



carbon + energy  
markets

Victorian retail gas market for residential and  
small business customers

**Description and analysis of commonly available  
offers**

May 2017

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# 1 Introduction

This Report provides descriptive qualitative and quantitative information on the gas retail market in Victoria using data on publicly available offers. The Report covers the retail market applicable to residential and small business customers.

The main purpose of this Report is provide a evidence on how much and how retailers operating in Victoria are charging for the provision of their service of retailing gas.

The description in this report is based on the commonly available offers that retailers are required to publish on their websites, and which are recorded on the Victorian Government's price comparison website. Network tariff data is taken from published network tariffs which are then matched to each offer on the basis of structure (each retail offer is associated with the nearest network tariff on the basis of their tariff structure).

## **2 Retail market description**

This section provides a summary description of the Victorian retail gas market. It describes in order customer numbers, retailers and retail offers, fixed versus variable charges in retail offers, discounts, and retail versus network charges.

### **2.1 Customer numbers**

At the end of 2016 there were a little under 1.9 residential gas connections in three separate distribution areas. Each of these distribution areas are divided into sub-zones and different network, and retail offers apply in these sub-zones.

### **2.2 Retailers and retail offers**

Eight retailers offer to sell grid-supplied gas to households and/or small business gas consumers in Victoria. All of these retailers make “market” offers and “standing” offers. Retailers have discretion in setting the prices in these offers, but are restricted from changing their standing offers more than twice per year. Retailers are required to post the terms of their offers in energy price fact sheets on their websites.

Three different tariff structures are used:

- Block tariffs: These are tariffs which charge different amounts for blocks of consumption metered daily or three-monthly. There may be between 2 and 4 blocks. A daily charge is also levied.
- Flat tariffs: This tariff has a single rate for consumption and a daily charge.
- Seasonal block: these are like block tariffs but have a seasonal component to the block rates.

On 12 May 2017 there were 792 different offers to residential and small business customers in the three gas regions and their respective zones as summarised in Table 1 below.

**Table 1. Number of gas offers (market and standing) to residential and small business customers by distribution area and tariff type**

	AusNet Services				Australian Gas Networks											Multinet Gas			
	Adjoining West	Adjoining Central	Central (AusNet)	West	Bairnsdale			Central (AGN)			Murray			North		Mildura	Melbourne Metrop	Yarra Valley Gas	South Gippsland
	al - Multiflat	al - Multiflat	al - Multiflat	al - Multiflat	multiflat	Flat	al - Multiflat	multiflat	Flat	al - Multiflat	multiflat	Flat	al - Multiflat	multiflat	al - Multiflat	multiflat	al - Multiflat	al - Multiflat	multiflat
agl	15	18	12	16	10			20			10			10				20	10
alinta	2	2	4	2		2		4	2			2		2				4	2
click	5	5	10	5				12	3		5			5				10	5
dodo			4							4						1		4	2
ea	10	10	20	12			10			30			10		10			20	10
lumc	10		17	13				20			8	8			10			20	10
momentum	4	4	4	4						8			4		4			4	4
origin	11	11	15	11	4	8		22	11			11		11		11		21	12
redenergy	2	2	4	2				4	2			2		2				4	2
simply			14	8						17						3		14	

Consumers in the more densely populated areas around Melbourne (the Multinet area and parts of the Ausnet and AGN areas) have many more competing retailers and competing offers.

The annual bill for a 55 GJ per annum residential customer that consumes 70% annually of their gas in the four colder winter months (assuming the conditions in conditional discounts are net) ranked from least expensive to most expensive is shown in Figure 1 below. There are 494 offers in this dataset:

**Figure 1. Annual gas bill, all residential offers, 55 GJ per year**

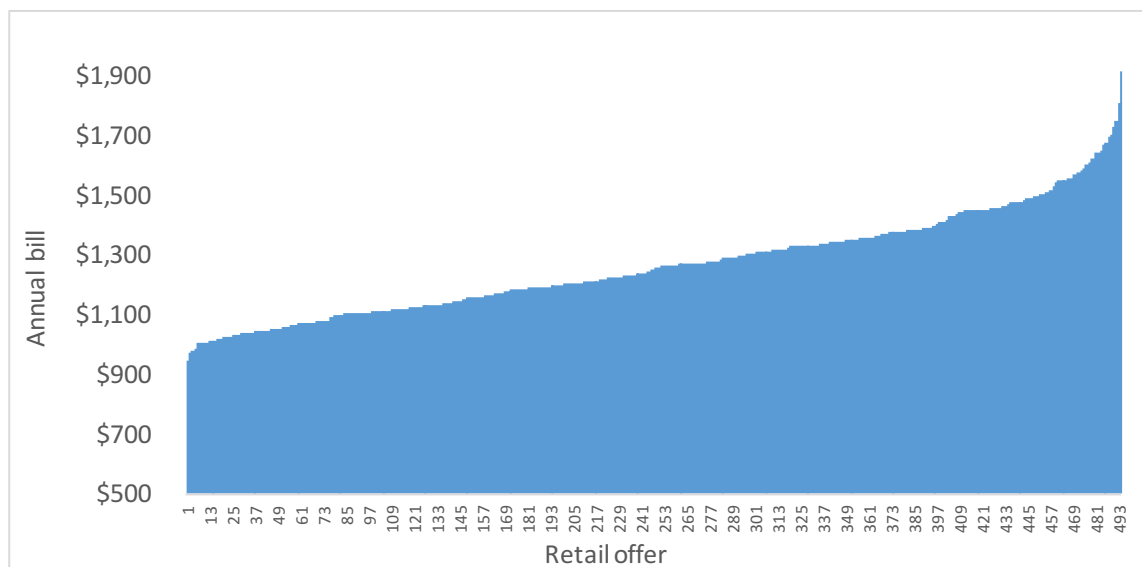


Table 2 presents summary statistics on the variable charges in flat and block tariffs for residential customers. It shows that block tariffs typically have higher rates than the variable rate in flat offers and also that the median rate in block offers barely varies between blocks.

**Table 2. Variable charges in flat and block offers to residential customers (market offers)**

	Block tariffs			
	Flat rate (cents per MJ)	Block 1 (cents per MJ)	Block 2 (cents per MJ)	Balance rate (cents per MJ)
Highest	2.72	3.49	2.76	2.31
Lowest	2.02	1.92	1.79	1.47
Median	2.39	2.44	2.17	1.76
Average	2.39	2.52	2.15	1.81

Table 3 for small business customers, also based on market offers, shows that median and average flat and block rates are about 10% lower than for residential customers.

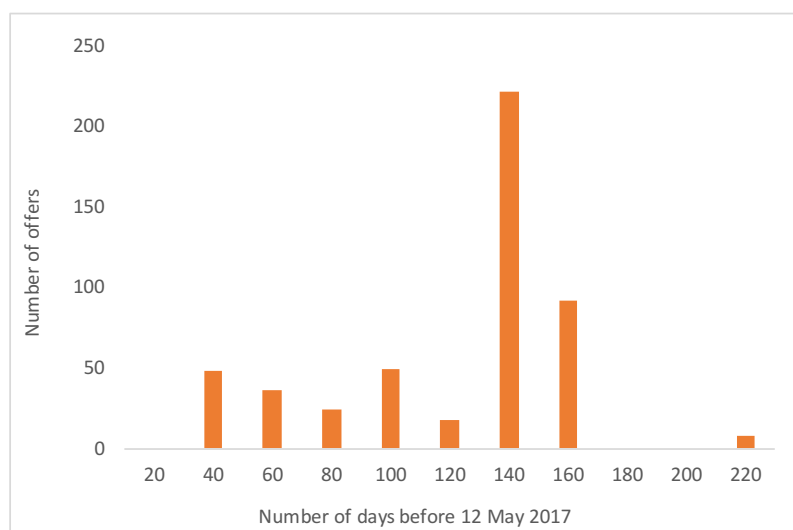
**Table 3. Variable charges in flat and block offers to small business customers (market offers)**

	Block tariffs				
	Flat rate (cents per MJ)	Block 1 (cents per MJ)	Block 2 (cents per MJ)	Block 3 (cents per kWh)	Balance rate (cents per MJ)
Highest	2.47	2.85	2.47	2.06	2.06
Lowest	1.74	1.80	1.37	1.07	1.47
Median	2.11	2.10	1.74	1.45	1.21
Average	2.11	2.24	1.81	1.51	0.84

Retailers update their offers frequently, although less so than in electricity and many seem to change their offers around a few dates such as the start of the year, to coincide with other changes. Figure 2 shows that around 40% the market offers to households that are currently in the market were introduced 120 days ago, with the remaining 60 % introduced mostly more recently.



**Figure 2. Offer duration: number of days before 12 May 2017 when offers were introduced to the market**



### 2.3 Fixed versus variable charges in retail offers

Summary statistics of the fixed charge on residential gas offers (market) in Victoria is shown in Table 4 below.

**Table 4. Summary statistics on daily charges in residential retail offers**

	Daily charge (cents per day)
Highest	95
Lowest	59
Median	73
Average	74

Table 6 for small business customers shows that median and average daily rates are about 20% higher than for residential customers.

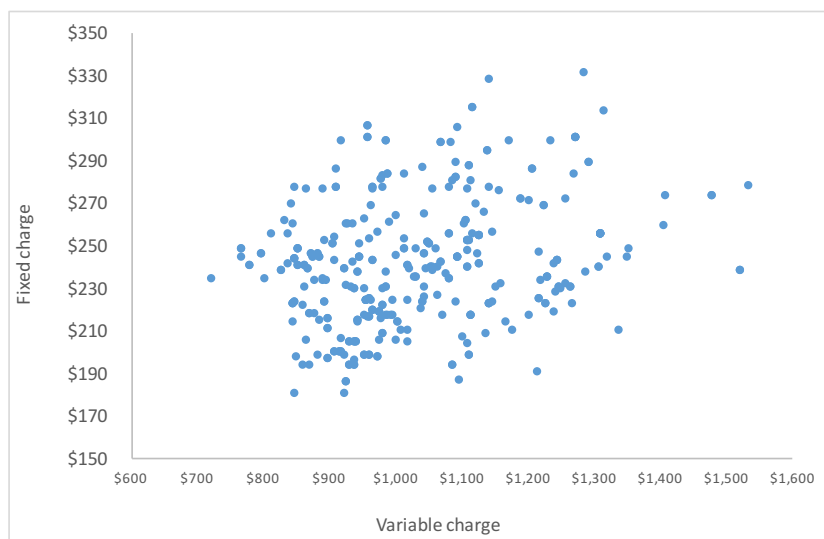
**Table 5. Summary statistics on daily charges in small business retail offers**

	Daily charge (cents per day)
Highest	109
Lowest	61
Median	88
Average	88

The proportion of the customers' bill that is accounted for by fixed charges will depend on many factors, but particularly their annual consumption and the discounts in their offers. The lower the consumption the greater the proportion of the bill that is explained by fixed charges. In addition, as described later in more detail, the predominant discount in retail offers is to discount usage charges rather than the total bill. This enlarges fixed charges relative to consumption charges.

Figure 3 shows the range of fixed charges (on the y-axis) and total charge assuming that all conditional discounts in offers that have them, are met.

**Figure 3. Scatter plot of fixed versus total charge in residential market offers**



## 2.4 Discounts

Table 6 presents summary statistics on discounts in market offers to residential customers. It shows that of the 361 residential market there were 64 that did not have any discount. 197 offers had a discount on usage charges, of which 155 were conditional. Of the 100 offers that had discounts on the total bill, all were conditional.

**Table 6. Summary statistics on discounts in market offers to residential customers**

	Number of offers	Median	Average	Highest	Lowest
Discount on Total (conditional and unconditional)	100	13%	10%	20%	0%
Of which unconditional	0	0%	0%	0%	0%
Of which conditional	100	13%	10%	20%	0%
Discount on Usage (conditional and unconditional)	197	26%	22%	40%	1%
Of which unconditional	42	5%	6%	12%	0%
Of which conditional	197	14%	13%	17%	7%
No discount	64				
<b>TOTAL</b>	<b>362</b>				

Table 7 provides summary statistics on discounts in market offers to small business customers. It shows generally similar outcomes to those for residential customers although discounts are much less prevalent in business offers although those do offer discounts typically offer discounts that are more commonly unconditional, at least relative to what they offer to residential customers.

**Table 7. Summary statistics on discounts in market offers to small business customers**

	Number of offers	Median	Average	Highest	Lowest
Discount on Total (conditional and unconditional)	25	15%	16%	17%	10%
Of which unconditional	0	0	0	0	0
Of which conditional	25	15%	16%	17%	10%
Discount on Usage (conditional and unconditional)	131	11%	11%	20%	5%
Of which unconditional	75	17%	16%	30%	0%
Of which conditional	56	11%	11%	20%	5%
No discount	47				
<b>TOTAL</b>	<b>203</b>				

As for electricity, discounts are sometimes fixed for the duration of what is often referred to as the “benefit period” at the end of which they may be varied or withdrawn. Benefit periods are typically one year, but in some offers extend to two years.

As might be expected, with such large conditional discounts, the annual bill in many residential offers will be significantly affected by whether the conditions in the discounts have been satisfied. This is shown in Figure 4 which shows the annual charges on the markets offers. It shows that if the conditions for discounts are not met, annual charges are typically in the range from \$1,300 to \$1,600 per year. If the conditions are met, the annual charge is most frequently in the range from \$1,100 to \$1,400 per year.

**Figure 4. Histogram showing frequency of annual charges (before-GST) with and without conditional discounts (assuming a 55 GJ per year household)**

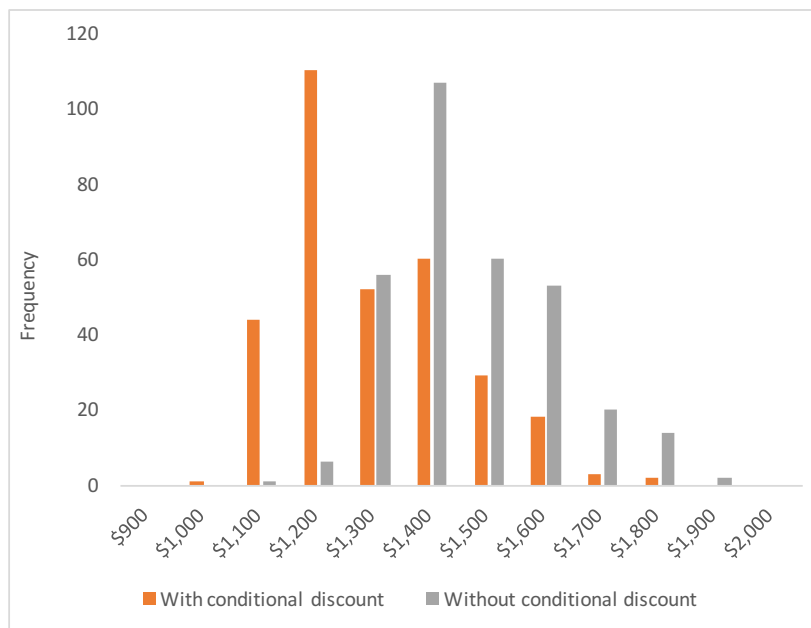
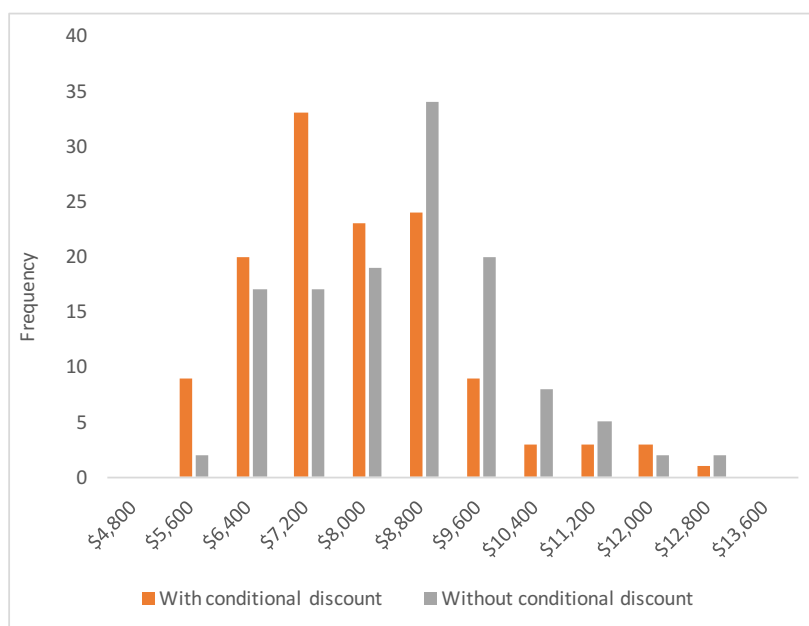


Figure 5 replicates the analysis in Figure 4 for the 128 offers with conditional discounts available to small business customers. Unsurprisingly the same trend for small business customers can be seen as for residential customers.

**Figure 5. Histogram showing frequency of annual charges (before-GST) with and without conditional discounts (assuming a 500 GJ per year small business)**



## 2.5 Network versus retail charges

As discussed in the next section, the charge for retailing gas and the charge for network services are typically the two largest components of the residential gas bill. A question that is frequently asked is how network and retail charges relate to one another. This subsection explores the data on this.

Three figures are presented showing in order total retail versus total network, and then the variable retail versus variable network and finally the fixed retail versus fixed network charges. The dataset used here is the average of the median offers (assuming all discounts are achieved) for AGL, Origin Energy and Energy Australia in the main central areas of each of the three distribution zones which together account for more than 70% of all Victorian households supplied with piped gas.

Figure shows that for the average of the three retailers' median offers, these retailers adjust their retail offers to reflect the network charges so that the difference between the total retail charge and total network charge is approximately the same in two of the three zones, but in the Ausnet Central Zone, the difference between retail and network charge is appreciable lower.

**Figure 6. Total retail charge minus total network charge**

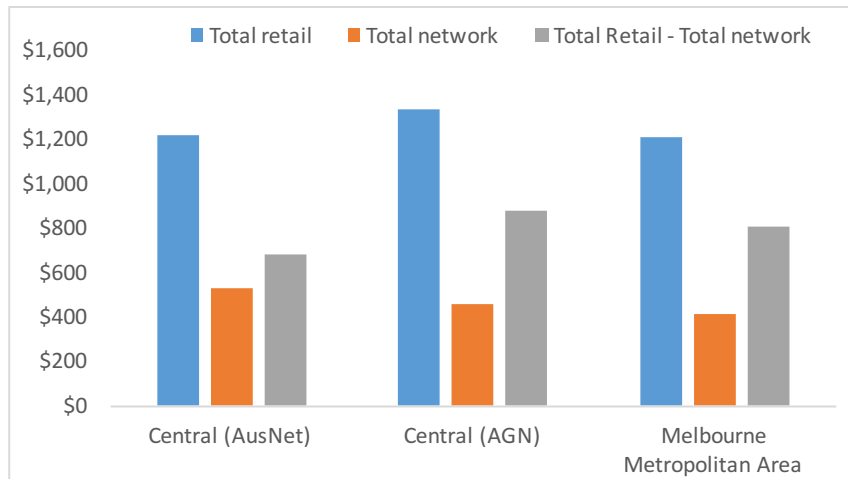
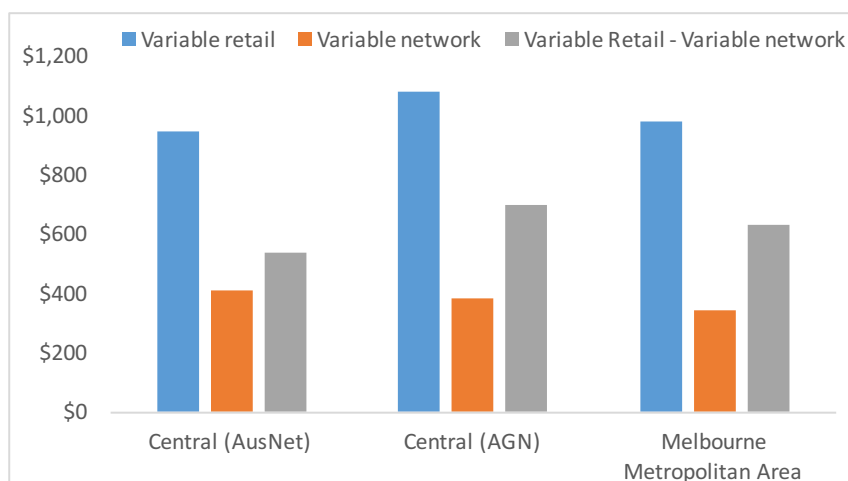


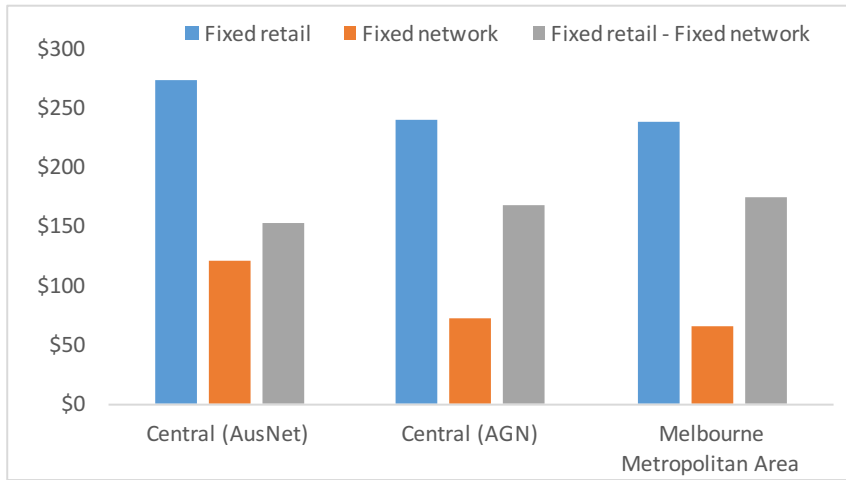
Figure 7 shows the variable network and retail charge and their difference while Figure 8 shows that the fixed network and fixed charge and their difference. It shows that in Ausnet’s distribution zone retailers are marking up their retail variable charges relative to network variable charges in much the same amount as they are for their fixed retail charges.

However comparing the relative size of the orange and grey bars in Figure 8, it is clear that in AGN and Multinet’s area retailers set their fixed charges in such a way that their mark up on the network service providers’ fixed charges is far higher than their mark up on the network service providers’ variable charges. This is consistent with the pattern seen in electricity.

**Figure 7. Variable retail charge and variable network charge**



**Figure 8. Fixed retail charge and fixed network charge**



### **3 Bill break-down**

This section breaks the residential and small business bill down into its component parts to reveal, by deduction, the charge the retailers make for their service of selling gas. The first subsection describes the method and the second presents the results.

#### **3.1 Method**

The charge that the retailers make for their services is not separately disclosed on customer's bills. Instead it has to be calculated by estimating the gas bill of a representative customer and then deducting the cost of the other components of the bill including the wholesale and network charges.

##### **3.1.1 Estimating the bill**

The first task is to estimate the bill of the representative customer by choosing the volume of electricity that that household purchases, and then the price that the household pays for that volume of gas.

Dealing first with volume, for residential customers, annual consumption of 55 GJ is assumed, of which 70% is consumed during the four winter months. For small business customers, some will consume less than households and others very much more. We have assumed 500 GJ per year and again 70% in the winter months.

Moving to the prices, a weighted median is calculated on the same lines as for the electricity calculations. The weighting is based on the latest data on customer numbers of each retailer on Standing and Market Offers (these customer number data were provided to us by the Essential Services Commission) and the number of residential customers in each of Victoria's three distribution regions. The weighting also includes assumptions on the proportion of customers receiving discounts on market offers and those not, as described below.

For the Standing Offers the median of relevant offers of each retailer is used. These are, typically, unique offers by distribution region and tariff type. To estimate the price paid by customers on Market Offers the price on the median offer is calculated firstly assuming that customers receive all conditional and unconditional discounts, and then assuming that they receive all unconditional discounts and no conditional discounts. The two estimates are weighted assuming half of all households on Market Offers



receive all conditional discounts in their offers, and half receive only the unconditional discounts in their Market Offers.

Figure 9 shows a box plot of the annual bills for residential customers in the Multinet area assuming all discounts are achieved.

**Figure 9. Box plot of Market Offers by retailers in the Multinet distribution area (all discounts assumed to be met)**

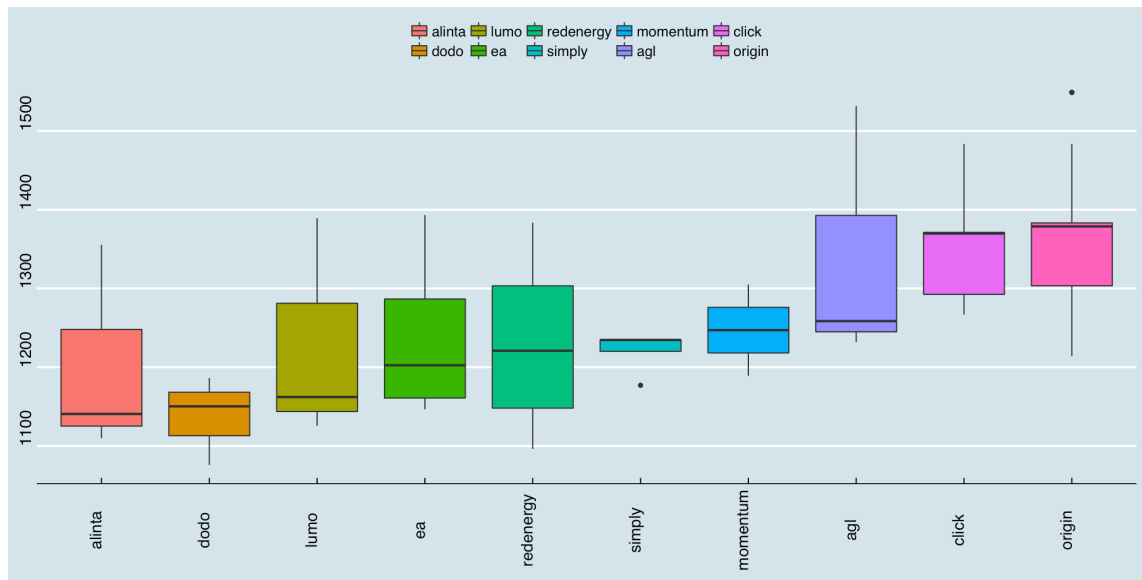
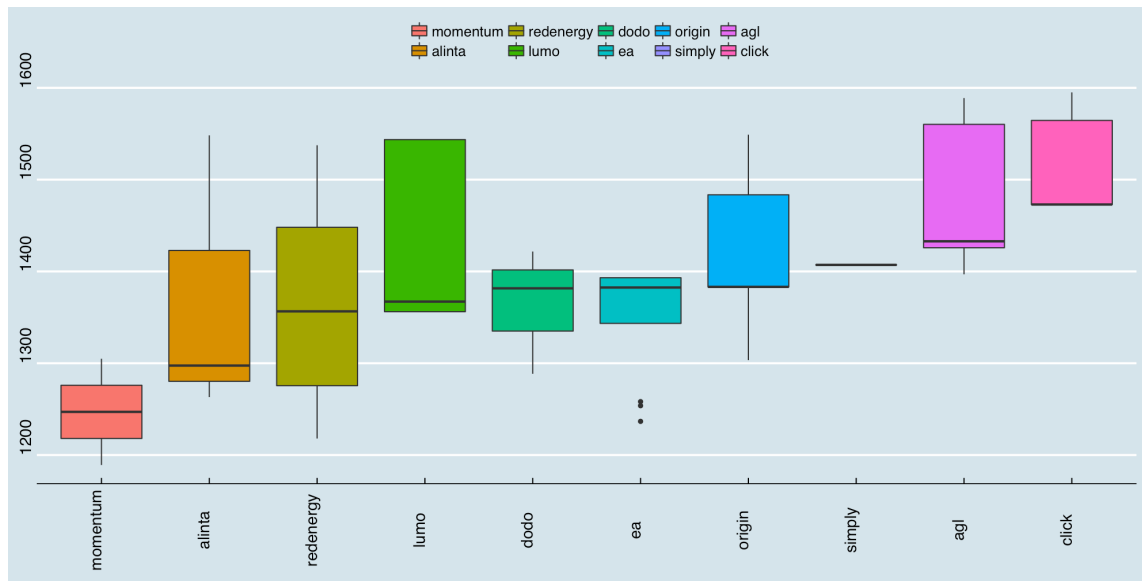


Figure 10 shows a box plot of the annual bills for residential customers in the Multinet area assuming all discounts are achieved.

**Figure 10. Box plot of Market Offers by retailers in the Multinet distribution area (only unconditional discounts assumed to be met)**



The estimates are calculated in each distribution area and the overall weighted average is established by weighting the results by the numbers of customers in each distribution area.

### 3.1.2 Estimating wholesale prices

A wholesale gas prices of \$7 per GJ was assumed on advice from Jacobs.

### 3.1.3 Estimating network charge

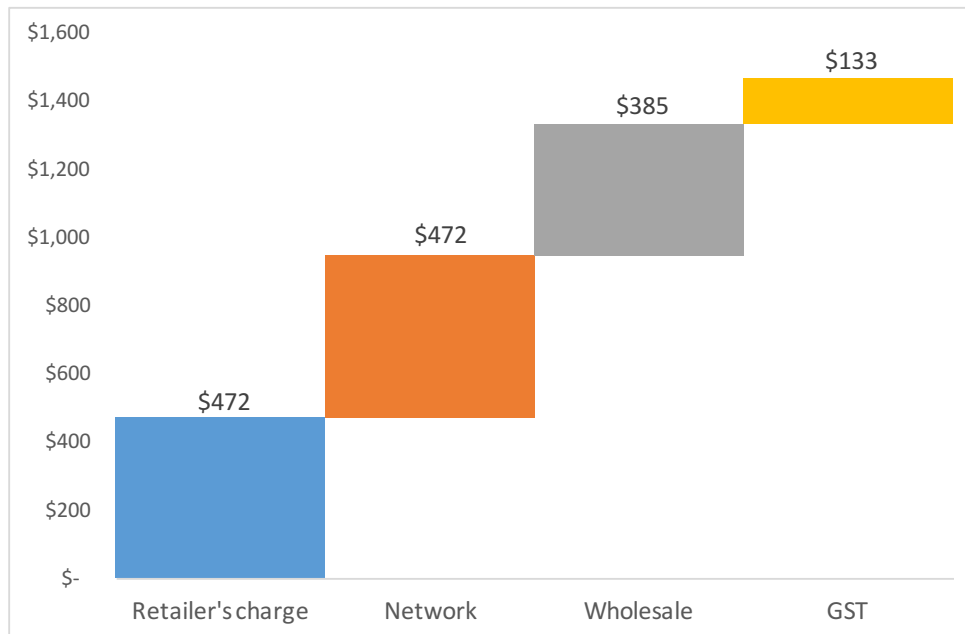
The network charge in each distribution region is based on the relevant 2017 rates specified in the published tariff sheets of each distribution network service provider, for two-part and block tariffs, as relevant. The weighted average Victorian network charge weights the network charge for each distributor based on the number of household customers that that retailer serves compared to the total number of household customers. These network tariff calculations are performed in MarkIntell.

### 3.1.4 GST

For the vast majority of residential customers, GST is not deductible and therefore is included in the estimate of residential customer bills. For small business customers, GST is not included since it is likely to be a deductible expenditure to them.

### 3.2 Results: Residential bill break-down

Figure 11. Residential bill break down (55GJ per year)



### 3.3 Results: Small business bill break-down

Figure 12. Small business bill break down (500 GJ per year)

