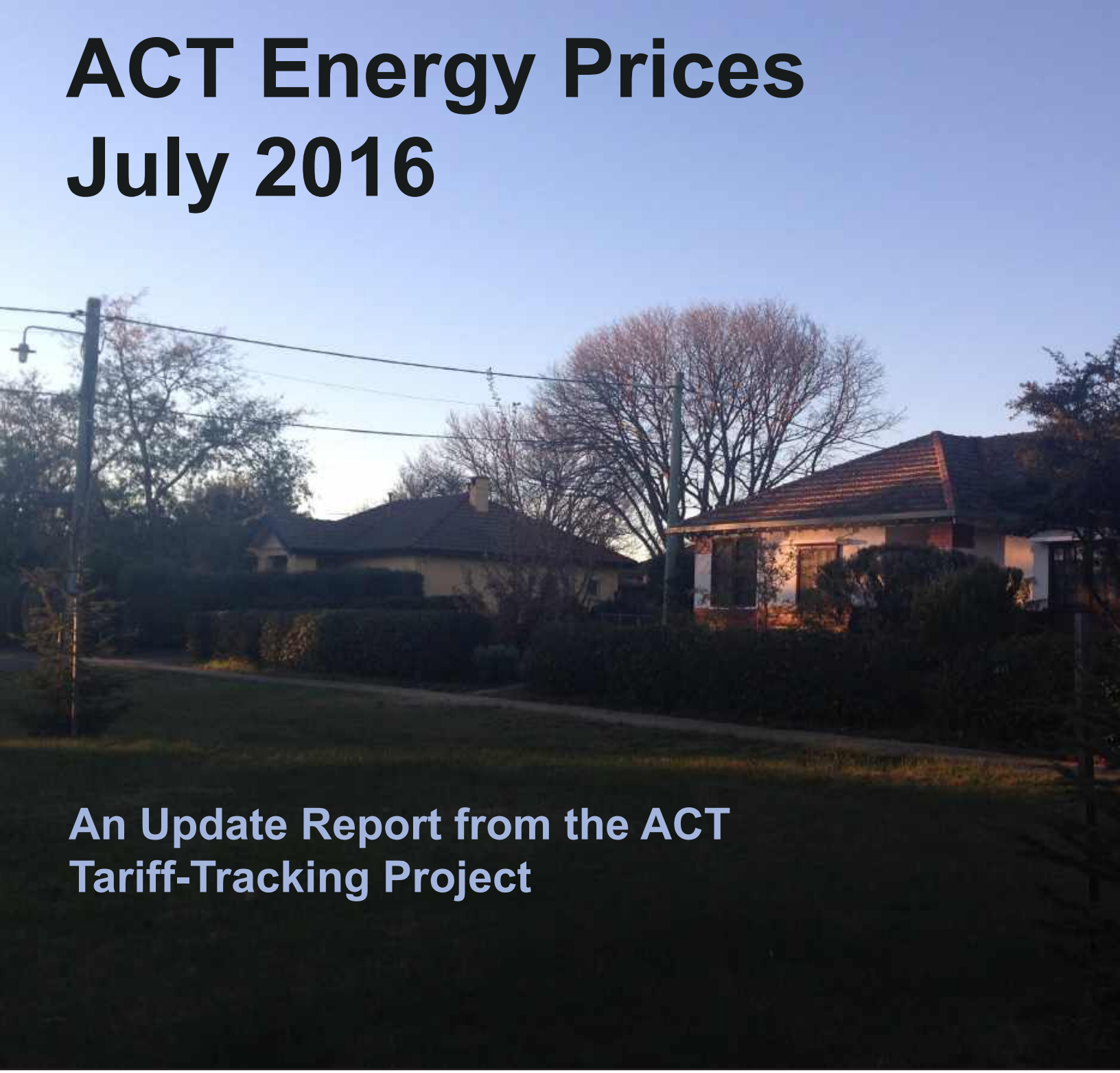
ACT Energy Prices July 2016



An Update Report from the ACT Tariff-Tracking Project

St Vincent de Paul Society
good works

ALVISS CONSULTING

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.

ACT Energy Prices July 2015 – July 2016
An Update Report on the ACT Tariff-Tracking Project

May Mauseth Johnston, August 2016
Alviss Consulting Pty Ltd

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

The ACT Tariff-Tracking Project

This project has tracked electricity and gas tariffs in the ACT from July 2009 to July 2016 and developed a spreadsheet-based tool that allows consumer advocates to build on the initial analysis while continuing to track changes as they occur.

To analyse changes to energy costs in the ACT, we assume typical household consumption of 48,000Mj per annum for gas, 6,500kWh per annum in electricity consumption for dual fuel households, and 8,000kWh per annum for all-electric households, thereof 30% off-peak for customers with controlled load (off-peak 1).[1]

We have also developed workbooks that allow the user to enter consumption levels and analyse household bills for regulated electricity and gas market offers from July 2009 to July 2016, as well as published electricity and gas market offers post the price resets in July 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: Regulated electricity offers July 2009-July 2016
Workbook 2: Gas offers July 2009-July 2016
Workbook 3: Electricity market offers post July 2013, 2014, 2015 and 2016
Workbook 4: Gas market offers post July 2013, 2014, 2015 and 2016
Workbook 5: Solar offers post July 2016

The four workbooks can be accessed at the St Vincent de Paul Society's website: www.vinnies.org.au/Energy

This report presents some of the key findings produced by the Tariff-Tracking tool to date.

[1] Gas and electricity consumption for dual fuel households is based on a mix of ICRC figures (see ICRC, Compliance and Performance Report for 2010-11, Licensed Electricity, Gas, Water and Sewerage Utilities, November 2012), ACT Government Canberra Quick Stats 2009-2010 and our own estimates. Note, however, that the Tariff-Tracking tool (the workbooks) is designed so users can insert their own consumption levels.

[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' websites to collect market offer for the Tariff-Tracking tool. If the retailer has more than one market offer we use the offer with the best rates/discounts that do not require direct debit arrangements. 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.

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Key findings

In terms of general trends, the tariff analysis has found that:[3]

- Households' annual electricity costs have typically increased by $100, or 6%, since July 2015. See chart 1 in section 1.

- Households' annual gas costs have typically decreased by $110, or 6.5%, since July 2015. See table 1 in section 1.

- Annual energy bills (electricity and gas) for dual fuel households with average consumption will decrease slightly. This is because the decrease to gas costs will offset the increase to electricity costs (as well as their electricity consumption being lower compared to all-electric households). See chart 3 in section 1.

- There are still very few market offers available to residential consumers in the ACT. ActewAGL, Energy Australia and Origin Energy are the only retailers marketing electricity and gas offers to residential consumers. However households on ActewAGL's standing offer can save by switching to a market offer.

- A typical consumption household can save $175 per annum (10%) on electricity costs by switching from ActewAGL's standing offer to ActewAGL's market offer (including discounts). See chart 6 in section 2.1.

- A typical consumption household can save $165 per annum on gas costs by switching from ActewAGL to Energy Australia (including pay on time discounts). See chart 9 in section 2.2.

- For an average consumption household, the network use of system charge (NUOS) currently accounts for 39% of their total bill. See section 4.

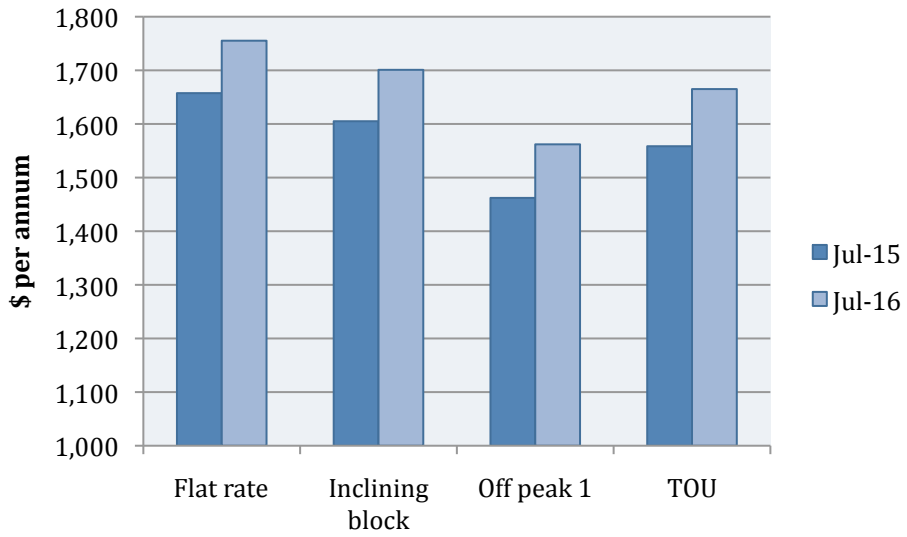
- ActewAGL and Origin offers a FIT rate of 6 cents per kWh for their respective 'Reward' and 'Saver' products while Energy Australia does not offer a retailer funded FIT for its 'Flexi Saver' product. A household with a 3 kW solar system installed will receive approximately $200 per annum in FIT credits from ActewAGL and Origin. This, in combination with ActewAGL's rates and discounts, means that a solar households using 8,000 kWh per annum is almost $250 per annum better off on ActewAGL's offer compared to Energy Australia's offer. See section 5.

[3] These calculations are based on changes to the regulated offer for dual fuel customers using 6,500kWh per annum, changes to the regulated offer for all-electric customers using 8,000kWh per annum (thereof 30% off-peak for customers with controlled off-peak load) and ActewAGL's offers for gas customers using 48,000Mj per annum.

1. Energy price changes from July 2015 to July 2016

Chart 1 below shows increases to the regulated electricity rates from July 2015 to July 2016 for each of the four tariff types. The annual bill for all-electric households with a typical consumption level will range from $1,560 to $1,750, depending on the tariff type. Average consumption households will experience an increase of approximately $100 to their annual bill regardless of the tariff type they are on.

Chart 1 Increases to the annual cost of regulated electricity offers for **all-electric** households from 2015 to 2016, Based on annual consumption level of 8,000kWh, GST inclusive[4]



Charts 2 and 3 below show changes in electricity and gas costs for dual fuel households. As these households typically use less electricity compared to all-electric households, the increases to the electricity bill will naturally be lower. Typical consumption dual fuel customers can expect and increase of $80-$90 to their annual electricity cost (chart 2). When combining the electricity and gas costs however, the total cost of energy, for average consumption households, has decreased by 1% due to lower gas prices (chart 3).

[4] Thereof 30% off-peak for households with controlled load (off-peak 1) and 20% peak, 50% shoulder and 30% off-peak for households on a Time of Use (TOU) tariff.

Chart 2 Increases to the annual cost of regulated electricity offers for **dual fuel** households from 2015 to 2016, Based on annual consumption level of 6,500kWh, GST inclusive[5]

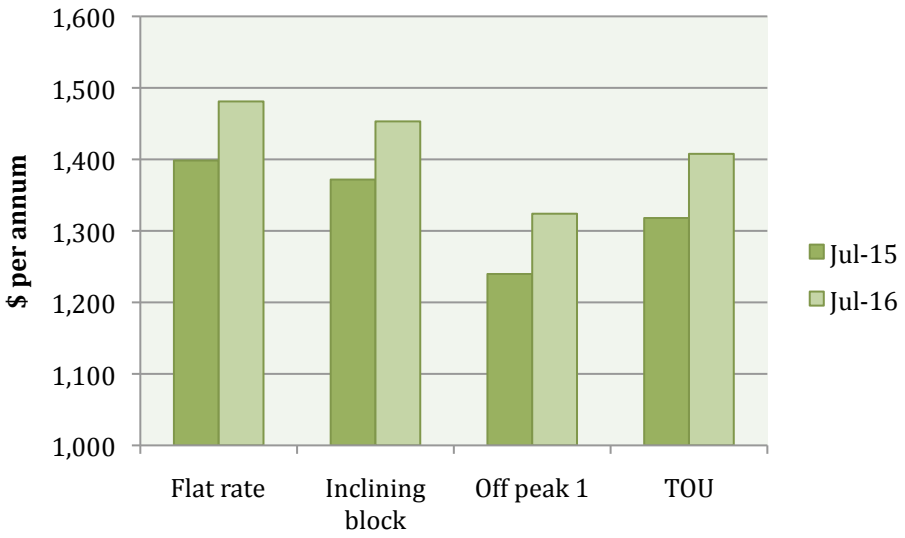


Chart 3 Changes to the annual cost for **dual fuel** customers and **gas** only from 2015-2016, dual fuel based on 6,500kWh (flat rate) and 48,000Mj per annum, GST inclusive[6]

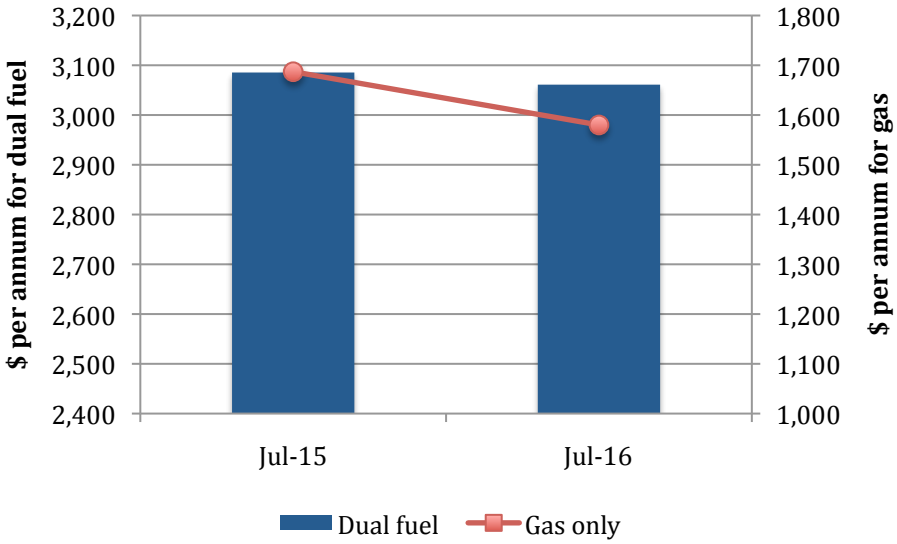


Table 1 below highlights the price trends for electricity and gas offers in the ACT from 2015 to 2016. All-electric households will typically see an increase to the annual electricity bill of $100 since last year while dual fuel households will typically experienced a combined decrease (electricity and gas) to the annual energy bill of approximately $25.

[5] Thereof 20% peak, 50% shoulder and 30% off-peak for households on a Time of Use (TOU) tariff.

[6] Based on ActewAGL's gas rates only.

Table 1 Electricity and gas price changes from July 2015 – July 2016

	All-electric (8,000kWh)	Gas (48,000Mj)	Dual fuel (6,500kWh + 48,000Mj)
$ Change	$100	-$110	-$25
% Change	6%	-6.5%	-1%

2. Regulated vs. market offers post July 2016

Since the introduction of full retail competition in the ACT energy retail market in 2003, households have been able to choose between regulated and market offers.[7] However only three retailers, the host retailer ActewAGL, Energy Australia and Origin Energy, are currently offering market contracts to residential electricity and gas customers. ActewAGL has approximately 95% of the market share in both the electricity and gas markets (small customers).[8]

The price-spread (or the difference between market offers) is, however, mostly increasing. Two years ago ACT households were unable to reduce their electricity bill by switching and the maximum potential saving for gas was $50 per annum. In July 2015 the potential saving was $150 for electricity and $160 for gas and this year the potential savings are $175 and $135 respectively.

The entry of Origin Energy into the residential energy markets in the ACT increased the number of offers available as well as the size of the discounts offered. We have yet to see what impact these developments will have on ActewAGL's market share but we note that ActewAGL has now responded to the increased competition by offering discounts on their market offer rates.

2.1 Electricity: Regulated vs. market offers post July 2016

Chart 4 below shows that households using 8,000kWh per annum (flat rate) will have an annual electricity bill of between $1,750 and $1,830, and that Energy Australia's offer contains higher rates than ActewAGL and Origin Energy (when calculated as annual bills and noting that this chart is based on rates prior to additional discounts).

[7] Also referred to as franchise customers (those on the regulated rate and non-franchise customers (those on a negotiated market contract). Note that gas retail prices are not regulated.

[8] AER, *State of the Energy Market 2015*, p 126

Chart 4 Electricity offers as annual bills, post July'16, Flat rate, not including discounts, 8,000kWh per annum (GST inc)

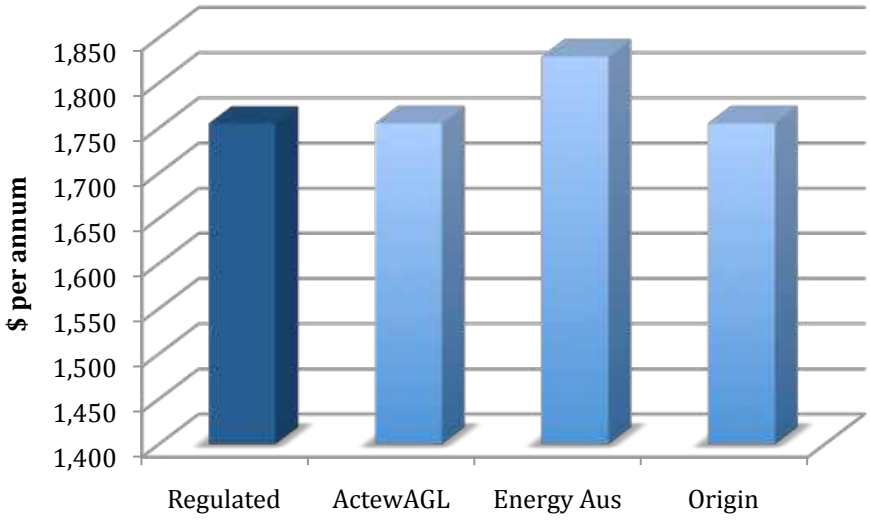
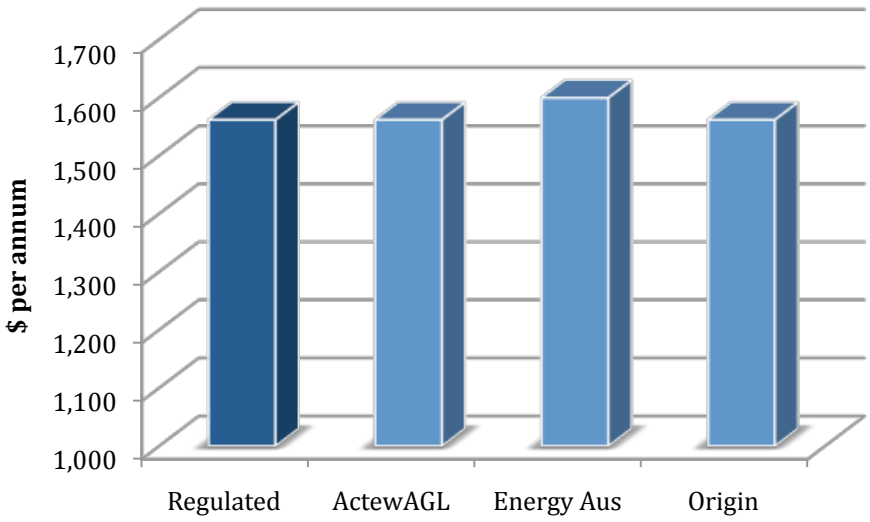


Chart 5 below shows a similar trend for households with controlled off-peak load.

Chart 5 Electricity offers as annual bills, post July'16, Controlled load, not including discounts, 8,000kWh per annum, thereof 30% off-peak (GST inc)

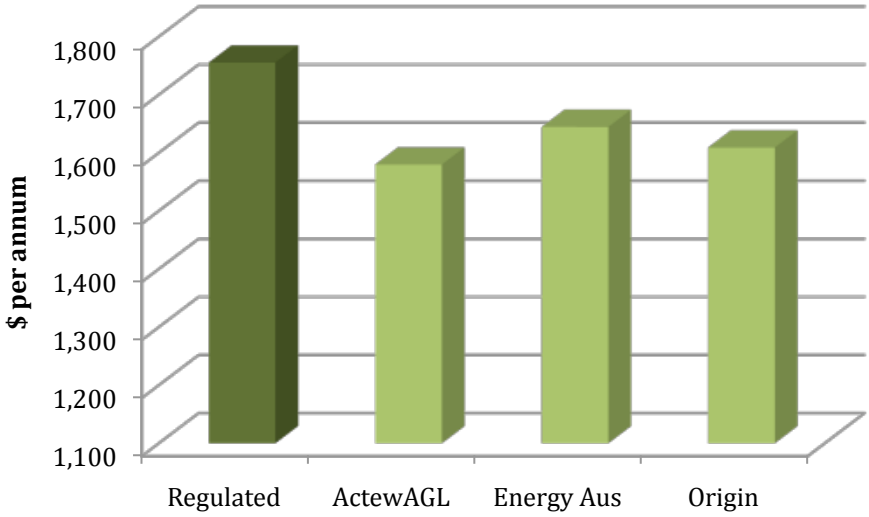


As stated above, the calculations for the market offers in charts 4 and 5 are based on rates only (cost per kWh and fixed charges) and do not include other market offer features such as discounts on consumption rates, discounts if bills are paid on time and welcome credits.

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

Chart 6 below shows annual bills after including additional discounts and pay on time discounts. It shows that average consumption (8,000kWh) households currently on ActewAGL's regulated rate can save $175, or 10%, per annum by switching to ActewAGL's market offer. Consumers switching from the regulated rates to Energy Australia would save approximately $110 per annum while customers switching to Origin would save almost $150 per annum (which are the same savings these two retailers offered last year).

Chart 6 Annual bills including discounts. Electricity offers post July 2016 as annual bills, Flat rate, 8,000kWh (GST inc).[9]



The discounts (including pay on time discounts) used to estimate the annual bills for chart 6 above are shown in table 2 below. Table 2 also shows other contract terms and features, such as early termination fees, associated with these market offers. Energy Australia and Origin have multiple market offers and the offers offer with the best rates/discounts that do not require direct debit arrangements have been included here.

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

Table 2 Published electricity market offers taking effect after 1 July 2016: Key additional features and contract conditions

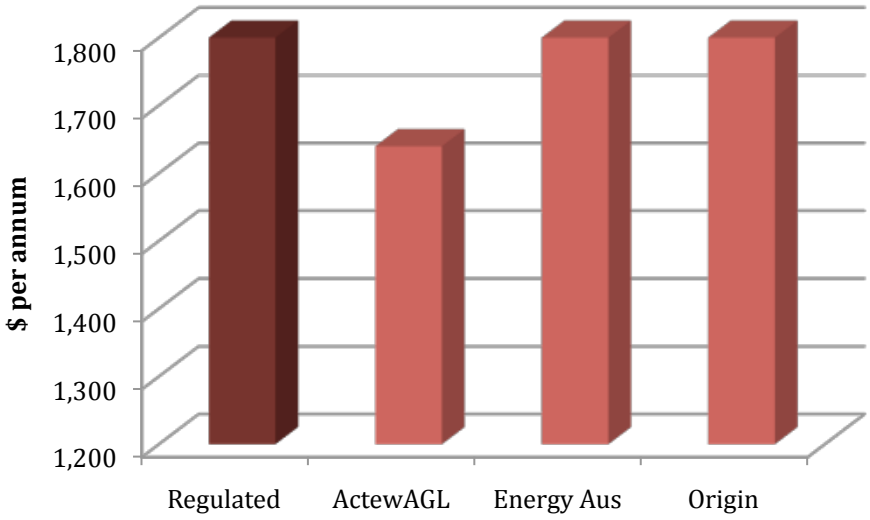
	Guaranteed discounts	Contract term/ benefit period	Early Termination Fee	Late Payment Fee	Pay on time discounts	Other
ActewAGL	12% off usage	1 year	No	$15	No	No
Energy Australia	No	1 year	No	$12	12% off usage	Yes^
Origin Energy	No	1 year	No	$12	10% off usage	No

^ Energy Australia offers an additional 2% discount off usage for customers that sign up online and agree to e-billing.

Pay on time discounts are becoming an increasingly common feature of energy market offers across Australia. Pay on time discounts combined with late payment fees means that ACT households can be severely penalised for late payment. Energy Australia and Origin have both pay on time discounts and late payment fees while ActewAGL has no pay on time discount but does apply late payment fees.

Chart 7 below shows the estimated annual electricity bill for customers that always pay late. It shows that Origin's market offer is similar to the regulated rates for late paying customers with average consumption (less than $15 difference) while Energy Australia's offer is $60 more than the regulated rates. ActewAGL is the only retailer that offers a guaranteed discount off usage rates and this results in late paying customers still saving $175 per annum by switching from the regulated rates to ActewAGL market offer.

Chart 7 Estimated annual bill for customers that pay late, electricity offers as of July 2016, Flat rate, 8,000kWh (GST inc)[10]

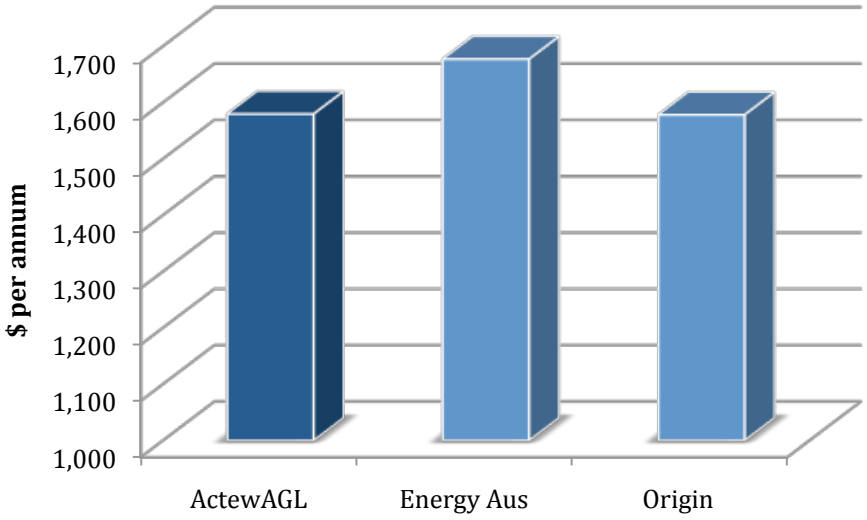


2.2 Gas market offers post July 2016

There are no regulated gas offers in the ACT and only Energy Australia, Origin Energy and ActewAGL currently have gas market offers for residential consumers. Furthermore, ActewAGL's stand alone gas offer does not contain any additional features, such as guaranteed discounts or pay on time discounts, while Energy Australia and Origin's offers do. Chart 8 below shows that while ActewAGL and Origin have quite similar rates (excluding additional discounts), Energy Australia's rates are higher. This is because both ActewAGL and Origin reduced their rates as of July/August 2016 while Energy Australia's remained the same.

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

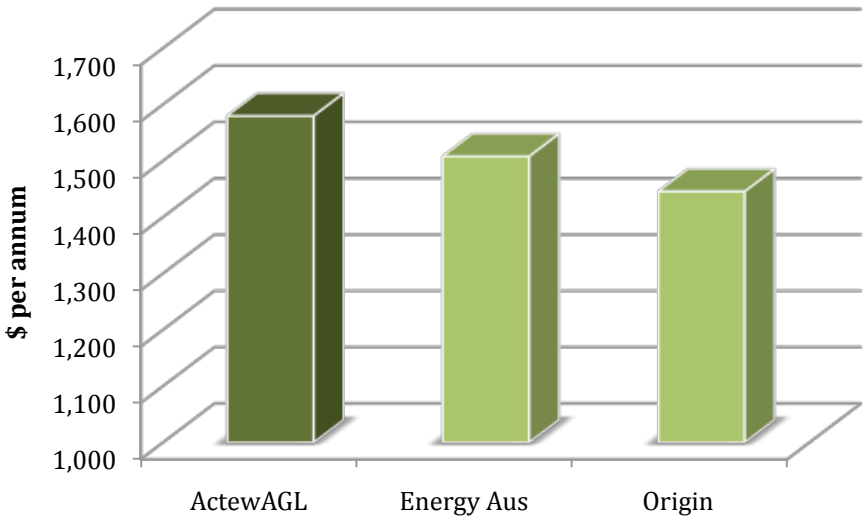
Chart 8 Gas offers post July'16, as annual bills (48,000Mj per annum)



However, the calculations for the market offers include their rates only (cost per MJ and fixed charges) and do not include other market offer features such as pay on time discounts. As such, consumers assessing gas market offers should take additional features into account as well as being aware of contract conditions such as late payment fees, the length of the contract and fees for exiting the contract early.

Chart 9 below shows annual bills after including additional discounts and pay on time discounts. It shows that households with average consumption (48,000Mj) can save $135 per annum by switching from ActewAGL to Origin's market offer.

Chart 9 Annual bills including discounts. Gas offers post July 2016 as annual bills, 48,000Mj (GST inc).[11]



The discounts (including pay on time discounts) used to estimate the annual bills for chart 11 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.

Table 3 Published gas market offers post July 2016: Key additional features and contract conditions

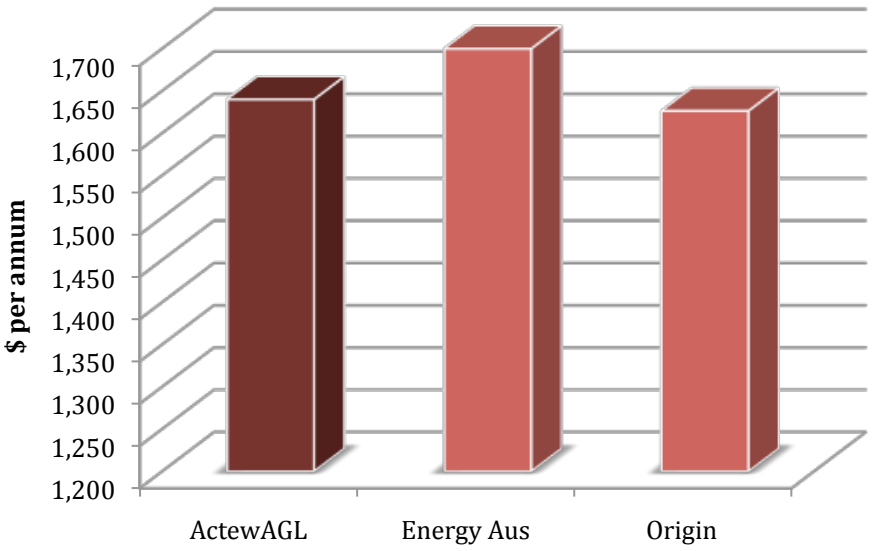
	Guaranteed discounts	Contract term/ benefit period	Early Termination Fee	Late Payment Fee	Pay on time discounts	Other
ActewAGL	No	No	No	$15	No	No
Energy Australia	No	1 year	No	$12	12% off usage	Yes^
Origin Energy	No	1 year	No	$12	10% off usage	No

^ Energy Australia offers an additional 2% discount off usage for customers that sign up online and agree to e-billing.

However, as Energy Australia and Origin's market offers comprise significant pay on time discounts (10 - 12%), late paying customers in the ACT will only save $15 per annum by switching from ActewAGL to Origin's gas offer. Chart 10 below shows the estimated annual gas bill for customers that always pay late.

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

Chart 10 Estimated annual bill for customers that pay late, gas offers post July 2016, 48,000Mj (GST inc)[12]



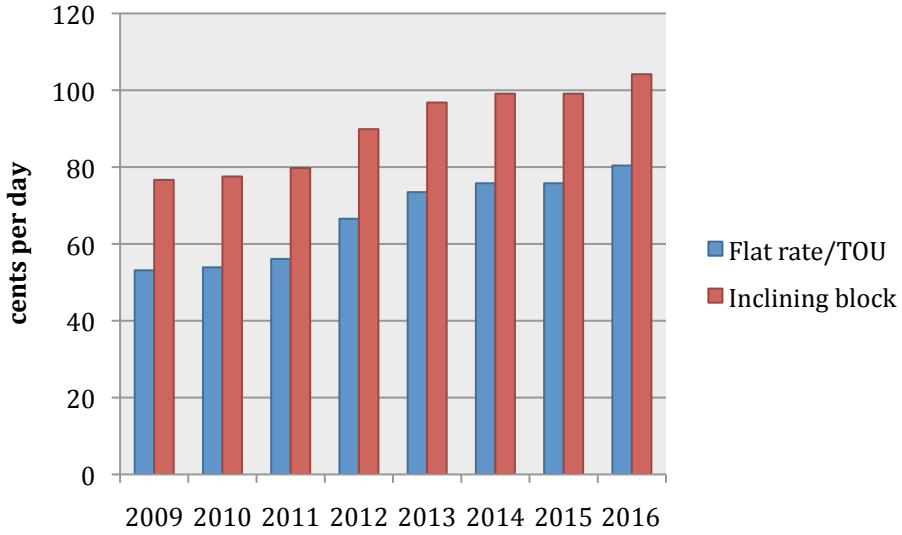
[12] Annual bill calculation includes discounts, pay on time discounts and late payment fees as per energy offer.

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 the ACT the supply charge for electricity customers on the flat rate (and the less common TOU rate) has increased by 51% since July 2009, while the overall higher supply charge for the inclining block tariff has increased by 36%. In July 2016 price-set the supply charge for flat rate and TOU customers increased by 3.5% since last year and the inclining block tariff increased the fixed component by 5%. Customers on the flat rate or a TOU tariff will continue to pay just under $295 per annum in fixed supply charges while customers on the inclining block tariff will pay $380. Chart 11 below shows the changes to the daily supply charges for regulated electricity rates from July 2009 to July 2016.

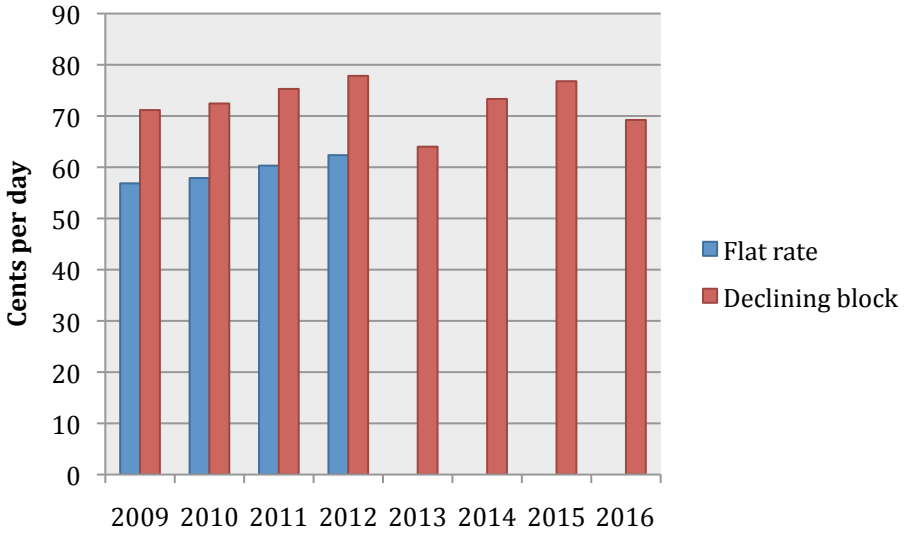
Chart 11 Daily supply charge (incl GST), regulated electricity offers, 2009-16



3.2 Gas supply charges

The gas supply charge decreased post July 2016. ACT households currently pay just over $250 per annum in order to be connected to natural gas. Chart 12 below shows gas supply charges from July 2009 to July 2016.

Chart 12 Gas supply charges from 2009 to 2016, cents per day (incl GST)[13]



[13] ActewAGL merged their tariff products to a single gas offer in 2013. Note: The declining block tariff was actually an inclining block in 2009 and 2010.

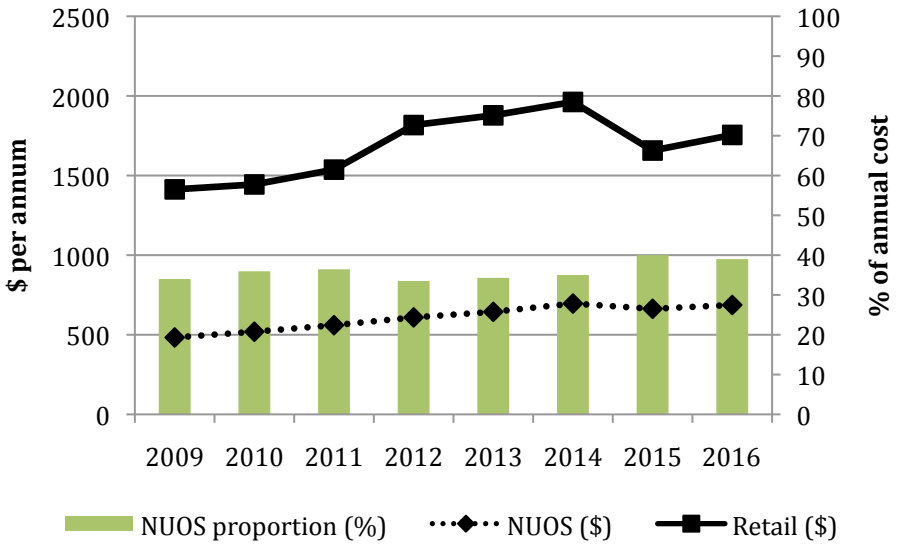
4. Network charges

The ACT electricity network, ActewAGL, introduces 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) as well as other costs such as jurisdictional charges and metering charges. The retailers can, and generally will, build changes to the NUOS (in relation to both shape and price) into their market retail tariffs. As the ACT also has a regulated retail offer, the Independent Competition and Regulatory Commission (ICRC) also changes the regulated retail rate to reflect changes to the NUOS.

Chart 13 shows annual retail bills (solid line), NUOS charges as annual cost (dotted line) and NUOS as proportion of annual bill (columns).

It shows that both the NUOS charge and the retail bill increased in July 2016 but the NUOS proportion of bills has decreased slightly. Since July 2015, the NUOS has included a metering capital charge (as part of the fixed supply charge) and if we exclude the metering capital charge from the NUOS, the NUOS accounts for 38% of the total cost in both 2016 and 2016 (instead of the respectively 40% and 39% indicated in the chart below).

Chart 13 ActewAGL: 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 retail tariff, single rate, 8,000 kWh per annum)[14]



[14] Based on the regulated rates from 2009 to 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 16,500 domestic solar systems in the ACT.[15] Many of these households are currently receiving solar feed in rebates of between 40 – 50 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' Feed in tariff (FIT) rates as well as the cost of electricity imported.

This section analyses and compares market offer bills for ACT 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.
- An annual generation capacity per kW installed of 1.801 MWh and an export rate of 55.1% for 3 kW systems and 27.3% for 1.5 kW systems.[16]

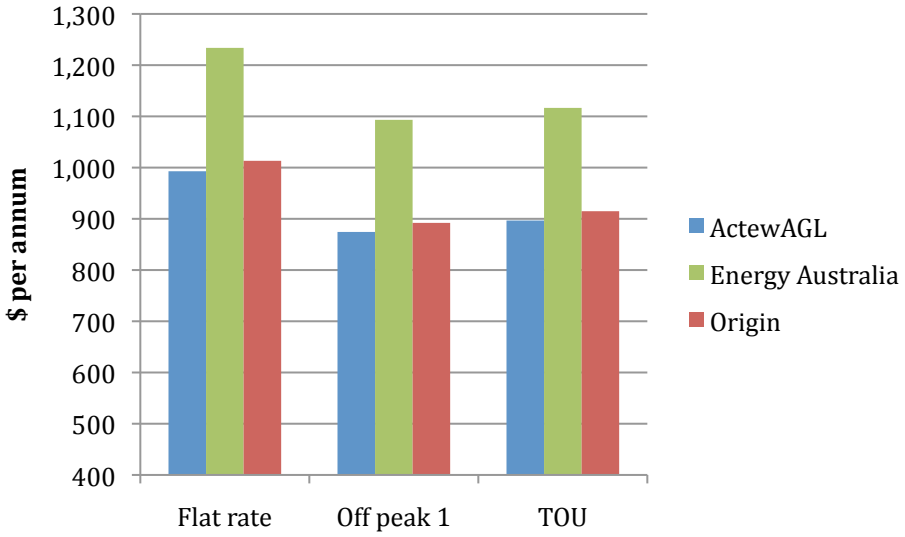
[15] Clean Energy Council, Clean Energy Australia Report 2015,26

[16] 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). As the data is based on NSW it might assume slightly higher generation capacity than the ACT average. The Clean Energy Council has reported that average daily production for 3 kW systems in Canberra is 12.9 kWh and (6.45 kWh for 1.5 kW systems). See http://www.solarchoice.net.au/blog/how-much-energy-will-my-solar-cells-produce/. 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

- 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, 30% of the total load has been allocated to the off-peak rate.
- For TOU tariffs, 20% of the load has been allocated to the peak rate, 30% to the off-peak rate and 50% to the shoulder 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.

Energy Australia does not offer a FIT rate for customers on the 'Flexi Saver' product while ActewAGL and Origin offers a FIT rate of 6 cents per kWh for their respective 'Reward' and 'Saver' products. Based on the assumptions listed above, a household with a 3 kW solar system installed will receive approximately $200 per annum in FIT credits from ActewAGL and Origin. This, in combination with ActewAGL's rates and discounts, means that a solar households with this consumption level is almost $250 per annum better off on ActewAGL's offer compared to Energy Australia's offer.

Chart 14 Annual bills including discounts and FIT credits for customers with a 3 kW solar system. Electricity offers post July 2016 as annual bills, Flat rate, 8,000kWh (GST inc).[17]

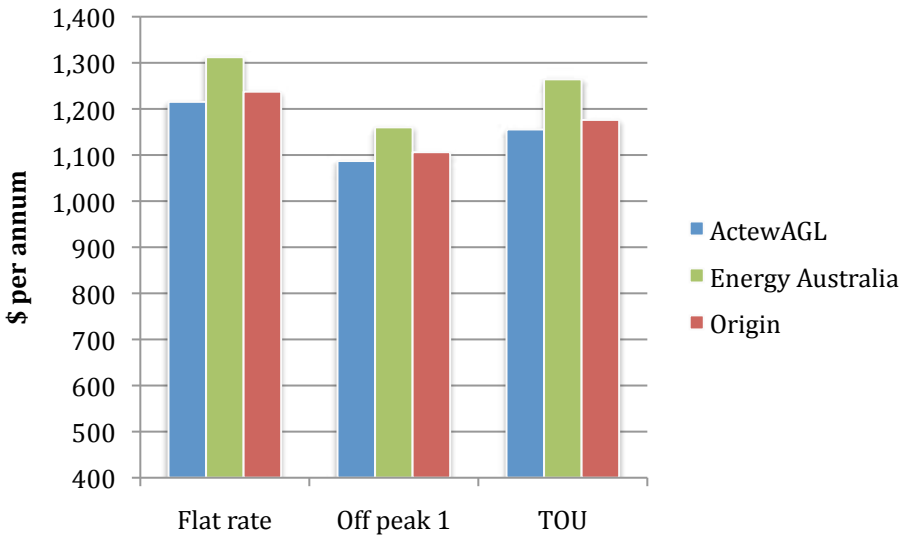


Households with the same consumption level and a 1.5 kW system installed can expect to receive approximately $45 in FIT credits per annum from ActewAGL and

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

Origin and the difference between Energy Australia and ActewAGL's annual bills is just under $100 per annum (see chart 15).

Chart 15 Annual bills including discounts and FIT credits for customers with a 1.5 kW solar system. Electricity offers post July 2016 as annual bills, Flat rate, 8,000kWh (GST inc).[18]



ActewAGL's market offer includes a 10% discount off usage charges but it also has a lower FIT rate compared to the standing offer. Chart 16 includes bill calculations for both ActewAGL's standing and market offers and it shows that households with 1.5 kW and 3.0 kW systems are better off on AGL's market offer, despite having a lower FIT rate.

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

Chart 16 ActewAGL annual bills for standing offer (7.5 cents FIT) and market offer (6 cents FIT) including discounts and FIT credits for customers with a 1.5 kW and 3.0 kW solar system. Electricity offers post July 2016 as annual bills, Flat rate, 8,000kWh (GST inc).