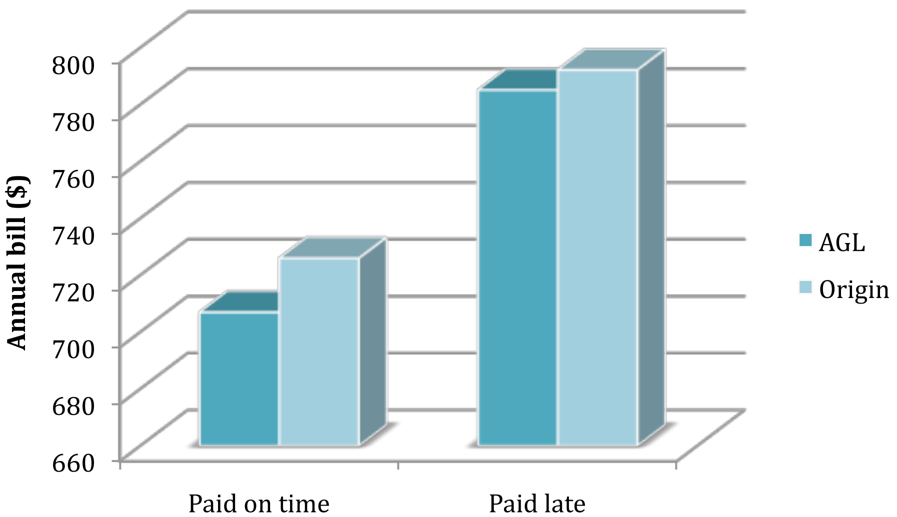


Chart 13 below shows that there is less difference between AGL and Origin's offers in the Envestra gas zone but that AGL's offers are slightly lower than Origin's. Annual bills are $65 - $75 less for prompt payers compared to late payers in this pricing zone.

Chart 13 Envestra gas zone: Estimated annual bills for customers that pay on time vs. pay late, gas offers as of July 2016 (10,000Mj, GST inc)[19]



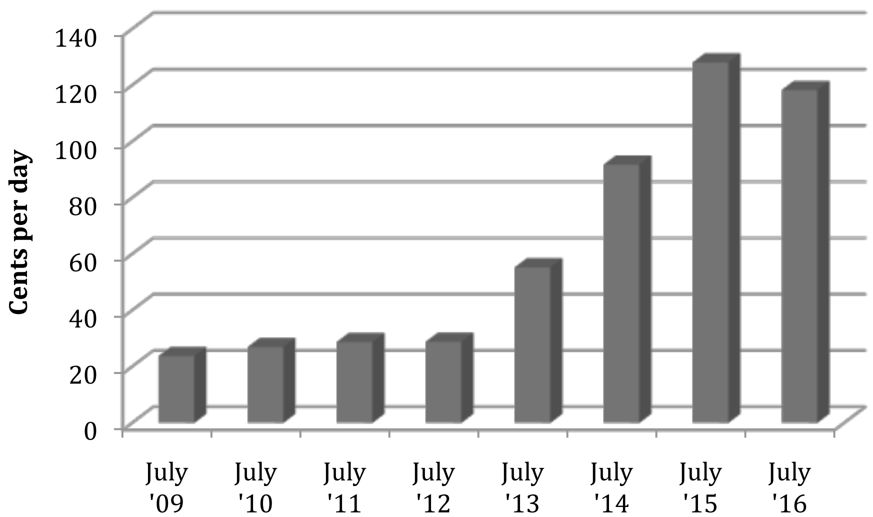
[18] Annual bill calculation includes discounts, pay on time discounts and late payment fees as per energy offer.
[19] Ibid.

3. Supply charges

3.1 Electricity supply charges

The supply charge is a fixed daily charge that is paid in addition to the consumption charges for electricity used. In Queensland the supply charge for single rate electricity customers (tariff 11) only increased by 5 cents (or 21%) during the three year period from July 2009 to July 2012.[20] In July 2013, 2014 and 2015, however, there were significant increases to the supply charge. This year, however, there has been a slight decrease to the electricity supply charge but the average supply charge (based on AGL and Origin's standing offers) is still over 118 cents per day meaning that households pay around $430 per annum in fixed charges. Chart 14 below shows the changes to the daily supply charge from July 2009 to July 2016.

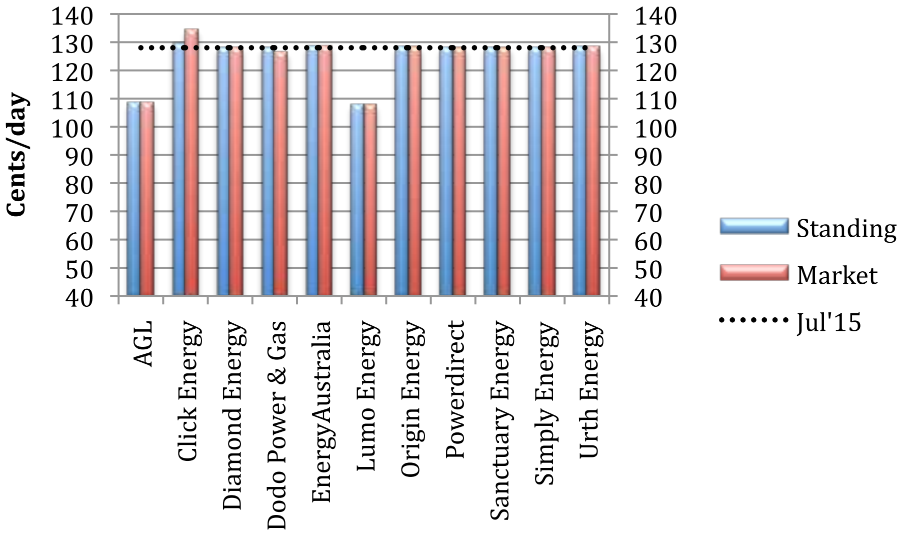
Chart 14 Daily supply charge, Tariff 11, regulated/standing electricity offers, 2009-16[21]



As the retail charges are no longer regulated, the supply charge varies between retailers. Chart 15 shows that most retailers have a fixed supply charge similar to the regulated rate of last year (July 2015) but that two retailers, AGL and Lumo, now have supply charges that are considerably lower compared to last year's regulated rate.

[20] This was a very low increase compared to other jurisdictions. In South Australia, for example, the fixed supply charge increased by 60% over the same period.
[21] The 2016 charge is based on AGL and Origin's average supply charge

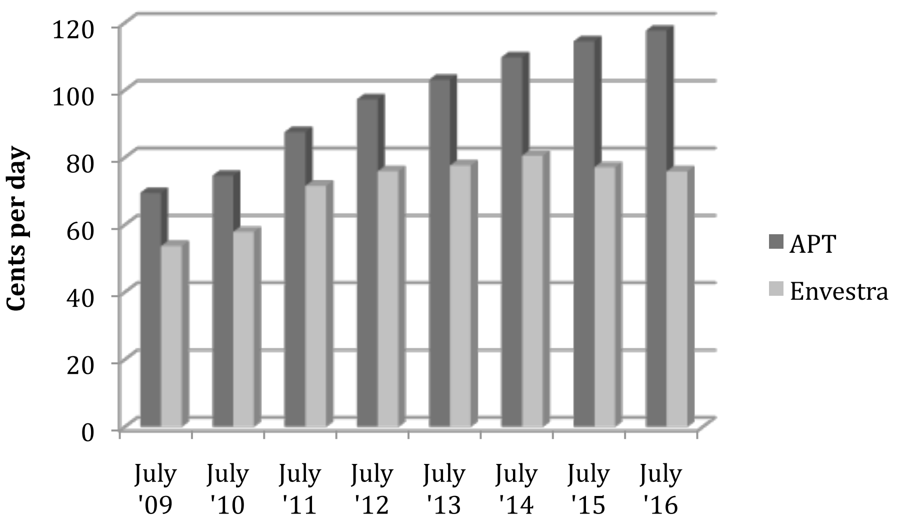
Chart 15 Daily supply charge, Tariff 11



3.2 Gas supply charges

In July 2016 the average fixed supply charge again increased in the APT (Brisbane South) distribution zone and decreased in the Envestra (Brisbane North) zone. The average gas supply charge is now almost 118 cents/day in the APT distribution area and 76 cents/day in the Envestra (Brisbane North) pricing zone. This effectively means that South Brisbane households (APT zone) pay $430 per annum in order to be connected to natural gas. Chart 16 below shows changes to the gas supply charge from July 2009 to July 2016 for both gas zones.

Chart 16 Gas supply charges from July 2009 to July 2016, Cents per day[22]



[22] Based on the average gas supply charge (AGL and Origin).

The average domestic gas consumption in Queensland is relatively low and as such the supply charges comprise a significant proportion of the annual gas bill.[23] For households consuming 10,000Mj per annum in the APT gas zone, the supply charge makes up 54-57% of the annual bill, depending on the retailer. In the Envestra zone (Brisbane North), the supply charge makes up approximately 37% of the annual bill (for the same consumption level).

[23] We have assumed typical residential annual gas consumption in Queensland to be 10,000Mj per annum while in Victoria we base it on 63,000Mj.

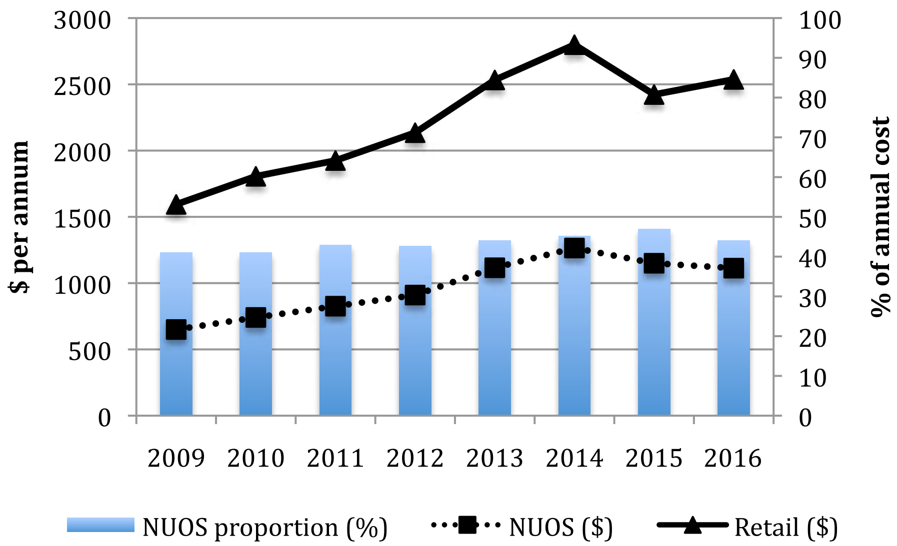
4. Network charges

The Queensland electricity networks, Energex and Ergon, introduce new Network Use of System (NUOS) charges as of 1 July every year. These NUOS charges are approved by the Australian Energy Regulator (AER) and comprise Transmission Use of System (TUOS) and Distribution Use of System (DUOS) and the retailers can, and generally will, build changes to the NUOS (in relation to both shape and price) into their retail tariffs.

Chart 17 shows annual retail bills (solid line), NUOS charges as annual cost (dotted line) and NUOS as proportion of annual bill (columns).[24]

It shows that both the NUOS charge and the NUOS proportion of bills have decreased from July 2016 while the overall retail bill has increased.

Chart 17 Energex: Retail bill per annum (incl. GST), NUOS charges and NUOS as proportion of total bill (incl. GST) from 2009 to 2016 (based on the regulated/standing retail offer, Tariff 11, 8,000 kWh per annum)[25]



[24] The regulated residential retail tariff, which applies to residential customers across Queensland, is based on Energex' network tariff only.

[25] Based on the regulated retail offer rates from 2009 to 2015 and AGL and Origin's standing offers (average) as in 2016, presented as annual bills for households using 8,000kWh per annum (flat rate). The annual NUOS charges have been calculated by allocating 2,000kWh per quarter (again based on annual consumption of 8,000kWh) to the step charges stipulated in the NUOS. The annual NUOS cost also includes fixed charges.

5. Solar offers

There are approximately 467,000 domestic solar systems in Queensland.[26] Many of these households are currently receiving a solar feed in rate (FIT) of 44 cents per exported kWh but as these schemes are closed to new entrants, customers currently looking for solar offers need to assess both the retailers' FIT rates as well as the cost of electricity imported.

This section analyses and compares market offer bills for South East Queensland customers with 1.5 kW and 3 kW systems installed. As retailers are not required to publish rates for solar products purchased and installed through them, this analysis only examines electricity offers available to customers independently of solar panels and installation.

Methodology and assumptions

To calculate the annual bills for the various solar market offers the following assumptions and methodology have been applied:

- An annual household consumption of 8,000kWh (including both produced and imported).
- Calculations have been produced for households with 1.5 kW and 3 kW systems only.
- For Brisbane households, an annual generation capacity per kW installed of 1.736 MWh and an export rate of 53.4% for 3 kW systems and 24.6% for 1.5 kW systems.[27]
- For rural households, an annual generation capacity per kW installed of 1.857 MWh and an export rate of 56.4% for 3 kW systems and 29.5% for 1.5 kW systems.[28]

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[26] Clean Energy Council, Clean Energy Australia Report 2015,26

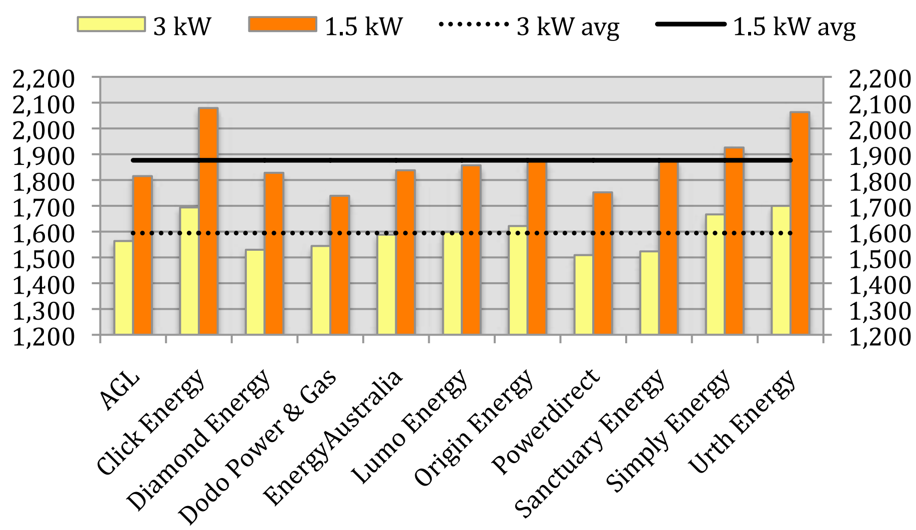
[27] These figures are based on NSW (outside Sydney) and were used for the analysis presented in a report for the Alternative Technology Association (ATA) by Alviss Consulting (Alviss Consulting, Retail Offers and Market Transparency for New Solar Customers, June 2013). Note that the estimated annual solar energy generation has a loss factor of 20% applied (includes temperature losses, soiling losses and wiring losses), the insolation is based on annual averages from the BOM over the years 1990 to 2008 (available at http://www.bom.gov.au/jsp/ncc/climate_averages/solar-exposure/index.jsp), and it is assumed that solar panels are mounted with a tilt equal to the latitude angle of the location (for non capital city areas these are Port Augusta, Longreach, Swan Hill and halfway between Dubbo and Bourke). The estimated export rates are based upon generation and export in NSW published in report prepared for NSW Industry and Investment by AECOM Australia, Solar bonus scheme, Forecast NSW PV Capacity and Tariff Payments, October 2010 available at http://23.101.218.132/prod/la/latabdoc.nsf/0/f43c91f5b4eddb97ca2577c90020a9fa/$FILE/Solar%20Bonus%20Scheme%20-%20Forecast%20PV%20Capacity%20&%20Tariff%20Payments.pdf

[28]Ibid

- Only FIT rates available to new customers have been included. Retailer funded FIT rates have been applied as per offer.
- For tariffs with controlled load, 15% of the total load has been allocated to the off-peak rate.
- A flat annual consumption has been assumed.
- The annual bills have been based on quarterly bill calculations and all step increases have been applied as quarterly thresholds (including when the retail offer refers to daily or monthly thresholds). Daily fixed charges have been multiplied by 91 to calculate the quarterly amount.

Chart 18 below compares annual retail bills for solar customers in Brisbane with 3 kW and 1.5 kW installed. It shows that Click, Simply and Urth Energy's offers produce annual bills above the average for both 3 kW and 1.5 kW systems. Brisbane solar customers with 3 kW systems (and this consumption level) would be approximately $190 per annum better off on Powerdirect's offer compared to Urth Energy's offer. Customers with a 1.5 kW system installed may save $340 per annum if they switched from Click to Dodo's offer. As Click, Urth and Sanctuary Energy all offer relatively high FIT rates (Click's is 11 cents, Urth and Sanctuary offer 10 cents) while Dodo's FIT rate is only 4 cents, this shows the importance of solar customers not choosing retail offers based on FIT rates alone.

Chart 18 Annual bills including discounts and FIT credits for *Brisbane* customers with 3 kW and 1.5 kW solar systems. Electricity offers post July 2016 as annual bills, Tariff 11, 8,000kWh (GST inc).[29]



Charts 19 and 20 below show annual bills for Brisbane solar customers on tariff 11, tariff 31 and tariff 33.

[29] Calculations include discounts off usage or bill as well as pay on time discounts off usage or bill.

Chart 19 Annual bills including discounts and FIT credits for *Brisbane* customers with a *3 kW* solar system. Electricity offers post July 2016 as annual bills, Tariff 11, 31 and 33, 8,000kWh (GST inc).[30]

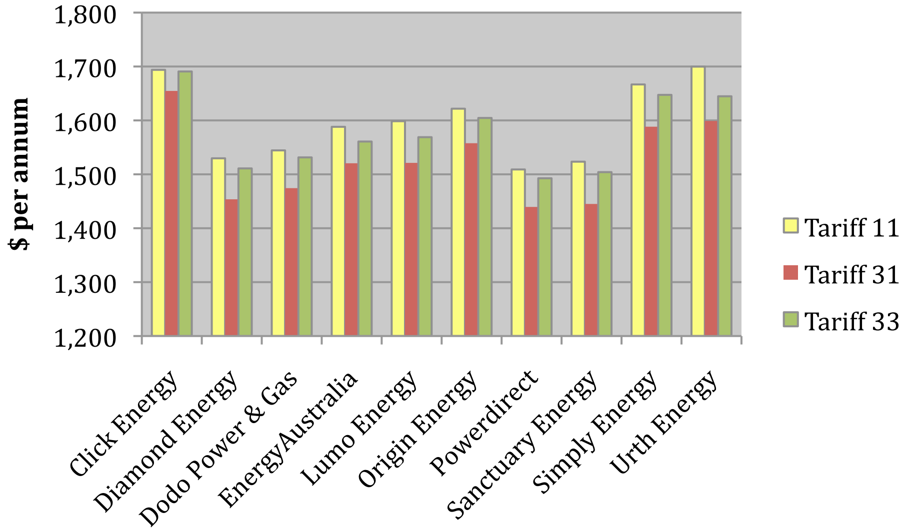
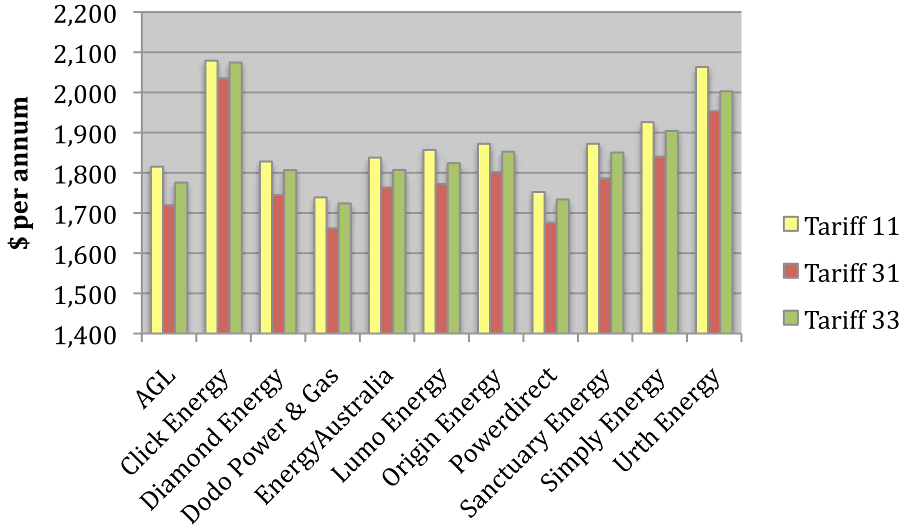


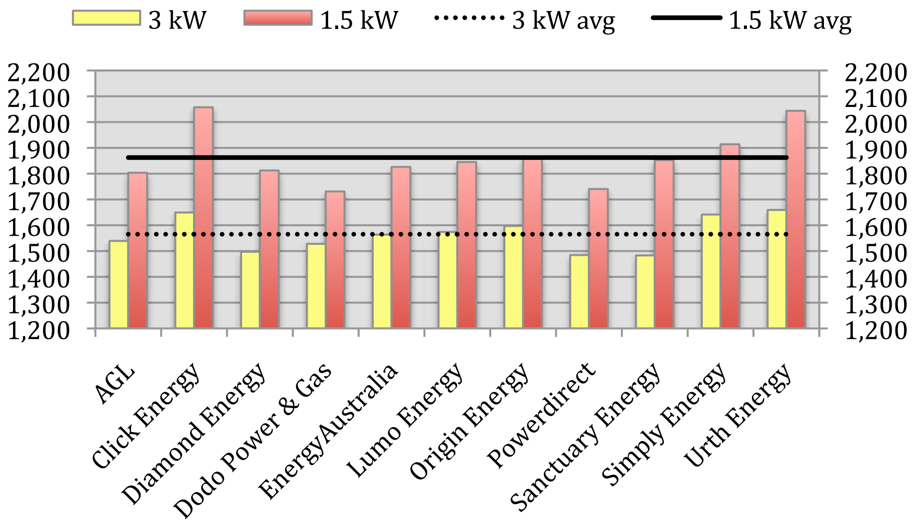
Chart 20 Annual bills including discounts and FIT credits for *Brisbane* customers with a *1.5 kW* solar system. Electricity offers post July 2016 as annual bills, Tariff 11, 31 and 33 8,000kWh (GST inc).[31]



Homes outside Brisbane's metropolitan area will typically have less overshadowing and therefore a higher generation capacity and export rate. Chart 21 compares annual retail bills for solar customers in Brisbane with 3 kW and 1.5 kW installed. It shows that the annual bills for solar customers are somewhat lower in non-metropolitan areas but the same retailers produce higher than average bills and the price-spread is similar to that in metropolitan areas (see chart 18 above).

[30] Ibid
[31] Ibid

Chart 21 Annual bills including discounts and FIT credits for *regional and rural* customers with 3 kW and 1.5 kW solar systems. Electricity offers post July 2016 as annual bills, Tariff 11, 8,000kWh (GST inc).[32]



[32] Calculations include discounts off usage or bill as well as pay on time discounts off usage or bill.