

Residential energy and water use in Sydney, the Blue Mountains and Illawarra

Results from the 2006 household survey

Electricity, Gas and Water — Research Paper
November 2007

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The Tribunal members for this review are:

Dr Michael Keating, AC, Chairman

Mr James Cox, Full Time Member

Ms Sibylle Krieger, Part Time Member

Inquiries regarding this document should be directed to a staff member:

Bee Thompson (02) 9290 8496

Brett Everett (02) 9290 8423

Independent Pricing and Regulatory Tribunal of New South Wales

PO Box Q290, QVB Post Office NSW 1230

Level 2, 44 Market Street, Sydney NSW 2000

T (02) 9290 8400 F (02) 9290 2061

www.ipart.nsw.gov.au

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1 Introduction

In 2006 the Independent Pricing and Regulatory Tribunal of New South Wales (IPART) conducted a survey of residential household water, electricity and gas consumers in the greater Sydney region. The survey provides valuable information about the characteristics of residential households and their energy and water consumption, which assists IPART in understanding the likely impacts of its pricing decisions.

The survey provides a snapshot of energy and water consumption, which is combined with information on household demographic characteristics, income and appliance use. The survey was undertaken in Sydney Water Corporation's area of operations, which includes parts of the areas where EnergyAustralia and Integral Energy are standard retail suppliers of electricity, and AGL is the standard retail supplier of gas. The survey builds on the Tribunal's earlier surveys undertaken in 1993-94, 1998-99 and most recently in 2003-04.¹

The main aims of the survey, as in previous years, were to collect information on the characteristics of households and their energy and water use that would:

- ▼ help the Tribunal assess the impact of its energy network, energy retail and water tariffs on different households and community groups, particularly low-income households
- ▼ provide information on the awareness of retail competition, the characteristics of customers being approached to change energy supplier, and the characteristics of customers who have decided to change energy supplier.

In addition, as part of the 2006 survey, information was collected on the installation of energy efficient light bulbs and water efficient showerheads.

The results were analysed to develop a profile of energy and water users in 2006, and will inform the next metropolitan water price reviews.² The results were also used to inform the Tribunal's decision-making on prices for regulated retail tariffs for electricity in 2007.³

¹ See IPART, *Residential energy use in Sydney, the Blue Mountains and Illawarra – results from the 2003 household survey*, RP 27, December 2005 and IPART, *Residential water use in Sydney, the Blue Mountains and Illawarra – results from the 2003 household survey*, RP 26, May 2004, for detailed results from the 2003 survey.

² Sydney Water's prices are currently being reviewed, and Hunter Water, Gosford Council and Wyong Council's prices are coming up for review in 2008.

³ IPART, *Promoting retail competition and investment in the NSW electricity industry – Regulated electricity retail tariffs and charges for small customers 2007 to 2010 – Final report and Determination*, June 2007.

IPART intends to do further work in the future investigating the determinants of water, electricity and gas demand using the 2003 and 2006 data, including the specific contributions to consumption made by different household appliances. IPART also plans to investigate in some detail the proportions of income that different households spend on energy and water services. IPART may consider estimating, where feasible, the own-price elasticity of water, electricity and gas demand.

1.1 The 2006 survey

The 2006 survey was conducted between August and October and involved 2,631 participants. IPART engaged Taverner Research Company to undertake face-to-face interviews with residential households on its behalf. Taverner also asked these households to allow EnergyAustralia, Integral Energy, AGL and Sydney Water to give it access to their consumption data as relevant.⁴ This allowed Taverner to provide a combined data set that included the participants' responses to the survey questions and their consumption data.

Given the particular focus on low-income households, the survey participants were split into two groups. The first group included a sample of approximately 2,000 households randomly selected from across the Sydney, Blue Mountains and Illawarra regions. The second group was drawn from Australian Bureau of Statistics census districts with a high proportion of low-income households, to increase the sample size of low-income households. For a more detailed description of the survey design and methodology, see Appendix B.

In June 2007, the Tribunal released an interim report of the survey results relating to energy consumption, to coincide with the release of the retail electricity final report and determination.⁵ Given the timing of the release of that report, the results were reported without having applied appropriate consumption weights to ensure that the survey results were representative of the wider population. This report extends the analysis presented in the interim report by reporting weighted results, and also reports the results relating to water consumption and characteristics.

Any differences between this report and the interim report are therefore the result of the weighting approach adopted. Weighting allows for the survey results to be considered as representative of the population as a whole, and therefore the results in this report should take precedence over the earlier report.

⁴ The sample sizes used for reporting of energy and water profiles in Appendix A differ depending on the number of households for which the utilities were able to provide water, electricity or gas consumption data.

⁵ IPART 2007, *Residential energy use in Sydney, the Blue Mountains and Illawarra – results from the 2006 household survey*, Interim Report, RP 28, June.

1.2 Key results

The 2006 results confirm many of the relationships between electricity, gas and water use and household characteristics observed from the 2003 results. In particular:

- ▼ higher electricity, gas and water use is associated with households with a larger number of occupants, living in houses and owning a greater number of large energy and water using appliances such as air conditioners, second refrigerators, dishwashers and swimming pools
- ▼ households connected to mains gas use on average less electricity than those not connected
- ▼ on average, higher income households use more electricity, gas and water than lower income households.

Many of these results confirm, and quantify, conventional wisdom on the relationships between household characteristics and water, electricity and gas demand. However, the survey results also sometime challenge conventional wisdom. For example:

- ▼ Whilst on average, low income households tend to use less electricity, gas and water than high income households, both surveys have found that a significant number of low income households are also large consumers, and *vice versa*. For example, the 2006 household survey results suggest that approximately 19,500 low income households in Sydney, the Blue Mountains and Illawarra used in excess of 400kL of water in 2006 (compared to an average for all households of around 200kL). Similarly, 38,500 low income households used in excess of 12,000kWh of electricity in 2006 (compared to an average for all households of around 7,700kWh).
- ▼ There is a relatively small variation in the penetration of air conditioners cross income groups. In the 2006 survey, 52 per cent of households in the lowest income group reported having an air conditioner compared to 60 per cent in the highest income group and 58 per cent overall.

Given concerns about the impact of air conditioners on network peak load requirements, the survey asked respondents whether they had an air conditioner installed, and if not whether they intended to install an air conditioner in the future. Some 58 per cent of households indicated that an air conditioner was installed, which is an increase of 14 per cent compared to the 2003 results. One may have expected this increase in air conditioner penetration to have a significant impact on electricity consumption. However, information provided by the electricity network businesses indicates that average household electricity consumption increased by only about 2 per cent between 2003 and 2006. The results therefore confirm that air conditioners have a greater impact on peak load than consumption volumes.

To consider the likely response of households with air conditioners to changes in price, respondents were asked whether they would switch off their air conditioners on very hot days if the price were 25 per cent higher. Almost half of all respondents with an air conditioner indicated that they would use it less in these circumstances, at least for short periods. A few respondents (7 per cent) indicated that they would turn off their air conditioner for the whole day.

Since 2003, water consumption has fallen by 19 per cent to 201kL per household on average in 2006, reflecting the introduction of water restrictions, Sydney Water's demand management measures and the implementation of a two-tier water usage charge.

To investigate how households may have responded to the introduction of the two-tier usage charge, the survey included a number of questions about householders' awareness of, and response to, the introduction of the two-tier water usage charge. On average, 53 per cent of respondents were aware of the two-tier usage charge, and this awareness was greatest amongst higher water using households. One third of respondents aware of the two-tier usage charge indicated that it had impacted on their level of water consumption. This proportion was higher among larger water users than smaller water users. Respondents were also asked whether they would be willing to pay 10 per cent more for water supplies to be interrupted less frequently. On average, 12 per cent of respondents indicated that they would be willing to pay 10 per cent more.

One of the most significant findings of the 2006 survey was that tenants living in public housing no longer consume more than tenants renting privately, as was the case in 2003. This is probably in response to active measures taken by the Department of Housing (DoH) and Sydney Water to reduce consumption in public housing. In particular, DoH began billing tenants for their water consumption in 2006, while Sydney Water's Waterfix programme actively promoted water conservation by fixing leaks and fitting water efficient fixtures. Water restrictions and higher water usage charges may have encouraged further reductions in water consumption.

Low income households were more likely to approach their service provider, particularly for electricity, with payment difficulties in the last three years. About 15 per cent of low income households approached their electricity retailer with payment difficulties, compared to 10 per cent who approached their gas retailer and 3 per cent who approached Sydney Water.

Another issue that was considered is the awareness amongst the survey respondents of retail electricity and gas competition, and the proportion of households that changed supplier. The survey asked for the reasons respondents had to change supplier, or the reasons why they chose not to change supplier.

We found that over 92 per cent of respondents were aware that it was possible to choose their electricity supplier and 93 per cent were aware they could choose their gas supplier. This was a considerable increase on the results in the 2003 survey where around 76 per cent of respondents indicated they were aware they could choose their energy supplier.

The number of respondents who decided to change supplier once approached had increased since 2003. In 2006, 34 per cent of households approached decided to change electricity supplier and 27 per cent of households decided to change gas supplier (20 and 14 per cent respectively in 2003). The 2006 results indicate that the proportion of low and high income customers approached to change electricity or gas supplier was almost equal. This differs from the 2003 results, where in general, a larger proportion of higher income households had been approached to change supplier.

Finally, the Tribunal in its role as administrator of the NSW Greenhouse Gas Reduction Scheme (GGAS) asked a number of questions about the rate of installation of both energy efficient light bulbs and water efficient showerheads provided as part of energy efficiency packs. Companies accredited under GGAS are able to create tradeable certificates called NGACs by distributing these energy efficiency packs.

The results confirmed an earlier Newspoll survey conducted on behalf of the Tribunal, and found that 48 per cent of all respondents in Sydney, the Blue Mountains and Illawarra had received at least one free energy efficiency pack. Of the energy efficient light bulbs and water efficient shower heads received, just over half had been installed. Respondents were then asked what they intended to do with the remaining light bulbs and shower heads. A majority (71 per cent) indicated that they intended to install the remaining light bulbs, while 13 per cent indicated that they would not be using the remaining light bulbs. Approximately 14 per cent of respondents did not plan to install any water saving showerheads.

1.3 Structure of the report

This report presents the survey data in detail. Where appropriate, we have compared the results with data collected as part of the 2003 survey. Appendix A provides tables of all of the 2006 survey results. Appendix C contains the survey questionnaire.

In the following chapters we profile residential customers in Sydney, the Blue Mountains and Illawarra in terms of their energy and water consumption. Our approach has been to describe users of energy and water with reference to their level of consumption, and identify those household attributes that are particularly associated with high and low levels of consumption. In addition, we have investigated the relationship between income and a household's annual consumption of energy and water.

While the analysis in each chapter shows (sometimes strong) relationships between energy and water consumption on the one hand and various household characteristics on the other, such relationships do not necessarily imply causation. Consumption may be driven by other underlying factors, or a complex combination of factors, and the results should therefore be interpreted with caution.

The chapters present a detailed profile of residential households in Sydney, the Blue Mountains and Illawarra. This profile includes:

- ▼ the relationship between electricity, gas and water consumption and the household's geographic location, number of occupants, family structure, type (ie a house or unit) and connection to mains gas
- ▼ the main uses for electricity amongst residential households in 2006, including the relationship between electricity consumption and the number of large energy using appliances, including whether an air-conditioner was installed and the frequency of its use in summer and winter
- ▼ the main uses for gas, including the relationship between gas consumption and the use of gas for water heating, cooking and space heating
- ▼ the main uses for water, including the relationship between water use and the number of indoor water using amenities, whether the household had a swimming pool and/or dishwasher, and the amount of garden watering
- ▼ the awareness of water price structures and the importance of service attributes
- ▼ the relationship between electricity, gas and water consumption and household income, and the extent of payment difficulties amongst survey respondents.

The remainder of the report is structured as follows:

- ▼ Chapters 2 to 4 provide a profile of electricity, gas and water consumption respectively for residential households. In particular, we focus on understanding the key characteristics of high and low consuming households.
- ▼ Chapter 5 investigates the consumption characteristics of low, average and high income households.
- ▼ Chapter 6 provides an overview of the results relating to the development of retail competition in the provision of electricity and gas to domestic customers.
- ▼ Chapter 7 presents the results relating to questions about the installation of energy efficient light bulbs and water efficient showerheads provided as part of energy efficiency packs distributed amongst residential households.

2 Electricity consumption in Sydney, the Blue Mountains and Illawarra

The survey data provide a comprehensive picture of the pattern of residential electricity consumption in Sydney, the Blue Mountains and Illawarra. The data also allow us to identify the characteristics associated with high and low electricity consumption.⁶

2.1 How do household characteristics affect electricity consumption?

Table 2.1 below provides a snapshot of the household characteristics of low and high volume electricity users in 2006. In general, high volume users had a higher number of occupants, were more likely to live in a house, live in Sydney and consist of couples with children.

Table 2.1 Snapshot: Household characteristics of high and low volume electricity users

Low Electricity Usage (<4,000 kWh per annum)	High Electricity Usage (>12,000 kWh per annum)
On average, have 2.2 people in household (compared to 2.8 people for all households)	On average, have 4.2 people in household (compared to 2.8 people for all households)
43% are single person households (compared to 23% of all households)	77% are couples with children (compared to 39% of all households)
66% live in houses (compared to 80% of all households)	95% live in houses (compared to 80% of all households)
83% live in Sydney (compared to 84% of all households)	90% live in Sydney (compared to 84% of all households)

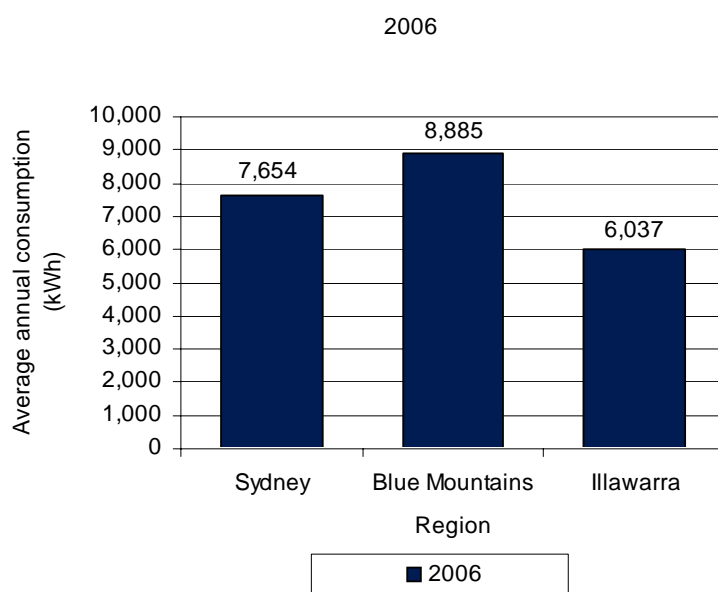
⁶ The consumption volumes reported in this section will differ from those in the interim report on energy use due to the application of consumption weights (IPART 2007, *Residential energy use in Sydney, the Blue Mountains and Illawarra – results from the 2006 household survey*, Interim Report, RP 28, June). Please note that the electricity consumption weights resulted in slightly lower average consumption in 2006 than is indicated by network data (about 2.5 per cent). The actual average consumption of households in Sydney and the Illawarra is therefore probably slightly higher than is indicated in this report.

To consider the possible reasons for the variation in electricity usage across households we examined the relationship between consumption and household size, dwelling type and locality. The results indicate that:

- ▼ respondents in the Blue Mountains used more electricity in 2006 (on average 8,886 kWh) than those in Sydney (7,654 kWh) and the Illawarra (6,307 kWh)
- ▼ households with more occupants on average used more electricity than those with fewer occupants
- ▼ households with children on average used less electricity than households with the same number of occupants composed entirely of adults (15 years of age or older)
- ▼ respondents living in houses used on average 8,121 kWh of electricity, 85 per cent more than those who live in units
- ▼ for households with the same number of occupants, respondents living in houses used on average about 30 per cent more than those living in units
- ▼ respondents who are connected to mains gas consumed less electricity on average than those who were not connected.

The survey results indicate that on average, electricity consumption was greatest in the Blue Mountains and lowest in Illawarra. This is likely to reflect climatic variations and differences in household characteristics between the regions. For example, the high average consumption in the Blue Mountains is likely to reflect both the more extreme climate and the predominance of stand-alone dwellings in that region. The average electricity consumption by respondents living in Sydney was 7,654 kWh – Figure 2.1.

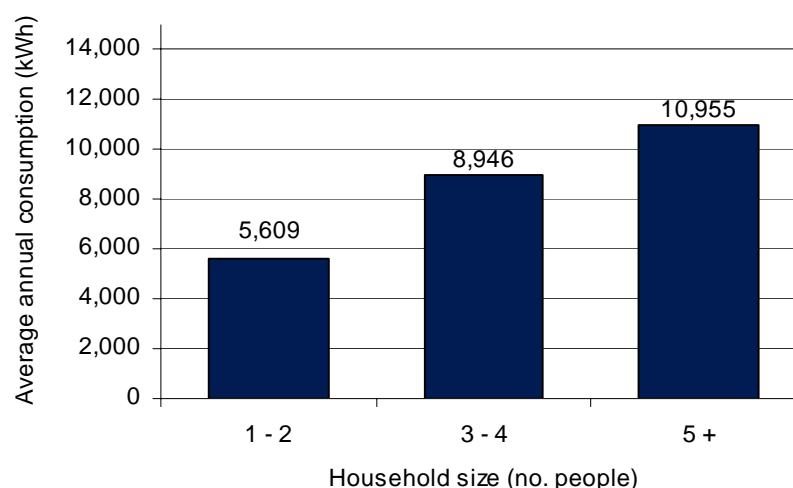
Figure 2.1 Average electricity consumption by region, 2006



Information provided by the electricity network businesses indicates that average residential electricity consumption was about 7,700 kWh per household in 2006 compared to 7,550 kWh in 2003 – a 2 per cent increase. This relatively small increase since 2003 is despite our survey findings of a significant increase in air-conditioner uptake since 2003 (see Section 2.2).

Electricity use increased on average with the number of household occupants – Figure 2.2. For example, average consumption for households with 5 or more occupants was 10,955 kWh, 95 per cent higher than for 1 or 2 person households.

Figure 2.2 Average electricity consumption by household size, 2006



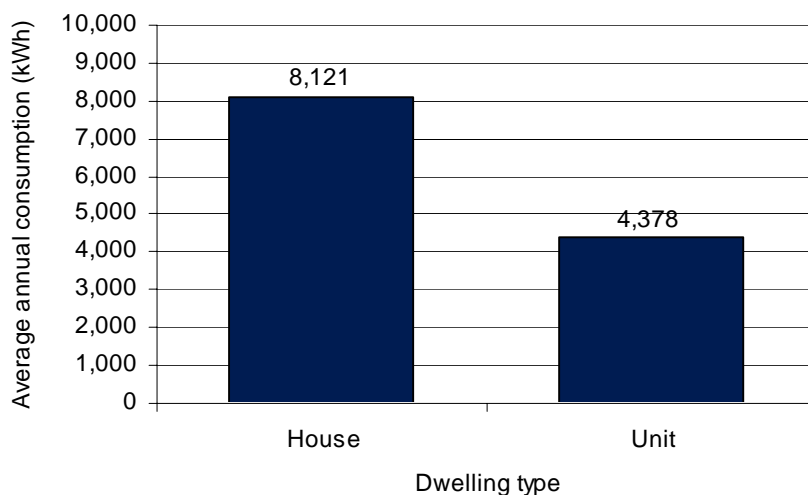
These results indicate that the average electricity consumption per person decreases with increasing numbers of household occupants. However, within households of the same size, household structure influences the level of electricity consumption. The survey results indicate that households with children of under 15 years of age use less electricity on average than households of the same size comprising only adults, where an adult is defined as anyone of 15 years of age or older. For example:

- ▼ households with two adults and one child consumed on average 7,326 kWh of electricity per annum compared to 8,880 kWh for households of three adults
- ▼ households with two adults and two children consumed on average 8,232 kWh of electricity per annum compared to 10,184 kWh for households of four adults
- ▼ households with two adults and three children consumed on average 10,857 kWh of electricity per annum compared to 11,800 kWh for households of five adults.

Respondents living in houses used on average 85 per cent more electricity than respondents living in units – Figure 2.3. This is likely to reflect both the larger

number of occupants in houses (3.2 for houses compared to 2.1 for units) and the greater energy requirements associated with maintaining larger premises.

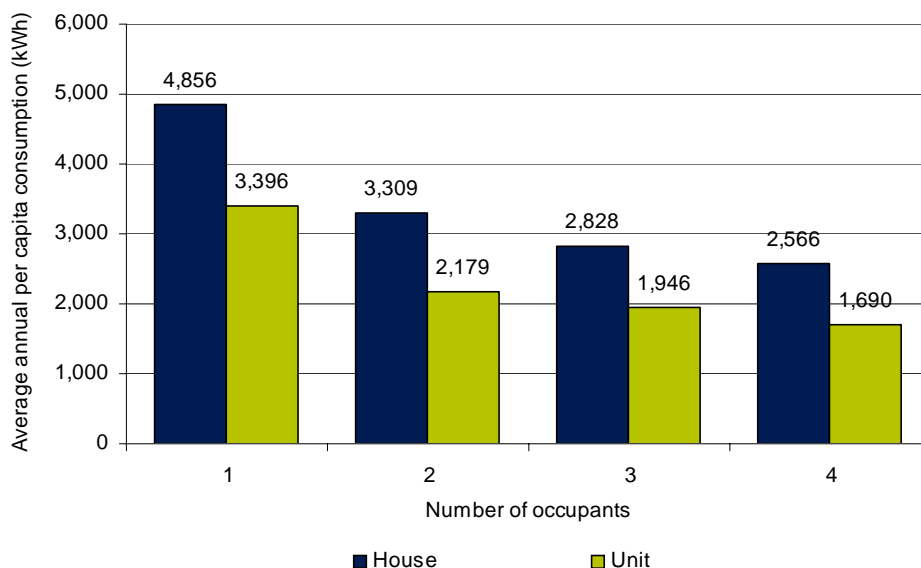
Figure 2.3 Average electricity consumption by dwelling type, 2006



To investigate the independent effect of dwelling type, we have estimated average electricity consumption for houses and units by number of occupants – Figure 2.4. The results indicate that even after controlling for the number of occupants, respondents living in houses consumed at least 30 per cent more electricity than occupiers of units with the same household size.⁷

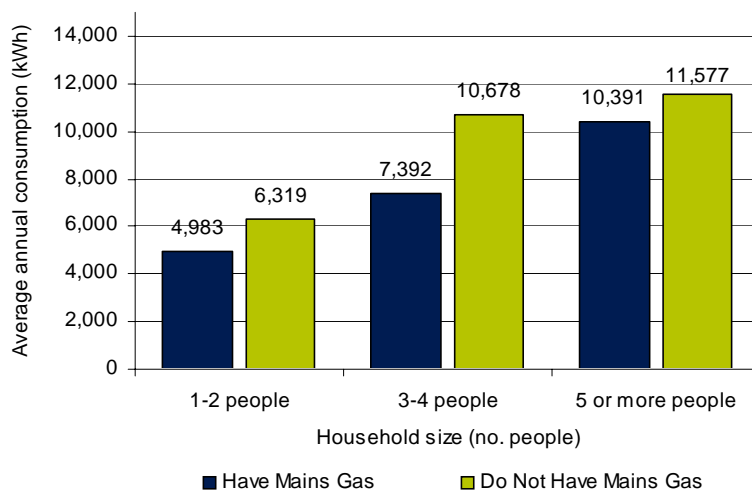
⁷ The difference in average electricity consumption between houses and units was 18 per cent in the 2003 survey.

Figure 2.4 Average per capita electricity consumption by dwelling type and household size



Finally, we examined the extent to which access to gas was associated with lower consumption of electricity amongst respondents. On average, respondents connected to gas consumed 24 per cent less electricity than those without gas. The difference related predominately to the use of gas for hot water and space heating. This difference was greatest for households with 3 or 4 occupants – Figure 2.5.

Figure 2.5 Average electricity consumption with and without mains gas by household size



2.2 What do households use electricity for?

In addition to collecting information on household consumption of electricity, we collected information on the number of large energy using appliances such as second refrigerators, air conditioners and swimming pool pumps. Given particular concerns about the penetration of air conditioners, we asked survey participants with air conditioning about their use of the appliance during summer and winter and also about the intention of survey participants without air conditioners to install one in the coming years.

We examined the appliance ownership characteristics of respondents with high and low volume electricity consumption – Table 2.2. These results show that high volume electricity users have more large domestic appliances than low volume electricity users and are more likely to have an air conditioner and a swimming pool. On the other hand, low volume electricity users were much more likely to have mains gas and were less likely to use electric hot water systems.

Table 2.2 Snapshot: Usage characteristics of high and low volume electricity users

Low Electricity Usage (< 4,000 kWh per annum)	High Electricity Usage (< 12,000 kWh per annum)
Own an average of 3.1 large domestic appliances	Own an average of 5.3 large domestic appliances
40% have electric hot water system, 32% of which are off peak	71% have electric hot water system, 75% of which are off peak
35% have air conditioners	77% have air conditioners
28% have reverse cycle air conditioners	58% have reverse cycle air conditioners
74% use air conditioners on very hot days only, 22% use them on most hot days	51% use air conditioners on very hot days only, 38% use them on most hot days
42% use air conditioners on very cold days only, and 20% use them on most cold days	34% use air conditioners on very cold days only, and 35% use them on most cold days
3% have swimming pools	36% have swimming pools
71% have mains gas	40% have mains gas
64% use gas for cooking	34% use gas for cooking

Analysis of the relationship between electricity consumption data and the number of large energy using appliances and air conditioners in general shows that:

- ▼ The average electricity consumption of respondents increased with the number of large energy using appliances (and respondents with higher household income had, on average, greater numbers of large energy using appliances).
- ▼ Customers of Integral Energy were more likely to have air conditioners (66 per cent) than customers of AGL (60 per cent) or EnergyAustralia (52 per cent).
- ▼ 18 per cent of Integral Energy customers and 12 per cent of EnergyAustralia customers were considering installing an air conditioner in the future.

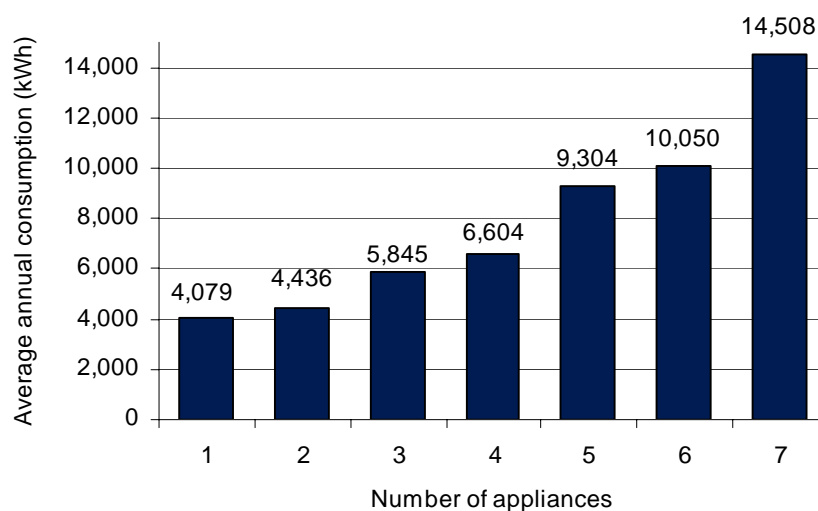
- ▼ Respondents with air conditioners consumed, on average, 2,948 kWh more than those without air conditioners.
- ▼ 67 per cent of respondents with air conditioners stated that during summer they used their air conditioners during very hot days only, whilst of those with reverse cycle air conditioners, 46 per cent used these for heating on very cold days only. Large users of electricity were much less likely to use their air conditioners only on very hot or very cold days, and were more likely to use them on hot or cold days, or most days.
- ▼ 48 per cent of respondents indicated that they would be willing to switch off their air conditioners on very hot days if the price at those times increased by 25 per cent.
- ▼ Customers of Integral Energy were more likely to use electricity for water heating than customers of other electricity retailers (and less likely to use gas).
- ▼ The difference in average annual electricity consumption between those with and without electric water heating was 2,099 kWh, while the difference between those with and without a swimming pool was 5,474 kWh.

The survey asked participants to provide information on the types of large energy using appliances that they own. The appliances included in the 2006 survey were a microwave oven, dishwasher, washing machine, clothes dryer, air conditioner, swimming pool, electric hot water system and a second refrigerator.⁸ In principle, the number of appliances operated by an individual respondent is likely to be positively related to the overall level of energy use for that respondent.

The results indicate that there is a straightforward relationship between the number of large energy using appliances within a household and the household's average electricity consumption. Respondents with all seven large energy using appliances used on average 136 per cent more electricity compared to respondents operating only one of these appliances – Figure 2.6.

⁸ The appliances included in the 2003 survey were the same as in 2006 except for the second refrigerator, namely microwave oven, dishwasher, washing machine, clothes dryer, air conditioner, swimming pool and electric hot water system.

Figure 2.6 Average electricity consumption by number of appliances



To determine whether the number of appliances was related to household income and the number of occupants, we also examined the relationship between income, household size and the number of appliances – Figure 2.7 and Figure 2.8. The results indicate that, on average, high income households have more large energy using appliances, while households with more occupants do not necessarily have more appliances.

Figure 2.7 Average number of large energy using appliances by income

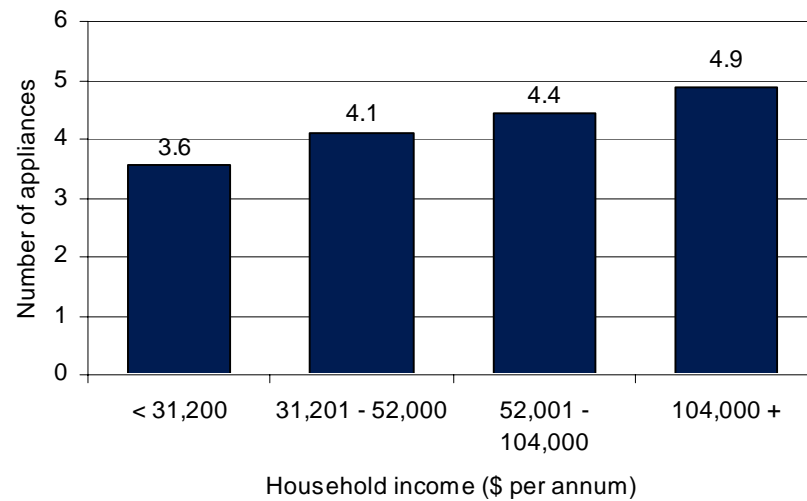
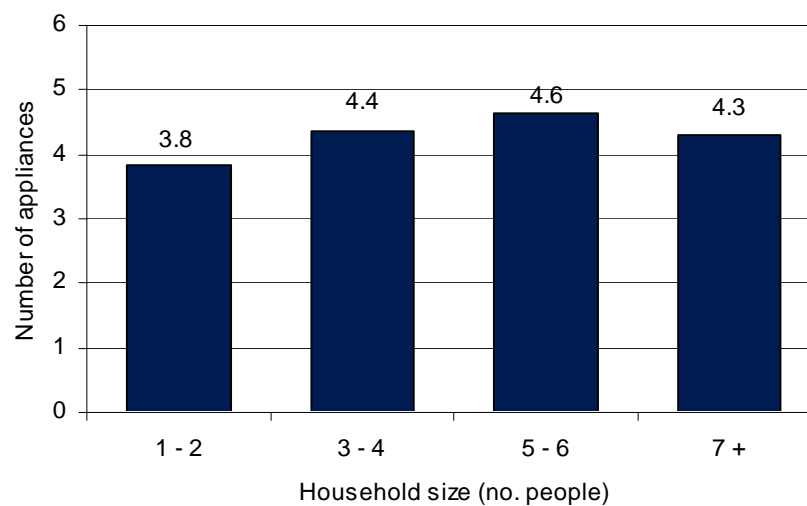


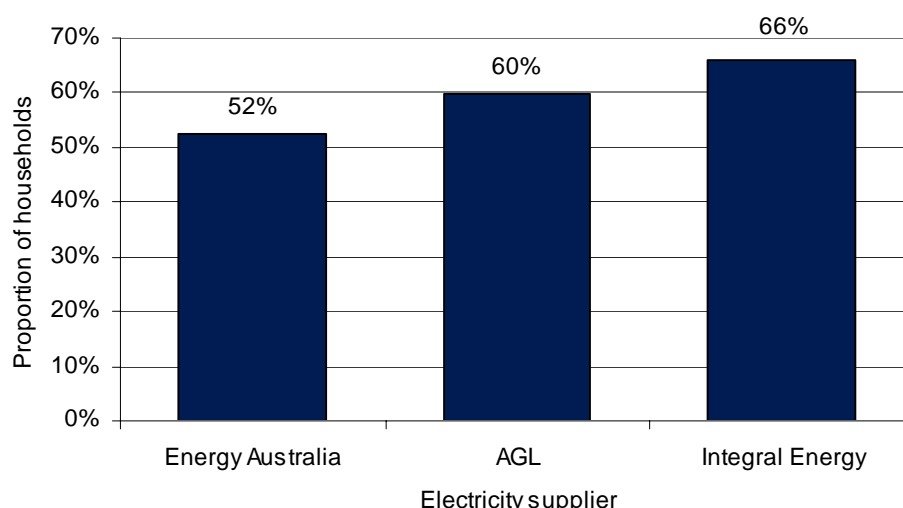
Figure 2.8 Average number of large energy using appliances by household size



Air conditioners are widely understood to be important contributors to daily peak network loads in summer peaking regions. For this reason, it would be useful to understand daily and seasonal variations in the use of air conditioners, particularly during the time of day. Unfortunately, given the nature of the survey we were unable to examine the daily usage patterns of air conditioners. We did however obtain some useful information by asking respondents whether they had air conditioning in their home, whether they intended to install or upgrade it in the future and how they used their air conditioning in summer and winter.

Of the sample group, 58 per cent of respondents had an air conditioner in their dwelling.⁹ Respondents served by Integral Energy were the most likely to have air conditioners, followed by AGL, while customers of EnergyAustralia were the least likely to have an air conditioner – Figure 2.9.

Figure 2.9 Proportion of respondents with air conditioning by electricity supplier



The proportion of respondents with air conditioners is significantly greater than the proportion in the 2003 survey (58 per cent compared to 44 per cent). This is particularly the case for customers of EnergyAustralia (52 per cent compared to 35 per cent).¹⁰

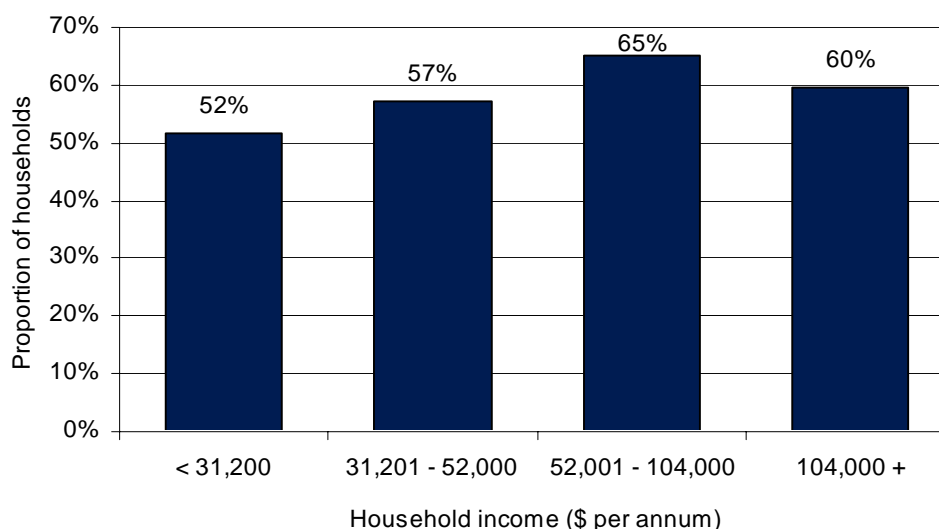
⁹ This is an increase of 14 per cent compared to 2003.

¹⁰ The 2003 survey results indicated that 57 per cent of Integral Energy's customers had an air conditioner. IPART, *Residential energy use in Sydney, the Blue Mountains and Illawarra – results from the 2003 household survey*, RP 27, December 2004, p 18.

We also examined the relationship between household income and air conditioners – Figure 2.10. It is interesting to note that there is less variation in penetration across income categories than conventional wisdom might suggest. However, as discussed below, households in the higher income brackets are likely to use their air conditioners more compared to those in the lower income brackets.

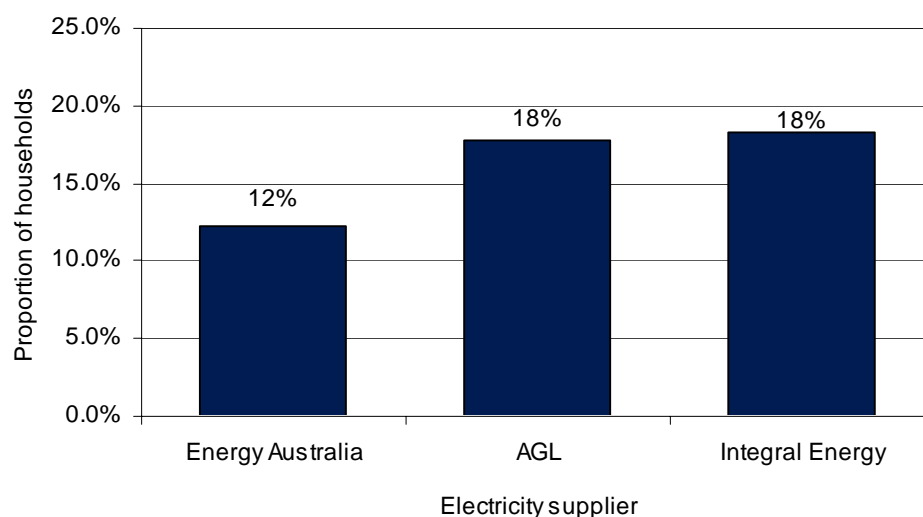
Whilst a higher proportion of all income groups reported having an air conditioner in 2006 compared to 2003, the largest increase occurred in the \$104,000+ group, in which 60 per cent of respondents reported having air conditioners in 2006, compared to 47 per cent in 2003.

Figure 2.10 Proportion of respondents with air conditioners by income, 2006



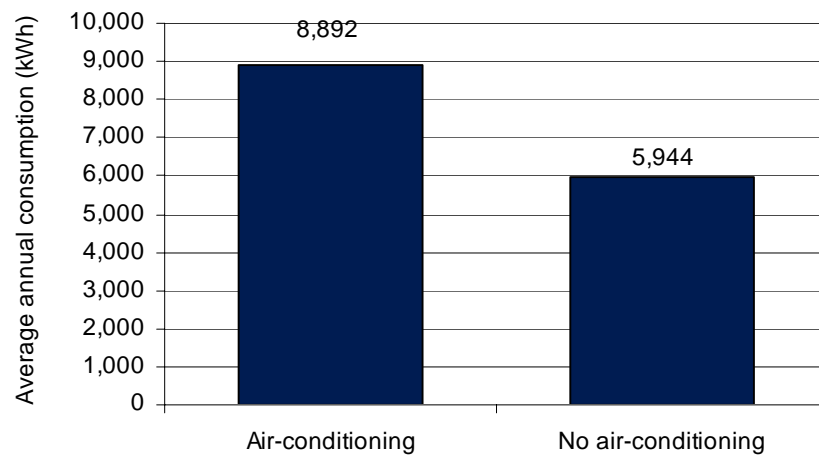
Given the impact of air conditioners on network maximum demand, for those respondents who reported that they did not have an air conditioner, we asked whether they were considering installing one in the future. On average, 15 per cent of households indicated that they were considering installing an air conditioner – Figure 2.11. This proportion is higher for Integral Energy and AGL's customers than for EnergyAustralia's customers, and has increased since the 2003 survey, when, on average, 8 per cent of households indicated that they were considering installing an air conditioner. In addition, it is also important to consider the change in air conditioner capacity for those households replacing their existing air conditioner with a new, higher capacity air conditioner. Results from the 2006 survey indicate that just over 9 per cent of respondents with air conditioners were considering upgrading their system.

Figure 2.11 Proportion of respondents without air conditioners considering installation, 2006



In light of particular concerns about the ongoing rise in the number of households with air conditioners, we have examined the relationship between having an air conditioner and electricity consumption. On average, electricity consumption for respondents with air conditioners was 50 per cent higher than for those without air conditioners – Figure 2.12. It is important to note that this does not necessarily indicate the incremental effect on average energy consumption of installing an air conditioner, since other household characteristics may contribute to both having an air conditioner and consuming more (eg, household income, dwelling type and number of other appliances).

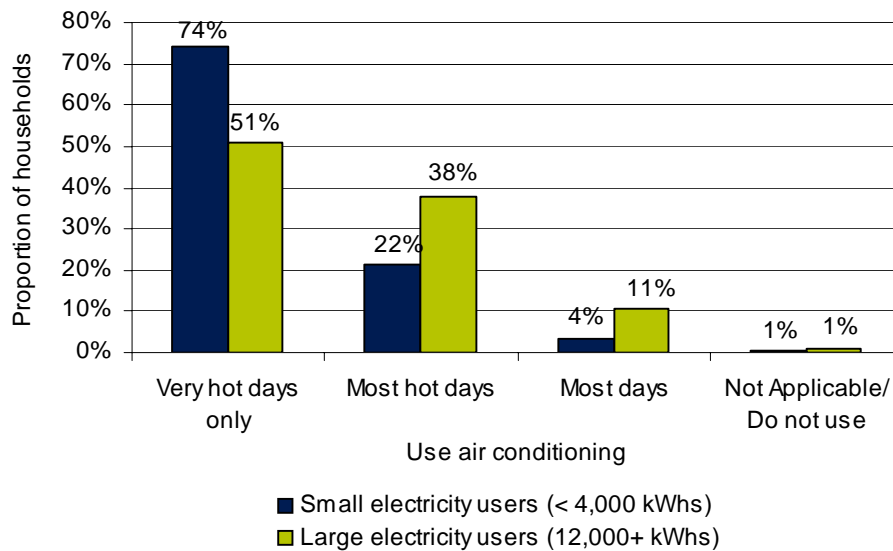
Figure 2.12 Average electricity consumption for respondents with and without an air conditioner



We asked respondents with an air conditioner how often they used their air conditioner, both in summer and winter periods (if it was a reverse cycle air conditioner).

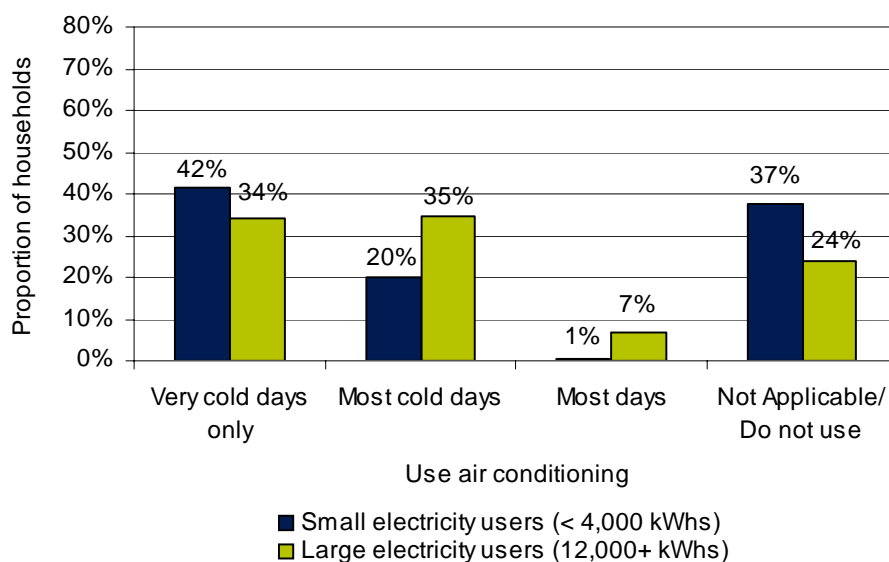
Most respondents indicated that they used air conditioning only on very hot days but a significant proportion said they used it on most hot days. Large electricity consumers were much more likely to say that they used their air conditioner on most hot days or on most days than those with low electricity consumption, and were less likely to say that they used it on very hot days only. Also, respondents in the higher income brackets were more likely to use air conditioners on most hot days than only on very hot days compared to respondents in the lower income brackets.

Figure 2.13 Proportion of respondents using air conditioner during summer



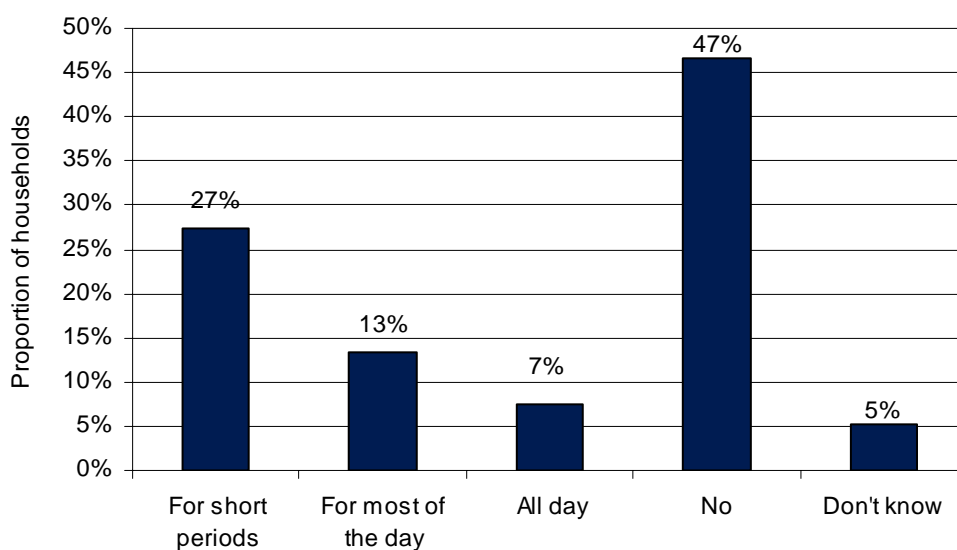
We asked respondents with reverse cycle air conditioners about their use of these for heating. The results were similar to those for the use of air conditioning for cooling. However, many respondents also indicated that they did not use their air conditioner for heating at all. Again, large electricity consumers were more likely to indicate that they used air conditioning on most cold days or most days, and less likely to say that they used it on very cold days only. Similarly, respondents in the higher income brackets were more likely to use air conditioners on most cold days than only on very cold days compared to respondents in the lower income brackets.

Figure 2.14 Proportion of respondents using air conditioner during winter



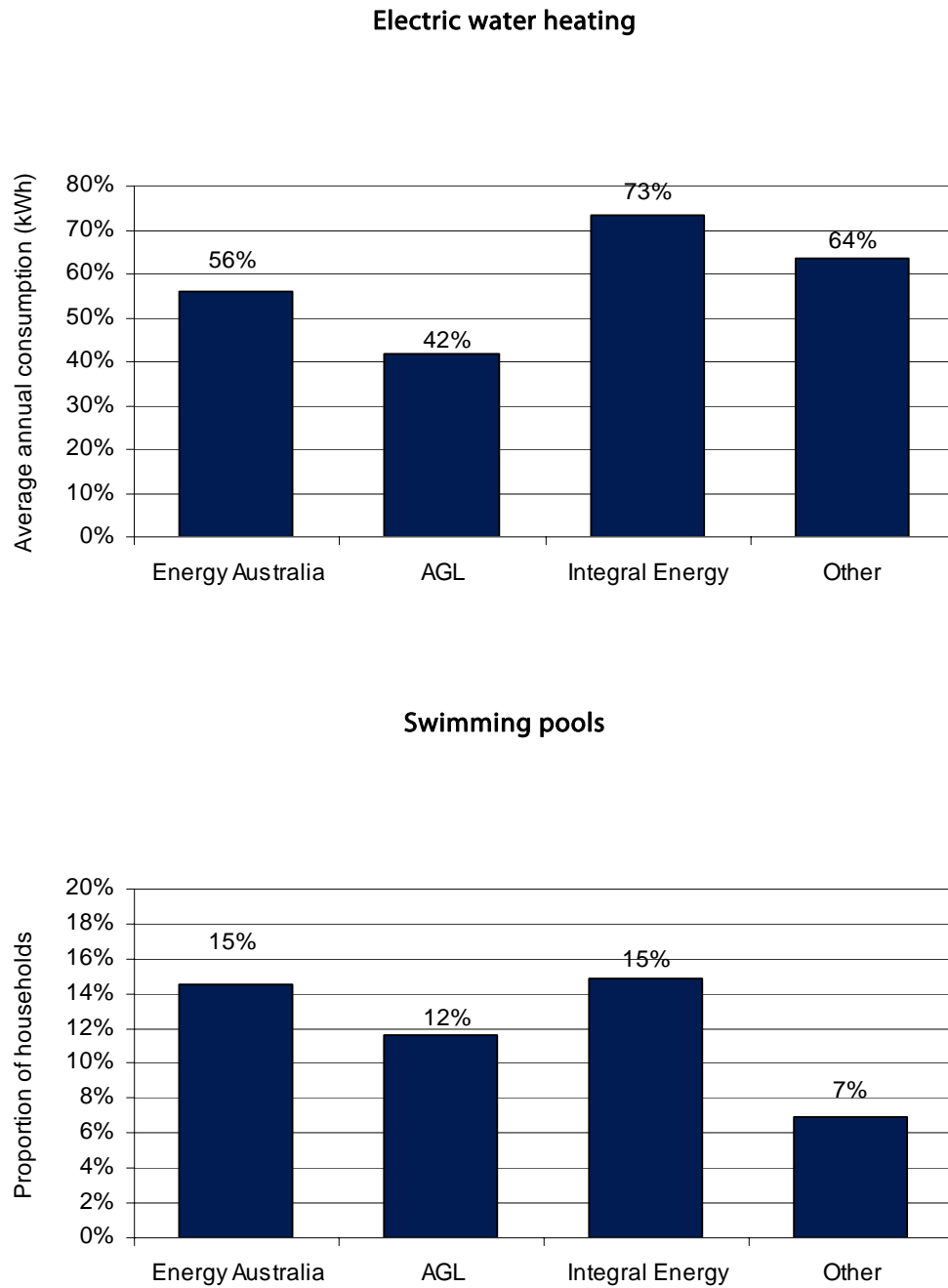
Participants were asked whether they would switch off their air conditioners on very hot days if the price were 25 per cent higher. Almost half of respondents with an air conditioner indicated that they would use it less in these circumstances, even if only for short periods (27 per cent). A few respondents (7 per cent) indicated that they would turn their air conditioner off for the entire day – Figure 2.15.

Figure 2.15 Proportion of respondents indicating a response to a 25 per cent price increase on very hot days



Other large energy using appliances that contribute considerably to household consumption are electric hot water systems and swimming pools. On average, 61 per cent of respondents reported that electricity was their main energy source for heating water. Of these, 64 per cent used off-peak hot water systems. However, there was some variability in this figure across retailers. Customers of Integral Energy were the most likely to use electric hot water systems, 73 per cent, compared to 56 per cent of Energy Australia's customers and only 42 per cent of AGL's customers. The reason for this variation probably lies in access to mains gas, with a smaller proportion of Integral Energy's customers using mains gas for regular household usage (33 per cent) compared to EnergyAustralia's (55 per cent) or AGL's customers (78 per cent). AGL's customers were also less likely to have a swimming pool than those of EnergyAustralia or Integral Energy.

Figure 2.16 Proportion of respondents with electric water heating and swimming pools by supplier

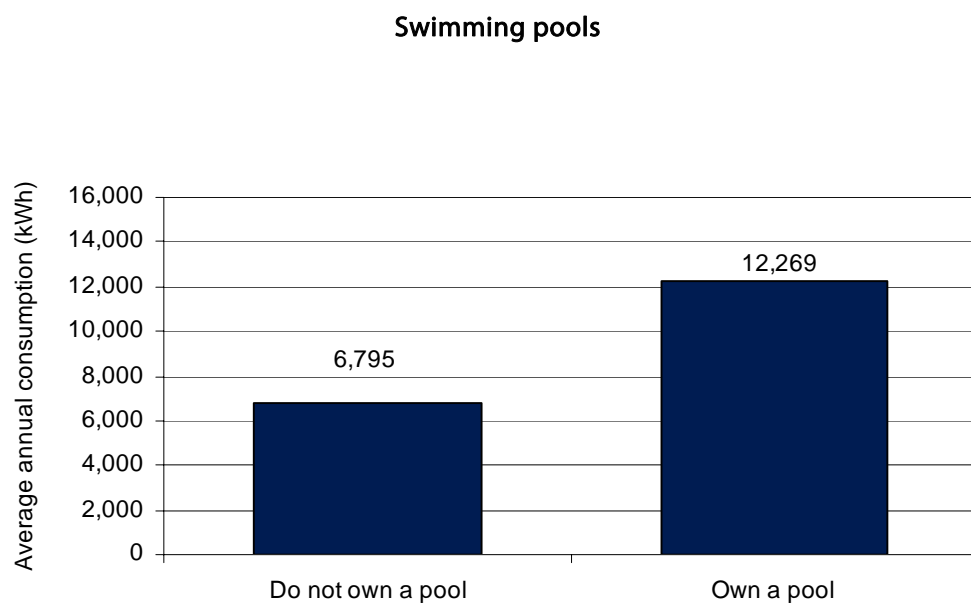
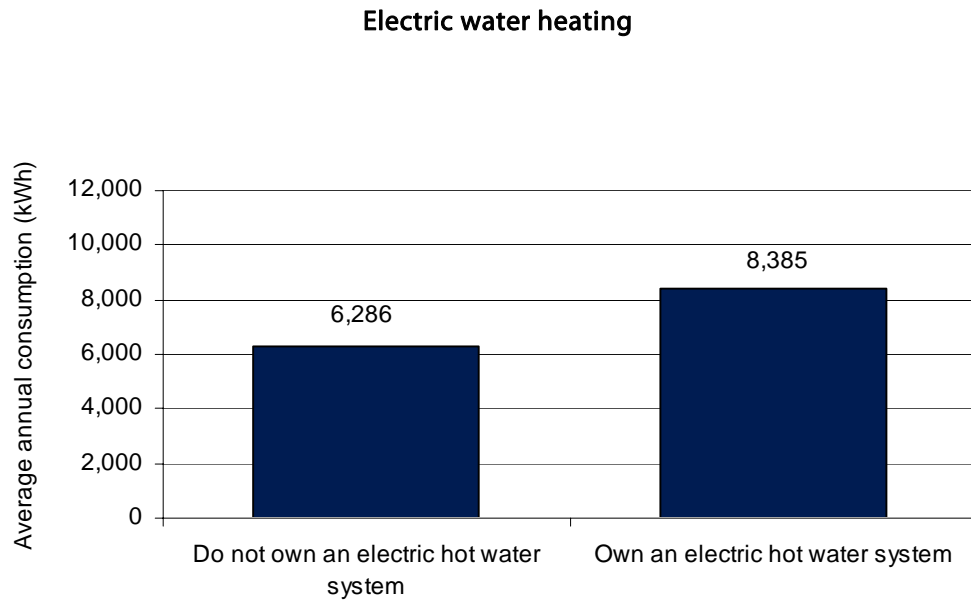


Previously we estimated the difference in electricity consumption of respondents with and without air conditioners – Figure 2.12. Similarly, we have estimated the average electricity consumption of households with and without electric hot water systems and swimming pools – Figure 2.17. As with air-conditioners, the observed difference in electricity consumption may be the result of underlying differences in the characteristics of the households who have a swimming pool or electric hot water system, compared to those households who do not. The results should therefore be used cautiously.¹¹

Having a swimming pool is associated with average electricity consumption that is 81 per cent more than for those households without a pool. Respondents with electric water heating consumed on average 33 per cent more electricity than those who did not use electricity for this purpose.

¹¹ IPART intends to undertake further analysis of the determinants of electricity, gas and water demand to better estimate the likely contribution of each appliance to household total consumption.

Figure 2.17 Average electricity consumption by respondents with and without electric water heating and swimming pools



3 Gas consumption in Sydney, the Blue Mountains and Illawarra

Of the 2,631 survey respondents, 49 per cent were connected to mains gas in 2006. Gas is used mainly for water heating, space heating and cooking.¹²

3.1 What is the relationship between household characteristics and gas consumption?

Table 3.1 provides a snapshot of the characteristics of households with high and low volume gas usage. In general, high volume gas consumers had a greater than average number of occupants, were more likely to live in a house, live in Sydney and consist of couples with children.

Table 3.1 Snapshot: Household characteristics of high and low volume gas users

Low Gas Usage (< 5,000 MJ per annum)	High Gas Usage (< 35,000 MJ per annum)
On average, have 2.1 people in household (compared to 2.9 people for all households)	On average, have 4 people in household (compared to 2.9 people for all households)
41% are single person households (compared to 20% of all households)	83% are couples with children (compared to 47% of all households)
65% live in houses (compared to 81% of all households)	88% live in houses (compared to 81% of all households)
94% live in Sydney (compared to 93% of all households)	97% live in Sydney (compared to 93% of all households)

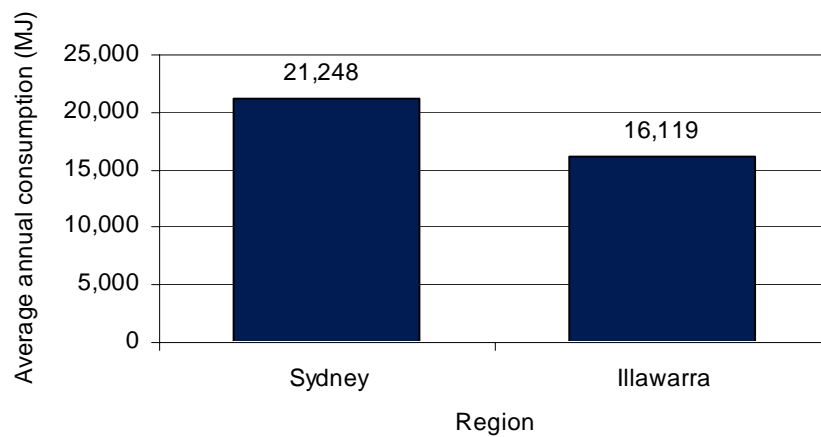
To consider the possible reasons for the observed variation in gas usage across respondents, we examined the relationship between consumption and household size, dwelling type and locality. The results indicate that:

- ▼ respondents living in Sydney consumed more than elsewhere, averaging 21,248 MJ per household
- ▼ households with more occupants consumed, on average, more gas than those with fewer occupants
- ▼ gas consumption by respondents living in houses was 145 per cent higher than for respondents living in units.

¹² The consumption volumes reported in this section will differ from those in the interim report on energy use due to the application of consumption weights (IPART 2007, *Residential energy use in Sydney, the Blue Mountains and Illawarra – results from the 2006 household survey*, Interim Report, RP 28, June).

Average household gas consumption amongst the survey respondents in 2006 that had access to mains gas was 20,851 MJ.¹³ Respondents in Sydney consumed 32 per cent more gas than those in the Illawarra– Figure. There was an insufficient sample size to report results for the Blue Mountains.

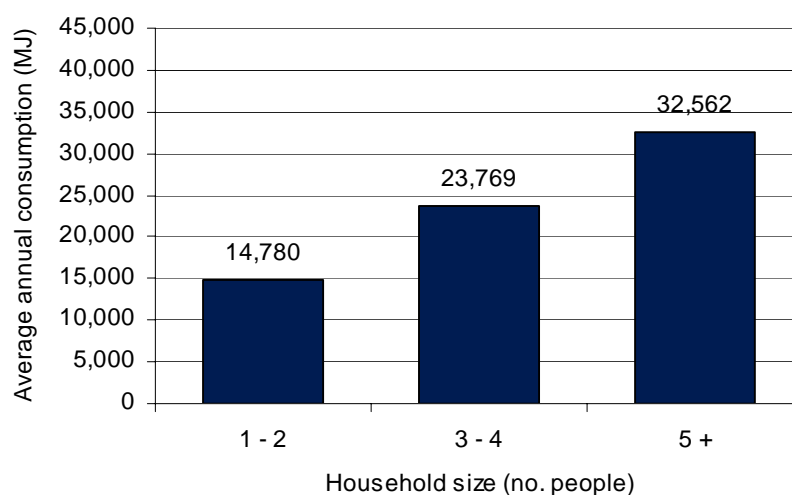
Figure 3.1 Average gas consumption by region, 2006



As was the case with electricity usage, larger households consumed more gas than smaller households – Figure 3.2. Households with 5 or more occupants consumed 120 per cent more than those with just 1 or 2 occupants.

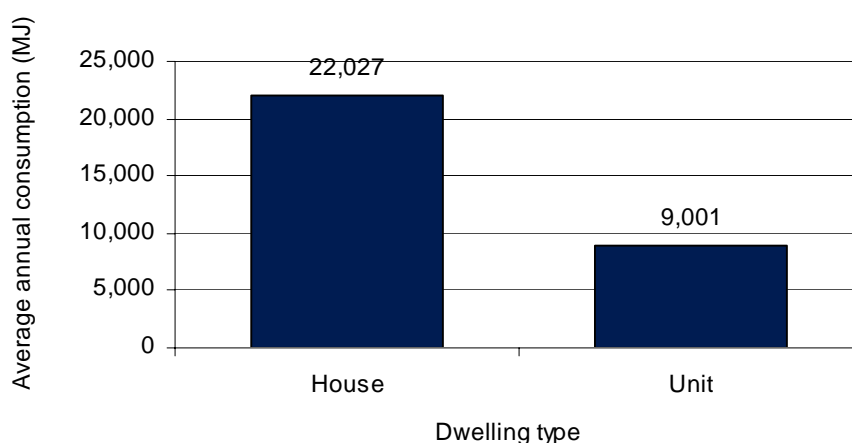
¹³ This is unchanged from the 2003 average household gas consumption of 21MJ.

Figure 3.2 Average gas consumption by household size, 2006



It is interesting to note that for households connected to mains gas, average consumption for those who live in houses is much higher than those who live in units (a difference of 145 per cent) – Figure 3.3. We investigate the reason in the following section on the uses of gas in residential households.

Figure 3.3 Average gas consumption by dwelling type, 2006



3.2 What do households use gas for?

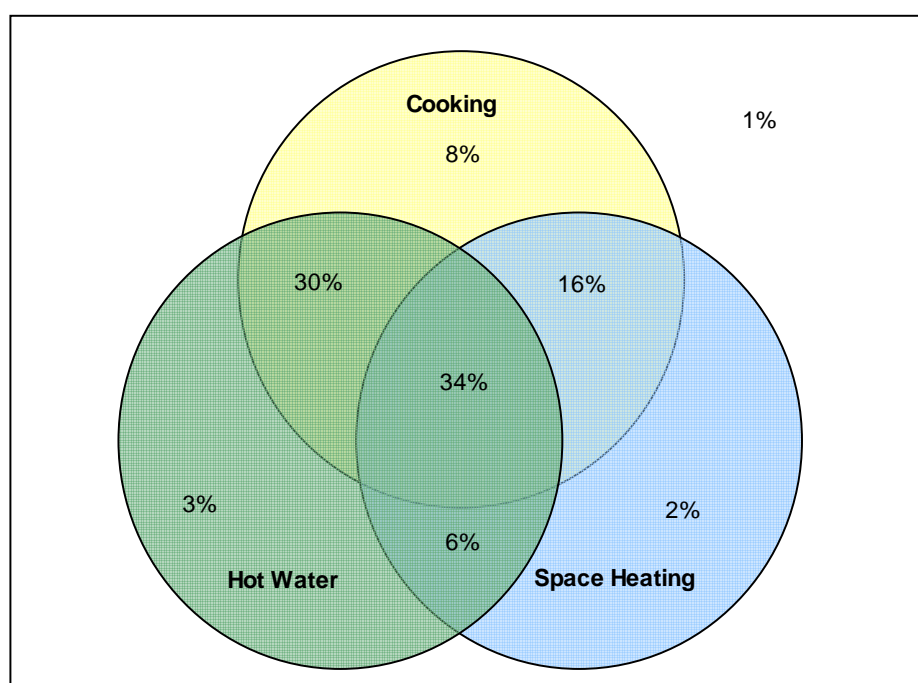
Survey participants were asked about their use of gas for space heating, water heating and cooking. High volume gas users were much more likely than low volume gas users to be using gas for hot water and space heating. However, the use of gas for cooking was not associated with high gas consumption – Table 3.2

Table 3.2 Snapshot: Usage characteristics of high and low volume gas users

Low Gas Usage (< 5,000 MJ per annum)	High Gas Usage (> 35,000 MJ per annum)
32% have gas hot water systems	89% have gas hot water systems
91% use gas for cooking	87% use gas for cooking
25% have gas heating	77% have gas heating

We examined the propensity of households who were connected to mains gas to use it for each of the three purposes described above – Figure 3.4. The largest proportion of households, 34 per cent, used gas for all three purposes in the home. Most households (85 per cent) used gas for at least two purposes, with cooking being the most popular use for gas (88 per cent). Only 1 per cent of respondents who were connected to gas used it for none of these three purposes.

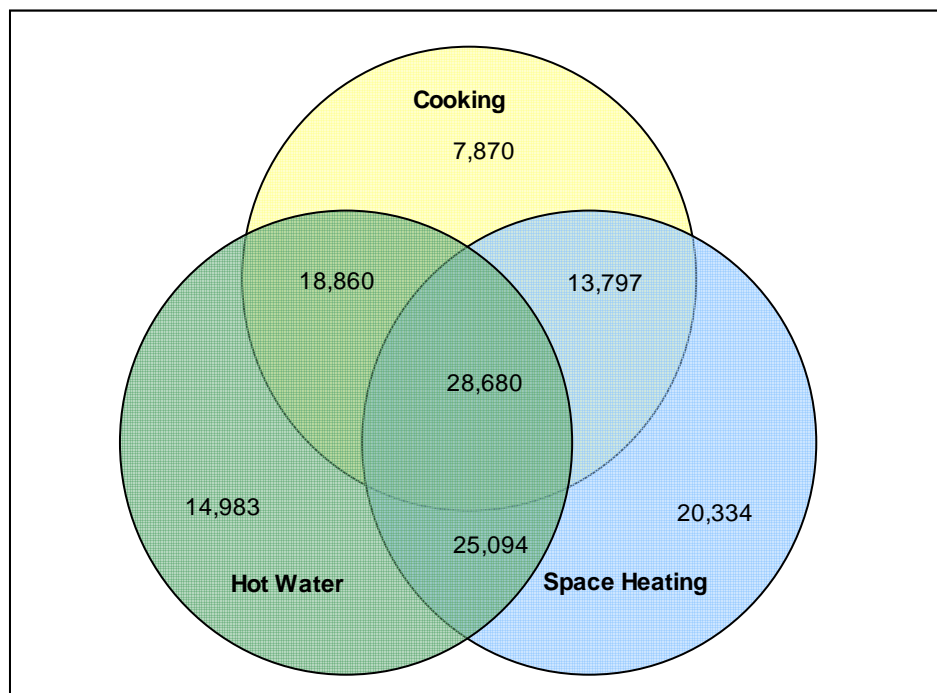
Figure 3.4 Average proportion of gas customers using gas for cooking, water heating and space heating, 2006



We also analysed respondents' consumption with reference to their use of gas for cooking, water heating and space heating. Respondents using gas for all three purposes had, on average, the highest gas consumption of 28,680 MJ per annum.

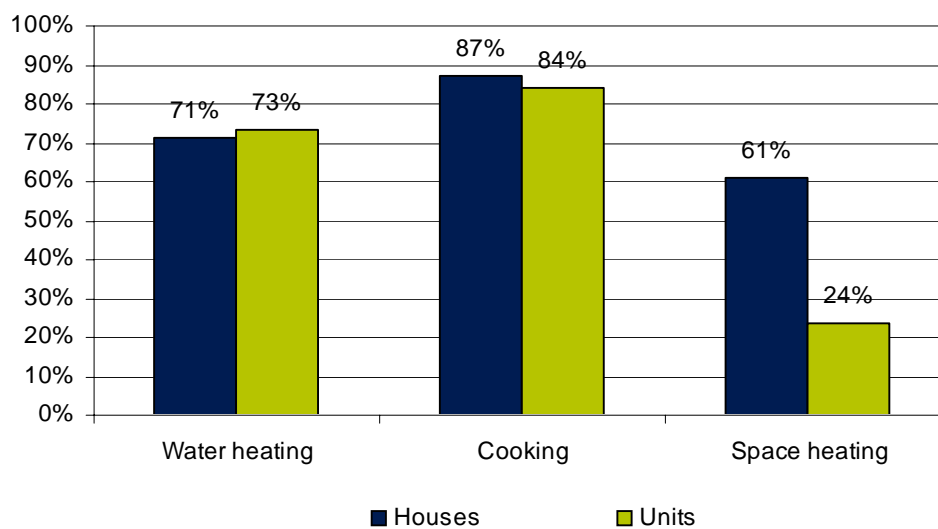
Respondents who used gas only for cooking consumed the least, while use of water and space heating were associated with higher gas usage.

Figure 3.5 Average gas consumption of gas customers using gas for cooking, water heating and space heating, 2006



In Figure 3.3 we identified a significant difference between gas consumption of houses and units. We have attempted to explain some of this difference by examining the proportion of gas customers in houses and units that use gas for cooking, water heating and space heating – Figure 3.6. The analysis indicates that while the penetration of gas use for water heating and cooking is similar between houses and units, 61 per cent of houses use gas for space heating compared to only 24 per cent of units. This suggests that the main reason for the observed difference in gas consumption between houses and units is the higher proportion of houses using gas for space heating.

Figure 3.6 Proportion of gas customers using gas for cooking, water heating and space heating by dwelling type, 2006



4 | Water consumption in Sydney, the Blue Mountains and Illawarra

In addition to collecting information on electricity and gas consumption, we collected data on household water use and on the types of large water using appliances that they owned. To examine questions around water price structures, respondents were asked about their awareness of the two-part water usage charge and whether its introduction had changed their water consumption behaviour. They were also asked about their willingness to pay more for fewer supply interruptions. Finally, respondents were asked to rank eight water service characteristics from most to least important.

Since the 2003 survey, mandatory water restrictions have been introduced in Sydney Water's service area,¹⁴ a two-tier usage charge has been applied to water consumption and Sydney Water has actively pursued demand management measures, for example through its indoor retrofit programme and rainwater tank rebate scheme.¹⁵ Comparing the results of the 2006 survey with the 2003 survey results has allowed us to consider the possible impact these changes have had on household water consumption.

4.1 What is the relationship between household characteristics and water consumption?

Table 4.1 provides a snapshot of the household characteristics of high and low volume water users in 2006. The results indicate that high volume water users had a larger number of household occupants, were more likely to live in separate houses and on large blocks of land and consist of couples with children.

¹⁴ Mandatory water restrictions were introduced in October 2003, after the 2003 survey had been conducted.

¹⁵ More information on Sydney Water's demand management programme can be found on its website (<http://www.sydneywater.com.au/SavingWater/>).

Table 4.1 Snapshot: Household characteristics of high and low volume water users

Low Water Usage (< 100kL per annum)	High Water Usage (> 500 kL per annum)
On average, have 1.6 people in household (compared to 2.8 people for all households)	On average, have 4.7 people in household (compared to 2.8 people for all households)
60% are single person households (compared to 25% of all households)	80% are couples with children (compared to 38% of all households)
25% live in units (compared to 22% of all households)	96% live in separate houses (compared to 66% of all households)
24% of households in houses live on small blocks of land (<500 square metres) (compared to 22% of all households)	31% of households in houses live on large blocks of land (> 900 square metres) (compared to 15% of all households)
83% live in Sydney (compared to 88% of all households)	96% live in Sydney (compared to 88% of all households)

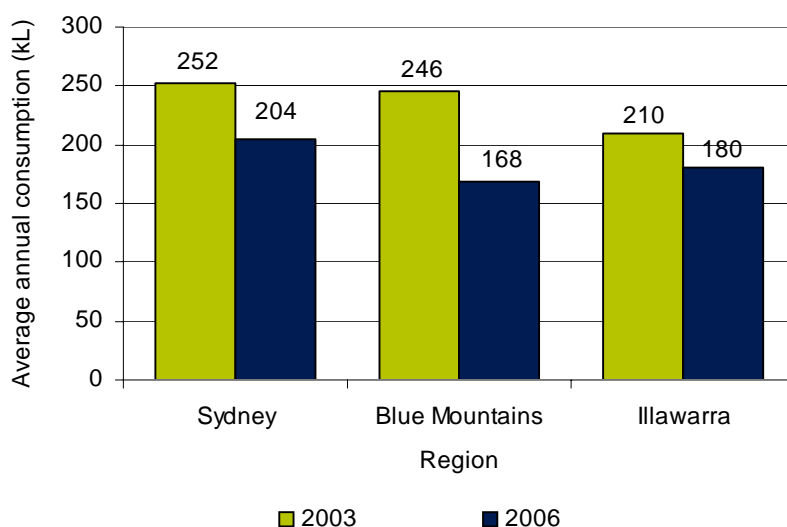
To consider the possible reasons for the variation in water usage across households we examined the relationship between consumption and household size, dwelling type, dwelling ownership and locality. The results indicate that:

- ▼ water consumption was higher in Sydney than in the Blue Mountains or the Illawarra
- ▼ larger households consumed more water than those with fewer occupants
- ▼ consumption of those living on large land blocks was 20 per cent higher than for those on small blocks
- ▼ on average, respondents living in houses used 45 per cent more water than those living in units
- ▼ about 65 per cent of renters pay quarterly charges on their usage of water
- ▼ there was no clear relationship between consumption and whether a respondent paid quarterly usage charges.

Average residential household water consumption in 2006 was 201 kilolitres. This represents a 19 per cent reduction from the average consumption reported in the 2003 survey of 249 kilolitres. Respondents in Sydney consumed slightly more water on average than those in the Illawarra, whilst those in the Blue Mountains used significantly less than respondents from the other regions – Figure 4.1. Water consumption in the Blue Mountains has declined the most since 2003, down 32 per cent. It has replaced the Illawarra as the region with the lowest usage, while Sydney remains the area with the highest average consumption.

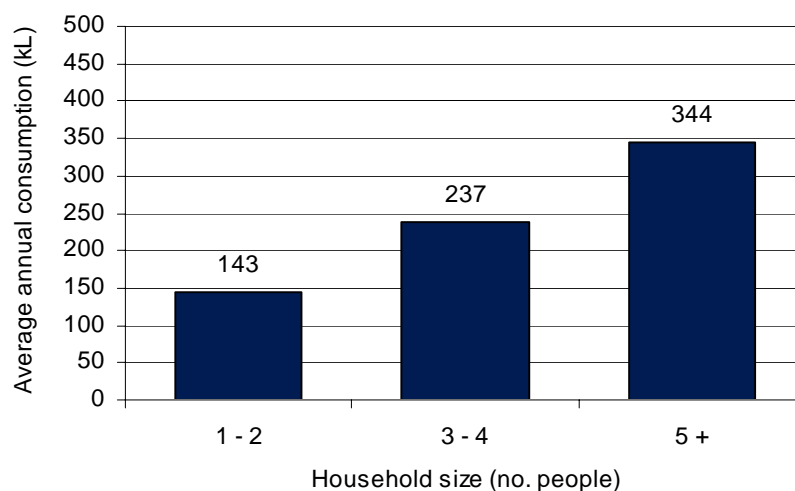
There are likely to be several reasons contributing to the observed reduction in usage. Since 2003, mandatory water restrictions have been introduced to Sydney Water's service area, the two-tier usage charge has been applied to individually metered residential water consumption, and Sydney Water has actively pursued demand management measures, for example through its indoor retrofit programme and rainwater tank rebate scheme.

Figure 4.1 Average water consumption by region, 2003 and 2006



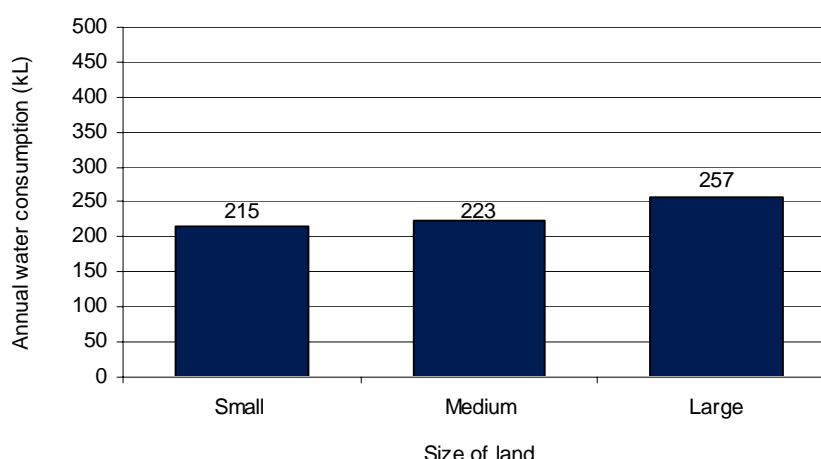
As was the case in the 2003 survey, higher water usage was associated with a greater number of household occupants – Figure 4.2. Households with 5 or more occupants consumed on average 344 kilolitres per year, almost 141 per cent more than households with only 1 or 2 occupants.

Figure 4.2 Average water consumption by number of household occupants, 2006



For households that live in houses, we investigated the relationship between land size and water consumption. The results suggest that larger land area is associated with higher water consumption – respondents who lived on large blocks consumed on average 19 per cent more water than those living on small blocks – Figure 4.3.

Figure 4.3 Average water consumption by land area



Results from the 2003 survey indicated that respondents who live in houses consumed more water than those who lived in units. Further, of those who were living in houses, renters in public housing consumed more than those renting privately. Of respondents living in units, those who were paying off their home consumed the most water.¹⁶

We examined the 2006 survey data to see if these patterns persisted – Figure 4.4. The analysis shows that respondents living in houses continue to consume more water than those who live in units. However, due to the introduction of outdoor water restrictions, water usage for respondents living in houses has decreased far more significantly since 2003 than has been the case for those living in units.

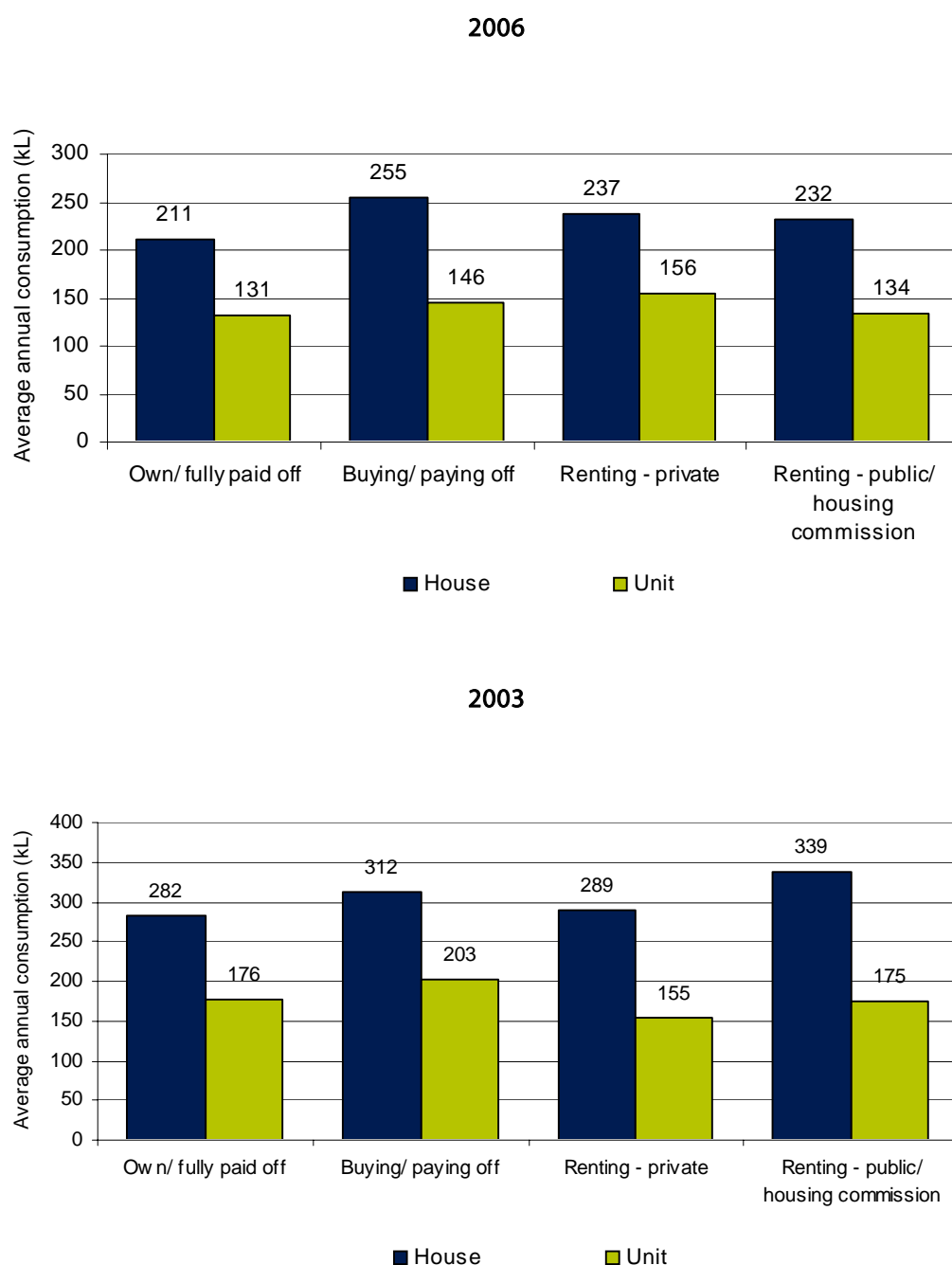
Tenants living in public housing no longer consume more than tenants renting privately as was the case in the 2003 survey. This is probably in response to active measures taken by the Department of Housing (DoH) and Sydney Water to reduce consumption in public housing. In particular, DoH began billing individually metered tenants for their water consumption from 1 July 2006.¹⁷ At the same time,

¹⁶ See IPART, *Residential water use in Sydney, the Blue Mountains and Illawarra – results from the 2003 household survey*, RP 26, April 2004, p.12

¹⁷ During March to November 2005 the Department of Housing (DoH) floated the concept of passing usage charges on to their tenants. In December 2005, they changed the Residential Tenancy Act which allowed them to do this. The charge was initially based on income rather than usage, but since 1 July 2006 DoH has charged individually metered properties the actual billed usage charge

Sydney Water actively promoted water conservation through its Waterfix programme, offered free of charge to low-income households, which involves fixing leaks and fitting water efficient fixtures. Water restrictions and higher water usage charges may have encouraged further reductions in water consumption.

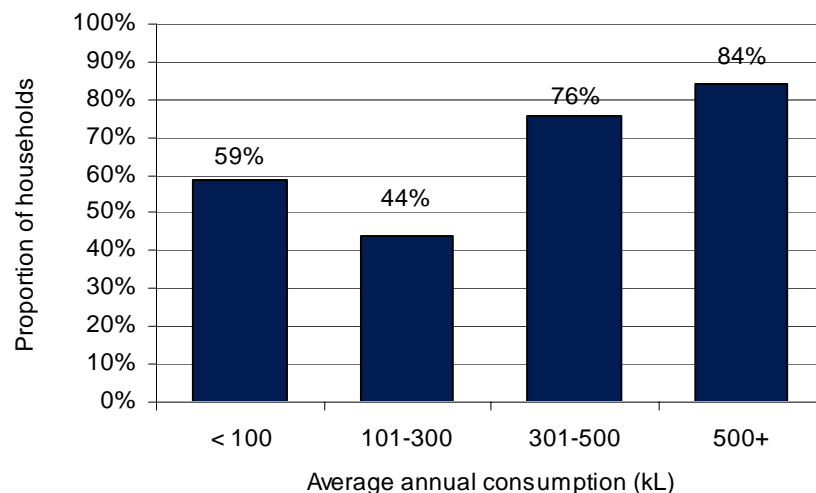
Figure 4.4 Average water consumption by dwelling ownership and type, 2006 and 2003



It is common for water users in rented accommodation not to pay water charges directly but for these to be paid by the landlord.¹⁸ In theory, this creates less of an incentive for renters to curtail their water consumption, since they cannot save money by reducing consumption and they do not face a charge for increased usage.

To investigate this issue, we examined the proportion of respondents who pay quarterly usage charges by water consumption group – Figure 4.5. This indicated that respondents in the highest consumption categories were more likely to be paying quarterly usage charges than those in the lowest two categories.

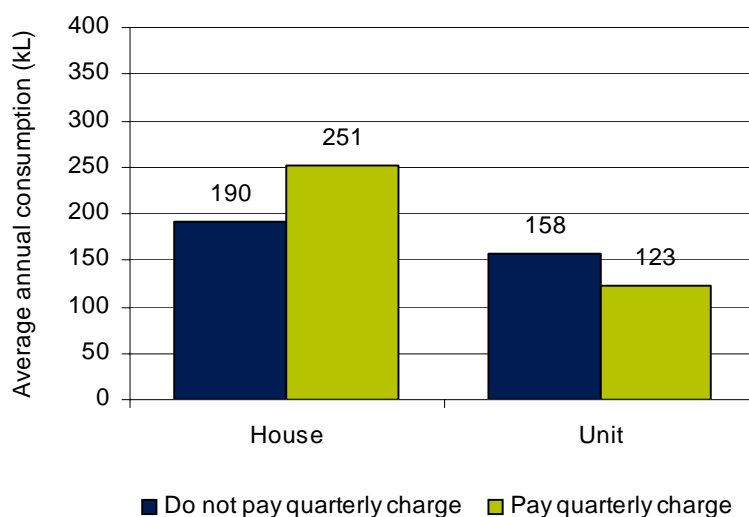
Figure 4.5 Proportion of respondents who pay quarterly water usage charges by average consumption



We also looked at average water consumption of respondents who do and do not pay quarterly water usage charges by dwelling type – Figure 4.6. For respondents living in units, consumption amongst those who do not pay quarterly usage charges is 28 per cent higher than for those who do pay these charges. However, for respondents living in houses, the reverse relationship holds, with those who pay quarterly water charges consuming 32 per cent more than those who do not.

¹⁸ IPART understands that landlords are now able to pass water charges directly onto tenants and, as indicated above, that this now occurs for individually metered public housing. However, we have been unable to obtain further information about the extent to which this occurs for private renters.

Figure 4.6 Average water consumption by dwelling type and whether respondent pays quarterly water usage charges



The results suggest that the difference in consumption between those households receiving a quarterly water usage bill and those that do not is more likely to be the result of underlying differences in the characteristics of the households, than the fact that some do not receive a quarterly water usage bill.

4.2 What do households use water for?

Households use water for a wide range of purposes. Some of these can be considered basic, or non-discretionary, in the sense that they are required for reasons of health, subsistence and hygiene, such as drinking, bathing, cooking, cleaning, washing and toilet flushing. Discretionary usage includes consumption for non-essential purposes such as watering gardens, washing cars and driveways and for use in swimming pools. It can also include consumption in excess of the amount necessary for health and hygiene, such as long showers.

To allow us to examine the characteristics associated with discretionary water use, survey participants were asked about large water using amenities such as swimming pools, spa baths and dishwashers. The results indicate that high volume water users have more water-using amenities, and in particular are much more likely to have a dishwasher and a swimming pool than low volume users – Table 4.2.

Table 4.2 Snapshot: Usage characteristics of high and low volume water users

Low Water Usage (< 100 kL per annum)	High Water Usage (> 500kL per annum)
Have an average of 4.8 indoor, water-using amenities (compared to 5.5 for all households)	Have an average of 6.8 indoor, water-using amenities (compared to 5.5 for all households)
4% have swimming pools (compared to 11% of all households)	33% have swimming pools (compared to 11% of all households)
25% have a dishwasher (compared to 42% of all households)	58% have a dishwasher (compared to 42% of all households)
21% usually water the garden with a hand held hose during the permitted hours (compared to 24% of all households)	32% usually water the garden with a hand held hose during the permitted hours (compared to 24% of all households)

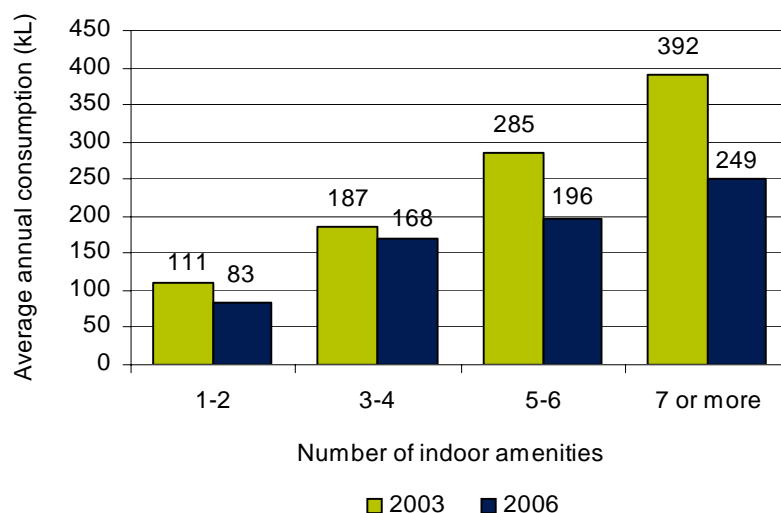
We examined the usage characteristics of respondents with large water using amenities in more detail. The results show that:

- ▼ consumption of water increased with the number of indoor water using amenities per household
- ▼ the average water consumption of respondents with swimming pools was 111 kL higher than those without pools
- ▼ the average water consumption of respondents with dishwashers was 51 kL more than those without dishwashers
- ▼ for respondents with a garden, there is only a weak association between garden watering behaviour and average consumption.

The results of the 2003 study found that greater numbers of indoor water using amenities were associated with higher average consumption of water. The amenities included showers and toilets as well as baths, spas, dishwashers and washing machines.

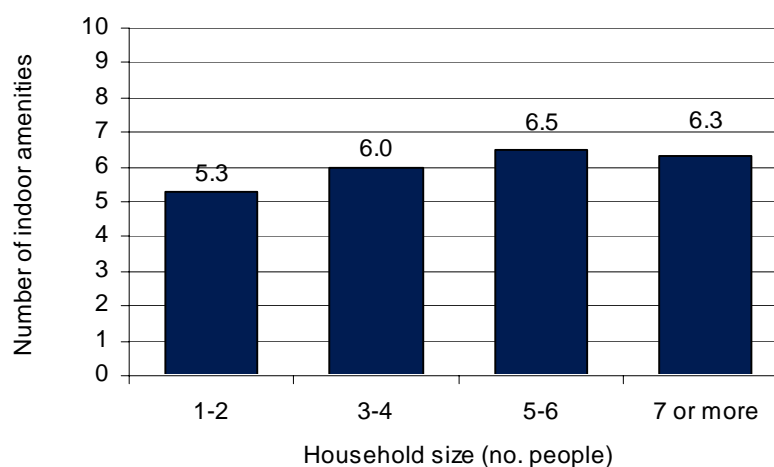
We replicated this analysis using the 2006 survey data – Figure 4.7. The results confirmed the relationship identified in the 2003 report. However, the relationship between the number of indoor water using amenities and water consumption does not appear to be as strong as it was in 2003. Average water consumption has decreased since 2003 by a larger amount for households with greater numbers of amenities than for those with fewer water using amenities.

Figure 4.7 Average water consumption by number of indoor water using amenities



We also considered the association between the number of indoor water using amenities and number of household occupants – Figure 4.8. Interestingly, the data did not indicate a strong relationship. The average number of amenities in a household of 1 or 2 occupants was only one less than for a household of seven or more occupants.

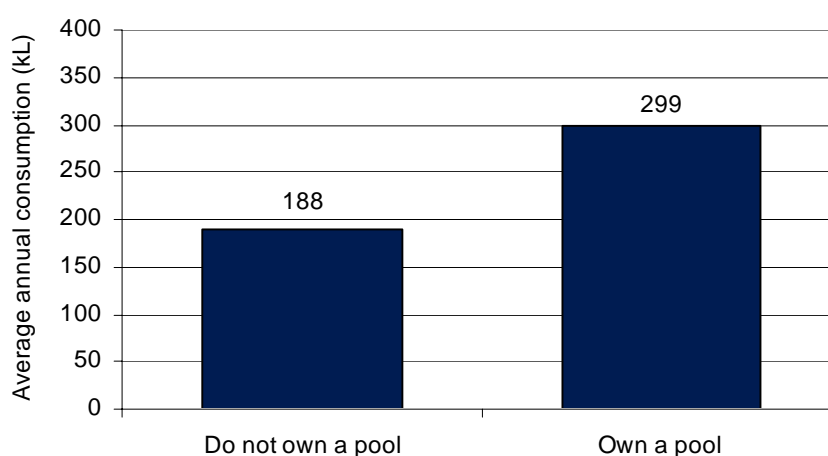
Figure 4.8 Average number of indoor water using amenities by households size



Two of the most common discretionary water amenities are swimming pools (14 per cent of households had one) and dishwashers (45 per cent). We examined the average consumption of respondents with and without these amenities – Figure 4.9 and Figure 4.10. Average water usage of households with swimming pools was 299 kL, 59 per cent greater than for those without swimming pools. Respondents with dishwashers consumed 28 per cent more than those without.

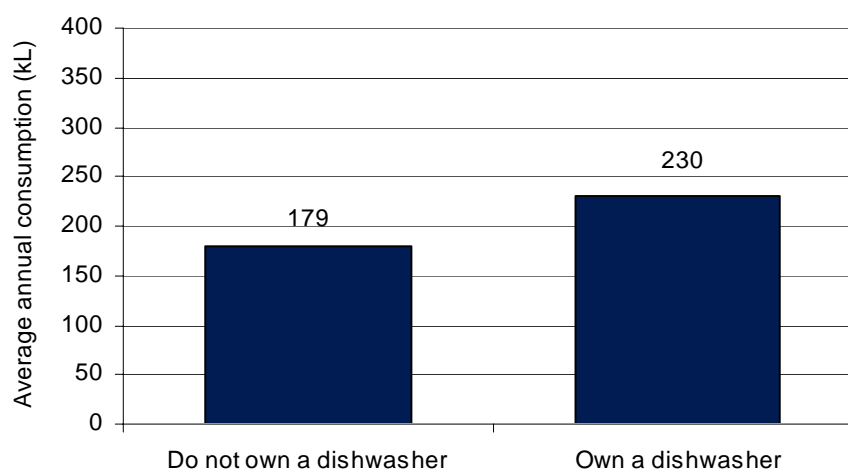
As discussed in Chapter 2 with reference to electricity consumption, the observed differences in water consumption are likely to be partly the result of underlying differences in the characteristics of the households who have a swimming pool or dishwasher compared to those households who do not. The results should therefore not be interpreted as indicating the incremental effect on water consumption of owning a swimming pool or a dishwasher, and should be used cautiously.¹⁹

Figure 4.9 Average water consumption of respondents with and without a swimming pool



¹⁹ IPART intends to undertake further analysis of the determinants of electricity, gas and water demand to better estimate the likely contribution of each appliance to household total consumption.

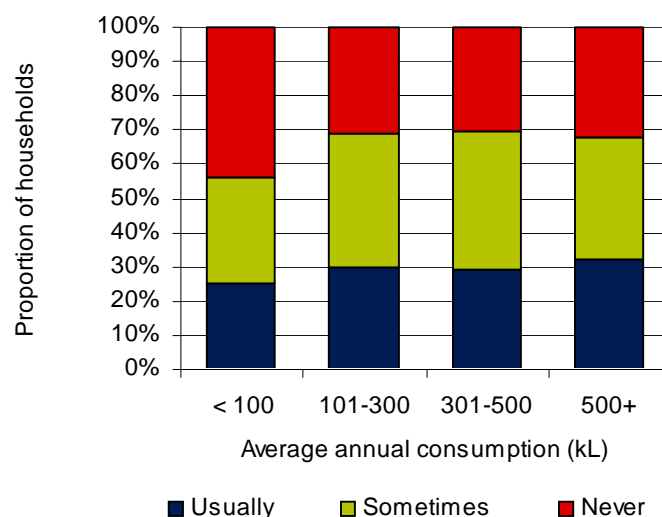
Figure 4.10 Average water consumption of respondents with and without a dishwasher



We asked respondents about their use of hand-held hoses for watering their gardens during permitted times. In the 2003 survey, 76 per cent of respondents reported using a hand-held hose to water their gardens. The results from the 2006 survey suggest that this proportion has decreased since the introduction of mandatory water restrictions. On average, 30 per cent reported that they usually used a hand-held hose to water their gardens, while a further 37 per cent sometimes used this method.

We investigated whether the proportion of respondents who used hand-held hoses to water their gardens was associated with water consumption – Figure 4.11. The results indicate that there is only a weak association between these factors.

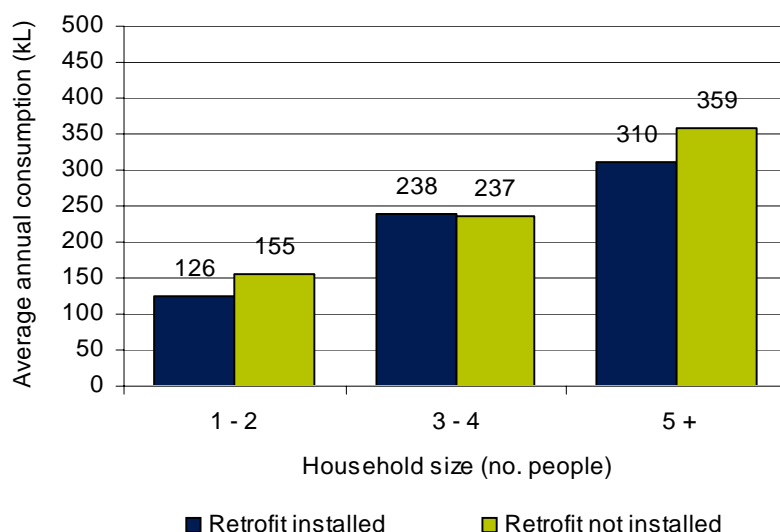
Figure 4.11 Proportion of respondents who usually, sometimes or never water there garden with a hand-held hose



The 2006 survey collected information on whether respondents had received retrofits from Sydney Water. In total almost 35 per cent of households had retrofits installed. Retrofits were most common, at 48 per cent, amongst respondents in the lowest bracket of household income whilst only 23 per cent of respondents in the highest household income bracket had them installed.

We examined the water consumption of households with and without retrofits – Figure 4.12. The results indicate that households with retrofits consume, on average, less than those without retrofits. This relationship is strongest amongst smaller and larger household but for households with 3 or 4 occupants water consumption is approximately the same for those with and without retrofits.

Figure 4.12 Average water consumption of respondents with and without retrofits by household size

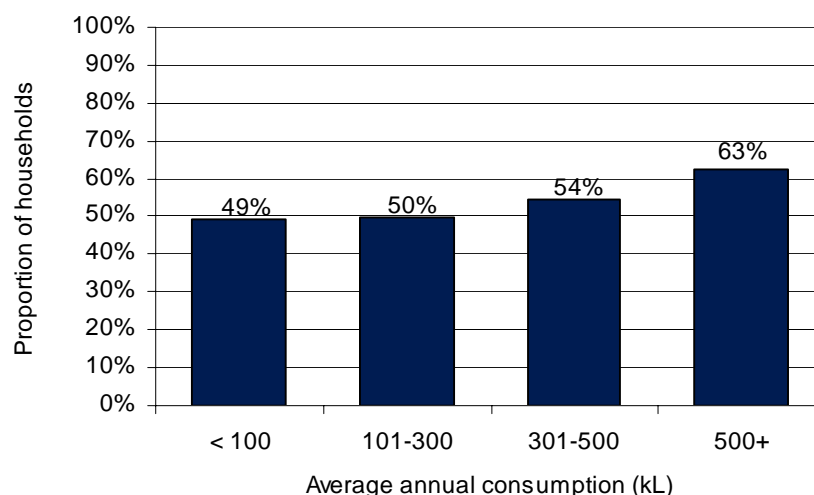


4.3 Awareness of water pricing and importance of service attributes

Since the 2003 survey, the structure of water tariffs has changed from a single usage charge, irrespective of the amount of water consumed each year, to a two-tier usage charge, where the charge per kilolitre of water consumed is higher for all individually metered residential consumption above 100 kilolitres per quarter. To investigate how households may have responded to the introduction of the two-tier usage charge, the survey included a number of questions about the awareness of, and response to, the introduction of the two-tier usage charge.

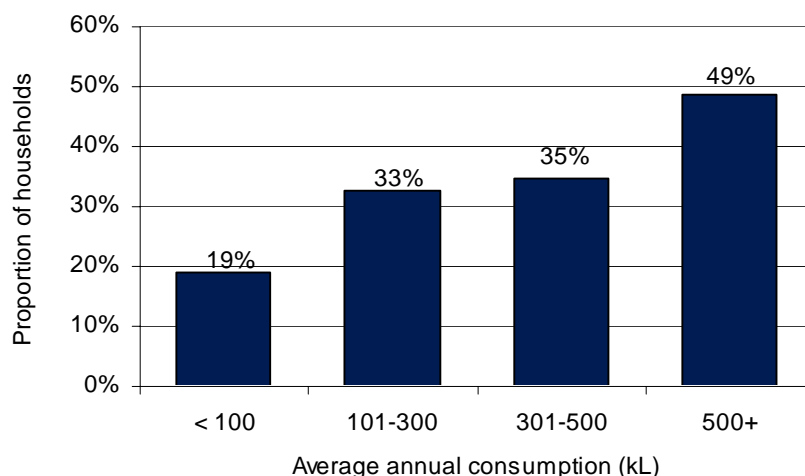
On average, 53 per cent of respondents indicated that they were aware of the two-tier usage charge. Awareness was greatest amongst those with the highest water consumption, with 63 per cent of households reporting awareness compared to 49 per cent of those with the lowest consumption – Figure 4.13.

Figure 4.13 Proportion of respondents aware of the two-tier water usage charge by consumption



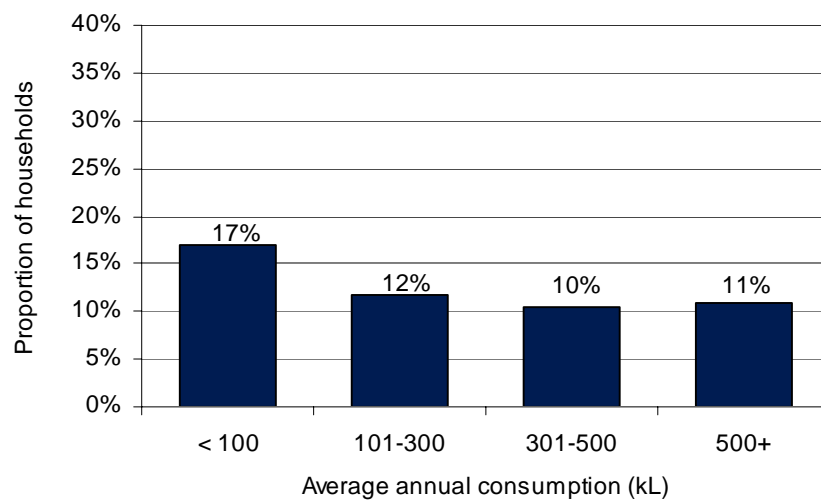
We also asked respondents who indicated awareness of the two-tier usage charge whether its introduction had affected their level of water consumption – Figure 4.14. As a proportion of those respondents who were aware of the tariff, 33 per cent indicated that their level of water usage had been affected. This proportion was much higher, at 49 per cent, amongst the highest category of water users than it was amongst the lowest category, where only 19 per cent stated that their water consumption had changed because of the two-tier usage charge. However, an interesting implication of these results is that even households using less than 400kL per year have responded to the two-tier charging structure, even though they are unaffected by the second tier price.

Figure 4.14 Proportion of respondents who changed water consumption behaviour due to the introduction of the two-tier water usage charge



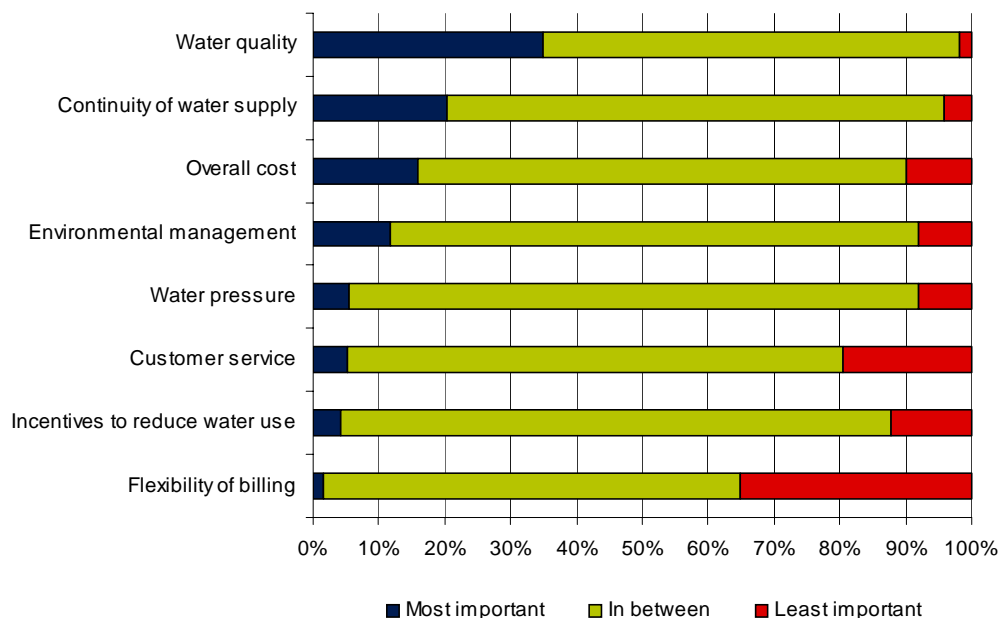
Respondents were asked whether they would be willing to pay 10 per cent more for water to have supply interrupted less frequently. On average, 12 per cent of respondents indicated that they would be willing to do this. Willingness was highest, at 17 per cent, amongst the smallest water users and lowest amongst those respondents using more than 500 kL per year – Figure 4.15.

Figure 4.15 Proportion of respondents willing to pay 10 per cent more for water for fewer supply interruptions



In order to assess which water service attributes were considered most important by users, respondents were asked to rank eight factors from most important (1) to least important (8). The responses to this question are summarised in Figure 4.16 below. For each attribute, we display the proportion of respondents who rated this factor as first or second most important (1 or 2), 'least important' (7 or 8) or 'in between' (3-6).

Figure 4.16 Proportion of respondents ranking water service attributes most and least important



Water quality was ranked by 35 per cent of respondents as the first or second most important attribute of water supply. Continuity of water supply also received a high proportion of importance rankings. On the other hand, flexibility of billing was considered by 35 per cent of respondents as one of the two least important factors.

The importance rankings did not in general appear to differ significantly by level of consumption. However, it is interesting to note that the importance placed on continuity of water supply was greatest amongst the largest water users, despite these being the least willing to pay 10 per cent more for fewer interruptions in their water supply.

5 The relationship between electricity, gas and water consumption and household income

A household's income can influence its consumption of energy and water and its ability to pay for these services. In this section we examine the relationship between income and consumption and other factors that can assist in identifying customers that are vulnerable to price increases.

As a proxy for identifying vulnerable customers, we have examined the characteristics of households that indicated they held a card entitling them to concessions on their utility bills. We also asked participants whether they had ever approached their supplier because of difficulties paying their utility bills.

The results of this investigation are:

- ▼ respondents with lower household income consume, on average, less of each service
- ▼ the association between consumption and income is stronger for gas than it is for electricity and water
- ▼ amongst those in the highest income brackets, respondents who own their home consume on average more electricity, gas and water than those who rent.
- ▼ three quarters of respondents in the lowest income bracket hold concession cards entitling them to rebates on their utilities bills
- ▼ for each utility, consumption by concession card holders was lower than by those who did not hold concession cards
- ▼ respondents were more likely to approach their electricity supplier with payment difficulties than their gas or water suppliers (see Box 5.2)
- ▼ for each utility, respondents with low household income were more likely to approach their supplier with payment difficulties than those with higher income
- ▼ tenants were much more likely to approach their supplier with payment difficulties than those who owned or were paying off their dwelling
- ▼ the most common response by suppliers to being approached with payment difficulties was to extend the due date of the bill.

5.1 Consumption characteristics and household income

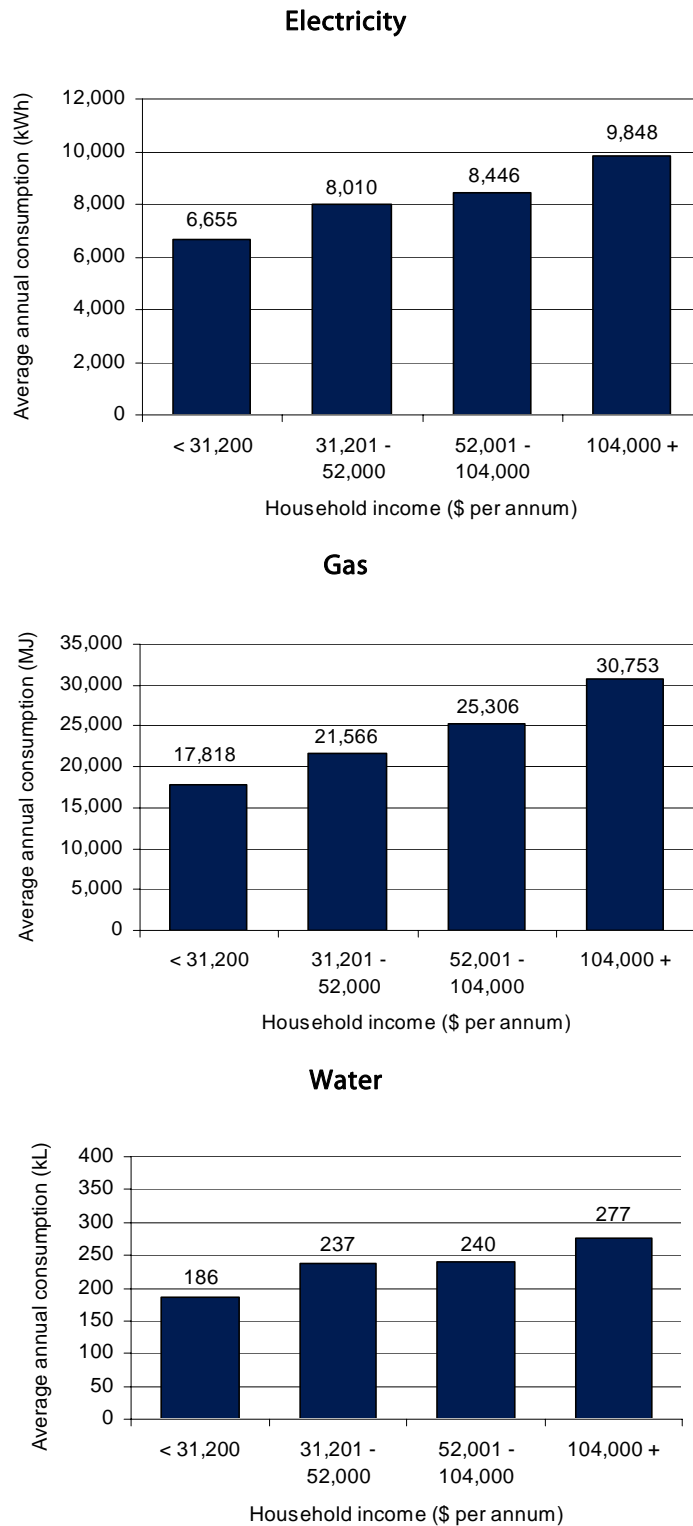
Table 5.1 presents detailed survey results for low and high income households. In general, respondents with high household incomes were much more likely to own or be paying off their homes than low income respondents. They also had, on average, more household occupants and were more likely to have mains gas, a swimming pool and one or more large energy using appliances such as dishwashers and clothes dryers. Only 4 per cent of high income households had a concession card, compared to 75 per cent of low income households.

Table 5.1 Typical household characteristics of low and high income respondents

Low Income (< \$31,200)	High Income (> \$104,000)
38% Rent their home (private or public) (compared to 15% of high-income households)	85% own or are paying off their home (compared to 62% of low-income households)
On average have 2.3 people in household	On average have 3.6 people in household
38% are single person households (compared to 7% for high-income households)	69% are couples with children (compared to 18% for low-income households)
75% have a concession card (compared to 4% for high-income households)	96% do not have a concession card (compared to 25% for low-income households)
42% have mains gas	68% have mains gas
49% have clothes dryer; 22% have a dishwasher; 98% have a washing machine; 90% have a microwave; 39% have a second refrigerator	80% have clothes dryer; 75% have a dishwasher; 99% have a washing machine; 95% have a microwave; 54% have a second refrigerator
52% of households have an air conditioner	60% of households have an air conditioner
72% use air conditioners on very hot days only, and 20% use them on most hot days	56% use air conditioners on very hot days only, and 36% use them on most hot days
47% use air conditioners on very cold days only, and 15% use them on most cold days	37% use air conditioners on very cold days only, and 30% use them on most cold days
5% have a swimming pool	25% have a swimming pool

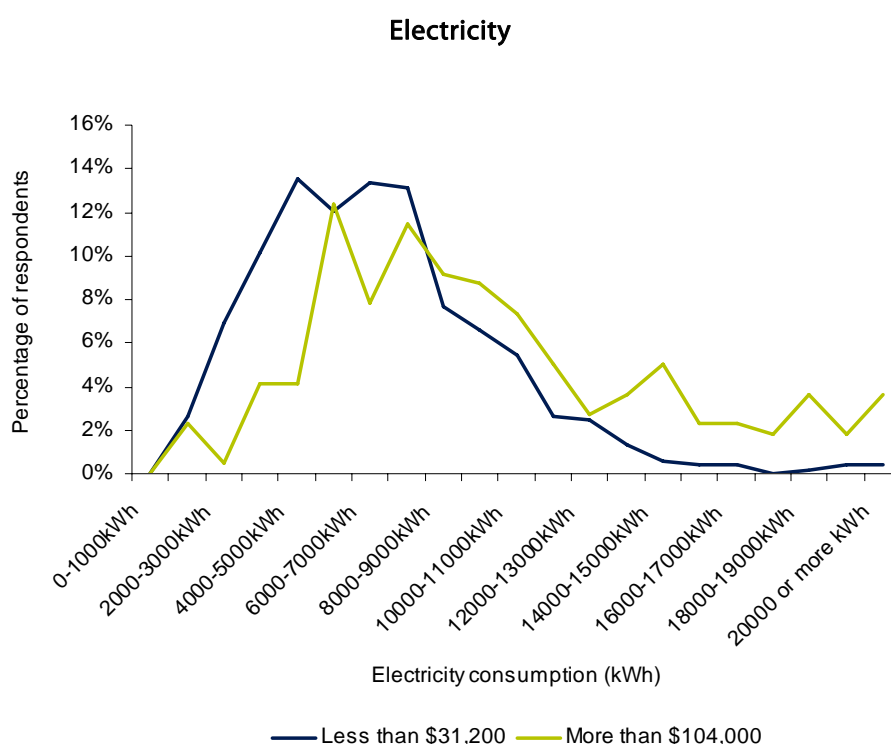
Using consumption data provided by electricity, gas and water suppliers, we examined the relationship between income and household consumption of electricity, gas and water. Higher income households in general consume more of all three services – Figure 5.1. However, consumption of gas appears to be more sensitive to income than usage of electricity and water. For example, the difference in consumption between the highest and lowest income brackets is 73 per cent in the case of gas consumption, but only 48 and 49 per cent for electricity and water respectively.

Figure 5.1 Average consumption of electricity, gas and water by income category, 2006



To determine the number of low income households that were also large electricity, gas and water users in 2006, we plotted the percentage of respondents within each consumption band, for both low and high income households – Figure 5.2. The figures demonstrate that a substantial number of low income households are also large consumers of electricity, gas and water.

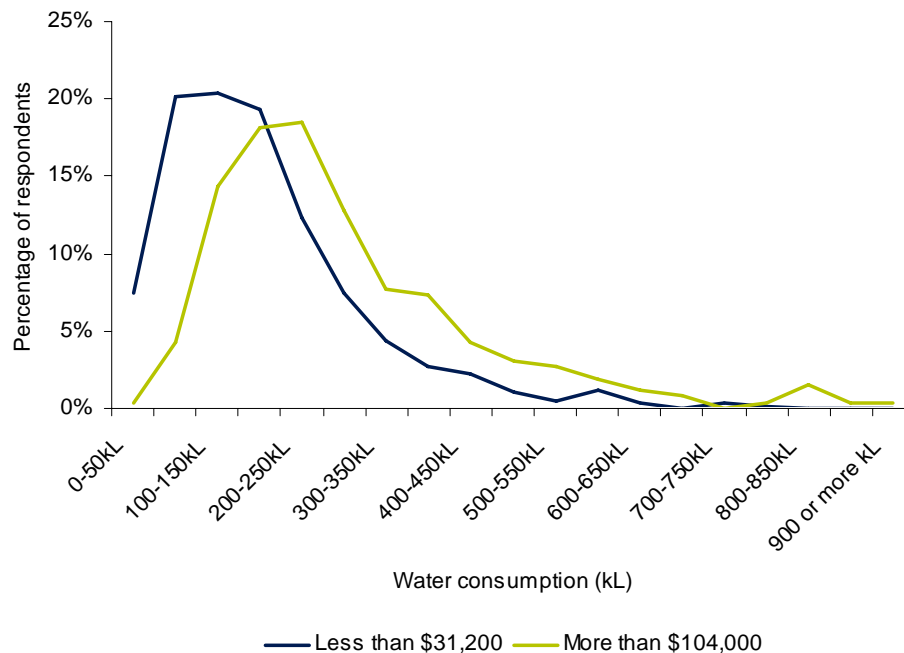
Figure 5.2 Proportion of households by electricity, gas and water consumption band, 2006



Gas



Water

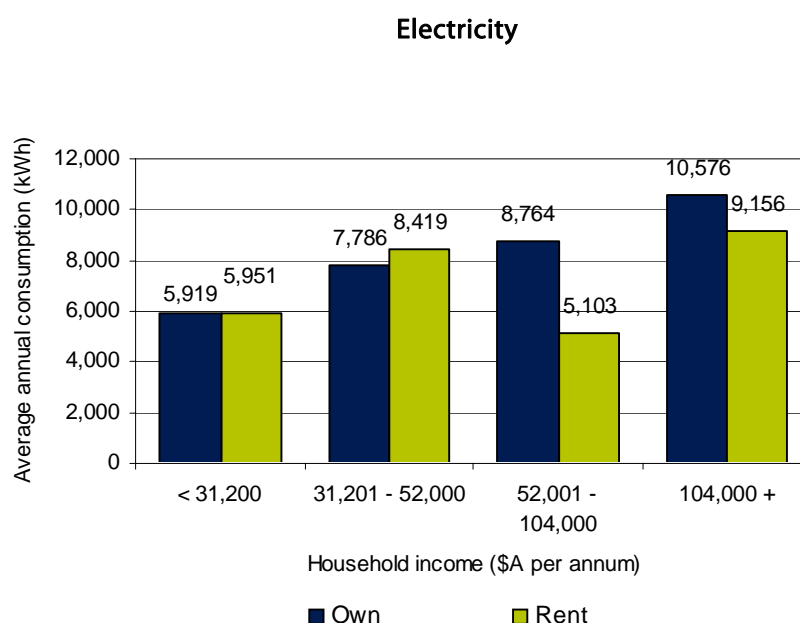


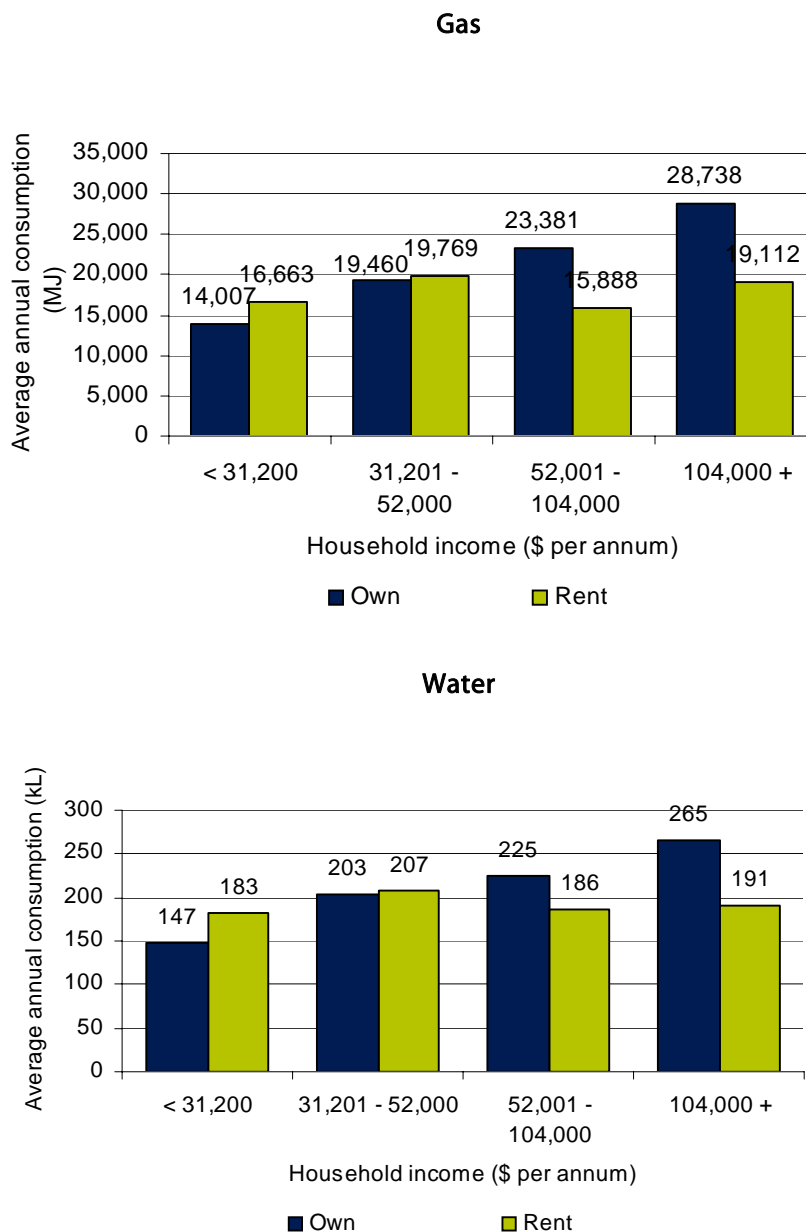
For example, approximately 19,500 low income households (< \$31,200) consume more than 400 kL of water per year, compared to approximately 26,000 high income households. Similarly, about 38,500 low income households consume more than 12,000kWh of electricity compared to 70,500 high income households, and 10,500 low income households consume more than 36,000MJ of gas compared to 30,500 high income households.

These results demonstrate that whilst low income households on average consume less electricity, gas and water than high income households, there are both large and small consumers within each income category.

We also analysed the differences in average household consumption of electricity, gas and water by home ownership status – Figure 5.3. The results show a relatively consistent pattern across the services by income groups. In the higher household income brackets, respondents owning or paying off their own homes consume more of each service than those who rent. However, in the lower income brackets, the consumption levels of owners and renters are similar.

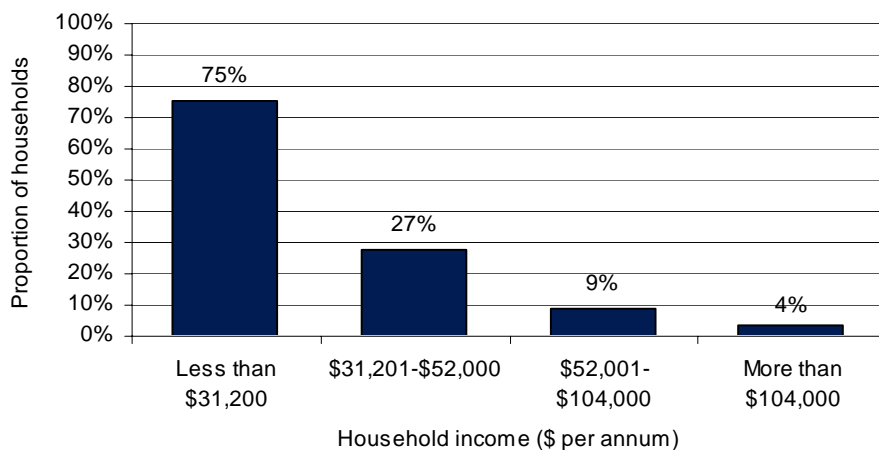
Figure 5.3 Average consumption of electricity, gas and water by income category





Pensioners with relevant concession cards receive rebates on their utility bills, and these are predominantly low-income households – Box 5.1. For example, 75 per cent of respondents in the lowest bracket held a concession card, whereas only 4 per cent of respondents in the highest income bracket held a concession card – Figure 5.4.

Figure 5.4 Concession card holders by income distribution



Box 5.1 Concession arrangements for energy and water services in Sydney

Who qualifies for concessions?

Concessions are available to Centrelink Pensioner concession card or Department of Veteran's Affairs concession card holders for household energy (electricity and gas) and water services.

Centrelink Pensioner concession cards are available to low income earners receiving selected payments (eg age or disability support pension, single parenting payment or carer payment), to help with the cost of medicines and a range of concessions.

Department of Veteran's Affairs concession cards are available to low-income war veterans who are service pensioners, age pensioners or war widows/widowers receiving an income support supplement.

What concessions are available for energy?

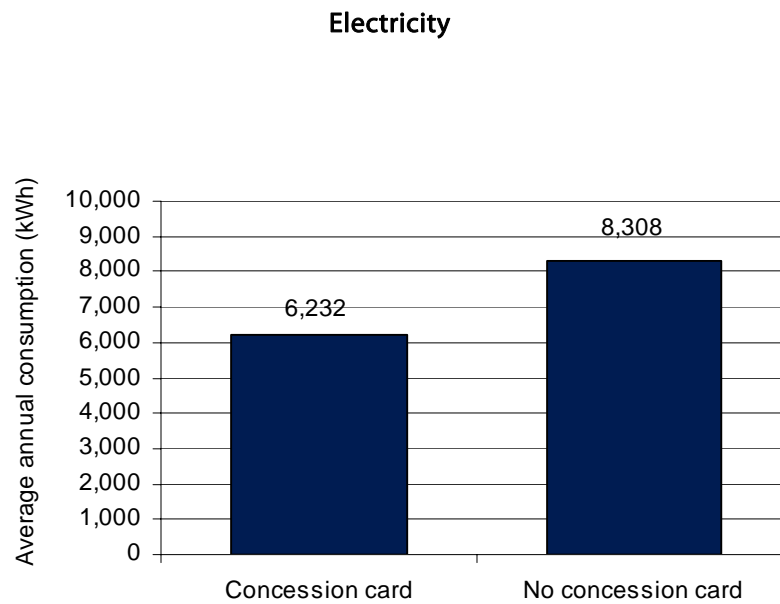
The NSW government on 1 January 2002 introduced a concession payment of \$112 per year for electricity and gas for eligible households. This payment replaced individual schemes run by the various energy retailers. These payments, in the form of rebates, are paid on electricity bills and are available to households with (at least) one member that holds a Centrelink Pensioner concession card or Department of Veteran's Affairs concession card.

What concessions are available for water and sewerage?

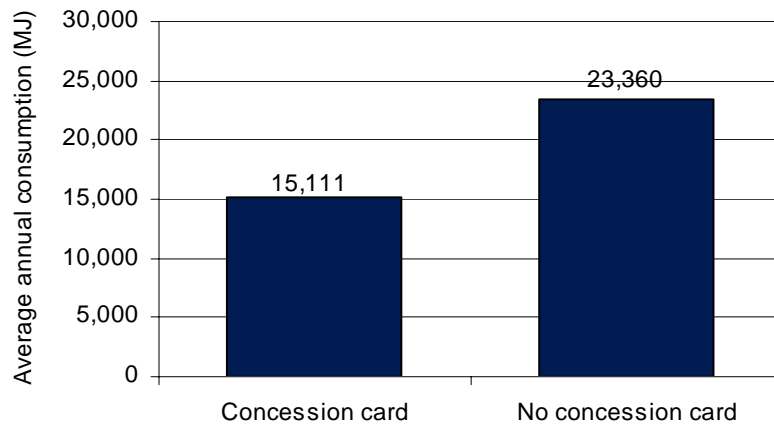
Sydney Water's pensioner rebates in 2006/07 were 100 per cent of the fixed charge for water and 81 per cent of the fixed charge for sewerage. Rebates are available to owner-occupiers holding Centrelink Pensioner concession cards or Department of Veteran's Affairs concession cards.

The findings show that concession card holders on average consume less than households without a concession card. The differences in consumption amount to 33 per cent, 55 per cent and 31 per cent for electricity, gas and water respectively – Figure 5.5.

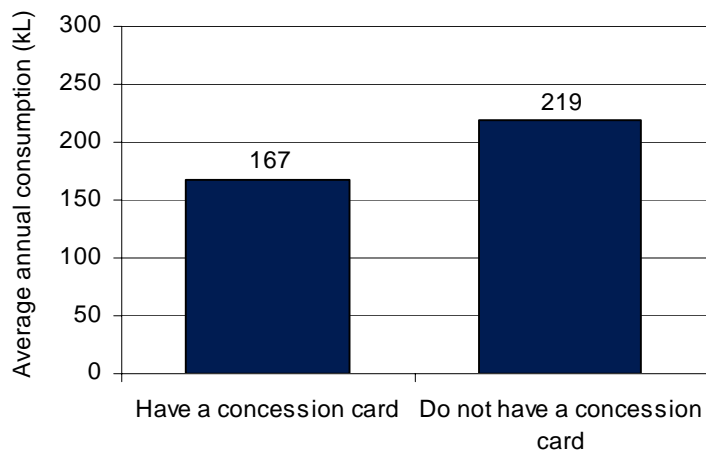
Figure 5.5 Average consumption of electricity, gas and water of concession card holders compared to non-concession card holders



Gas



Water



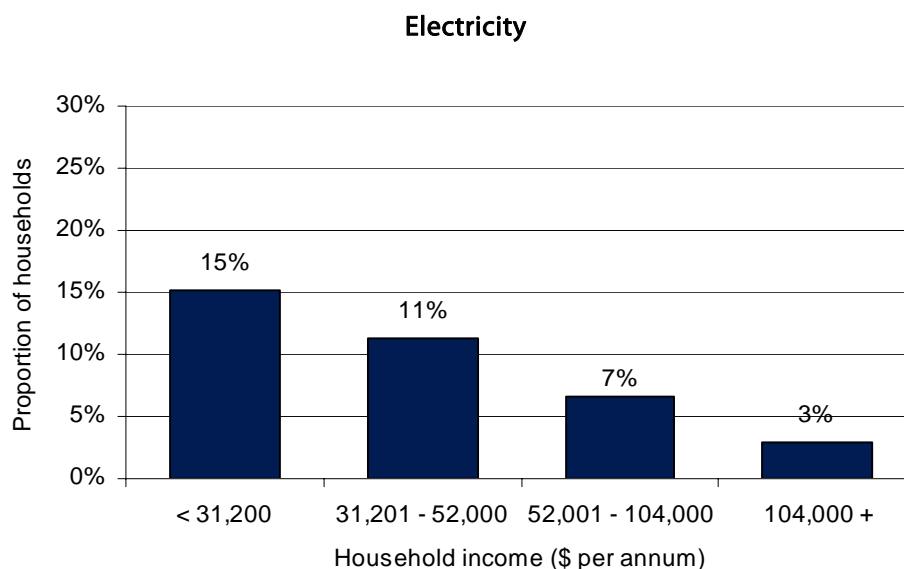
5.2 Respondents with difficulties paying their utility bills

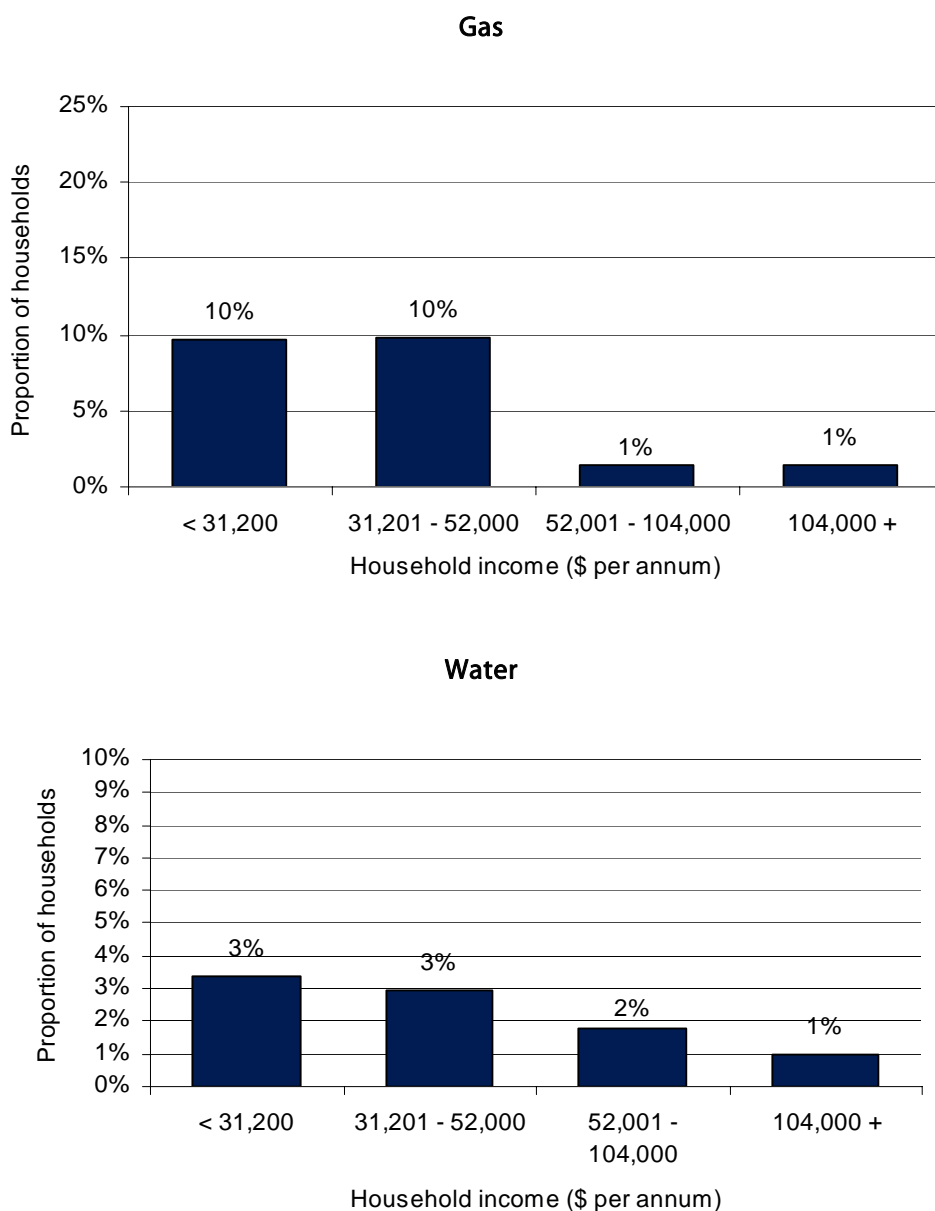
Survey respondents were asked if they had ever approached their electricity, gas or water supplier because of payment difficulties in the last three years and, if so, what help they received. We also asked if respondents had asked for other financial help from a charity at any time in the last three years and if they had ever been disconnected by their supplier.

The results indicate that customers are more likely to approach their electricity supplier due to payment difficulties (9 per cent of respondents) than either their gas or water supplier (5 and 2 per cent respectively). This is likely to reflect electricity bills being a larger proportion of household income and the greater likelihood of being disconnected from electricity supplies compared to water supplies under existing disconnections policies.

Unsurprisingly, respondents from low income households were more likely than those from high income households to approach their suppliers with payment difficulties – Figure 5.6. For example, 15 per cent of respondents in the lowest income bracket had approached their electricity retailer in the last three years compared to 3 per cent in the highest income bracket. This result is similar to that observed in 2003, where 15 per cent of low income households had also approached their electricity retailer with payment difficulties in the previous three years.

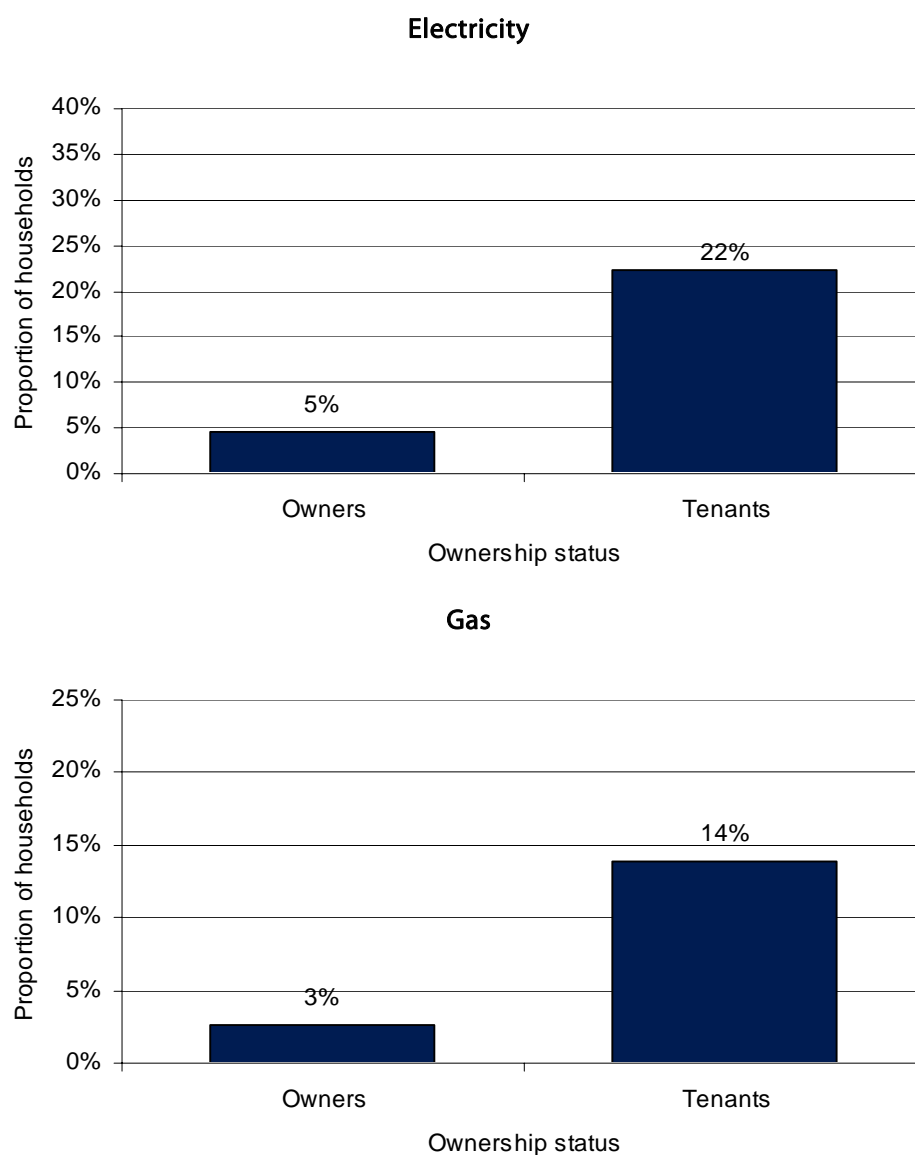
Figure 5.6 Proportion of households who approached their supplier in the last three years about difficulties paying electricity, gas and water bills, by income

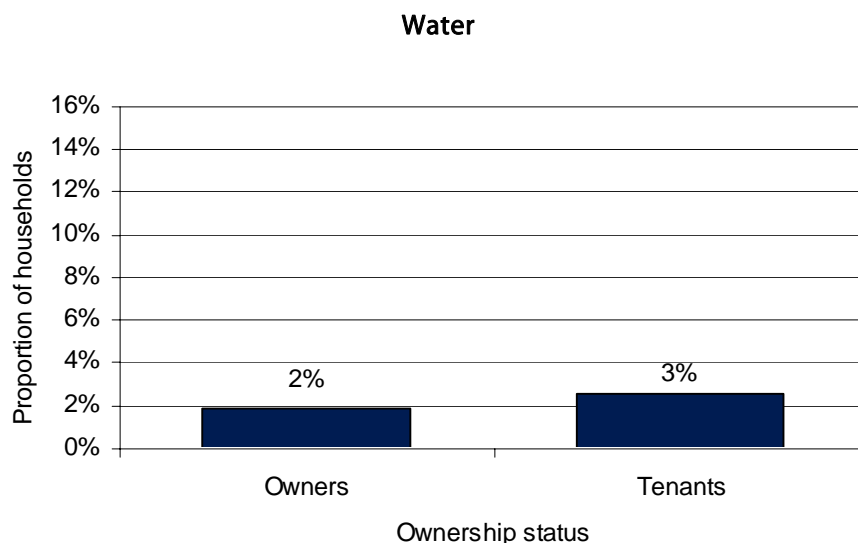




We also examined the extent to which dwelling ownership status is associated with difficulty paying utility bills – Figure 5.7. The results indicate that this association is stronger than for the household income categories. For example, 22 per cent of renters had approached their supplier in the last three years with difficulties paying their electricity bill, compared to 5 per cent of owners.

Figure 5.7 Proportion of households who approached their supplier about difficulties paying electricity, gas and water bills, by ownership status, 2006





The most common response to those who approached their supplier with payment difficulties was to extend the due date on the bill – more than 70 per cent of respondents reported this reaction. The next most frequent response was to allow the bill to be paid off in instalments.

Box 5.2 Why are households more likely to approach their electricity suppliers with payment difficulties than their gas or water suppliers?

Households may be more likely to approach their electricity supplier with payment difficulties than their gas or water supplier because:

1. Electricity bills tend to be larger than gas or water bills
2. Electricity is an essential service that no-one can do without, whereas gas is more discretionary in nature. The possibility of disconnection is therefore perhaps more urgent for electricity than gas.
3. Gas customers have higher incomes, on average, than electricity customers. Fewer are therefore likely to have difficulty paying their bills.
4. Water bills are likely to be comparatively small for most low income owner-occupiers, because they receive generous rebates on the fixed charges – Box 5.2.
5. Tenants, who tend to have the greatest difficulty paying their energy bills, do not pay fixed water, sewerage or stormwater charges directly to Sydney Water, and only sometimes pay usage charges directly. In addition, bills for usage only are usually fairly small.

We also asked whether respondents had sought financial assistance from a charity to pay their utility bills in the last three years. On average, 3 per cent of respondents sought financial assistance from a charity. Of respondents in the lowest income bracket, 7 per cent had sought help from a charity in the last three years.

Finally, we asked respondents whether they had been disconnected by their electricity, gas or water supplier. Disconnections were most frequent for electricity services, at 1 per cent on average compared to 0.3 per cent for both gas and water.²⁰

²⁰ Disconnections appear to be more common in the lower income brackets, but the number of observations was too low to provide statistically significant results (see Appendix A Table 5)

6 Retail competition in electricity and gas

Full retail competition for electricity and gas was introduced in New South Wales on 1 January 2002. From that time, residential energy consumers have had the option to choose their energy supplier. In more recent years, as the market has matured, energy retailing businesses have more proactively marketed competitive retail offers to customers.

For those customers who do not choose to accept a competitive market offer, IPART provides a default regulated tariff. It is anticipated that default regulated tariffs will remain until retail competition matures to an effective level. To determine whether retail competition is effective in each state, the Australian Energy Market Commission (the AEMC) has been directed by the Ministerial Council on Energy (MCE) to undertake a review of the effectiveness of retail competition. Information on retail market structure and the extent of customer switching between suppliers will be an important input to this review. IPART's survey results will therefore provide useful information when the AEMC comes to consider the effectiveness of retail competition in New South Wales.

The 2006 survey asked similar questions about retail competition as were asked in 2003, except that in 2006 respondents were also asked about being approached by, and switching to a market contract with, their existing electricity or gas supplier. In general the 2006 results indicate that since 2003:

- ▼ The awareness of competition in electricity and gas has increased from 74 and 77 per cent to 92 and 93 per cent respectively.
- ▼ The proportion of households that have been approached to switch electricity supplier has increased from 27 per cent by 2003 to 53 per cent by 2006. Similarly the proportion of households that have been approached to switch gas supplier has increased from 29 per cent by 2003 to 36 per cent by 2006.
- ▼ The proportion of households that switched electricity supplier once approached increased from 20 per cent by 2003 to 34 per cent by 2006. Similarly the proportion of households that switched gas supplier once approached increased from 14 per cent by 2003 to 27 per cent by 2006.
- ▼ By 2006 approximately 44 and 43 per cent of households had been approached to switch to a market contract by their existing supplier of electricity or gas respectively.
- ▼ In general, of those households approached, a higher proportion changed to a market offer than switched to a new electricity or gas supplier.

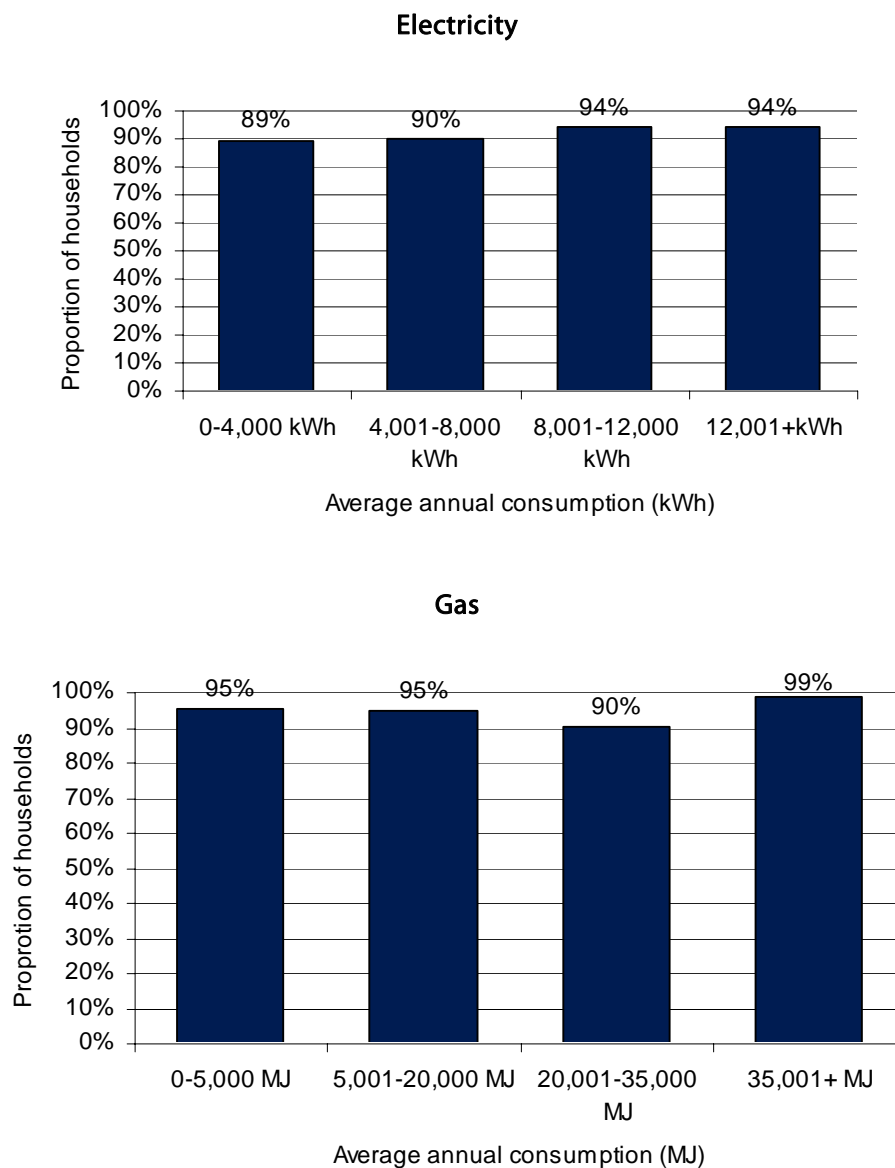
- ▼ The main reason for choosing to switch energy supplier or move to a market offer was that the offer was cheaper.
- ▼ The main reason for deciding not to change energy supplier or move to a market offer was that the customer was happy with their existing supplier.

The remainder of this chapter presents these results in greater detail.

6.1 Awareness of retail electricity and gas supplier choice

In 2003 awareness of the option to choose electricity and gas retailers were high – 74 per cent and 77 per cent respectively. The 2006 results indicate that this awareness has increased markedly. The proportion of households who indicated they were aware that they could choose their electricity and gas supplier is now 92 per cent and 93 per cent respectively.

Figure 6.1 Proportion of electricity customers who were aware that they could choose their electricity and gas supplier



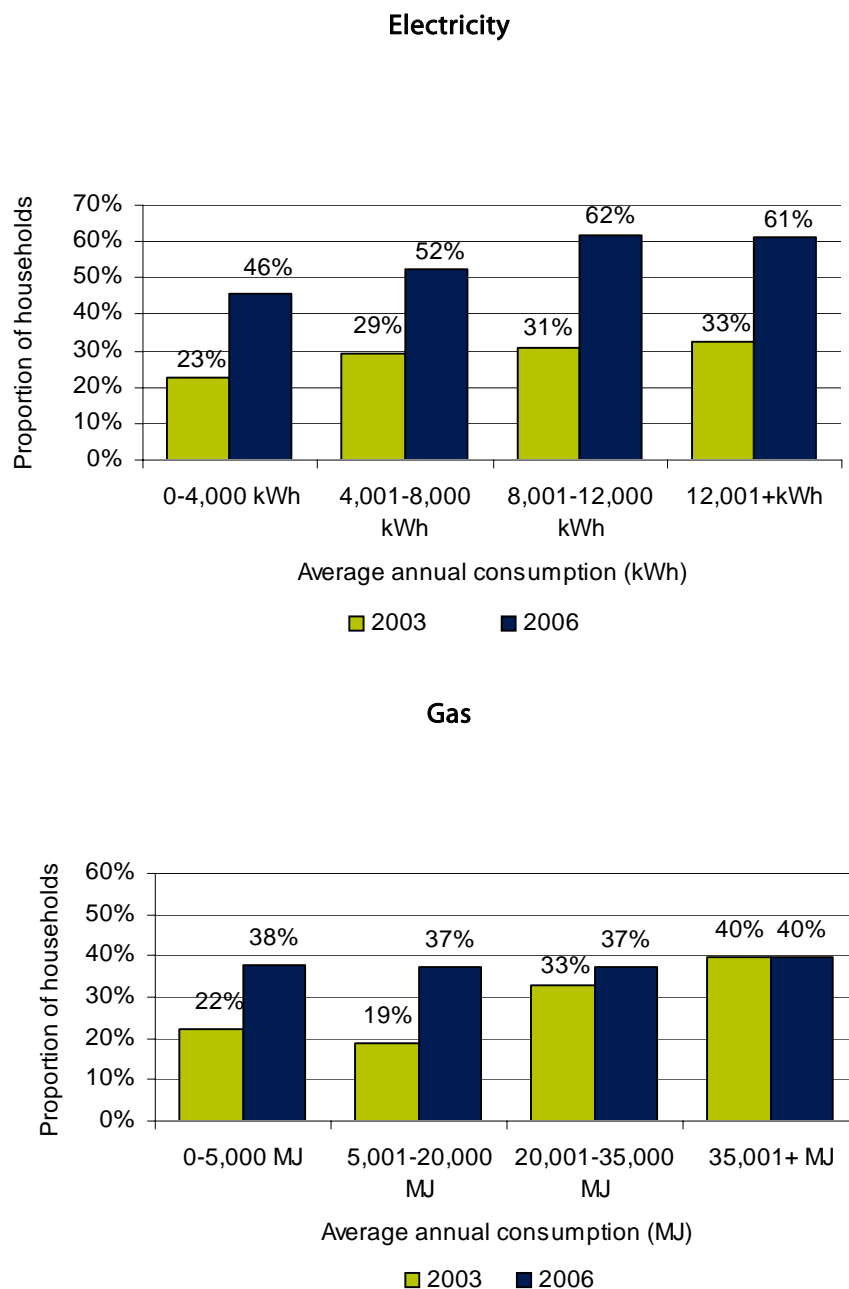
Since 2003, the difference in awareness of retail competition by consumption grouping has diminished. In 2003, higher consumption households were generally more aware that they were able to change their supplier. This difference in awareness between consumption groups was negligible by 2006.

6.2 Proportion of households approached to switch electricity and gas supplier

The survey indicates that the level of marketing effort by electricity and gas retail businesses to sign residential customers onto market contacts was greater by 2006 than it had been by 2003. Significantly more households had been approached by 2006 compared to 2003.

The 2006 survey results indicate that around 55 per cent of households had been approached to switch their electricity or gas retailer, at any point in the past. 53 per cent of households had been approached to switch their electricity supplier (27 per cent by 2003), and 36 per cent had been approached to switch their gas supplier (29 per cent by 2003).

Figure 6.2 Proportion of gas and electricity customers approached to change supplier by consumption, electricity and gas



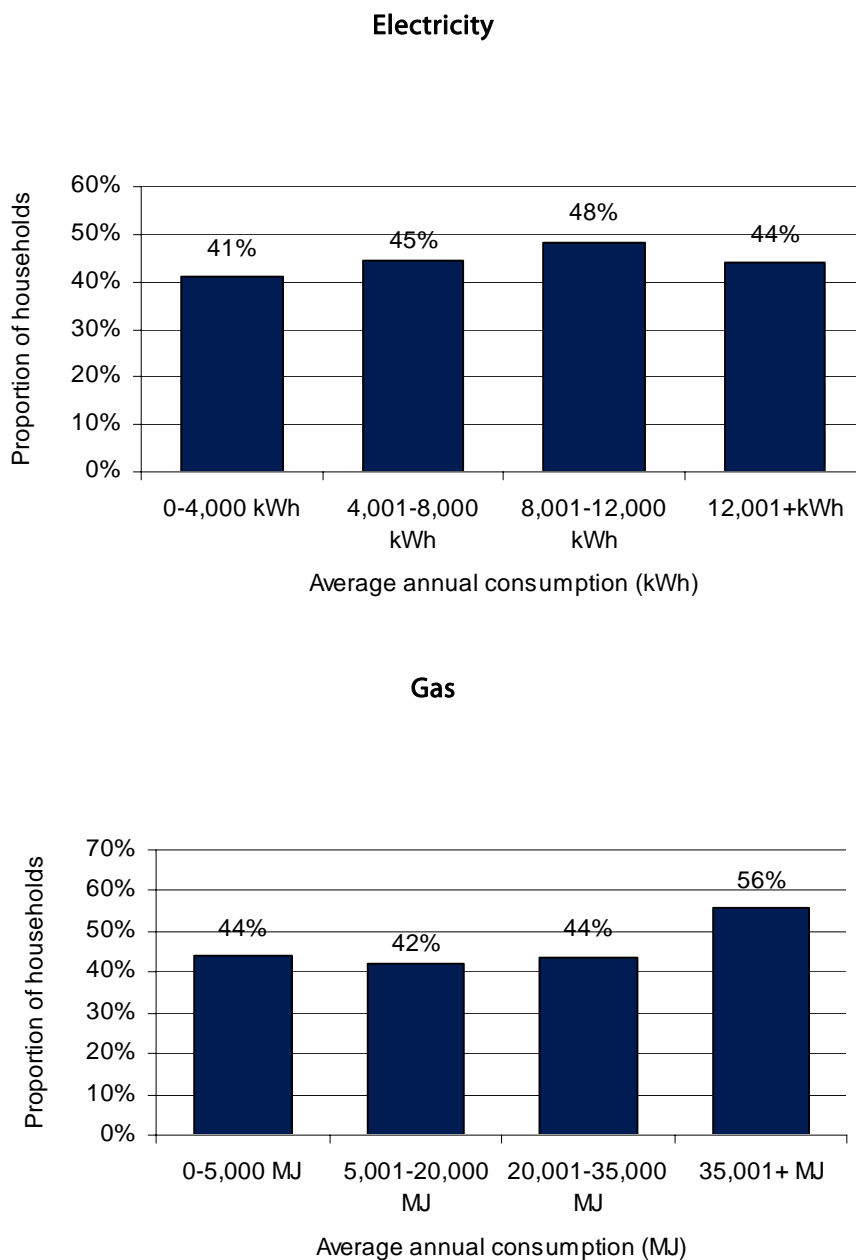
The 2003 results indicated that households with higher than average consumption and income were more likely to have been approached, compared to households with lower than average consumption and income. This trend is still present for electricity consumption, with 62 per cent of high electricity consuming households being approached compared with 46 per cent of low electricity consuming households. However, the trend no longer exists for income for either gas or electricity, or for gas consumption. It appears that there is no longer any difference

in the income or the gas consumption characteristics of those households who have been approached, compared to those who have not been approached.

6.3 Proportion of households offered a market contract with existing supplier

In addition to asking respondents about offers to switch to a new supplier, they were also asked whether their existing supplier had offered them a market contract (rather than remain on the default regulated tariff). Overall, 44 per cent of households indicated they had been offered a market contract with an existing electricity supplier, and 43 per cent with an existing gas supplier.

Figure 6.3 Proportion of electricity and gas customers approached to enter a contract with an existing supplier by consumption, electricity and gas

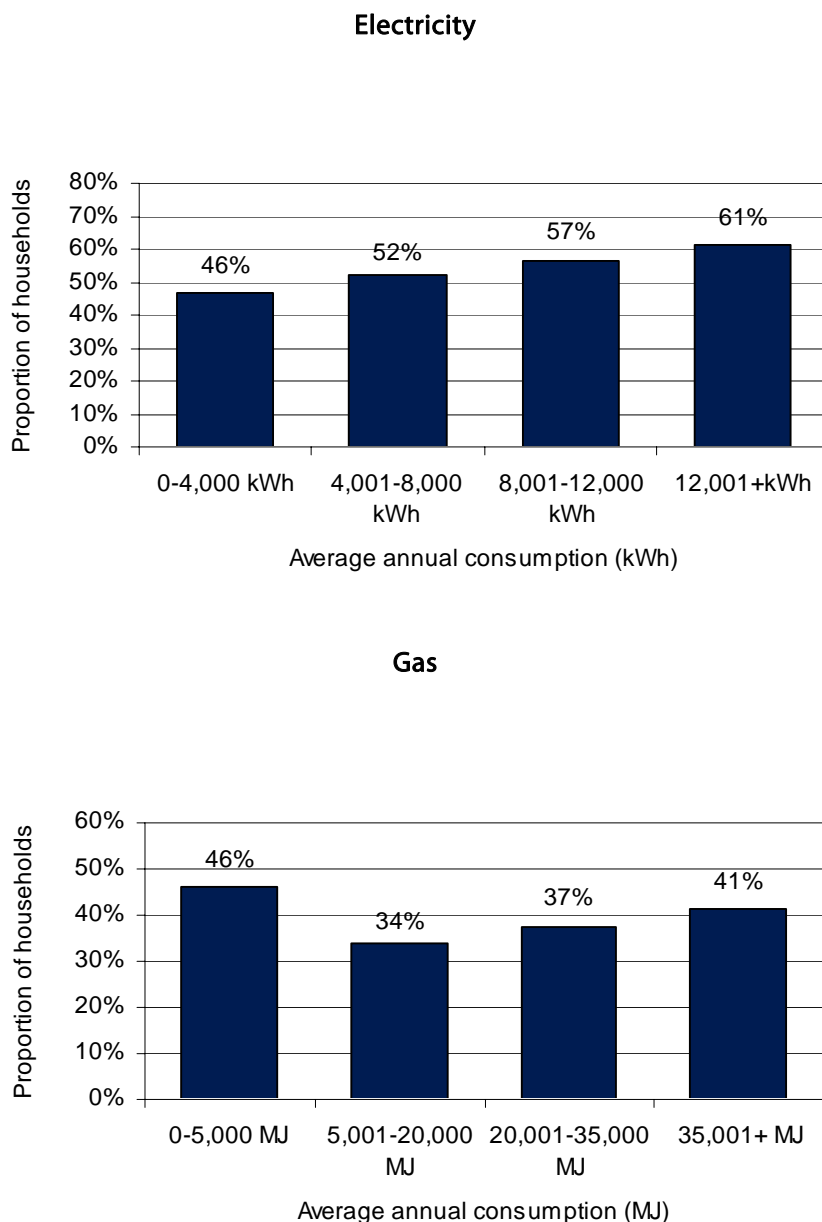


6.4 Proportion of households approached who switched supplier, or changed to a market contract with an existing supplier

We asked respondents who had been approached to enter into a market contract with either their existing electricity or gas supplier or an alternative supplier whether they had taken up these offers. The results indicated that:

- ▼ 34 per cent of households that were approached to switch electricity supplier subsequently changed supplier
- ▼ 27 per cent of households that were approached to switch gas supplier subsequently changed supplier
- ▼ 55 per cent of households that were approached to change to a market contract with an existing electricity supplier, did switch
- ▼ 46 per cent of households that were approached to change to a market contract with an existing gas supplier did change to a market contract.

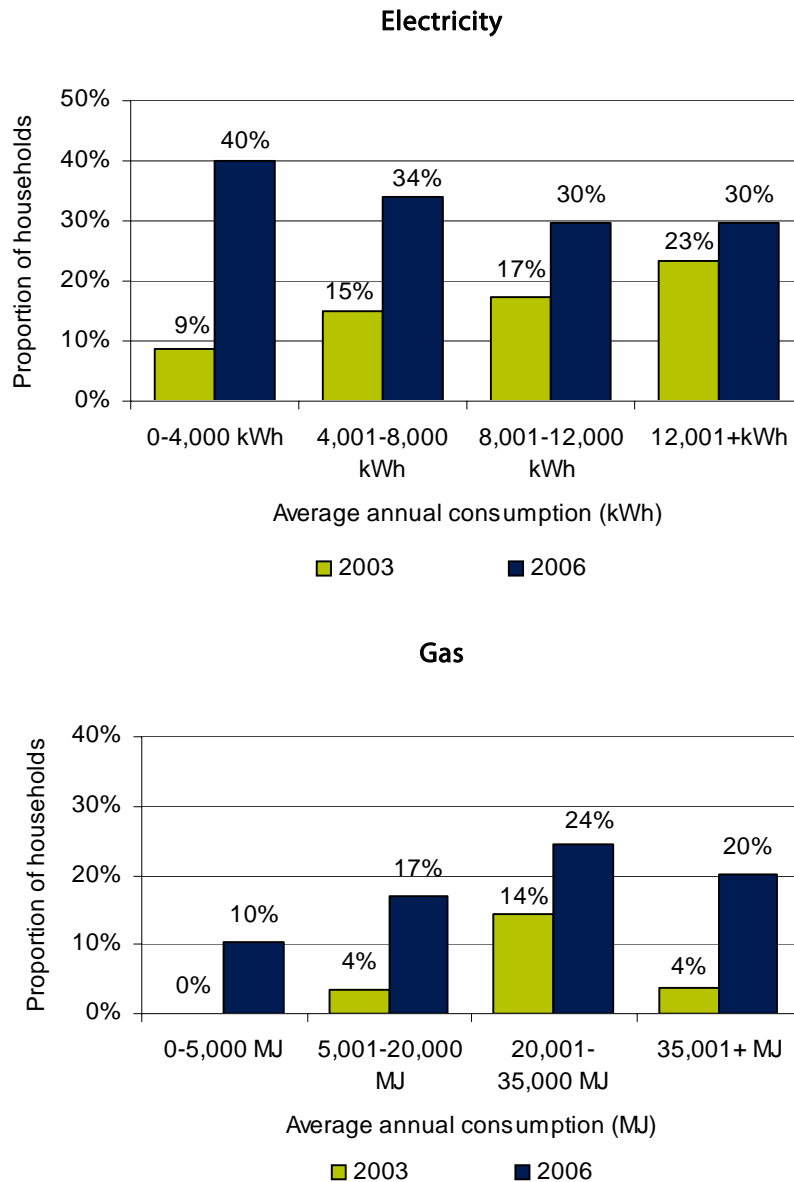
Figure 6.4 Proportion of electricity and gas customers approached who entered into a contract with an existing supplier by consumption, electricity and gas



These results suggest that households were more likely to move to a market offer with an existing electricity or gas supplier once approached than switch to a new supplier.

The results also indicate that the proportion of households that are switching suppliers once approached has increased since 2003. In addition, there no longer seems to be a relationship between switching behaviour and income and consumption levels. This is in contrast to the situation in 2003, when households with higher consumption and income levels were more likely to switch.

Figure 6.5 Proportion of electricity and gas customers approached who entered into a contract with a new supplier by consumption, electricity and gas



6.5 Reasons for choosing to switch energy supplier or move to a market offer

In general, and as indicated by the 2003 results, the main reason reported for households choosing to switch electricity supplier or move to a market offer, was that the offer was cheaper (65 per cent). This was followed by the offer of a combined electricity/gas bill (9 per cent).

In 2006 households gave a more diverse range of reasons for switching electricity supplier than in 2003. In particular, in 2006 only 65 per cent of respondents indicated

that they had switched because it was cheaper compared with 75 per cent in 2003. In 2006 almost 5 per cent of respondents switched supplier or moved onto a market contract because it was “better for the environment”. This response, which refers to the purchase of “green” energy, was spontaneous (not prompted by the questionnaire) and indicates an increased awareness of environmental issues since 2003.

Similar to the reasons for switching electricity supplier, the main reason for switching gas supplier or changing to a market gas contract was because it was cheaper (55 per cent in 2006, compared with 50 per cent in 2003). The next most important reason was the offer of a combined electricity and gas bill (21 per cent in 2006, compared with 33 per cent in 2003).

As for electricity, in 2006 there was an increase in the diversity of reasons for switching gas supplier, including “other supplier offered better service,” and “salesperson was persuasive.”

6.6 Reasons for choosing not to switch energy supplier or move to a market contract

As indicated above, many households who were approached to change electricity supplier, or offered a market contract, accepted the offer. For those households who chose not to accept the offer, the main reasons for doing so were:

- ▼ 38 per cent were happy with their existing supplier
- ▼ 17 per cent did not want to be locked into a contract
- ▼ 14 per cent thought it was no cheaper
- ▼ 11 per cent indicated that it was too much trouble to switch.

In 2003, 17 per cent of respondents indicated that it was too much trouble to switch and 10 per cent did not want to be locked into a contract. However, the comparability of the 2006 and 2003 results regarding switching behaviour is limited because the 2003 survey did not ask respondents about being approached by, or switching to a market contract with, their existing electricity supplier.

Similarly, the main reasons for choosing to not switch gas supplier when approached were:

- ▼ 31 per cent were happy with their current supplier
- ▼ 21 per cent did not want to be locked into a contract
- ▼ 15 per cent indicated that it was too much trouble to switch
- ▼ 13 per cent indicated that it was no cheaper.

Compared to the 2003 results, the proportion of households that were concerned about locking into a contract increased from 7 per cent in 2003, to 21 per cent in 2006.

Again, these results should be treated with caution because the 2003 survey did not ask respondents about being approached by their existing gas supplier to change to a market contract.

6.7 Conclusions

The results indicate that in general households were more aware of the potential to change electricity and/or gas supplier in 2006 than they were in 2003. In addition, the proportion of households that had ever been approached to switch electricity supplier has increased substantially from around 27 per cent by 2003 to over 53 per cent by 2006.

Once approached, the proportion of households who chose to switch electricity supplier also increased from around 20 per cent in 2003 to over 34 per cent in 2006. Moreover 55 per cent of 2006 respondents who were approached by their existing electricity supplier to enter into a market contract took up this offer.

Finally, the reasons that respondents listed for switching supplier or entering into a market offer were predominately that it was cheaper. Other reasons included a combined electricity and gas bill; that the salesperson was persuasive; or because the proffered electricity contract was better for the environment. Respondents who chose not to enter into a contract with a new or existing supplier cited satisfaction with their current supplier; that they did not want to be locked into a contract; that it was too much trouble to switch; or that the price savings did not justify a change.

7 | Energy efficiency packs

A final issue that was investigated as part of the 2006 survey was the penetration of energy efficiency packs amongst residential households, and the rate of installation of both energy efficient light bulbs and showerheads provided within the packs. These questions were asked to assist IPART in its role as the New South Wales Greenhouse Gas Reduction Scheme (GGAS) Administrator.

The installation of these products reduces energy use and greenhouse gas emissions. Hence, companies accredited under GGAS are able to create tradeable certificates called NGACs by distributing these energy efficiency packs.

In 2006, large numbers of these energy efficiency packs were given away by companies accredited under GGAS. The Scheme Rules include an Installation Discount Factor (IDF) to allow for the likelihood that not all products given away will be installed. However, as research data on installation rates for these types of giveaway program were not available when the Scheme was developed, an IDF of 0.8 was initially assumed, ie, that 80 per cent of products given away were installed. The large increase in the number of packs given away in 2006 provided an opportunity to test the assumption that 80 per cent of products given away were installed.

In July of 2006, IPART engaged Newspoll to conduct a telephone survey of 400 households in the Sydney Statistical Division to determine the proportion of all households that had received an energy efficiency pack, and the proportion of products distributed that had been installed by the time of the survey.

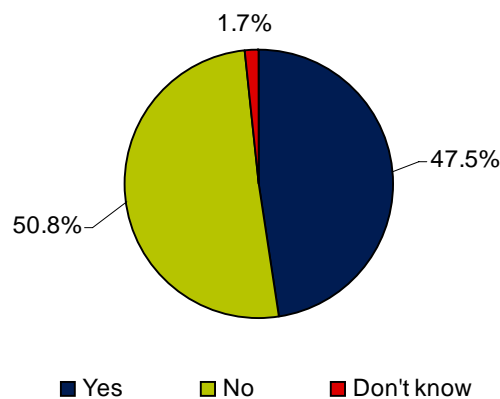
The Newspoll results indicated that 185 people (46 per cent of survey respondents) had received an energy efficiency pack. All of these packs contained energy efficient light bulbs. Of respondents receiving an energy efficiency pack, 55 per cent (102 people) also received a water saving showerhead in the pack. The majority of these people (87) received only one showerhead each.

The 185 respondents receiving an energy efficiency pack reported receiving a total of 1,146 light bulbs and that 528 of these bulbs had been installed at the time of the survey. In other words, 46 per cent of these light bulbs had been installed so far. Similarly, of the 87 people who received one showerhead each, only 42 showerheads (or 48 per cent) had been installed by the time of the survey.

To verify the Newspoll results, IPART included the same questions in the 2006 household survey. In addition, the household survey questions also sought to determine the installation intentions of households who had received a water efficient showerhead but had not as yet installed it.

The results show that 47.5 per cent of all respondents residing in Sydney, the Blue Mountains and Illawarra received at least one free energy efficiency pack, a result similar to that obtained from the Newspoll survey (46 per cent).

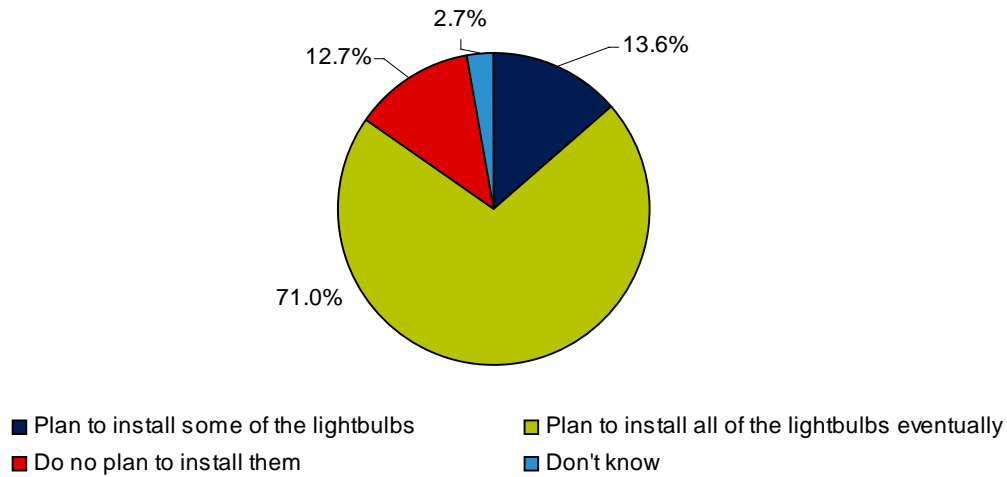
Figure 7.1 Proportion of households that received energy efficient packs



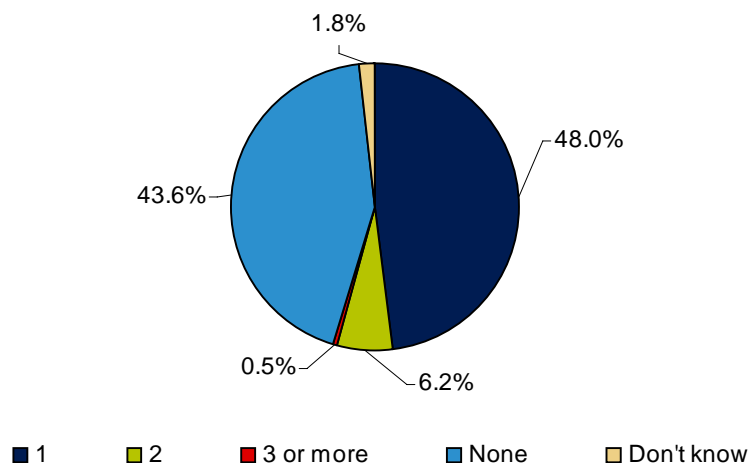
On average, each respondent received 6.6 energy efficient light bulbs (compared with 6.3 in the Newspoll survey) as part of the program. The median number of light bulbs received was 6, consistent with the fact that most packs contained 6 light bulbs and each household received on average one pack.

However, despite respondents receiving 6.6 light bulbs, on average, the data indicate that they installed only 3.4 of these, or just over 50 per cent of the bulbs received. This is very similar to the Newspoll survey, which found that 46 per cent of bulbs were installed.

Respondents were also asked what they were intending to do with the remaining light bulbs. The findings show that an overwhelming majority (71 per cent) planned to eventually install the remaining light bulbs. However, 13 per cent of households indicated they would not be using the light bulbs that they had not already installed. This last result is higher than that obtained from the Newspoll survey where 6 per cent of respondents indicated that they would not be installing the light bulbs that had not already been installed.

Figure 7.2 Description of light bulbs that have not been installed

In addition to energy efficient light bulbs, some of the energy efficient packs included water-saving showerheads. Figure 7.3 below shows that the largest proportion of respondents, 48 per cent (47 per cent in the Newspoll survey), received one showerhead, around 6 per cent received two (8 per cent in the Newspoll survey) and almost 44 per cent of respondents (identical to the Newspoll survey) did not receive a water-saving showerhead in the pack.

Figure 7.3 Proportion of households that received showerheads in the giveaway packs

Of the respondents who received a water-saving showerhead, 57 per cent indicated that they had installed at least one water efficient showerhead (48 per cent in the Newspoll survey), but 6 per cent of those either already had removed them or were planning to do so. Approximately 14 per cent of respondents did not plan to install

any water saving showerheads (compared to 26 per cent in the Newspoll survey), whilst the remaining respondents either planned to install them, or already had an efficient showerhead installed.

From the household survey results we were able to calculate that about 51 per cent of the total number of water efficient showerheads received by households had been installed.

Overall, the household survey results verify the earlier Newspoll survey results about the penetration of energy efficiency packs (almost half of all households) and the installation of energy efficient light bulbs (about 50 per cent). They expanded the results of the Newspoll survey by estimating that about half of the water efficient showerheads had been installed.



Appendices

A Detailed survey results

Table 1
All Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Estimated population	No.	442,309	---	572,057	---	308,904	---	257,774	---	1,581,043	---
Proportion of households	%	27.98	---	36.18	---	19.54	---	16.30	---	100.00	---
Sample size	No.	239	---	717	---	464	---	218	---	1,638	---
Demographic characteristics											
Region											
Sydney	%	82.84	3.91	82.06	1.78	86.20	1.87	90.30	2.74	84.43	1.39
Blue Mountains	%	2.42	49.44	3.44	20.05	5.29	19.81	5.03	41.33	3.77	15.30
Illawarra	%	14.75	21.04	14.51	9.27	8.51	15.23	4.67	31.58	11.80	9.05
Dwelling type											
Separate House	%	66.02	5.61	78.91	1.99	89.06	1.67	95.27	1.46	79.96	1.60
Dwelling/Non-dwelling combined and Semi-detached	%	16.95	16.64	13.56	9.66	7.12	17.18	4.03	32.23	11.70	8.40
Low rise flats/units	%	8.30	21.54	4.06	18.86	1.79	35.35	0.31	100.03	4.19	13.99
Flats (3 storeys and above)	%	8.73	29.39	3.47	20.69	2.03	33.19	0.39	99.95	4.16	19.09
Land size (houses only)											
Small (Less than 500 square metres)	%	25.32	16.63	25.39	7.39	14.92	12.10	11.83	19.35	20.46	6.54
Medium (500 to 900 square metres)	%	59.02	8.26	62.94	3.29	67.87	3.43	65.29	5.86	63.56	2.55
Large (More than 900 square metres)	%	15.66	23.58	11.67	11.72	17.21	10.83	22.88	15.30	15.98	7.96
Household structure											
Single person (young, middle and mature)	%	43.36	9.11	19.18	8.11	12.58	12.64	5.06	27.80	22.56	6.18
Single parent (young, middle and mature family)	%	12.74	21.11	12.90	10.04	10.15	14.31	6.25	27.70	11.27	8.75
Couple with children (young, middle and mature family)	%	18.64	15.10	33.38	5.46	49.51	4.84	76.98	3.93	39.21	3.75
Couple no children (young and mature)	%	25.26	15.34	34.54	5.39	27.76	7.71	11.70	19.43	26.96	5.28
Ownership status											
Owned fully/ Fully paid off	%	49.21	8.14	54.75	3.48	52.50	4.48	42.04	8.86	50.69	3.03
Buying/ Paying off home	%	17.58	15.89	20.98	7.37	24.38	8.34	42.50	9.43	24.23	5.33
Renting - Private	%	18.38	18.29	15.08	9.03	15.51	11.04	6.28	25.54	14.64	7.89
Renting - Public/Housing Commissior	%	14.83	21.38	9.19	12.06	7.61	16.10	9.18	30.67	10.44	10.63
Average number of times moved in last three year:	No.	0.35	19.07	0.25	9.95	0.24	12.52	0.22	18.80	0.27	8.37
Average number of bedrooms	No.	2.86	2.44	3.06	0.97	3.44	1.21	3.91	1.83	3.21	0.90
Average number of people in household	No.	2.20	5.21	2.61	1.83	3.08	2.04	4.16	2.70	2.84	1.72
Average number of people aged 15 and over	No.	1.78	3.98	2.07	1.48	2.46	1.97	2.90	2.82	2.20	1.43
Average number of people aged less than 15 year:	No.	0.42	21.79	0.53	6.65	0.62	4.92	1.26	8.04	0.64	5.62
Average number of people who spend most days of the week at home	No.	1.35	8.33	1.63	2.84	1.72	3.70	2.23	6.38	1.67	2.73

Table 1
All Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Income, Concession and Payment Characteristics											
Annual household income											
less than \$31,200	%	45.51	8.75	38.44	4.83	25.63	8.02	14.95	18.81	34.09	4.38
\$31,201-\$52,000	%	15.74	16.58	17.59	8.26	19.32	9.60	19.91	17.35	17.79	6.34
\$52,001-\$104,000	%	21.29	16.46	20.36	7.56	28.17	7.47	26.94	12.62	23.22	5.69
more than \$104,000	%	7.06	27.98	10.86	10.86	14.58	11.50	27.33	12.85	13.21	7.49
Refused to answer	%	10.40	20.23	12.76	9.95	12.29	12.62	10.86	18.75	11.70	7.48
Concession cards											
Has a concession card	%	50.98	7.80	41.02	4.58	30.51	7.09	20.85	15.95	38.46	3.96
Has a pensioners concession card	%	46.72	8.53	38.07	4.88	27.95	7.55	19.07	17.18	35.41	4.26
Has a Veterans' Affairs gold health card	%	2.47	41.19	2.97	21.37	1.27	40.85	1.47	50.19	2.25	17.69
Has a concession card but not sure what it is called	%	2.39	52.33	1.26	32.40	1.29	41.07	0.31	100.03	1.43	27.87
Awareness of energy concessions for concession card holders											
Yes	%	94.46	2.37	91.60	1.78	89.70	2.94	96.53	2.54	92.80	1.24
No	%	5.04	43.39	6.06	23.01	7.23	30.86	1.80	99.93	5.49	19.11
Unsure	%	0.50	100.23	2.34	38.17	3.08	49.52	1.67	100.07	1.71	28.32
Awareness of water concessions for concession card holders											
Yes	%	83.65	5.18	85.55	2.41	82.67	3.94	93.53	3.48	85.10	2.23
No	%	6.35	38.65	9.94	17.85	9.13	26.89	1.80	99.93	7.76	15.73
Unsure	%	10.00	38.08	4.51	25.95	8.19	29.17	4.67	58.02	7.13	21.93
Claims energy concession if aware											
Yes	%	93.46	2.90	94.18	1.50	89.24	3.09	89.44	9.35	92.73	1.57
No	%	4.94	45.40	4.57	26.91	6.78	32.65	10.56	79.18	5.59	23.24
Unsure	%	1.59	99.19	1.25	57.40	3.98	44.53	0.00	---	1.67	42.34
Claims water concession if aware											
Yes	%	85.29	5.48	89.07	2.24	80.75	4.54	81.73	11.00	85.73	2.51
No	%	8.55	33.26	7.51	22.14	10.71	26.69	14.12	62.85	9.01	17.48
Unsure	%	6.16	65.36	3.41	35.15	8.54	30.64	4.15	70.46	5.26	30.86
Proportion of households that approached the supplier because of payment difficulties											
Gas	%	4.05	36.24	5.86	20.81	2.97	44.53	1.79	71.16	4.26	17.62
Electricity	%	5.20	30.17	7.56	13.06	8.84	14.99	18.75	18.61	8.97	9.72
Water	%	1.97	48.52	1.67	29.57	1.85	33.67	5.45	39.79	2.41	20.70
Proportion of households that were offered the following help when discussed											
Gas											
Allowed to pay off in installments	%	16.98	68.94	26.93	36.03	39.91	56.10	0.00	---	23.21	30.09
Extended the due date on the bill	%	91.51	9.22	73.07	13.28	77.89	25.11	100.00	0.00	81.65	7.71
Other (Specify)	%	0.00	---	6.50	70.25	0.00	---	0.00	---	3.15	71.65
No help offered	%	0.00	---	4.32	99.23	0.00	---	0.00	---	2.10	100.79

Table 1
All Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									Total
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh			
Electricity											
Allowed to pay off in installments	%	29.29	48.46	26.22	22.90	28.58	24.88	23.77	40.02	26.34	17.40
Extended the due date on the bill	%	95.14	5.11	69.37	9.00	65.87	11.40	76.23	12.48	75.21	5.67
Referred me to an emergency relief agency	%	0.00	---	0.33	58.25	0.62	58.69	0.00	---	0.24	41.44
Other (Specify)	%	0.00	---	0.20	70.69	0.26	99.88	0.00	---	0.12	58.55
No help offered	%	0.00	---	1.76	99.49	0.00	---	0.00	---	0.54	100.32
Water											
Allowed to pay off in installments	%	12.85	100.51	10.87	94.72	33.17	48.82	62.62	28.57	33.79	33.04
Extended the due date on the bill	%	87.15	14.82	81.19	15.02	47.66	36.22	37.38	47.86	61.33	17.91
Referred me to an emergency relief agency	%	0.00	---	0.00	---	9.58	97.51	0.00	---	1.44	102.23
No help offered	%	0.00	---	7.94	97.85	9.58	97.51	0.00	---	3.44	73.31
Proportion of households who sought financial help in the last three years	%	3.64	33.61	1.87	25.29	3.21	25.79	5.85	37.38	3.28	16.81
Proportion of households who have had the gas or electricity disconnected or water restricted											
Gas	%	0.25	100.09	0.16	99.95	0.18	99.97	0.00	---	0.16	59.88
Electricity	%	1.36	54.61	1.61	30.59	0.59	57.76	2.23	81.92	1.44	28.54
Water	%	0.00	---	0.54	51.61	0.35	70.64	0.00	---	0.26	42.45
Electricity, Gas and Water Consumption											
Average electricity consumption	kWh	2,676	2.93	5,931	0.70	9,705	0.55	16,672	2.46	7,509	2.67
Average gas consumption	MJ	17,263	7.77	22,737	4.75	24,922	6.89	45,424	17.03	23,936	5.71
Average water consumption	kL	145	5.92	189	2.50	239	2.62	335	4.03	212	2.17
Do you use gas, either mains or cylinder gas, for your regular household usage?											
Yes, mains	%	70.86	5.01	52.02	3.66	39.15	5.88	40.39	9.40	52.88	2.87
Yes, cylinder (large, not portable)	%	2.38	45.75	4.40	17.87	5.39	19.77	2.90	35.42	3.78	13.15
No	%	26.76	12.95	43.58	4.34	55.46	4.22	56.72	6.77	43.34	3.45
Proportion of households by electricity network											
Energy Australia	%	57.74	7.25	56.56	3.34	53.16	4.40	49.66	7.90	55.10	2.84
Integral Energy	%	42.26	9.90	43.44	4.35	46.84	5.00	50.34	7.79	44.90	3.48
Proportion of households by electricity supplier											
Energy Australia	%	42.60	8.73	43.57	4.34	43.53	5.38	41.06	8.85	42.88	3.40
AGL	%	23.13	16.57	15.59	8.91	11.22	13.34	10.35	24.45	15.99	8.29
Integral Energy	%	27.74	14.09	34.55	5.25	39.70	5.75	40.13	10.11	34.56	4.34
Don't Know / Can't recall/ Unsure	%	0.25	100.09	0.10	100.00	0.00	---	0.00	---	0.11	74.31
Other	%	0.00	---	0.20	70.69	0.00	---	0.00	---	0.07	70.75
Origin Energy	%	4.67	33.66	3.64	19.51	3.97	23.92	4.66	27.73	4.16	13.98
Jack Green	%	1.01	50.14	1.96	27.22	1.15	41.20	3.07	64.23	1.72	24.14
TruEnergy	%	0.60	99.74	0.38	60.24	0.44	71.81	0.42	99.92	0.46	45.41
Power Direct	%	0.00	---	0.00	---	0.00	---	0.31	100.03	0.05	100.02

Table 1
All Households by Electricity Consumption

Feature	Units	Electricity Consumption Category								Total	
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh			
Proportion of households by gas supplier											
Energy Australia	%	16.43	16.64	17.90	11.33	18.73	15.78	20.06	20.20	17.74	8.04
AGL	%	83.57	3.27	81.25	2.54	80.74	3.70	79.94	5.07	81.89	1.76
Don't Know / Can't recall/ Unsure	%	0.00	---	0.65	70.69	0.00	---	0.00	---	0.23	70.93
Other	%	0.00	---	0.00	---	0.53	99.81	0.00	---	0.08	100.08
TruEnergy	%	0.00	---	0.19	100.01	0.00	---	0.00	---	0.07	100.09
Extent of Retail competition											
Proportion of households that are aware that they can choose their											
Electricity supplier	%	89.35	2.75	90.26	1.25	94.03	1.18	93.94	1.69	91.34	0.95
Gas supplier	%	92.32	2.99	91.62	1.63	96.62	1.42	98.19	1.31	93.42	1.28
Proportion of households that were approached by their original supplier to enter contract											
Electricity supplier	%	41.03	9.28	44.67	4.25	48.36	4.86	44.21	8.62	44.30	3.37
Gas supplier	%	43.94	10.71	45.34	5.84	47.67	7.92	41.66	13.49	44.69	4.91
Proportion of households that entered a contract with their original supplier											
Electricity supplier	%	46.45	12.25	52.10	5.46	56.64	5.90	61.18	8.23	53.08	3.96
Gas supplier	%	46.16	14.92	40.83	9.53	45.81	12.01	56.80	14.09	45.42	6.99
Proportion of households that were approached by a different supplier to switch											
Electricity supplier	%	45.72	8.66	52.18	3.65	61.56	3.71	61.32	6.05	53.70	2.85
Gas supplier	%	28.38	14.15	39.02	6.64	37.49	9.77	35.82	16.11	34.41	5.86
Proportion of households that switched to a different supplier											
Electricity supplier	%	40.09	14.69	34.02	7.34	29.73	9.24	29.82	16.37	33.72	5.98
Gas supplier	%	26.11	23.58	22.86	15.53	22.00	23.65	24.66	33.93	23.96	11.38
Main reason for entering into contract with original or switching electricity supplier:											
It was cheaper	%	46.12	14.48	65.66	4.35	70.62	4.54	67.86	7.43	62.38	3.81
Combined electricity and gas bill offer	%	21.98	29.17	7.87	21.13	4.75	31.15	6.26	38.28	10.33	18.03
Other supplier offered better service	%	4.21	59.96	1.75	45.19	1.45	58.13	0.73	100.03	2.10	34.01
Other	%	18.35	30.10	15.32	14.00	18.09	15.06	20.75	20.15	17.61	10.30
Using green electricity/ better for the environment	%	6.14	49.01	8.03	20.30	3.57	35.13	4.40	50.08	5.96	17.70
Monetary incentive/ discount/ rebate offer	%	3.20	62.74	1.38	49.84	1.51	57.65	0.00	---	1.61	36.06

Table 1
All Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Main reason for entering into contract with original or switching gas supplier											
It was cheaper	%	40.45	19.96	58.27	8.71	56.19	12.22	57.14	16.75	51.09	8.07
Combined electricity and gas bill offer	%	31.84	30.12	20.34	20.64	18.43	28.92	20.99	37.96	24.46	17.59
Salesperson was persuasive	%	3.74	58.38	4.03	49.83	3.49	69.75	0.00	---	3.32	34.14
Other supplier offered better service	%	7.21	59.23	2.22	70.85	1.48	99.69	2.64	99.47	4.04	43.34
Other	%	12.54	44.43	13.10	26.32	16.47	30.94	19.22	38.02	14.20	19.05
Monetary incentive/ discount/ rebate offer	%	4.23	75.38	2.05	70.39	3.94	69.86	0.00	---	2.90	47.12
Main reason for not entering into contract with original or switching electricity supplier:											
It was no cheaper	%	14.86	26.10	15.99	12.73	13.71	16.14	14.46	23.64	14.93	9.53
I was happy with my current supplier	%	27.09	17.85	35.74	7.50	35.02	8.65	41.19	13.13	34.47	5.63
It was too much trouble to switch	%	13.61	35.16	10.66	16.48	11.79	17.62	12.98	31.59	12.05	13.17
Did not want to be locked into a contract	%	25.54	18.19	18.88	11.47	14.85	15.15	16.23	21.47	19.11	8.30
Other	%	15.60	23.67	15.78	12.90	19.22	13.02	10.69	36.69	15.58	9.36
I'm already in a contract	%	3.30	54.11	2.95	30.19	5.40	27.22	4.46	40.97	3.86	18.42
Main reason for not entering into contract with original or switching gas supplier											
It was no cheaper	%	7.38	49.97	15.73	18.04	13.21	29.82	9.31	59.66	11.92	15.91
I was happy with my current supplier	%	26.88	24.04	36.22	10.43	23.69	20.38	31.65	25.83	30.75	9.30
It was too much trouble to switch	%	12.66	38.36	12.50	20.74	15.92	26.70	23.55	44.01	14.41	16.61
Did not want to be locked into a contract	%	38.40	19.44	20.09	15.62	19.97	22.66	24.16	30.31	26.37	11.61
Other	%	14.69	26.87	15.46	18.37	27.21	18.81	11.32	49.12	16.56	12.26
Don't know/ Not sure	%	4.20	50.13	0.66	99.79	3.97	56.95	0.00	---	2.22	35.97
Hot water systems											
Proportion of households where the main energy source for hot water is											
Electric	%	39.81	9.89	59.29	3.17	72.75	2.88	70.50	4.83	58.30	2.62
Gas	%	56.85	6.97	37.38	4.96	24.52	8.26	27.03	12.28	38.63	3.93
Other	%	3.34	40.43	3.17	20.90	2.73	27.77	2.47	41.66	3.02	16.58
Proportion of households with an electric system with the following type of system:											
Off Peak	%	32.41	16.02	60.79	3.90	76.77	2.99	74.72	5.69	61.90	3.17
Standard electric	%	58.10	10.35	31.07	7.24	19.05	11.26	16.98	20.63	30.63	6.24
Don't know	%	9.49	45.75	8.14	16.55	4.18	25.53	8.31	36.65	7.47	15.78

Table 1
All Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Household appliances											
Main energy sources for cooking											
Gas only	%	54.78	7.15	35.90	5.10	27.27	7.72	24.59	12.40	37.65	4.09
Electricity only	%	35.80	10.40	55.25	3.44	65.69	3.41	65.53	5.45	53.52	2.88
Both electricity and gas	%	9.42	21.98	8.86	12.29	7.04	17.21	9.88	24.42	8.83	9.48
Proportion of households with the following appliances:											
Clothes dryer	%	38.07	9.71	58.55	3.22	73.99	2.79	83.66	2.97	59.93	2.60
Dishwasher	%	25.57	12.41	40.15	4.65	54.57	4.29	66.11	5.59	43.12	3.43
Washing machine	%	93.63	2.30	98.77	0.42	99.18	0.42	100.00	0.00	97.61	0.65
Microwave	%	88.98	2.70	91.56	1.17	95.62	1.01	96.19	1.32	92.39	0.90
Second refrigerator	%	22.32	15.33	41.82	4.49	59.24	3.89	68.66	5.08	44.14	3.40
Proportion of households with the following											
Bath	%	80.71	3.78	85.44	1.56	87.66	1.76	84.20	3.34	84.35	1.33
Bath with spa jets	%	2.63	42.43	6.23	14.60	8.89	14.94	12.93	20.32	6.84	10.07
Spa	%	2.63	67.16	2.73	22.51	5.28	20.09	17.11	20.21	5.54	15.14
Swimming Pool	%	3.14	37.35	6.91	13.76	19.81	9.61	35.61	10.71	13.05	7.35
Sauna	%	0.00	---	0.78	45.36	0.68	57.87	0.38	99.96	0.47	33.99
Heating											
Proportion of households with the following types of room heating											
Reverse cycle air conditioning	%	28.47	12.45	38.23	4.84	53.15	4.42	57.80	6.63	41.61	3.57
Electric (not air conditioning)	%	51.21	7.78	48.96	3.90	49.31	4.77	39.43	9.89	48.10	3.17
Gas	%	40.19	9.73	38.48	4.84	28.70	7.41	25.94	11.81	35.00	4.17
Oil	%	5.37	30.42	7.49	13.43	7.77	15.99	4.40	30.60	6.45	10.43
Wood, Solid Fuel	%	4.99	32.53	4.24	17.78	11.73	13.06	6.15	35.25	6.22	11.36
Kerosene	%	0.00	---	0.61	46.11	0.44	71.91	1.81	98.51	0.60	52.60
Ducted air (ie central heating in multi-dwelling unit)	%	0.00	---	2.00	26.92	3.38	24.17	9.65	26.90	2.96	17.25
Other heating	%	0.60	99.74	0.38	60.24	0.00	---	0.00	---	0.31	61.26
No heating	%	8.84	30.16	3.50	20.07	2.42	30.16	1.71	51.74	4.49	18.49
Proportion of households with more than one heating source who use the following heating source most often											
Reverse cycle air conditioning	%	16.64	18.52	22.20	7.10	33.71	6.57	42.68	9.25	26.23	5.09
Electric (not air conditioning)	%	40.35	9.62	30.46	5.76	29.61	7.27	21.45	15.27	31.59	4.57
Gas	%	31.35	11.42	33.23	5.43	21.57	8.99	20.53	13.33	28.36	4.74
Oil	%	1.61	48.65	5.91	15.27	3.47	24.84	2.69	38.48	3.71	12.56
Wood, Solid Fuel	%	1.21	70.32	2.70	22.16	6.22	18.56	1.81	50.78	2.83	15.00
Kerosene	%	0.00	---	0.41	59.31	0.44	71.91	0.00	---	0.24	46.00
Ducted air (ie central heating in multi-dwelling unit)	%	0.00	---	1.40	32.14	2.56	27.74	9.13	27.99	2.50	19.47
Proportion of households that apart from electric fans, have any air conditioning or air cooling in their dwelling'											
	%	35.27	10.74	49.86	3.83	64.44	3.50	77.21	3.71	53.09	2.89

Table 1
All Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Proportion of households without an air conditioner that are considering installing an air conditioner	%	9.89	25.79	16.40	12.06	16.05	18.20	19.46	26.77	14.08	9.99
For those households with an air conditioner, are you planning to upgrade your current air conditioning system?	%	19.31	29.29	8.21	17.95	7.97	19.90	9.66	31.04	10.56	13.71
How often use air conditioner during summer											
Only on very hot days	%	74.18	7.32	69.71	3.56	66.60	4.14	50.82	9.27	65.32	2.96
On most hot days	%	21.50	23.46	21.47	10.31	25.22	10.07	37.63	12.56	26.20	6.89
On most days	%	3.60	65.45	4.87	23.62	4.84	25.58	10.56	29.07	5.98	16.59
Not applicable/ do not use	%	0.72	100.22	3.95	26.80	3.34	31.48	0.99	70.96	2.50	19.69
How often use air conditioner during winter											
Only on very cold days	%	41.61	15.05	44.44	6.04	46.97	6.21	34.29	11.88	42.11	4.59
On most cold days	%	20.21	28.05	16.50	12.01	19.81	11.82	34.86	13.09	22.33	7.97
On most days	%	0.72	100.22	4.45	23.63	6.37	22.58	7.03	40.40	4.82	17.81
Not applicable/ do not use	%	37.47	18.06	34.62	7.46	26.85	9.68	23.82	18.23	30.75	6.42
Would switch air conditioner off if price were 25% higher											
Yes, for short periods	%	30.90	19.91	28.71	8.54	30.13	8.93	23.06	16.67	28.11	6.43
Yes, for most of the day	%	22.94	26.35	16.80	12.05	11.55	16.37	15.71	23.68	16.44	10.16
Yes, all day	%	10.13	48.67	8.33	17.61	5.39	24.59	4.48	36.03	7.05	16.59
No	%	33.88	17.18	41.64	6.39	48.06	6.08	55.25	8.45	44.95	4.43
Don't know	%	2.15	58.06	4.52	24.27	4.87	25.62	1.50	57.82	3.45	16.65
Energy and Water Efficiency											
Proportion of households that received energy efficient packages	%	45.44	8.65	47.77	3.99	45.97	5.10	47.47	8.29	46.72	3.26
Average number of energy efficient light bulbs	No.	5.94	4.15	6.29	2.71	7.08	3.64	6.11	6.26	6.31	1.98
Average number of energy efficient light bulbs installed	No.	2.74	10.04	3.15	4.39	3.48	5.65	3.46	10.25	3.15	3.65
Proportion of households that describe the light bulbs that have not been installed as											
Plan to install some of them	%	24.89	23.90	11.66	17.87	7.89	28.03	13.79	44.00	15.02	14.59
Plan to install all of them eventually	%	53.37	12.41	73.90	3.89	76.69	4.41	62.61	12.86	66.84	4.18
Do not plan to install them	%	20.26	32.61	13.21	16.88	13.10	20.20	12.70	47.55	15.11	15.66
Don't know	%	1.49	70.90	1.23	58.51	2.33	49.71	10.90	52.16	3.02	34.48
Proportion of households that received the following number of water-saving showerheads											
One	%	34.09	14.88	45.73	6.03	57.00	6.05	49.67	11.83	45.38	4.74
Two	%	3.00	54.31	5.70	23.17	6.84	25.28	9.16	30.33	5.76	15.19
Three or more	%	0.00	---	0.54	72.29	1.13	70.30	0.00	---	0.42	50.61
None	%	60.12	8.86	47.02	5.89	33.63	9.80	38.16	15.04	46.54	4.74
Don't know	%	2.80	65.61	1.01	51.93	1.40	58.07	3.00	62.16	1.90	33.61
Proportion of households that installed at least one water-saving showerhead	%	67.05	10.95	56.95	6.64	55.35	7.73	56.73	13.37	58.50	4.65

Table 1
All Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Proportion of households that installed at least one water-saving showerhead but have removed or are planning to remove it	%	17.17	40.39	5.07	32.91	6.66	32.65	11.91	54.05	9.12	22.51
Proportion of households that are not planning to install water-saving showerheads	%	7.50	44.45	13.66	18.85	13.74	21.62	9.18	38.09	11.63	13.25

Table 2
Dual Fuel Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Estimated population	No.	313,412	---	297,592	---	120,941	---	104,111	---	836,055	---
Proportion of households	%	37.49	---	35.59	---	14.47	---	12.45	---	100.00	---
Sample size	No.	168	---	366	---	179	---	93	---	806	---
Demographic characteristics											
Region											
Sydney	%	83.45	4.75	84.49	2.27	83.89	3.32	88.94	3.83	84.56	2.06
Blue Mountains	%	2.56	57.08	3.73	26.44	6.33	28.41	6.42	40.36	4.00	19.33
Illawarra	%	13.99	27.12	11.78	14.57	9.78	23.35	4.64	50.50	11.43	14.23
Dwelling type											
Separate House	%	67.88	6.62	81.08	2.59	87.41	2.89	94.60	2.36	78.73	2.49
Dwelling/Non-dwelling combined and Semi-detached	%	18.64	19.03	13.01	13.84	8.69	24.84	4.63	45.35	13.45	11.45
Low rise flats/units	%	5.36	30.50	2.56	33.27	1.65	58.00	0.77	99.98	3.25	21.52
Flats (3 storeys and above)	%	8.12	40.81	3.36	28.83	2.26	49.70	0.00	---	4.56	29.05
Land size (houses only)											
Small (Less than 500 square metres)	%	31.58	16.78	29.21	9.23	17.41	17.67	18.60	23.43	26.49	8.14
Medium (500 to 900 square metres)	%	51.74	11.18	59.67	4.86	67.97	5.55	48.69	12.43	56.80	4.30
Large (More than 900 square metres)	%	16.67	27.27	11.12	16.59	14.62	19.48	32.72	19.66	16.71	12.02
Household structure											
Single person (young, middle and mature)	%	41.17	11.60	16.17	12.71	10.42	23.17	6.28	38.02	23.68	9.06
Single parent (young, middle and mature family)	%	12.24	23.04	11.93	14.95	8.64	25.77	3.62	58.37	10.54	12.47
Couple with children (young, middle and mature family)	%	20.31	17.09	41.78	6.42	55.05	7.06	74.81	6.54	39.60	5.37
Couple no children (young and mature)	%	26.28	17.95	30.12	8.39	25.90	13.24	15.29	26.85	26.19	8.18
Ownership status											
Owned fully/ Fully paid off	%	48.79	9.86	51.42	5.18	52.44	7.24	44.31	12.80	49.69	4.49
Buying/ Paying off home	%	21.01	17.42	26.94	8.69	30.58	11.46	49.23	11.98	28.06	6.87
Renting - Private	%	16.98	24.46	14.16	13.07	13.30	19.61	4.72	52.47	13.90	12.78
Renting - Public/Housing Commissior	%	13.22	27.24	7.48	18.66	3.67	37.54	1.74	70.94	8.35	17.77
Average number of times moved in last three year	No.	0.32	21.23	0.27	13.47	0.32	17.98	0.28	26.53	0.30	10.48
Average number of bedrooms	No.	2.89	2.26	3.16	1.23	3.46	2.11	4.06	2.68	3.21	1.19
Average number of people in household	No.	2.21	5.36	2.81	2.41	3.15	3.19	4.17	4.12	2.80	2.37
Average number of people aged 15 and over	No.	1.79	4.47	2.18	2.04	2.52	3.27	3.00	4.76	2.19	2.07
Average number of people aged less than 15 years	No.	0.42	17.42	0.63	8.27	0.63	7.67	1.17	12.43	0.62	6.73
Average number of people who spend most days of the week at home	No.	1.24	7.54	1.67	4.09	1.69	5.78	2.06	9.34	1.56	3.41

Table 2
Dual Fuel Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Income, Concession and Payment Characteristics											
Annual household income											
less than \$31,200	%	45.48	10.56	30.22	8.12	19.98	15.10	11.03	30.64	32.07	6.89
\$31,201-\$52,000	%	15.49	19.79	17.19	11.75	16.28	17.43	7.99	35.01	15.28	9.59
\$52,001-\$104,000	%	22.63	18.79	24.84	9.25	22.90	13.63	29.23	19.47	24.28	8.16
more than \$104,000	%	9.11	28.99	14.37	12.89	23.44	13.77	38.31	14.98	16.69	9.19
Refused to Answer	%	7.28	26.55	13.39	13.44	17.40	16.47	13.43	26.24	11.68	9.99
Concession cards											
Has a concession card	%	46.64	10.29	32.38	7.72	23.42	13.68	15.01	25.60	34.27	6.46
Has a pensioners concession card	%	43.87	10.94	29.98	8.18	21.77	14.34	13.46	27.58	31.94	6.88
Has a Veterans' Affairs gold health card	%	2.42	53.61	1.89	38.24	0.53	99.81	0.77	99.98	1.75	32.15
Has a concession card but not sure what it is called	%	1.21	76.15	0.51	70.59	1.11	71.58	0.77	99.98	0.89	44.56
Awareness of energy concessions for concession card holder:											
Yes	%	98.47	1.11	93.08	2.58	93.18	4.10	100.00	0.00	96.22	1.13
No	%	0.76	100.49	3.98	44.91	4.55	69.35	0.00	---	2.18	36.59
Unsure	%	0.76	100.49	2.94	57.06	2.27	99.14	0.00	---	1.60	45.54
Awareness of water concessions for concession card holder:											
Yes	%	83.81	6.81	85.90	3.80	91.59	4.45	94.85	5.36	85.88	3.69
No	%	2.29	58.35	8.45	31.02	4.20	69.81	0.00	---	4.43	26.79
Unsure	%	13.90	40.50	5.65	37.86	4.20	69.81	5.15	98.73	9.69	31.40
Claims energy concession if aware											
Yes	%	93.46	3.44	91.93	2.88	94.48	4.05	94.85	5.36	93.14	2.09
No	%	6.54	49.20	6.07	37.78	2.44	99.08	5.15	98.74	5.92	31.67
Unsure	%	0.00	---	2.00	70.12	3.08	98.43	0.00	---	0.95	58.01
Claims water concession if aware											
Yes	%	86.87	7.09	87.25	3.86	83.95	7.26	76.82	15.84	86.08	3.96
No	%	6.42	50.80	6.81	37.37	10.43	48.29	16.36	67.49	7.57	26.95
Unsure	%	6.72	83.06	5.94	40.15	5.62	69.21	6.82	97.32	6.35	46.55
Proportion of households that approached the supplier because of payment difficulties:											
Gas	%	4.20	36.19	5.91	20.81	2.99	44.53	1.81	71.16	4.34	17.60
Electricity	%	4.70	36.08	6.95	19.12	5.55	31.22	7.50	41.07	5.97	15.39
Water	%	1.57	63.03	1.15	51.06	2.01	57.10	1.81	71.16	1.51	31.98
Proportion of households that were offered the following help when discussed											
Gas											
Allowed to pay off in installments	%	16.98	68.94	26.93	36.03	39.91	56.10	0.00	---	23.21	30.09
Extended the due date on the bill	%	91.51	9.22	73.07	13.28	77.89	25.11	100.00	0.00	81.65	7.71
Other (Specify)	%	0.00	---	6.50	70.25	0.00	---	0.00	---	3.15	71.65
No help offered	%	0.00	---	4.32	99.23	0.00	---	0.00	---	2.10	100.79

Table 2
Dual Fuel Households by Electricity Consumption

Feature	Units	Electricity Consumption Category								Total	
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh			
Electricity											
Allowed to pay off in installments	%	15.18	70.07	20.65	37.93	41.75	38.50	0.00	---	18.64	28.60
Extended the due date on the bill	%	92.41	8.22	76.59	10.62	67.83	22.74	100.00	0.00	83.74	5.87
Referred me to an emergency relief agency	%	0.00	---	2.77	100.15	0.00	---	0.00	---	1.15	101.06
Other (Specify)	%	0.00	---	2.77	100.15	0.00	---	0.00	---	1.15	101.06
No help offered	%	0.00	---	3.68	99.22	0.00	---	0.00	---	1.52	100.68
Water											
Allowed to pay off in installments	%	22.78	101.52	0.00	---	32.96	85.76	0.00	---	15.18	70.92
Extended the due date on the bill	%	77.22	29.94	77.72	27.08	67.04	42.16	100.00	0.00	78.80	15.43
No help offered	%	0.00	---	22.28	94.47	0.00	---	0.00	---	6.02	103.55
Proportion of households who sought financial help in the last three years	%	1.78	44.98	1.43	41.45	0.53	99.81	1.56	99.19	1.45	29.05
Proportion of households who have had the gas or electricity disconnected or water restricted											
Gas	%	0.36	100.17	0.30	99.90	0.45	99.90	0.00	---	0.31	59.90
Electricity	%	0.36	100.17	1.10	50.49	0.00	---	0.00	---	0.52	45.61
Water	%	0.00	---	0.30	99.90	0.45	99.90	0.00	---	0.17	72.81
Electricity, Gas and Water Consumption											
Average electricity consumption	kWh	2,597	3.61	5,832	0.98	9,725	0.84	16,961	3.96	6,568	3.96
Average gas consumption	MJ	17,263	7.77	22,682	4.81	24,969	7.00	45,424	17.03	23,925	5.75
Average water consumption	kL	142	6.90	207	3.37	251	4.85	364	5.55	210	3.19
Proportion of households by electricity network											
Energy Australia	%	59.39	8.57	64.92	3.91	65.32	5.47	62.45	10.03	62.60	3.76
Integral Energy	%	40.61	12.53	35.08	7.24	34.68	10.31	37.55	16.68	37.40	6.29
Proportion of households by electricity supplier											
Energy Australia	%	42.54	10.49	44.17	5.99	46.87	8.05	45.40	12.55	44.10	4.84
AGL	%	29.16	16.36	24.00	9.46	18.84	15.80	14.62	25.35	24.02	8.78
Integral Energy	%	24.09	19.08	26.99	8.78	29.06	11.68	31.55	20.00	26.77	7.95
Other	%	0.00	---	0.19	100.01	0.00	---	0.00	---	0.07	100.09
Origin Energy	%	2.29	61.45	3.29	28.51	4.79	34.68	6.10	37.52	3.48	20.91
Jack Green	%	1.07	57.95	1.16	50.17	0.45	99.90	1.56	99.19	1.07	34.65
Tru Energy	%	0.85	99.67	0.19	100.01	0.00	---	0.00	---	0.39	84.08
Power Direct	%	0.00	---	0.00	---	0.00	---	0.77	99.98	0.10	100.06
Proportion of households by gas supplier											
Energy Australia	%	16.43	16.64	17.90	11.33	18.73	15.78	20.06	20.20	17.74	8.04
AGL	%	83.57	3.27	81.25	2.54	80.74	3.70	79.94	5.07	81.89	1.76
Don't Know / Can't recall/ Unsure	%	0.00	---	0.65	70.69	0.00	---	0.00	---	0.23	70.93
Other	%	0.00	---	0.00	---	0.53	99.81	0.00	---	0.08	100.08
TruEnergy	%	0.00	---	0.19	100.01	0.00	---	0.00	---	0.07	100.09

Table 2
Dual Fuel Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Extent of Retail competition											
Proportion of households that are aware that they can choose their											
Electricity supplier	%	92.68	2.96	92.06	1.57	97.95	1.04	98.97	1.04	94.00	1.25
Gas supplier	%	92.32	2.99	91.62	1.63	96.62	1.42	98.19	1.31	93.42	1.28
Proportion of households that were approached by their original supplier to enter contract											
Electricity supplier	%	46.56	10.17	50.56	5.26	55.01	6.84	45.97	12.72	49.13	4.52
Gas supplier	%	43.94	10.71	45.34	5.84	47.67	7.92	41.66	13.49	44.69	4.91
Proportion of households that entered a contract with their original supplier											
Electricity supplier	%	47.81	13.78	48.00	7.78	56.57	8.94	55.64	14.97	50.21	5.95
Gas supplier	%	46.16	14.92	40.83	9.53	45.81	12.01	56.80	14.09	45.42	6.99
Proportion of households that were approached by a different supplier to switch											
Electricity supplier	%	45.19	10.49	53.67	4.95	59.06	6.28	61.25	8.95	52.21	4.27
Gas supplier	%	28.38	14.15	39.02	6.64	37.49	9.77	35.82	16.11	34.41	5.86
Proportion of households that switched to a different supplier											
Electricity supplier	%	44.73	15.81	30.96	10.73	33.28	14.00	25.92	24.05	35.07	8.56
Gas supplier	%	26.11	23.58	22.86	15.53	22.00	23.65	24.66	33.93	23.96	11.38
Main reason for entering into contract with original or switching electricity supplier:											
It was cheaper	%	39.16	19.01	64.33	6.19	63.99	8.07	52.98	17.63	54.01	6.56
Combined electricity and gas bill offer	%	26.66	29.00	14.91	20.28	10.87	30.22	16.99	36.93	18.61	17.18
Salesperson was persuasive	%	3.66	50.75	4.25	37.88	6.69	39.71	2.49	99.46	4.26	24.30
Other supplier offered better service	%	5.29	59.89	0.63	99.86	0.91	99.82	1.98	99.97	2.49	47.53
Other	%	17.54	37.72	8.61	26.96	15.57	25.61	20.26	34.06	14.37	19.01
Using green electricity/ better for the environment	%	7.70	48.92	7.28	29.32	1.97	70.46	5.30	69.60	6.27	25.72
Main reason for entering into contract with original or switching gas supplier											
It was cheaper	%	40.45	19.96	58.27	8.71	56.19	12.22	57.14	16.75	51.09	8.07
Combined electricity and gas bill offer	%	31.84	30.12	20.34	20.64	18.43	28.92	20.99	37.96	24.46	17.59
Salesperson was persuasive	%	3.74	58.38	4.03	49.83	3.49	69.75	0.00	---	3.32	34.14
Other supplier offered better service	%	7.21	59.23	2.22	70.85	1.48	99.69	2.64	99.47	4.04	43.34
Other	%	12.54	44.43	13.10	26.32	16.47	30.94	19.22	38.02	14.20	19.05
Monetary incentive/ discount/ rebate offer	%	4.23	75.38	2.05	70.39	3.94	69.86	0.00	---	2.90	47.12

Table 2
Dual Fuel Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Main reason for not entering into contract with original or switching electricity supplie:											
It was no cheaper	%	11.16	35.64	15.09	17.44	13.62	26.10	11.06	42.00	13.05	13.99
I was happy with my current supplie	%	26.41	22.41	37.12	9.65	23.66	18.44	37.21	20.38	31.60	8.31
It was too much trouble to switch	%	9.36	40.72	12.21	20.20	15.50	24.00	18.21	42.86	12.75	15.77
Did not want to be locked into a contract	%	30.78	19.25	16.94	16.17	15.83	23.20	16.65	31.15	20.98	11.27
Other	%	17.45	25.79	15.94	17.01	26.02	17.15	16.87	46.25	18.21	12.09
I'm already in a contract	%	4.84	53.67	2.70	41.08	5.37	43.96	0.00	---	3.41	29.09
Main reason for not entering into contract with original or switching gas supplier:											
It was no cheaper	%	7.38	49.97	15.73	18.04	13.21	29.82	9.31	59.66	11.92	15.91
I was happy with my current supplie	%	26.88	24.04	36.22	10.43	23.69	20.38	31.65	25.83	30.75	9.30
It was too much trouble to switch	%	12.66	38.36	12.50	20.74	15.92	26.70	23.55	44.01	14.41	16.61
Did not want to be locked into a contract	%	38.40	19.44	20.09	15.62	19.97	22.66	24.16	30.31	26.37	11.61
Other	%	14.69	26.87	15.46	18.37	27.21	18.81	11.32	49.12	16.56	12.26
Don't know/ Not sure	%	4.20	50.13	0.66	99.79	3.97	56.95	0.00	---	2.22	35.97
Hot water systems											
Proportion of households where the main energy source for hot water is											
Electric	%	20.35	20.59	28.38	8.44	38.61	9.56	32.05	17.72	27.31	7.31
Gas	%	78.08	5.43	69.07	3.56	59.29	6.28	66.15	8.63	70.67	2.87
Other	%	1.57	63.03	2.56	33.17	2.10	50.19	1.81	71.16	2.03	26.03
Proportion of households with an electric system with the following type of system:											
Off Peak	%	26.54	30.95	58.39	8.23	69.43	8.01	65.67	17.36	52.90	8.09
Standard electric	%	55.98	20.23	29.39	15.11	24.90	21.05	18.32	39.78	34.21	12.47
Don t know	%	17.48	59.97	12.22	26.54	5.67	49.21	16.01	73.07	12.89	28.83
Household appliances											
Main energy sources for cooking											
Gas only	%	75.15	4.98	65.18	3.91	63.30	5.75	56.31	10.63	67.54	2.93
Electricity only	%	11.90	22.34	19.88	10.85	20.28	14.91	19.23	26.96	16.86	8.96
Both electricity and gas	%	12.94	22.16	14.94	12.70	16.42	17.12	24.46	21.87	15.59	9.70
Proportion of households with the following appliance:											
Clothes dryer	%	42.23	10.88	66.38	3.79	75.03	4.35	77.77	5.69	60.00	3.83
Dishwasher	%	28.66	13.97	52.40	5.08	64.16	5.63	78.74	5.69	48.48	4.56
Washing machine	%	97.72	1.13	99.49	0.36	100.00	0.00	100.00	0.00	98.96	0.44
Microwave	%	89.73	3.21	90.84	1.66	96.35	1.41	93.68	2.74	91.58	1.38
Second refrigerator	%	27.07	16.34	44.54	5.94	66.92	5.29	66.64	7.81	43.98	4.98

Table 2
Dual Fuel Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Proportion of households with the following											
Bath	%	82.75	3.95	84.87	2.24	86.87	2.91	87.46	3.93	84.69	1.78
Bath with spa jets	%	3.36	45.62	9.05	16.71	13.79	18.81	14.31	26.02	8.26	12.23
Spa	%	1.08	99.44	3.14	29.12	6.74	28.14	18.49	28.36	4.80	19.46
Swimming Pool	%	2.28	48.63	7.09	18.78	24.65	13.43	39.44	15.38	11.86	10.96
Sauna	%	0.00	---	1.19	50.85	1.73	57.58	0.00	---	0.67	38.74
Heating											
Proportion of households with the following types of room heating											
Reverse cycle air conditioning	%	27.71	15.03	34.81	7.29	44.50	8.43	44.45	13.20	34.75	5.92
Electric (not air conditioning)	%	45.97	10.35	41.19	6.36	45.15	8.33	28.09	19.61	41.92	5.25
Gas	%	54.30	8.79	64.24	3.96	58.63	6.36	55.51	10.85	58.61	3.79
Oil	%	5.28	34.91	5.65	21.93	5.85	29.71	4.65	49.94	5.42	16.72
Wood, Solid Fuel	%	5.47	37.79	2.04	35.72	11.93	20.68	2.11	72.62	4.77	19.27
Kerosene	%	0.00	---	0.19	100.01	0.00	---	0.00	---	0.07	100.09
Ducted air (ie central heating in multi-dwelling unit)	%	0.00	---	2.85	31.70	4.29	35.06	11.67	42.19	3.09	24.87
Other heating	%	0.85	99.67	0.00	---	0.00	---	0.00	---	0.32	99.84
No heating	%	5.97	52.64	1.31	44.99	0.00	---	0.77	99.98	2.80	43.81
Proportion of households with more than one heating source who use the following heating source most often											
Reverse cycle air conditioning	%	13.65	24.64	14.08	13.11	22.23	14.01	25.76	21.63	16.55	10.04
Electric (not air conditioning)	%	34.22	13.28	22.76	9.78	22.46	14.18	10.18	30.79	25.44	7.92
Gas	%	43.04	10.85	55.40	4.77	45.86	8.21	48.23	12.06	48.49	4.57
Oil	%	2.28	48.63	3.42	28.75	2.85	44.57	3.32	58.27	2.90	21.52
Wood, Solid Fuel	%	0.85	99.67	0.79	58.62	3.30	40.70	1.34	99.41	1.25	35.42
Kerosene	%	0.00	---	2.24	35.71	3.30	40.70	10.40	46.44	2.57	28.43
Ducted air (ie central heating in multi-dwelling unit)	%	5.97	52.64	1.31	44.99	0.00	---	0.77	99.98	2.80	43.81
Proportion of households that apart from electric fans, have any air conditioning or air cooling in their dwelling'											
	%	35.75	12.74	50.24	5.30	59.51	6.24	69.14	7.17	48.50	4.57
Proportion of households without an air conditioner that are considering installing an air conditioner											
	%	11.07	29.38	12.32	19.59	20.29	23.40	18.18	35.11	13.08	14.48
For those households with an air conditioner, are you planning to upgrade your current air conditioning system'											
	%	11.75	35.58	5.40	29.80	3.88	49.63	0.00		5.93	22.63
How often use air conditioner during summer											
Only on very hot days	%	74.83	8.37	70.05	4.91	64.16	7.30	55.23	14.04	67.69	4.14
On most hot days	%	19.16	28.99	21.47	14.28	24.07	17.36	39.93	19.83	24.57	10.69
On most days	%	5.02	65.07	6.78	28.35	6.31	37.17	3.60	71.92	5.64	23.16
Not applicable/ do not use	%	1.00	100.36	1.71	57.47	5.47	40.07	1.25	100.01	2.10	30.78

Table 2
Dual Fuel Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
How often use air conditioner during winter											
Only on very cold days	%	43.58	17.40	37.19	9.82	46.49	10.49	33.18	19.48	39.90	7.22
On most cold days	%	18.74	36.82	13.17	18.49	15.24	23.25	31.20	23.55	18.28	14.28
On most days	%	1.00	100.36	4.40	35.05	6.00	40.11	3.60	71.92	3.60	25.06
Not applicable/ do not use	%	36.68	21.25	45.23	8.30	32.26	14.25	32.03	22.89	38.22	7.81
Would switch air conditioner off if price were 25% higher											
Yes, for short periods	%	26.92	23.75	27.77	12.21	29.18	15.15	27.46	26.13	27.73	9.50
Yes, for most of the day	%	30.95	25.15	17.14	16.64	9.02	32.01	7.58	40.68	17.81	15.02
Yes, all day	%	7.35	82.42	6.98	27.36	6.60	36.90	9.63	40.85	7.48	26.59
No	%	31.80	21.27	43.26	8.62	47.16	10.37	53.83	13.94	42.66	6.87
Don't know	%	2.99	58.22	4.86	31.63	8.05	32.58	1.50	99.76	4.31	21.54
Energy and Water Efficiency											
Proportion of households that received energy efficient packs	%	52.16	9.18	48.91	5.44	46.63	8.09	46.93	12.53	49.55	4.49
Average number of energy efficient light bulb:	No.	5.83	4.81	6.24	3.57	7.07	5.89	6.07	12.46	6.17	2.84
Average number of energy efficient light bulbs installed	No.	2.77	11.81	2.93	6.59	3.14	8.30	3.39	16.34	2.95	5.54
Proportion of households that describe the light bulbs that have not been installed as											
Plan to install some of them	%	23.56	29.84	11.32	23.55	4.48	57.68	10.86	60.79	15.11	20.75
Plan to install all of them eventually	%	51.04	15.19	71.25	5.51	81.55	5.80	54.77	21.42	62.98	6.37
Do not plan to install them	%	23.53	33.91	15.80	20.21	11.18	33.81	29.22	42.63	19.64	19.12
Don't know	%	1.87	71.17	1.63	70.21	2.80	70.22	5.16	70.94	2.27	36.19
Proportion of households that received the following number of water-saving showerheads											
One	%	34.26	17.18	36.48	9.97	39.11	13.89	28.90	27.05	35.07	8.31
Two	%	3.00	62.80	4.23	37.31	6.33	39.90	5.13	57.56	4.14	25.44
Three or more	%	0.00	---	0.00	---	1.42	99.32	0.00	---	0.19	100.13
None	%	59.30	10.50	58.90	6.33	52.17	10.63	60.28	14.02	58.30	5.25
Don't know	%	3.44	65.57	0.39	100.02	0.97	99.77	5.69	74.40	2.30	45.40
Proportion of households that installed at least one water-saving showerhead	%	74.72	10.10	51.81	11.37	62.51	12.54	56.67	25	62.58	6.77
Proportion of households that installed at least one water-saving showerhead but have removed or are planning to remove it	%	21.02	39.51	4.08	56.91	5.46	69.26	18.05	56	12.05	29.59
Proportion of households that are not planning to install water-saving showerheads	%	5.50	57.80	20.50	22.75	12.04	42.71	13.76	68	12.85	19.71

Table 3
Electricity Only Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Estimated population	No.	118,367	---	247,957	---	171,307	---	146,197	---	683,827	---
Proportion of households	%	17.31	---	36.26	---	25.05	---	21.38	---	100.00	---
Sample size	No.	65	---	317	---	260	---	117	---	759	---
Demographic characteristics											
Region											
Sydney	%	81.94	7.05	83.16	2.61	88.87	2.17	92.61	3.80	86.40	1.81
Blue Mountains	%	2.26	98.92	2.33	38.41	4.13	30.12	3.20	97.43	2.95	30.23
Illawarra	%	15.80	34.69	14.50	14.06	7.01	21.99	4.19	44.40	10.65	12.66
Dwelling type											
Separate House	%	61.88	11.05	74.88	3.37	89.86	2.15	95.50	1.95	80.79	2.05
Dwelling/Non-dwelling combined and Semi-detached	%	13.04	35.46	14.85	13.84	6.00	25.25	3.81	45.54	9.96	12.37
Low rise flats/units	%	13.96	30.54	6.29	22.70	2.07	44.54	0.00	---	5.21	17.90
Flats (3 storeys and above)	%	11.12	35.48	3.98	29.64	2.07	44.54	0.69	99.97	4.04	21.18
Land size (houses only)											
Small (Less than 500 square metres)	%	9.20	56.31	22.89	12.27	13.77	17.07	7.69	32.59	14.69	10.42
Medium (500 to 900 square metres)	%	78.33	9.92	65.85	4.79	67.16	4.65	76.56	5.40	70.58	2.93
Large (More than 900 square metres)	%	12.47	49.75	11.26	18.59	19.07	13.52	15.74	21.78	14.73	10.63
Household structure											
Single person (young, middle and mature)	%	50.19	15.13	22.61	10.95	14.25	15.63	3.76	44.53	21.55	8.28
Single parent (young, middle and mature family)	%	15.25	43.46	14.25	14.06	11.30	17.76	7.90	33.05	12.40	12.77
Couple with children (young, middle and mature family)	%	13.00	37.70	24.25	10.20	44.44	7.12	81.01	4.61	38.83	5.47
Couple no children (young and mature)	%	21.56	32.65	38.90	7.35	30.01	9.65	7.33	31.57	27.22	7.04
Ownership status											
Owned fully/ Fully paid off	%	50.58	14.99	56.12	5.12	53.05	5.92	39.22	12.83	50.78	4.31
Buying/ Paying off home	%	9.07	37.57	14.73	13.93	18.47	13.33	38.07	14.55	19.71	9.05
Renting - Private	%	19.89	28.27	16.91	12.75	17.87	13.53	7.72	28.86	15.69	9.43
Renting - Public/Housing Commission	%	20.46	33.60	12.24	15.65	10.61	17.92	14.99	31.32	13.82	12.96
Average number of times moved in last three years	No.	0.46	37.63	0.24	15.53	0.20	17.46	0.18	26.34	0.26	14.14
Average number of bedrooms	No.	2.79	6.69	2.92	1.62	3.37	1.54	3.79	2.48	3.20	1.42
Average number of people in household	No.	2.17	13.39	2.38	2.83	3.03	2.80	4.24	3.58	2.90	2.61
Average number of people aged 15 and over	No.	1.72	9.04	1.96	2.20	2.41	2.58	2.86	3.51	2.22	2.08
Average number of people aged less than 15 years	No.	0.45	62.75	0.42	11.56	0.61	6.71	1.38	10.42	0.68	9.45
Average number of people who spend most days of the week at home	No.	1.66	19.52	1.58	3.99	1.79	4.88	2.39	8.69	1.82	4.36

Table 3
Electricity Only Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Income, Concession and Payment Characteristics											
Annual household income											
less than \$31,200	%	48.70	15.38	47.83	6.02	31.64	9.26	18.51	23.13	37.66	5.60
\$31,201-\$52,000	%	12.10	37.54	19.16	11.74	21.54	11.93	27.49	19.46	20.32	8.77
\$52,001-\$104,000	%	19.63	33.64	15.41	13.49	29.14	9.80	24.85	17.15	21.60	8.30
more than \$104,000	%	2.26	98.92	7.13	20.55	8.49	20.70	20.29	21.93	9.44	13.57
Refused to Answer	%	17.32	31.14	10.46	16.79	9.18	20.05	8.85	27.68	10.98	12.16
Concession cards											
Has a concession card	%	62.85	11.60	50.65	5.69	37.79	8.08	26.07	19.34	44.29	4.92
Has a pensioners concession card	%	54.29	13.78	46.72	6.16	34.34	8.71	24.03	20.80	40.08	5.39
Has a Veterans' Affairs gold health card	%	2.83	58.08	3.98	27.55	1.91	44.67	2.04	57.78	2.85	20.78
Has a concession card but not sure what it is called	%	5.73	68.25	2.30	36.34	1.54	50.12	0.00	---	2.21	35.20
Awareness of energy concessions for concession card holders											
Yes	%	86.22	7.16	90.06	2.63	87.98	3.90	95.10	3.66	89.31	2.25
No	%	13.78	44.79	7.81	27.65	8.53	34.32	2.54	100.27	8.77	21.83
Unsure	%	0.00	---	2.12	50.15	3.49	56.99	2.35	100.46	1.92	35.77
Awareness of water concessions for concession card holders											
Yes	%	82.25	8.34	84.28	3.41	79.30	5.37	92.99	4.41	83.81	2.80
No	%	14.74	44.88	11.63	22.25	11.46	28.85	2.54	100.27	11.21	18.92
Unsure	%	3.00	71.18	4.09	35.22	9.24	33.75	4.47	71.52	4.97	22.75
Claims energy concession if aware											
Yes	%	92.97	5.77	95.34	1.73	87.55	4.08	87.11	13.26	92.03	2.49
No	%	1.74	100.50	3.87	37.69	8.93	34.31	12.89	89.58	5.64	34.18
Unsure	%	5.28	96.90	0.79	99.75	3.52	57.55	0.00	---	2.33	57.94
Claims water concession if aware											
Yes	%	80.96	9.34	89.24	3.03	78.90	5.86	83.78	14.12	84.39	3.40
No	%	13.50	43.31	8.93	27.35	10.98	32.01	13.18	89.39	11.04	22.70
Unsure	%	5.54	96.77	1.83	70.29	10.13	34.00	3.04	100.13	4.57	35.71
Proportion of households that approached the supplier because of payment difficulties											
Electricity	%	7.01	53.55	8.86	18.11	11.55	17.20	27.71	19.43	13.25	12.27
Water	%	3.20	75.49	2.48	36.15	1.92	40.55	8.33	43.78	3.71	26.39
Proportion of households that were offered the following help when discussed											

Table 3
Electricity Only Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Electricity											
Allowed to pay off in installments	%	54.32	50.54	32.15	28.12	25.28	31.33	28.36	39.15	30.98	20.66
Extended the due date on the bill	%	100.00	0.00	64.39	14.33	63.80	13.89	71.64	15.50	70.77	8.46
Referred me to an emergency relief agency	%	0.00	---	6.06	69.94	9.63	56.24	0.00	---	3.58	46.01
Other (Specify)	%	0.00	---	0.00	---	4.04	98.12	0.00	---	0.88	100.55
No help offered	%	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
Water											
Allowed to pay off in installments	%	0.00	---	16.89	91.23	33.33	59.03	72.31	23.72	43.04	33.55
Extended the due date on the bill	%	100.00	0.00	83.11	18.54	33.33	59.03	27.69	61.91	52.65	26.68
Referred me to an emergency relief agency	%	0.00	---	0.00	---	16.67	93.34	0.00	---	2.15	103.77
No help offered	%	0.00	---	0.00	---	16.67	93.34	0.00	---	2.15	103.77
Proportion of households who sought financial help in the last three years	%	8.90	44.47	2.36	33.57	5.42	26.41	9.22	39.38	5.72	19.99
Proportion of households who have had the gas or electricity disconnected or water restricted											
Gas	%	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
Electricity	%	4.15	62.45	2.39	38.34	1.07	57.66	3.93	80.85	2.69	33.32
Water	%	0.00	---	0.88	60.12	0.32	99.94	0.00	---	0.40	52.25
Electricity, Gas and Water Consumption											
Average electricity consumption	kWh	2,882	4.96	6,043	1.07	9,680	0.76	16,524	3.21	8,648	3.59
Average water consumption	kL	145	12.19	173	3.77	226	3.01	314	5.73	214	3.07
Proportion of households by electricity network											
Energy Australia	%	51.87	14.66	49.53	5.81	45.91	6.86	39.45	12.42	46.87	4.57
Integral Energy	%	48.13	15.80	50.47	5.71	54.09	5.82	60.55	8.09	53.13	4.04
Proportion of households by electricity supplier											
Energy Australia	%	42.73	16.37	44.92	6.38	42.08	7.43	36.43	12.97	42.01	4.93
AGL	%	8.27	72.56	5.92	23.40	5.99	24.68	7.83	46.39	6.75	21.45
Integral Energy	%	37.61	20.33	41.35	6.85	46.45	6.74	46.82	11.75	43.15	5.07
Don t Know / Can t recall/ Unsure	%	0.00	---	0.23	100.00	0.00	---	0.00	---	0.08	100.07
Other	%	10.45	41.69	4.43	26.69	2.94	37.56	3.88	41.01	4.98	19.67
Origin Energy	%	0.94	100.24	2.72	34.10	1.75	45.09	4.30	75.97	2.51	32.95
Jack Green	%	0.00	---	0.42	99.81	0.79	71.70	0.74	99.92	0.51	51.45
Tru Energy	%	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
Extent of Retail competition											
Proportion of households that are aware that they can choose their											
Electricity supplier	%	81.87	6.41	88.57	2.09	91.01	2.00	90.05	2.99	88.33	1.53
Proportion of households that were approached by their original supplier to enter contract											
Electricity supplier	%	23.40	22.31	38.20	7.33	44.50	7.02	40.71	12.42	37.76	5.26

Table 3
Electricity Only Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Proportion of households that entered a contract with their original supplier											
Electricity supplier	%	44.39	24.82	59.70	7.68	55.55	8.39	66.22	10.20	58.33	5.09
Proportion of households that were approached by a different supplier to switch											
Electricity supplier	%	47.39	15.84	52.18	5.51	63.77	4.74	61.18	8.47	56.18	3.84
Proportion of households that switched to a different supplier											
Electricity supplier	%	29.58	33.61	38.21	10.19	25.95	13.25	32.19	22.29	32.06	8.63
Main reason for entering into contract with original or switching electricity supplier											
It was cheaper	%	75.27	14.24	68.27	6.13	74.75	5.72	76.51	7.67	72.75	3.74
Combined electricity and gas bill offer	%	3.87	99.65	0.00	---	0.00	---	0.00	---	0.42	99.95
Other	%	13.12	70.68	14.75	21.65	12.84	25.46	13.49	33.00	13.76	15.33
Monetary incentive/ discount/ rebate offer	%	3.87	99.65	1.63	70.48	2.08	70.44	0.00	---	1.59	45.31
I am happy with my current electricity supplier	%	3.87	99.65	6.89	32.78	4.95	44.08	7.51	45.26	6.21	22.53
I prefer the billing system	%	3.87	99.65	0.00	---	0.00	---	0.00	---	0.42	99.95
Thought I had to/ were forced to/ tricked	%	9.25	94.07	0.00	---	2.08	70.44	0.00	---	1.55	68.88
Main reason for not entering into contract with original or switching electricity supplier											
It was no cheaper	%	23.12	40.10	19.11	18.43	11.17	23.95	14.20	33.37	16.31	14.16
I was happy with my current supplier	%	31.60	29.68	33.15	12.79	43.92	9.54	47.20	16.07	39.24	7.76
It was too much trouble to switch	%	25.20	50.02	8.52	29.68	9.48	26.63	8.36	45.70	11.47	23.56
Did not want to be locked into a contract	%	13.66	47.46	19.85	18.16	15.27	19.90	15.49	31.25	16.51	12.82
Other	%	6.41	58.59	15.71	20.73	14.33	20.52	6.37	49.42	11.69	14.46
I don't like salesman attitude	%	4.28	71.44	1.49	70.33	1.69	70.12	0.00	---	1.66	41.32
Hot water systems											
Proportion of households where the main energy source for hot water is											
Electric	%	91.68	4.58	95.62	1.22	96.09	1.28	96.38	1.72	95.22	1.02
Gas	%	0.00	---	0.00	---	0.79	71.70	0.55	100.11	0.31	58.56
Other	%	8.32	50.48	4.02	27.80	3.13	35.32	3.07	51.06	4.34	21.83
Proportion of households with an electric system with the following type of system											
Off Peak	%	35.88	18.62	60.24	4.71	78.48	3.31	75.61	6.10	63.95	3.47
Standard electric	%	58.91	11.98	32.96	8.28	17.42	13.85	17.52	23.78	30.18	7.29
Don t know	%	5.21	54.04	6.81	21.99	4.10	29.77	6.87	36.40	5.87	16.27

Table 3
Electricity Only Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Household appliances											
Main energy sources for cooking											
Gas only	%	0.00	---	0.82	59.01	0.85	70.91	0.74	99.92	0.67	41.99
Electricity only	%	100.00	0.00	97.09	0.96	98.36	0.84	99.26	0.74	98.38	0.44
Both electricity and gas	%	0.00	---	2.09	38.42	0.79	71.80	0.00	---	0.96	34.15
Proportion of households with the following appliances											
Clothes dryer	%	26.29	22.62	50.06	5.75	71.84	3.96	88.37	3.20	59.59	3.67
Dishwasher	%	16.82	29.43	25.39	9.71	46.87	6.71	56.00	9.63	35.83	5.72
Washing machine	%	85.09	7.64	98.00	0.83	98.52	0.76	100.00	0.00	96.32	1.32
Microwave	%	89.82	4.27	92.36	1.72	95.15	1.46	97.79	1.30	93.78	1.05
Second refrigerator	%	9.84	41.22	37.59	7.35	52.68	5.96	69.66	6.99	43.42	4.92
Proportion of households with the following											
Bath	%	73.60	9.61	85.83	2.30	87.72	2.35	82.43	5.08	83.46	2.16
Bath with spa jets	%	0.94	100.24	2.99	31.91	5.61	25.56	11.25	32.99	5.06	19.34
Spa	%	6.01	95.05	2.52	35.44	4.75	28.56	14.92	31.77	6.33	24.20
Swimming Pool	%	4.75	65.04	6.89	21.11	15.70	14.71	30.14	16.17	13.70	10.73
Sauna	%	0.00	---	0.36	99.87	0.00	---	0.66	100.00	0.27	70.75
Heating											
Proportion of households with the following types of room heating											
Reverse cycle air conditioning	%	31.12	22.94	43.25	6.58	58.57	5.30	65.15	7.72	49.67	4.39
Electric (not air conditioning)	%	62.65	12.03	59.58	4.74	53.91	5.82	48.16	11.33	56.25	3.86
Gas	%	2.26	98.92	2.71	35.41	2.75	37.89	2.58	61.66	2.61	25.79
Oil	%	6.06	60.15	10.26	17.08	9.51	19.26	4.45	38.30	8.11	13.32
Wood, Solid Fuel	%	3.20	75.49	6.91	20.72	11.79	17.41	9.34	38.50	8.01	14.40
Kerosene	%	0.00	---	1.19	51.41	0.79	71.80	3.20	97.43	1.31	55.29
Ducted air (ie central heating in multi-dwelling unit)	%	0.00	---	0.90	58.45	3.08	33.23	8.70	33.10	2.96	23.90
Other heating	%	0.00	---	0.88	60.12	0.00	---	0.00	---	0.32	60.34
No heating	%	17.22	32.02	6.21	22.75	4.04	31.32	2.46	59.17	6.77	17.74
Proportion of households with more than one heating source who use the following heating source most often											
Reverse cycle air conditioning	%	25.09	27.71	32.78	8.22	42.27	7.35	54.26	9.97	38.42	5.56
Electric (not air conditioning)	%	53.18	14.15	42.23	6.74	36.58	8.28	29.96	16.89	40.09	5.35
Gas	%	2.26	98.92	2.71	35.41	1.26	58.20	0.00	---	1.69	32.78
Oil	%	0.00	---	9.29	18.07	3.88	31.39	2.38	50.18	4.85	15.43
Wood, Solid Fuel	%	2.26	98.92	4.86	24.37	8.88	20.63	2.24	58.83	4.86	16.46
Kerosene	%	0.00	---	0.96	59.17	0.79	71.80	0.00	---	0.55	45.98
Ducted air (ie central heating in multi-dwelling unit)	%	0.00	---	0.54	71.31	2.29	37.54	8.70	33.10	2.63	25.91
Proportion of households that apart from electric fans, have any air conditioning or air cooling in their dwelling?											
	%	35.27	20.60	50.37	5.72	42.27	7.35	81.79	4.32	58.64	3.66

Table 3
Electricity Only Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Proportion of households without an air conditioner that are considering installing an air conditioner	%	7.86	53.59	21.82	15.47	1.26	58.20	20.99	40.47	16.13	13.85
For those households with an air conditioner, are you planning to upgrade your current air conditioning system?	%	40.64	34.40	11.68	22.78	8.88	20.63	15.32	31.15	15.49	16.70
How often use air conditioner during summer											
Only on very hot days	%	71.05	15.94	70.09	5.30	67.95	5.27	47.42	13.19	62.82	4.47
On most hot days	%	28.95	39.11	20.83	15.88	26.99	12.64	37.17	16.49	28.31	9.30
On most days	%	0.00	---	2.55	45.24	3.41	40.83	14.51	32.35	6.10	25.61
Not applicable/ do not use	%	0.00	---	6.53	31.35	1.65	58.35	0.90	100.00	2.77	27.41
How often use air conditioner during winter											
Only on very cold days	%	33.17	31.98	52.44	7.70	45.21	8.43	33.93	15.91	42.85	6.33
On most cold days	%	25.23	41.65	21.29	15.75	24.10	13.65	37.06	16.46	27.21	9.50
On most days	%	0.00	---	4.42	33.12	7.28	27.18	8.64	50.22	6.04	25.00
Not applicable/ do not use	%	41.60	33.07	21.84	15.46	23.41	13.88	20.37	27.68	23.91	11.53
Would switch air conditioner off if price were 25% higher											
Yes, for short periods	%	43.23	31.21	31.85	11.87	31.99	11.24	21.18	21.53	29.89	8.85
Yes, for most of the day	%	2.68	100.81	17.01	17.75	12.16	20.82	20.09	28.08	15.05	14.25
Yes, all day	%	18.16	50.41	10.67	22.84	4.03	37.46	1.65	71.02	6.86	20.00
No	%	35.94	32.18	36.41	10.70	49.14	7.79	55.48	11.24	45.69	6.20
Don't know	%	0.00	---	4.05	40.58	2.69	44.77	1.60	70.90	2.51	28.33
Energy and Water Efficiency											
Proportion of households that received energy efficient packs	%	29.82	19.47	47.26	6.09	46.39	6.77	47.81	11.43	44.14	4.82
Average number of energy efficient light bulbs	No.	6.37	7.94	6.37	4.44	7.14	4.89	6.18	6.66	6.53	2.84
Average number of energy efficient light bulbs installed	No.	2.58	15.33	3.49	5.80	3.75	7.77	3.61	13.52	3.48	4.75
Proportion of households that describe the light bulbs that have not been installed as											
Plan to install some of them	%	32.52	32.29	10.12	32.05	9.60	33.93	17.00	56.81	14.62	21.25
Plan to install all of them eventually	%	63.51	16.71	80.39	5.24	74.76	6.34	67.08	17.17	73.53	5.04
Do not plan to install them	%	3.97	98.46	8.72	34.27	14.49	26.11	1.76	100.84	8.08	20.99
Don't know	%	0.00	---	0.77	99.99	1.15	99.67	14.15	67.21	3.77	62.14
Proportion of households that received the following number of water-saving showerheads											
One	%	35.44	26.79	57.01	7.35	69.07	6.24	62.87	12.36	59.02	5.01
Two	%	0.00	---	7.56	30.69	7.73	32.46	12.45	35.39	7.85	19.26
Three or more	%	0.00	---	1.25	72.10	1.01	99.56	0.00	---	0.75	58.61
None	%	64.56	14.70	32.31	12.21	21.39	17.87	23.40	30.69	31.14	9.05
Don't know	%	0.00	---	1.86	59.88	0.81	99.76	1.28	100.19	1.23	46.04

Table 3
Electricity Only Households by Electricity Consumption

Feature	Units	Electricity Consumption Category									
		0 - 4,000 kWh		4,001 - 8,000 kWh		8,001 - 12,000 kWh		12,001+ kWh		Total	
Proportion of households that installed at least one water-saving showerhead	%	26.80	52.00	62.24	8.12	53.94	9.68	56.05	16.46	55.96	6.48
Proportion of households that installed at least one water-saving showerhead but have removed or are planning to remove it	%	0.00	---	6.21	40.28	7.60	36.95	8.87	92.77	6.94	36.13
Proportion of households that are not planning to install water-saving showerheads	%	17.87	66.16	7.26	36.80	15.35	24.92	8.21	45.16	10.61	18.64

Table 4
Gas Households by Gas Consumption

Feature	Units	Gas Consumption Category									
		0 - 5,000 MJ		5,001 - 20,000 MJ		20,001 - 35,000 MJ		35,001+ MJ		Total	
Estimated population	No.	72,690	---	262,978	---	177,991	---	82,730	---	596,389	---
Proportion of households	%	12.19	---	44.10	---	29.84	---	13.87	---	100.00	---
Sample size	No.	52	---	244	---	186	---	118	---	600	---
Demographic characteristics											
Region											
Sydney	%	93.71	3.30	91.95	1.75	93.57	1.65	96.94	1.56	93.34	1.02
Blue Mountains	%	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
Illawarra	%	6.29	49.19	8.05	19.99	6.43	24.05	3.06	49.53	6.66	14.27
Dwelling type											
Separate House	%	64.85	11.23	80.77	3.25	84.32	3.44	88.33	3.66	80.94	2.21
Dwelling/Non-dwelling combined and Semi-detached	%	13.69	32.22	12.91	16.36	14.12	20.03	10.54	29.22	13.04	10.99
Low rise flats/units	%	10.90	50.70	1.22	58.34	0.39	100.02	0.00	---	1.98	39.84
Flats (3 storeys and above)	%	10.55	46.00	5.10	32.14	1.17	57.67	1.13	99.47	4.04	24.34
Land size (houses only)											
Small (Less than 500 square metres)	%	29.55	27.00	28.40	12.36	24.93	14.90	16.46	23.70	25.63	8.46
Medium (500 to 900 square metres)	%	53.56	17.43	61.10	6.22	59.85	7.21	69.44	6.83	61.24	4.00
Large (More than 900 square metres)	%	16.89	48.19	10.50	23.59	15.22	22.01	14.10	23.50	13.14	13.60
Household structure											
Single person (young, middle and mature)	%	40.60	18.76	27.87	11.17	7.60	27.60	3.43	59.48	20.06	9.45
Single parent (young, middle and mature family)	%	2.08	99.20	11.49	19.86	10.13	23.34	8.87	32.53	9.58	13.87
Couple with children (young, middle and mature family)	%	33.92	21.43	31.37	10.22	59.56	6.79	82.53	4.78	47.11	4.86
Couple no children (young and mature)	%	23.40	28.61	29.27	11.06	22.70	15.48	5.17	44.51	23.25	8.63
Ownership status											
Owned fully/ Fully paid off	%	52.16	14.50	58.72	5.77	46.33	8.67	48.14	10.48	52.76	4.28
Buying/ Paying off home	%	19.58	32.21	24.26	12.42	32.51	11.79	40.24	12.45	28.36	7.25
Renting - Private	%	21.64	27.71	8.05	22.14	13.27	20.67	6.60	45.09	11.07	12.88
Renting - Public/Housing Commission	%	6.62	49.35	8.97	20.94	7.90	28.43	5.02	44.39	7.81	15.10
Average number of times moved in last three years	No.	0.26	29.70	0.20	21.99	0.28	21.13	0.20	31.83	0.23	12.68
Average number of bedrooms	No.	2.56	5.36	3.13	1.87	3.43	1.97	3.66	2.38	3.23	1.31
Average number of people in household	No.	2.12	7.48	2.50	3.77	3.33	3.33	3.99	3.39	2.91	2.25
Average number of people aged 15 and over	No.	1.87	6.50	2.04	3.14	2.39	3.14	2.97	4.15	2.25	1.99
Average number of people aged less than 15 years	No.	0.25	32.29	0.47	13.11	0.94	10.30	1.03	11.06	0.66	7.10
Average number of people who spend most days of the week at home	No.	1.37	10.34	1.49	5.41	1.96	6.39	1.76	9.13	1.65	3.63

Table 4
Gas Households by Gas Consumption

Feature	Units	Gas Consumption Category									
		0 - 5,000 MJ		5,001 - 20,000 MJ		20,001 - 35,000 MJ		35,001+ MJ		Total	
Income, Concession and Payment Characteristics											
Annual household income											
less than \$31,200	%	35.80	19.62	36.89	9.04	18.08	16.92	11.61	28.88	27.63	7.36
\$31,201-\$52,000	%	6.57	49.40	17.04	15.30	17.86	17.52	10.39	32.78	15.09	10.73
\$52,001-\$104,000	%	26.02	26.83	20.08	13.94	28.62	12.79	25.59	17.03	24.12	8.12
more than \$104,000	%	12.51	41.13	12.32	18.20	19.57	16.41	31.55	14.55	17.17	9.66
Refused to Answer	%	19.10	32.62	13.66	16.27	15.87	17.84	20.87	19.50	15.98	10.08
Concession cards											
Has a concession card	%	36.84	19.15	40.65	8.35	22.18	14.67	9.96	30.03	30.41	6.85
Has a pensioners concession card	%	35.32	19.76	38.27	8.81	20.96	15.15	8.62	33.24	28.63	7.18
Has a Veterans' Affairs gold health card	%	1.52	99.71	2.06	41.28	0.00	---	0.67	99.93	1.19	36.16
Has a concession card but not sure what it is called	%	0.00	---	0.31	100.01	1.22	74.75	0.67	99.93	0.60	53.75
Awareness of energy concessions for concession card holders											
Yes	%	95.87	4.25	96.91	1.59	90.49	5.25	86.59	10.60	94.89	1.66
No	%	0.00	---	2.32	57.60	5.24	72.55	13.41	68.44	3.12	39.41
Unsure	%	4.13	98.75	0.77	100.12	4.27	71.00	0.00	---	1.99	50.61
Awareness of water concessions for concession card holders											
Yes	%	77.89	11.56	88.87	3.42	82.87	7.96	83.69	13.07	85.71	3.18
No	%	8.26	68.71	4.55	40.58	5.24	72.55	6.71	98.56	5.35	30.58
Unsure	%	13.85	54.65	6.58	37.64	11.89	48.57	9.60	95.55	8.94	25.54
Claims energy concession if aware											
Yes	%	95.69	4.44	89.50	4.26	90.05	4.84	100.00	0.00	90.97	2.82
No	%	4.31	98.72	8.64	42.09	9.95	43.81	0.00	---	7.90	31.13
Unsure	%	0.00	---	1.87	71.21	0.00	---	0.00	---	1.12	71.37
Claims water concession if aware											
Yes	%	94.70	5.51	87.14	4.82	82.50	7.81	82.81	14.01	86.99	3.50
No	%	5.30	98.49	9.08	42.68	15.38	40.21	9.17	97.26	9.91	28.54
Unsure	%	0.00	---	3.78	50.10	2.12	99.80	8.01	98.45	3.11	41.51
Proportion of households that approached the supplier because of payment difficulties											
Gas	%	0.00	---	4.72	29.01	4.40	37.06	6.03	44.46	4.23	20.43
Electricity	%	0.00	---	5.91	25.12	8.29	27.88	9.23	35.32	6.36	16.73
Water	%	0.00	---	0.59	70.82	1.99	59.57	3.78	58.98	1.38	36.92
Proportion of households that were offered the following help when discussed											
Gas											
Allowed to pay off in installments	%	0.00	---	22.51	53.57	35.24	47.55	37.35	59.46	29.40	30.71
Extended the due date on the bill	%	0.00	---	73.43	18.44	73.61	20.07	81.33	21.47	75.05	11.74
Other (Specify)	%	0.00	---	19.91	63.75	0.00	---	0.00	---	9.79	68.29
No help offered	%	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---

Table 4
Gas Households by Gas Consumption

Feature	Units	Gas Consumption Category									
		0 - 5,000 MJ		5,001 - 20,000 MJ		20,001 - 35,000 MJ		35,001+ MJ		Total	
Electricity											
Allowed to pay off in installments	%	0.00	---	22.71	46.10	25.53	43.71	43.79	43.47	28.05	26.56
Extended the due date on the bill	%	0.00	---	74.05	15.61	79.17	12.95	68.42	27.04	74.91	9.81
Referred me to an emergency relief agency	%	0.00	---	8.56	95.90	0.00	---	0.00	---	3.51	99.31
Other (Specify)	%	0.00	---	7.35	97.19	0.00	---	0.00	---	3.01	99.82
No help offered	%	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
Proportion of households who sought financial help in the last three years	%		---								
		0.00		0.82	72.40	2.03	53.42	1.89	71.40	1.23	37.21
Proportion of households who have had the gas or electricity disconnected or water restricted											
Gas	%	0.00	---	0.31	100.01	0.86	99.55	1.13	99.47	0.55	59.88
Electricity	%	0.00	---	0.00	---	1.25	75.09	2.08	70.24	0.66	52.53
Water	%	0.00	---	0.63	70.66	0.00	---	0.00	---	0.28	70.72
Electricity, Gas and Water Consumption											
Average electricity consumption	kWh	6,413	8.12	6,363	4.27	7,338	4.21	9,290	5.70	7,044	2.61
Average gas consumption	MJ	2,544	8.88	12,604	2.43	26,422	1.30	51,166	3.87	20,851	3.20
Average water consumption	kL	168	13.93	166	4.96	256	3.62	369	5.03	222	3.04
Proportion of households by electricity network											
Energy Australia	%	80.12	7.03	69.58	4.82	60.72	7.03	71.04	7.44	68.52	3.27
Integral Energy	%	19.88	28.34	30.42	11.02	39.28	10.86	28.96	18.24	31.48	7.12
Proportion of households by electricity supplier											
Energy Australia	%	56.99	12.91	50.34	6.83	43.24	9.14	62.81	7.88	50.76	4.44
AGL	%	17.56	32.47	21.68	13.14	20.34	15.80	13.46	26.58	19.64	9.16
Integral Energy	%	18.88	28.39	22.97	12.63	31.19	12.34	18.83	21.88	24.35	8.00
Other	%	0.00	---	0.00	---	0.86	99.55	0.00	---	0.26	99.93
Origin Energy	%	6.57	49.40	3.43	33.35	3.20	39.72	3.22	50.28	3.71	20.95
Jack Green	%	0.00	---	1.59	74.44	1.17	57.67	0.64	99.95	1.14	49.89
Power Direct	%	0.00	---	0.00	---	0.00	---	1.05	99.55	0.15	100.04
Proportion of households by gas supplier											
Energy Australia	%	17.88	36.74	15.27	17.47	18.13	16.89	24.23	17.74	17.68	10.14
AGL	%	82.12	8.00	84.73	3.15	81.87	3.74	75.77	5.67	82.32	2.18
Extent of Retail competition											
Proportion of households that are aware that they can choose their											
Electricity supplier	%	96.96	2.20	95.03	1.52	92.61	2.36	97.57	1.48	94.90	1.03
Gas supplier	%	95.44	2.73	94.97	1.54	90.11	2.81	98.69	0.94	94.09	1.13
Proportion of households that were approached by their original supplier to enter contract											
Electricity supplier	%	50.90	14.84	48.80	7.04	43.70	9.05	60.02	8.31	49.09	4.59
Gas supplier	%	43.93	17.43	42.05	8.05	43.57	9.09	56.01	8.96	44.67	5.01

Table 4
Gas Households by Gas Consumption

Feature	Units	Gas Consumption Category									
		0 - 5,000 MJ		5,001 - 20,000 MJ		20,001 - 35,000 MJ		35,001+ MJ		Total	
Proportion of households that entered a contract with their original supplier											
Electricity supplier	%	45.83	25.38	42.22	11.56	47.67	12.29	42.18	14.97	44.12	7.29
Gas supplier	%	46.18	27.15	33.81	14.85	37.23	15.34	41.26	15.97	37.58	8.80
Proportion of households that were approached by a different supplier to switch											
Electricity supplier	%	64.37	11.37	58.92	5.69	52.13	7.69	57.52	8.66	57.37	3.87
Gas supplier	%	37.69	19.60	37.29	8.91	37.18	10.50	39.56	12.42	37.62	5.81
Proportion of households that switched to a different supplier											
Electricity supplier	%	27.51	27.68	33.56	13.27	33.35	15.74	34.61	18.53	32.82	8.65
Gas supplier	%	10.43	92.63	16.91	24.85	24.41	22.78	20.16	30.71	18.80	15.27
Main reason for entering into contract with original or switching electricity supplier											
It was cheaper	%	53.40	22.16	57.80	9.77	70.38	8.44	70.48	9.66	62.47	5.76
Combined electricity and gas bill offer	%	7.51	70.02	14.99	25.01	7.67	41.44	19.25	28.77	12.58	17.32
Salesperson was persuasive	%	8.37	94.43	5.90	38.00	3.43	74.40	0.00	---	4.70	35.39
Other	%	27.49	40.34	12.15	28.35	10.99	39.99	8.78	53.40	13.53	19.68
Monetary incentive/ discount/ rebate offer	%	8.37	94.43	0.79	100.09	1.56	99.50	0.00	---	1.97	66.19
No reason	%	8.37	94.43	2.68	69.97	1.08	99.99	0.00	---	2.66	54.97
Main reason for entering into contract with original or switching gas supplier											
It was cheaper	%	45.03	41.78	43.77	17.03	69.21	10.49	56.58	15.66	54.03	8.81
Combined electricity and gas bill offer	%	6.28	101.26	26.87	24.54	9.77	44.97	28.48	27.10	19.37	17.83
Salesperson was persuasive	%	16.23	90.83	5.13	58.59	1.57	100.00	0.00	---	4.49	51.77
Other	%	32.46	56.68	19.07	29.86	17.87	35.68	12.87	50.95	19.24	20.76
Monetary incentive/ discount/ rebate offer	%	16.23	90.83	0.00	---	3.90	71.00	0.00	---	3.21	66.90
No reason	%	16.23	90.83	2.41	99.08	0.00	---	2.15	99.82	3.34	66.14
Main reason for not entering into contract with original or switching electricity supplier											
It was no cheaper	%	17.90	40.64	11.88	26.95	16.85	25.99	16.70	30.70	14.79	15.25
I was happy with my current supplier	%	13.57	43.08	37.67	12.27	47.22	12.35	24.32	23.59	34.61	8.55
It was too much trouble to switch	%	12.85	43.46	8.95	28.38	8.08	39.76	23.19	24.15	11.38	16.22
Did not want to be locked into a contract	%	18.50	43.83	20.82	17.23	12.14	28.92	20.05	25.76	18.08	12.92
Other	%	20.24	37.14	18.00	18.90	12.27	31.50	15.75	31.54	16.51	13.68
Have not decided yet/ too busy to decide	%	5.85	96.07	0.00	---	1.80	99.03	0.00	---	1.35	73.25
I don't trust them	%	5.85	96.07	2.11	60.17	0.82	100.02	0.00	---	2.03	52.10
I'm only renting/ moving soon	%	5.25	70.33	0.58	100.02	0.82	100.02	0.00	---	1.26	51.82

Table 4
Gas Households by Gas Consumption

Feature	Units	Gas Consumption Category									
		0 - 5,000 MJ		5,001 - 20,000 MJ		20,001 - 35,000 MJ		35,001+ MJ		Total	
Main reason for not entering into contract with original or switching gas supplier											
It was no cheaper	%	13.89	58.89	11.00	28.12	15.26	28.37	15.44	35.84	13.30	17.20
I was happy with my current supplier	%	24.22	35.04	32.06	15.41	39.77	15.08	24.30	24.83	32.05	9.78
It was too much trouble to switch	%	6.06	69.90	12.48	29.33	8.66	39.65	21.01	26.13	11.84	17.92
Did not want to be locked into a contract	%	20.92	43.29	23.97	17.77	22.98	21.14	18.06	29.57	22.36	12.13
Other	%	24.05	38.83	19.86	19.90	12.45	31.68	21.19	29.12	18.48	13.94
I don't trust them	%	10.86	71.91	0.63	100.09	0.87	100.04	0.00	---	1.97	59.15
Hot water systems											
Proportion of households where the main energy source for hot water is											
Electric	%	63.48	11.83	29.98	10.98	12.60	21.81	8.74	31.83	25.93	8.01
Gas	%	31.96	23.31	68.47	4.84	86.95	3.19	88.59	3.52	72.33	2.91
Other	%	4.56	57.13	1.55	50.65	0.44	99.96	2.67	58.03	1.74	30.67
Proportion of households with an electric system with the following type of system											
Off Peak	%	56.52	15.55	62.88	10.41	38.44	29.52	53.45	29.24	57.08	8.15
Standard electric	%	33.23	24.95	26.93	22.35	49.29	23.85	14.20	67.94	31.36	13.94
Don't know	%	10.25	60.11	10.19	42.73	12.27	65.98	32.36	43.77	11.56	27.56
Household appliances											
Main energy sources for cooking											
Gas only	%	77.47	8.37	66.91	4.92	75.26	4.43	74.45	5.69	71.74	2.84
Electricity only	%	8.98	51.83	14.71	17.10	9.50	23.07	12.82	24.99	12.19	12.16
Both electricity and gas	%	13.54	38.29	18.38	14.85	15.24	18.24	12.73	25.18	16.07	10.33
Proportion of households with the following appliances											
Clothes dryer	%	54.22	13.90	57.54	5.90	68.27	5.61	83.79	4.40	63.98	3.42
Dishwasher	%	28.08	25.26	44.19	7.78	58.73	6.72	78.23	5.58	51.29	4.40
Washing machine	%	94.55	4.30	99.37	0.45	99.62	0.38	98.21	1.80	98.70	0.62
Microwave	%	82.33	6.74	88.34	2.31	90.89	2.47	97.54	1.49	89.64	1.49
Second refrigerator	%	27.76	23.62	43.89	7.82	50.82	7.90	64.73	7.41	46.88	4.80
Proportion of households with the following											
Bath	%	67.31	10.76	83.39	3.02	90.49	2.45	83.28	4.75	83.53	2.04
Bath with spa jets	%	8.63	43.79	9.45	21.81	8.19	27.92	19.01	21.03	10.30	13.14
Spa	%	1.52	99.71	2.97	35.77	6.32	31.90	7.73	33.18	4.45	19.49
Swimming Pool	%	8.54	52.86	11.34	20.94	14.14	19.41	27.54	16.29	14.08	11.21
Sauna	%	0.00	---	0.49	99.84	2.02	59.79	1.31	70.58	1.00	44.05

Table 4
Gas Households by Gas Consumption

Feature	Units	Gas Consumption Category									
		0 - 5,000 MJ		5,001 - 20,000 MJ		20,001 - 35,000 MJ		35,001+ MJ		Total	
Heating											
Proportion of households with the following types of room heating											
Reverse cycle air conditioning	%	30.60	22.94	36.50	9.11	45.66	8.81	34.09	14.32	38.18	5.77
Electric (not air conditioning)	%	63.94	11.58	44.59	7.67	39.50	10.02	29.93	15.52	43.40	5.17
Gas	%	24.83	25.18	57.01	5.93	64.85	5.96	76.74	5.75	58.16	3.86
Oil	%	9.38	57.45	4.66	27.79	4.76	34.26	2.72	58.93	5.00	20.68
Wood, Solid Fuel	%	0.00	---	2.93	48.10	6.13	30.89	3.01	58.47	3.54	24.81
Kerosene	%	0.00	---	0.51	99.82	0.00	---	0.00	---	0.22	99.96
Ducted air (ie central heating in multi-dwelling unit)	%	0.00	---	3.06	40.21	2.94	50.95	4.96	37.64	2.92	25.77
Other heating	%	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
No heating	%	7.46	59.73	1.46	51.96	1.69	61.12	0.64	99.95	2.15	33.86
Proportion of households with more than one heating source who use the following heating source most often											
Reverse cycle air conditioning	%	25.50	26.50	18.93	14.04	19.57	16.84	18.27	22.96	19.83	9.26
Electric (not air conditioning)	%	39.80	18.34	28.69	10.83	16.34	18.23	9.86	32.69	23.75	8.19
Gas	%	21.79	27.63	44.80	7.66	55.71	7.20	65.62	7.47	48.14	4.67
Oil	%	5.45	74.59	3.61	31.88	2.59	46.92	0.64	99.95	3.12	25.84
Wood, Solid Fuel	%	0.00	---	0.00	---	2.41	52.53	0.00	---	0.72	53.02
Kerosene	%	0.00	---	2.51	44.17	1.69	70.04	4.96	37.64	2.30	28.60
Ducted air (ie central heating in multi-dwelling unit)	%	7.46	59.73	1.46	51.96	1.69	61.12	0.64	99.95	2.15	33.86
Proportion of households that apart from electric fans, have any air conditioning or air cooling in their dwelling?	%	37.66	19.40	51.64	6.66	61.86	6.17	55.22	9.01	53.48	4.20
Proportion of households without an air conditioner that are considering installing an air conditioner	%	11.27	59.70	15.06	23.01	13.02	34.55	32.48	21.03	16.27	14.92
For those households with an air conditioner, are you planning to upgrade your current air conditioning system?	%	15.77	66.26	6.29	33.50	7.83	37.42	12.62	39.36	8.54	21.06
How often use air conditioner during summer											
Only on very hot days	%	36.32	30.73	71.02	6.01	68.14	7.24	59.19	11.56	65.35	4.52
On most hot days	%	38.54	31.16	20.72	18.15	24.80	18.40	34.26	19.21	25.60	10.47
On most days	%	10.66	67.40	4.95	43.62	5.19	46.10	6.55	49.81	5.75	25.38
Not applicable/ do not use	%	14.48	69.68	3.31	49.97	1.88	73.93	0.00	---	3.30	38.36
How often use air conditioner during winter											
Only on very cold days	%	17.58	47.39	47.18	10.09	48.78	10.86	31.04	20.74	42.88	7.14
On most cold days	%	43.65	28.49	14.95	22.33	17.49	22.38	15.22	31.89	18.33	13.40
On most days	%	14.70	54.71	3.95	44.86	1.25	99.48	6.19	50.46	4.26	28.43
Not applicable/ do not use	%	24.07	40.67	33.92	13.28	32.48	15.22	47.55	14.84	34.53	8.45

Table 4
Gas Households by Gas Consumption

Feature	Units	Gas Consumption Category									
		0 - 5,000 MJ		5,001 - 20,000 MJ		20,001 - 35,000 MJ		35,001+ MJ		Total	
Would switch air conditioner off if price were 25% higher											
Yes, for short periods	%	32.15	33.42	25.05	17.26	22.52	19.32	21.26	28.22	24.24	11.09
Yes, for most of the day	%	9.37	68.91	11.01	26.01	13.15	25.79	16.81	31.80	12.44	15.62
Yes, all day	%	0.00	---	10.94	26.79	12.38	29.10	4.62	74.04	9.59	19.24
No	%	58.48	19.93	46.28	10.23	46.03	11.50	50.60	13.92	47.86	6.46
Don't know	%	0.00	---	6.73	34.79	5.92	42.22	6.71	49.67	5.87	23.98
Energy and Water Efficiency											
Proportion of households that received energy efficient packs	%	61.51	11.40	53.91	6.32	48.82	8.22	46.99	10.74	52.36	4.29
Average number of energy efficient light bulbs	No.	7.59	16.33	6.55	4.89	6.65	5.23	6.03	7.31	6.66	3.86
Average number of energy efficient light bulbs installed	No.	3.11	17.65	3.27	9.19	3.07	9.62	2.79	12.41	3.13	5.86
Proportion of households that describe the light bulbs that have not been installed as											
Plan to install some of them	%	2.62	99.95	16.90	25.37	8.18	41.25	5.68	71.15	10.85	21.04
Plan to install all of them eventually	%	87.97	8.23	62.04	8.80	72.17	8.08	80.87	7.94	71.38	4.69
Do not plan to install them	%	2.62	99.95	17.34	22.50	16.11	29.43	11.33	43.54	13.73	16.82
Don't know	%	6.78	95.68	3.72	75.39	3.54	72.03	2.11	99.70	4.04	46.09
Proportion of households that received the following number of water-saving showerheads											
One	%	38.96	26.17	38.10	12.32	34.48	15.80	40.71	18.37	37.54	8.36
Two	%	6.39	95.85	6.01	43.67	4.13	59.07	3.65	71.43	5.25	31.72
Three or more	%	2.47	99.87	0.00	---	0.00	---	0.00	---	0.35	100.03
None	%	52.18	20.01	55.89	8.64	59.68	9.38	55.64	13.48	56.38	5.71
Don't know	%	0.00	---	0.00	---	1.71	70.67	0.00	---	0.48	70.94
Proportion of households that installed at least one water-saving showerhead	%	60.78	24.19	59.50	12.09	57.76	16.22	65.35	17.95	60.02	8.21
Proportion of households that installed at least one water-saving showerhead but have removed or are planning to remove it	%	0.00	---	11.79	37.30	6.17	72.51	0.00	---	7.01	33.72
Proportion of households that are not planning to install water-saving showerheads	%	18.53	68.97	19.03	31.49	15.66	40.07	17.60	55.10	17.93	22.25

Table 5
All Households by Income

Feature	Units	Income Category										Refused to Indicate Income		Total	
		< \$31,200		\$31,201 - \$52,000		\$52,001 - \$104,000		> \$104,000							
Estimated population	No.	426,799	---	269,937	---	419,159	---	225,730	---	180,949	---	1,522,574	---		
Proportion of households	%	28.03	---	17.73	---	27.53	---	14.83	---	11.88	---	100.00	---		
Sample size	No.	921	---	446	---	616	---	324	---	324	---	2,631	---		
Demographic characteristics															
Region															
Sydney	%	85.26	1.34	88.03	1.75	90.00	1.14	94.68	1.09	89.57	1.64	88.96	0.63		
Blue Mountains	%	1.94	17.92	1.95	21.92	1.60	25.73	1.78	33.21	1.57	33.29	1.78	11.18		
Illawarra	%	12.80	8.60	10.02	14.93	8.40	11.29	3.53	24.04	8.86	15.57	9.25	5.73		
Dwelling type															
Separate House	%	79.64	1.68	81.94	2.24	82.67	1.88	81.89	2.65	84.49	2.42	81.79	0.94		
Dwelling/Non-dwelling combined and Semi-detached	%	11.10	9.39	8.12	16.06	11.75	11.30	13.03	14.55	10.51	16.49	10.96	5.73		
Low rise flats/units	%	4.52	15.26	5.51	19.85	3.19	22.64	2.22	37.37	3.05	31.40	3.82	9.92		
Flats (3 storeys and above)	%	4.74	14.88	4.44	22.06	2.40	26.40	2.86	32.85	1.95	40.42	3.43	10.43		
Land size (houses only)															
Small (Less than 500 square metres)	%	22.92	6.80	17.44	11.53	21.09	8.69	22.59	11.41	20.90	11.97	21.14	4.26		
Medium (500 to 900 square metres)	%	65.97	2.66	69.33	3.50	67.40	3.10	59.37	5.10	61.04	4.87	65.38	1.60		
Large (More than 900 square metres)	%	11.10	10.36	13.24	13.25	11.51	12.17	18.04	13.14	18.06	12.89	13.48	5.54		
Household structure															
Single person (young, middle and mature)	%	37.59	4.31	16.44	10.95	7.27	14.66	7.37	20.17	11.51	16.24	18.00	4.13		
Single parent (young, middle and mature family)	%	17.09	7.37	11.52	13.57	7.65	14.49	3.74	28.60	10.95	16.59	10.81	5.67		
Couple with children (young, middle and mature family)	%	18.04	7.13	43.39	5.57	62.29	3.21	69.46	3.77	52.33	5.57	46.31	2.19		
Couple no children (young and mature)	%	27.28	5.45	28.65	7.69	22.79	7.59	19.43	11.57	25.21	9.99	24.88	3.50		
Ownership status															
Owned fully/ Fully paid off	%	54.26	3.04	48.85	4.90	42.33	4.75	39.26	6.96	60.00	4.60	48.47	2.06		
Buying/ Paying off home	%	7.83	11.36	20.77	9.32	38.41	5.15	45.93	6.08	23.01	10.30	25.99	3.45		
Renting - Private	%	14.08	8.19	23.91	8.56	18.12	8.70	14.17	13.84	16.01	12.92	17.18	4.41		
Renting - Public/Housing Commission	%	23.82	5.94	6.48	18.28	1.14	37.89	0.64	70.49	0.99	57.45	8.36	6.09		
Average number of times moved in last three year	No.	0.22	9.97	0.30	11.02	0.33	8.95	0.34	11.78	0.27	14.03	0.29	4.84		
Average number of bedrooms	No.	2.88	0.93	3.22	1.33	3.39	1.05	3.67	1.61	3.34	1.52	3.25	0.58		
Average number of people in household	No.	2.28	1.98	3.12	2.48	3.36	1.62	3.56	2.15	3.21	2.53	3.03	0.98		
Average number of people aged 15 and over	No.	1.84	1.63	2.34	2.19	2.54	1.56	2.70	2.33	2.57	2.53	2.34	0.91		
Average number of people aged less than 15 year	No.	0.44	7.28	0.78	7.49	0.82	4.53	0.86	7.03	0.64	8.45	0.69	3.16		
Average number of people who spend most days of the week at home	No.	1.63	2.33	1.83	4.04	1.75	3.58	1.46	5.49	1.57	5.05	1.67	1.72		

Table 5
All Households by Income

Feature	Units	Income Category								Refused to Indicate Income		Total	
		< \$31,200		\$31,201 - \$52,000		\$52,001 - \$104,000		> \$104,000					
Income, Concession and Payment Characteristics													
Concession cards													
Has a concession card	%	75.12	1.90	27.47	7.78	8.71	13.21	3.69	27.69	27.98	8.93	32.20	2.78
Has a pensioners concession card	%	70.05	2.16	23.31	8.69	6.83	15.14	3.06	30.26	26.51	9.27	29.25	2.96
Has a Veterans' Affairs gold health card	%	3.97	16.33	2.06	32.99	1.59	31.72	0.64	70.49	1.30	49.67	2.16	12.88
Has a concession card but not sure what it is called	%	2.09	22.70	2.33	31.27	0.80	45.04	0.00	---	0.82	59.41	1.32	16.61
Awareness of energy concessions for concession card holder													
Yes	%	93.17	1.04	87.69	3.44	88.21	5.12	91.39	8.98	96.52	2.04	92.29	0.96
No	%	5.66	15.60	10.23	27.36	5.89	55.99	8.61	95.30	2.32	69.88	6.07	13.03
Unsure	%	1.18	35.16	2.08	60.91	5.89	55.99	0.00	---	1.16	99.44	1.64	26.31
Awareness of water concessions for concession card holder													
Yes	%	84.58	1.63	82.70	4.19	82.32	6.48	91.39	8.98	90.72	3.44	84.88	1.38
No	%	9.32	11.92	11.81	25.11	9.82	42.43	8.61	95.30	6.96	39.32	9.48	10.16
Unsure	%	6.10	14.99	5.49	37.79	7.86	47.96	0.00	---	2.32	69.88	5.64	13.33
Claims energy concession if aware													
Yes	%	93.05	1.08	92.13	2.90	84.49	6.12	78.25	14.79	89.18	3.81	91.64	1.04
No	%	4.74	17.65	5.97	39.60	15.51	33.34	12.33	68.07	8.41	36.10	6.21	13.41
Unsure	%	2.21	26.44	1.90	70.08	0.00	---	9.42	94.80	2.40	69.85	2.15	22.93
Claims water concession if aware													
Yes	%	85.20	1.73	84.52	4.35	76.22	8.39	87.67	9.57	82.87	5.05	84.24	1.53
No	%	9.84	12.54	9.35	31.74	23.78	26.87	12.33	68.08	11.12	31.52	10.96	10.17
Unsure	%	4.96	18.17	6.13	39.59	0.00	---	0.00	---	6.01	43.71	4.80	15.61
Renters who pay quarterly water usage charges	%	78.10	2.85	52.92	8.22	58.76	7.82	56.81	12.77	59.80	11.22	65.50	2.84
Renters who pay quarterly water usage charges directly to the water supplier	%	8.20	20.45	7.14	43.13	18.15	25.54	19.00	40.21	38.79	22.45	12.87	12.53
Proportion of households that approached the supplier because of payment difficulties:													
Gas	%	9.60	15.51	9.58	22.42	1.48	45.37	1.39	57.35	2.04	50.32	4.72	12.09
Electricity	%	15.16	7.83	11.23	13.43	6.65	15.10	2.86	32.85	5.50	23.16	9.15	6.07
Water	%	3.36	17.71	2.97	27.32	1.75	29.23	0.95	57.46	1.95	40.42	2.33	12.48
Proportion of households that were offered the following help when discussed													
Gas													
Allowed to pay off in installment	%	28.52	25.94	16.58	53.16	46.74	49.47	0.00	---	50.00	51.15	25.84	20.95
Extended the due date on the bill	%	66.12	11.74	77.90	12.63	76.63	26.45	100.00	0.00	50.00	51.15	71.83	7.69
Other (Specify)	%	5.36	69.29	11.05	67.21	0.00	---	0.00	---	0.00	---	6.05	49.27
No help offered	%	8.06	55.75	5.53	97.94	0.00	---	0.00	---	0.00	---	5.65	49.42

Table 5
All Households by Income

Feature	Units	Income Category								Refused to Indicate Income		Total	
		< \$31,200		\$31,201 - \$52,000		\$52,001 - \$104,000		> \$104,000					
Electricity													
Allowed to pay off in installment	%	33.83	11.91	16.49	32.34	16.24	35.25	11.11	94.46	33.66	33.52	25.47	10.67
Extended the due date on the bil	%	65.04	6.24	79.44	7.30	88.02	5.78	88.89	11.81	60.44	19.33	73.55	3.74
Referred me to an emergency relief agency	%	2.19	57.21	6.11	56.05	0.00	---	0.00	---	5.90	97.07	2.77	37.64
Other (Specify)	%	0.72	99.84	0.00	---	0.00	---	0.00	---	0.00	---	0.33	100.06
No help offered	%	3.63	43.98	2.04	99.17	0.00	---	0.00	---	0.00	---	2.13	40.77
Water													
Allowed to pay off in installment	%	26.26	30.53	15.38	65.55	9.76	95.15	0.00	---	33.33	58.18	19.48	25.48
Extended the due date on the bil	%	54.16	16.71	76.92	15.31	90.24	10.30	100.00	0.00	66.67	29.09	70.83	8.00
Referred me to an emergency relief agency	%	3.28	99.09	0.00	---	0.00	---	0.00	---	0.00	---	1.33	100.24
No help offered	%	16.30	41.22	7.69	96.82	0.00	---	0.00	---	0.00	---	8.35	39.87
Proportion of households who sought financial help in the last three years	%	6.56	12.50	3.50	25.38	0.86	44.53	0.00	---	0.97	57.46	2.81	10.99
Proportion of households who have had the gas or electricity disconnected or water restricted													
Gas	%	0.55	44.61	0.69	57.55	0.00	---	0.00	---	0.17	100.00	0.30	33.87
Electricity	%	1.76	24.78	2.10	33.00	0.34	70.60	0.32	99.86	0.65	70.49	1.08	18.42
Water	%	0.22	70.65	0.71	57.59	0.17	99.93	0.32	99.86	0.32	99.85	0.32	35.71
Electricity, Gas and Water Consumption													
Average electricity consumption	kWh	6,655	1.80	8,010	2.62	8,446	2.28	9,848	3.19	7,920	3.15	8,009	1.18
Average gas consumption	MJ	17,818	4.75	21,566	6.27	25,306	5.53	30,753	6.54	28,845	7.92	24,532	2.94
Average water consumption	kL	186	2.27	237	3.14	240	2.52	277	3.35	249	4.51	231	1.37
Do you use gas, either mains or cylinder gas, for your regular household usage?													
Yes, mains	%	42.32	3.86	42.02	5.61	49.25	4.13	67.66	3.86	53.48	5.22	49.26	2.02
Yes, cylinder (large, not portable)	%	3.27	17.64	3.87	23.59	4.99	17.29	3.16	30.16	4.32	24.92	3.96	9.63
No	%	54.41	3.03	54.11	4.40	45.76	4.43	29.19	8.71	42.20	6.56	46.78	2.12
Proportion of households by electricity network													
Energy Australia	%	49.59	3.58	56.07	4.50	54.33	4.09	71.23	3.79	65.75	4.47	57.10	1.86
Integral Energy	%	50.41	3.53	43.93	5.75	45.67	4.87	28.77	9.39	34.25	8.58	42.90	2.48
Proportion of households by electricity supplier													
Energy Australia	%	40.30	4.03	45.80	5.20	43.53	4.64	60.12	4.53	55.28	5.02	46.88	2.12
AGL	%	14.57	7.98	9.15	14.98	13.54	10.32	11.81	15.17	9.59	17.40	12.32	5.29
Integral Energy	%	36.35	4.37	34.93	6.52	36.33	5.34	24.06	9.83	29.45	8.50	33.45	2.78
Don't Know / Can't recall / Unsure	%	0.55	44.61	0.00	---	0.00	---	0.32	99.86	0.00	---	0.20	41.46
Other	%	0.11	99.96	0.00	---	0.00	---	0.64	70.49	0.32	99.85	0.16	50.68
Sydney Electricity	%	0.00	---	0.00	---	0.17	99.93	0.00	---	0.00	---	0.05	100.00
Prospect Electricity	%	0.11	99.96	0.00	---	0.00	---	0.00	---	0.00	---	0.03	100.00
Origin Energy	%	5.63	13.60	6.40	18.29	4.05	20.04	2.54	34.90	3.57	29.60	4.63	8.98
Jack Green	%	1.38	27.74	3.27	26.30	1.59	31.72	0.52	72.43	0.50	73.71	1.54	15.82
Tru Energy	%	0.88	35.20	0.46	70.56	0.79	45.14	0.00	---	0.97	57.46	0.66	23.88
Power Direct	%	0.11	99.96	0.00	---	0.00	---	0.00	---	0.32	99.85	0.07	71.13

Table 5
All Households by Income

Feature	Units	Income Category								Refused to Indicate Income		Total	
		< \$31,200		\$31,201 - \$52,000		\$52,001 - \$104,000		> \$104,000					
Proportion of households by gas supplier													
Energy Australia	%	19.93	10.21	21.33	14.16	21.36	11.10	26.43	11.37	17.98	16.39	21.61	5.48
AGL	%	78.51	2.66	77.59	3.96	76.90	3.17	72.16	4.23	80.20	3.82	76.85	1.58
Integral Energy	%	0.52	70.56	0.00	---	0.00	---	0.47	99.80	0.00	---	0.22	59.01
Don't Know / Can't recall/ Unsure	%	0.00	---	0.00	---	0.69	70.48	0.00	---	0.00	---	0.19	70.66
Other	%	0.26	99.91	0.00	---	0.35	99.86	0.47	99.80	0.00	---	0.25	58.63
Origin Energy	%	0.26	99.91	0.54	99.77	0.00	---	0.00	---	0.00	---	0.15	71.32
Jack Green	%	0.00	---	0.00	---	0.00	---	0.00	---	0.61	99.73	0.08	100.00
Tru Energy	%	0.52	70.55	0.54	99.77	0.69	70.48	0.47	99.80	1.21	70.29	0.65	35.69
Extent of Retail competition													
Proportion of households that are aware that they can choose their													
Electricity supplier	%	88.47	1.19	89.26	1.66	94.49	0.96	96.31	1.09	91.74	1.65	91.82	0.58
Gas supplier	%	91.90	1.50	89.93	2.46	94.00	1.44	97.18	1.17	93.61	2.01	93.48	0.74
Proportion of households that were approached by their original supplier to enter contract													
Electricity supplier	%	36.28	4.38	44.38	5.35	46.03	4.40	53.13	5.24	49.47	5.66	44.47	2.23
Gas supplier	%	36.58	6.69	41.58	8.73	41.83	6.83	47.87	7.09	47.91	8.00	42.54	3.33
Proportion of households that entered a contract with their original supplier													
Electricity supplier	%	56.17	4.85	57.19	6.20	57.26	5.19	54.22	7.08	45.68	8.76	54.93	2.73
Gas supplier	%	54.61	7.66	52.35	10.87	43.13	10.30	46.38	10.62	29.43	17.26	45.63	4.82
Proportion of households that were approached by a different supplier to switch													
Electricity supplier	%	53.12	3.11	49.87	4.79	57.99	3.46	52.55	5.30	49.58	5.65	53.38	1.86
Gas supplier	%	35.32	6.88	29.26	11.50	41.32	6.90	32.70	9.78	41.85	9.04	36.36	3.79
Proportion of households that switched to a different supplier													
Electricity supplier	%	39.19	5.66	32.23	9.80	33.84	7.50	33.20	10.96	26.84	13.18	34.20	3.79
Gas supplier	%	24.99	14.86	23.03	25.29	30.42	13.64	31.60	17.64	20.64	23.26	27.01	7.88
Main reason for entering into contract with original or switching electricity supplier													
It was cheaper	%	66.32	3.75	61.58	6.01	64.07	4.65	66.84	5.88	67.80	6.51	65.09	2.30
Combined electricity and gas bill offered	%	8.69	17.01	9.20	23.64	8.78	20.03	10.52	24.43	6.87	34.60	8.92	10.03
Salesperson was persuasive	%	5.05	22.59	4.66	34.54	3.94	30.99	2.10	57.15	6.11	36.88	4.29	14.60
Other	%	11.31	14.75	15.14	17.99	15.34	14.62	8.88	26.62	10.03	28.58	12.61	8.29
Using green electricity/ better for the environment	%	3.91	26.21	3.55	40.12	5.11	26.37	7.45	29.22	1.89	60.17	4.57	14.42
I am happy with my current electricity supplier	%	4.73	23.68	5.88	30.69	2.76	37.28	4.21	39.97	7.30	34.03	4.53	14.31
Main reason for entering into contract with original or switching gas supplier													
It was cheaper	%	52.50	9.06	48.68	14.51	55.22	9.88	55.65	10.77	63.71	12.33	54.55	4.95
Combined electricity and gas bill offered	%	22.93	17.39	28.64	22.18	19.73	22.34	21.97	22.82	10.97	47.17	21.45	10.39
Salesperson was persuasive	%	4.54	43.76	5.97	56.07	1.23	99.50	1.46	99.40	7.40	56.44	3.42	27.76
Other supplier offered better service	%	3.62	49.16	0.00	---	4.93	48.78	1.46	99.40	2.74	98.72	2.86	31.80
Other	%	10.06	28.62	12.74	36.36	16.41	24.67	13.59	29.90	8.22	55.33	12.84	14.20
I am happy with my current electricity supplier	%	6.35	36.63	3.98	69.39	2.47	69.90	5.86	48.57	6.96	57.77	4.88	23.57

Table 5
All Households by Income

Feature	Units	Income Category								Refused to Indicate Income	Total		
		< \$31,200		\$31,201 - \$52,000		\$52,001 - \$104,000		> \$104,000					
Main reason for not entering into contract with original or switching electricity supplie													
It was no cheaper	%	11.82	14.03	16.62	15.75	14.35	14.21	13.63	20.27	16.82	17.64	14.32	7.21
I was happy with my current supplie	%	46.06	5.56	41.33	8.40	35.06	7.87	28.93	12.52	32.79	11.29	37.66	3.75
It was too much trouble to switc	%	7.95	17.52	9.56	21.33	13.79	14.58	16.22	18.29	10.07	23.77	11.49	8.29
Did not want to be locked into a contrac	%	14.77	12.30	13.98	17.46	14.93	13.86	22.22	14.98	22.21	14.80	16.80	6.54
Other	%	16.49	11.50	15.02	16.76	16.66	13.00	13.81	19.93	16.18	18.05	15.82	6.75
I'm already in a contrac	%	2.92	29.72	3.48	37.15	5.22	25.12	5.19	34.43	1.92	57.19	3.91	14.96
Main reason for not entering into contract with original or switching gas supplier													
It was no cheaper	%	7.95	28.95	17.05	26.31	12.97	23.39	15.61	25.49	13.19	27.28	13.04	11.80
I was happy with my current supplie	%	45.49	9.29	37.48	15.45	28.62	13.99	21.95	20.48	18.54	22.18	30.51	6.71
It was too much trouble to switch	%	6.51	32.25	11.10	32.84	18.17	19.01	18.01	23.39	19.05	22.03	14.80	10.98
Did not want to be locked into a contrac	%	19.31	17.36	11.51	32.78	18.74	18.59	26.42	18.29	28.09	17.10	20.87	8.78
Other	%	17.83	18.22	22.87	21.96	21.49	17.15	18.01	23.39	19.95	21.64	19.97	9.07
Wanted to have all bills in on	%	2.91	49.31	0.00	---	0.00	---	0.00	---	1.17	99.49	0.81	44.82
Hot water systems													
Proportion of households where the main energy source for hot water is													
Electric	%	68.04	2.27	64.50	3.55	59.21	3.38	45.64	6.09	58.77	4.70	60.56	1.61
Gas	%	29.58	5.11	33.19	6.78	37.94	5.20	51.19	5.45	37.53	7.24	36.67	2.63
Other	%	2.27	21.67	2.08	33.00	2.85	23.98	3.18	31.11	3.38	29.87	2.66	12.18
Proportion of households with an electric system with the following type of system													
Off Peak	%	65.99	2.84	65.62	4.26	64.10	3.88	65.73	5.86	54.59	6.49	64.04	1.87
Standard electric	%	26.49	6.59	26.77	9.74	27.43	8.43	24.91	14.08	34.67	9.80	27.58	4.05
Don t know	%	7.51	13.91	7.61	20.50	8.48	17.20	9.36	25.42	10.75	20.42	8.38	8.32
Household appliances													
Main energy sources for cooking													
Gas only	%	31.54	4.87	32.84	6.83	35.05	5.53	42.84	6.45	38.80	7.04	35.27	2.70
Electricity only	%	63.65	2.50	61.40	3.79	56.02	3.60	38.87	7.00	53.61	5.21	56.28	1.76
Both electricity and gas	%	4.80	14.74	5.76	19.42	8.94	12.97	18.30	11.81	7.59	19.68	8.44	6.73
Average number of:													
Single flush toilets	No.	0.60	3.96	0.62	6.28	0.53	6.25	0.52	8.75	0.53	8.73	0.57	2.81
Dual flush toilets	No.	0.90	3.04	1.19	4.11	1.42	3.02	1.72	3.59	1.40	4.17	1.28	1.63
Indoor showers	No.	1.23	1.29	1.42	2.08	1.57	2.08	1.86	2.23	1.61	2.55	1.50	0.96
Proportion of households with the following appliance													
Clothes dryer	%	49.00	3.37	60.86	3.83	67.33	2.83	79.80	2.81	62.09	4.38	62.27	1.54
Dishwasher	%	22.32	6.16	37.80	6.13	53.61	3.78	75.48	3.18	50.06	5.59	44.86	2.22
Washing machine	%	97.84	0.49	97.53	0.74	98.97	0.42	99.36	0.45	96.75	1.04	98.19	0.26
Microwave	%	90.42	1.07	93.02	1.28	95.95	0.85	94.92	1.30	89.86	1.90	93.01	0.53
Second refrigerator	%	38.87	4.14	49.77	4.80	48.36	4.20	53.69	5.19	52.20	5.36	47.19	2.11

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		< \$31,200		\$31,201 - \$52,000		\$52,001 - \$104,000		> \$104,000					
Proportion of households with the followin													
Bath	%	81.88	1.56	86.15	1.92	86.63	1.59	84.66	2.39	84.47	2.39	84.66	0.84
Bath with spa jets	%	3.21	18.08	6.54	17.99	10.51	11.73	10.58	16.27	9.37	17.32	7.64	7.06
Spa	%	1.98	23.34	4.78	21.16	4.43	18.47	6.13	21.81	6.30	21.73	4.28	9.53
Swimming Pool	%	5.38	13.75	13.03	12.39	15.42	9.49	25.06	9.66	16.81	12.55	13.77	5.11
Sauna	%	0.22	70.65	0.25	99.88	0.80	45.04	0.95	57.46	0.32	99.85	0.51	29.18
Heating													
Proportion of households with the following types of room heating													
Reverse cycle air conditioning	%	40.66	3.99	44.67	5.32	53.98	3.75	48.92	5.71	40.38	6.81	46.23	2.15
Electric (not air conditioning)	%	52.11	3.17	53.23	4.48	45.31	4.47	41.45	6.64	43.62	6.37	47.85	2.08
Gas	%	24.95	5.71	25.47	8.17	33.45	5.70	46.70	5.96	39.17	6.95	32.30	2.89
Oil	%	5.42	13.81	7.89	16.31	8.61	13.40	10.37	16.50	6.39	21.67	7.59	7.10
Wood, Solid Fuel	%	3.11	18.20	7.35	16.65	7.26	14.39	8.55	18.21	6.09	21.95	6.16	7.86
Kerosene	%	0.66	40.70	0.46	70.56	0.34	70.60	0.00	---	0.00	---	0.36	32.11
Ducted air (ie central heating in multi-dwelling unit)	%	1.23	29.13	3.18	26.04	3.98	20.10	5.93	22.32	0.97	57.46	3.00	11.75
Other heating	%	0.17	73.15	0.23	99.90	0.17	99.93	0.00	---	0.00	---	0.14	52.61
No heating	%	6.56	12.50	2.52	29.77	1.88	28.99	0.95	57.46	3.47	29.74	3.36	10.16
Proportion of households with more than one heating source who use the following heating source most often													
Reverse cycle air conditioning	%	26.72	5.48	29.13	7.46	32.49	5.88	26.51	9.27	26.38	9.39	28.66	3.15
Electric (not air conditioning)	%	39.44	4.10	36.62	6.29	26.48	6.79	17.25	12.28	28.85	8.84	30.82	2.96
Gas	%	20.12	6.55	20.09	9.53	27.21	6.60	38.79	7.01	34.40	7.68	26.53	3.32
Oil	%	3.70	16.88	5.74	19.42	4.73	18.48	6.88	20.63	2.92	32.83	4.72	9.12
Wood, Solid Fuel	%	1.90	23.16	4.09	22.91	4.26	19.08	4.34	26.25	3.00	31.61	3.43	10.69
Kerosene	%	0.55	44.61	0.23	99.90	0.17	99.93	0.00	---	0.00	---	0.24	38.34
Ducted air (ie central heating in multi-dwelling unit)	%	0.90	33.85	1.58	36.73	2.79	24.09	5.29	23.69	0.97	57.46	2.20	13.78
Proportion of households that apart from electric fans, have any air conditioning or air cooling in their dwelling													
	%	51.71	3.19	57.11	4.14	65.08	2.97	59.51	4.61	53.89	5.18	57.76	1.70
Proportion of households without an air conditioner that are considering installing an air conditioner													
	%	10.06	14.20	12.80	18.97	18.40	14.31	18.83	18.36	21.18	15.97	15.14	7.27
For those households with an air conditioner, are you planning to upgrade your current air conditioning system													
	%	8.31	15.33	10.89	18.17	9.63	15.52	9.08	23.11	8.43	25.55	9.30	8.31
How often use air conditioner during summer													
Only on very hot days	%	72.34	2.85	70.29	4.11	65.50	3.67	55.94	6.42	65.09	5.60	66.55	1.88
On most hot days	%	19.98	9.21	19.26	12.94	27.06	8.28	35.37	9.79	25.82	12.96	25.05	4.60
On most days	%	3.62	23.82	8.08	21.44	6.65	19.04	7.09	26.01	4.04	37.26	5.92	10.72
Not applicable/ do not use	%	4.05	22.48	2.37	39.38	0.79	57.52	1.60	57.28	5.06	32.80	2.48	15.80

Table 5
All Households by Income

Feature	Units	Income Category								Refused to Indicate Income		Total	
		< \$31,200		\$31,201 - \$52,000		\$52,001 - \$104,000		> \$104,000					
How often use air conditioner during winter													
Only on very cold days	%	46.80	4.91	46.60	6.77	48.56	5.21	36.77	9.49	46.27	8.25	45.72	2.88
On most cold days	%	14.86	11.00	16.42	14.24	22.26	9.41	28.96	11.33	23.69	13.74	20.56	5.23
On most days	%	4.26	21.88	4.84	28.17	5.96	20.27	10.48	21.23	1.81	57.22	5.57	11.15
Not applicable/ do not use	%	34.08	6.40	32.15	9.18	23.23	9.15	23.79	12.95	28.23	12.20	28.15	4.18
Would switch air conditioner off if price were 25% higher													
Yes, for short periods	%	26.92	7.58	30.29	9.62	26.85	8.36	27.16	11.82	25.17	13.23	27.33	4.31
Yes, for most of the day	%	16.87	10.22	13.85	15.72	13.49	12.91	10.11	21.42	8.67	24.82	13.35	6.68
Yes, all day	%	9.62	14.08	6.44	24.19	7.01	18.59	4.27	34.59	9.46	23.84	7.42	9.23
No	%	40.29	5.60	45.24	6.95	49.96	5.07	52.59	6.87	46.22	8.25	46.69	2.82
Don't know	%	6.31	17.73	4.17	30.02	2.69	30.12	5.87	29.24	10.48	22.41	5.21	11.05
Water and Energy Efficiency													
Proportion of households watering the garden with hand-held hose during permitted hours													
Usually	%	25.58	5.64	26.05	8.03	27.66	6.59	34.75	7.65	25.13	9.71	27.54	3.24
Sometimes	%	34.46	4.56	31.34	7.07	34.47	5.61	35.75	7.49	38.58	7.07	34.59	2.74
Never	%	31.13	4.92	32.43	6.91	32.62	5.83	24.42	9.80	31.52	8.21	30.82	2.97
Proportion of households aware of the two-part water tariff	%	47.10	3.50	49.16	4.86	55.98	3.61	61.19	4.45	54.46	5.13	52.88	1.88
Proportion of households who changed the amount of water used because of the new tariff													
Yes	%	39.63	5.94	31.42	10.11	29.72	8.30	22.27	13.27	42.25	8.84	32.73	3.91
No	%	57.99	4.10	64.39	5.08	66.11	3.87	76.17	3.98	53.58	7.03	63.99	2.05
Don't know	%	2.38	30.30	4.19	32.64	4.16	26.29	1.56	57.30	4.17	36.98	3.27	15.11
Proportion of households willing to pay 10% more to have water shut down less frequently	%	12.91	8.63	13.12	12.32	12.27	10.95	12.66	14.69	7.94	19.25	12.14	5.38
Proportion of households with retrofit	%	47.77	3.58	36.04	6.54	29.04	6.53	23.09	10.45	28.34	9.28	34.51	2.80
Proportion of households that received DIY kit	%	2.20	22.80	2.36	30.78	2.89	24.63	3.00	32.83	1.75	44.33	2.49	13.04
Proportion of households with rainwater tank	%	2.82	20.13	2.46	30.84	3.58	20.54	1.09	50.97	3.53	28.11	2.79	11.63
Average ratings of water service characteristics important to households													
Overall cost	(1 Most - 8 Least)	4.23	1.81	4.31	2.60	4.16	2.23	4.42	2.61	4.49	2.81	4.29	1.05
Quality of water	(1 Most - 8 Least)	2.67	2.29	2.62	3.26	2.61	2.88	2.66	3.88	2.37	3.73	2.61	1.38
Pressure of water	(1 Most - 8 Least)	4.62	1.45	4.60	2.11	4.61	1.78	4.36	2.45	4.28	2.68	4.53	0.88
Continuity of water supply	(1 Most - 8 Least)	3.70	1.88	3.57	2.89	3.41	2.45	3.12	3.55	3.60	3.20	3.50	1.19
Customer service	(1 Most - 8 Least)	5.37	1.36	5.49	1.79	5.67	1.41	5.89	1.67	5.65	2.15	5.58	0.73
Incentives to reduce water use	(1 Most - 8 Least)	5.14	1.28	5.03	1.86	4.94	1.64	4.89	2.32	5.05	2.18	5.02	0.79
Flexibility of billing arrangements	(1 Most - 8 Least)	5.83	1.14	6.25	1.44	6.37	1.14	6.75	1.36	6.34	1.55	6.25	0.59
Good environmental management of water	(1 Most - 8 Least)	4.42	1.65	4.14	2.39	4.22	1.99	3.91	2.86	4.19	2.87	4.21	0.99
Proportion of households that received energy efficient pack	%	46.89	0.00	44.33	5.36	49.82	4.08	49.69	5.62	45.90	6.08	47.54	2.09
Average number of energy efficient light bulb	No.	6.46	0.02	6.11	2.94	7.06	3.81	6.78	3.86	6.20	4.65	6.60	1.59
Average number of energy efficient light bulbs installed	No.	3.45	0.04	3.37	5.70	3.48	4.67	3.15	6.99	3.32	6.51	3.39	2.32

Table 5
All Households by Income

Feature	Units	Income Category								Refused to Indicate Income	Total		
		< \$31,200		\$31,201 - \$52,000		\$52,001 - \$104,000		> \$104,000					
Proportion of households that describe the light bulbs that have not been installed as													
Plan to install some of them	%	16.83	0.00	13.92	22.50	14.13	16.79	7.08	32.41	13.83	25.83	13.60	8.66
Plan to install all of them eventuall	%	68.81	0.00	71.81	5.61	71.59	4.30	74.84	5.23	68.06	7.04	71.04	2.21
Do not plan to install them	%	12.14	0.00	9.93	26.73	11.12	19.34	17.25	19.83	14.85	24.28	12.67	9.13
Don't know	%	2.22	0.00	4.33	41.19	3.16	37.58	0.82	99.64	3.27	56.79	2.69	20.70
Proportion of households that received the following number of water-saving showerheads													
One	%	51.18	0.00	49.96	7.19	50.95	5.69	36.16	10.55	46.10	8.98	48.00	3.02
Two	%	4.46	0.00	6.40	27.23	7.09	21.09	7.45	27.92	5.82	32.90	6.16	11.47
Three or more	%	0.47	0.01	0.52	99.78	0.34	99.87	0.00	---	1.41	70.22	0.48	41.19
None	%	42.00	0.00	42.09	8.42	39.55	7.17	54.71	7.22	44.76	9.22	43.59	3.30
Don't know	%	1.88	0.00	1.03	70.37	2.06	40.41	1.68	58.48	1.91	57.94	1.77	21.56
Proportion of households that installed at least one water-saving showerhead	%	58.44	0.00	53.22	8.94	58.34	6.41	42.97	13.84	70.13	7.46	56.91	3.41
Proportion of households that installed at least one water-saving showerhead but have removed or are planning to remove it	%	5.28	0.00	8.16	31.97	6.27	29.36	4.40	56.47	4.91	49.32	5.93	15.64
Proportion of households that are not planning to install water-saving showerheads	%	15.33	0.00	10.52	27.77	14.50	18.53	16.13	27.59	9.28	35.98	13.67	9.89

Table 6
Combined Dwellings by Water Consumption

Feature	Units	Water Consumption Category									
		0 - 100 kL		101 - 300 kL		301 - 500 kL		> 500 kL		Total	
Estimated population	No.	305,906	---	1,002,505	---	207,422	---	50,991	---	1,566,825	---
Proportion of households	%	19.52	---	63.98	---	13.24	---	3.25	---	100.00	---
Sample size	No.	291	---	1203	---	327	---	85	---	1906	---
Demographic characteristics											
Region											
Sydney	%	82.84	3.33	88.63	1.16	88.86	1.96	96.45	2.09	87.78	1.01
Blue Mountains	%	5.23	26.84	2.87	20.43	3.39	29.84	0.00	---	3.30	14.63
Illawarra	%	11.94	20.79	8.50	10.12	7.75	19.03	3.55	56.78	8.91	8.59
Dwelling type											
Separate House	%	57.24	6.79	61.72	3.51	89.93	2.07	96.20	2.24	65.70	2.57
Dwelling/Non-dwelling combined and Semi-detached	%	23.87	14.99	15.75	10.71	6.99	21.30	3.80	56.69	15.79	8.38
Low rise flats/units	%	9.30	28.79	12.04	14.46	3.08	39.20	0.00	---	9.92	12.64
Flats (3 storeys and above)	%	9.59	27.32	10.49	15.49	0.00	---	0.00	---	8.58	13.66
Land size (houses only)											
Small (Less than 500 square metres)	%	24.38	13.96	22.49	6.91	18.51	12.61	19.53	23.20	21.95	5.46
Medium (500 to 900 square metres)	%	59.77	6.55	64.81	2.75	65.57	4.30	49.42	11.55	63.36	2.20
Large (More than 900 square metres)	%	15.85	19.08	12.69	10.48	15.91	13.42	31.04	17.00	14.69	7.21
Household structure											
Single person (young, middle and mature)	%	59.79	6.04	18.96	9.56	5.37	26.04	2.73	69.89	24.83	5.97
Single parent (young, middle and mature family)	%	4.60	25.81	13.58	10.47	9.83	17.23	10.49	33.56	11.19	8.77
Couple with children (young, middle and mature family)	%	7.12	24.64	37.82	4.88	72.17	3.62	80.26	5.72	37.52	3.73
Couple no children (young and mature)	%	28.48	11.86	29.64	6.19	12.63	15.13	6.52	43.35	26.45	5.24
Ownership status											
Owned fully/ Fully paid off	%	62.48	5.92	44.20	4.33	41.32	6.77	53.29	10.49	47.68	3.15
Buying/ Paying off home	%	9.50	21.48	23.26	6.89	34.75	7.81	21.52	21.49	22.04	5.39
Renting - Private	%	15.53	18.49	24.80	7.89	15.11	14.11	15.35	26.55	21.40	6.67
Renting - Public/Housing Commission	%	12.49	22.12	7.74	13.53	8.81	17.91	9.84	33.65	8.88	10.10
Average number of times moved in last three years	No.	0.34	18.64	0.40	9.10	0.24	14.51	0.20	45.34	0.36	7.52
Average number of bedrooms	No.	2.57	2.43	2.95	1.30	3.65	1.51	3.91	3.27	3.00	1.03
Average number of people in household	No.	1.56	3.62	2.75	1.88	4.05	2.04	4.73	3.75	2.76	1.56
Average number of people aged 15 and over	No.	1.47	3.08	2.15	1.59	2.91	2.33	3.42	4.71	2.16	1.33
Average number of people aged less than 15 years	No.	0.09	25.41	0.60	6.19	1.14	6.59	1.32	13.29	0.60	4.76
Average number of people who spend most days of the week at home	No.	1.04	5.48	1.55	3.22	2.13	4.92	2.32	10.23	1.55	2.50

Table 6
Combined Dwellings by Water Consumption

Feature	Units	Water Consumption Category									
		0 - 100 kL		101 - 300 kL		301 - 500 kL		> 500 kL		Total	
Income, Concession and Payment Characteristics											
Annual household income											
less than \$31,200	%	56.14	6.57	30.52	6.05	19.06	11.73	18.41	23.41	33.61	4.35
\$31,201-\$52,000	%	15.76	16.92	20.23	8.32	19.05	11.68	18.73	23.32	19.15	6.49
\$52,001-\$104,000	%	13.91	19.59	23.12	6.66	28.83	9.01	14.60	26.78	21.80	5.41
more than \$104,000	%	4.54	37.25	13.05	9.67	17.76	12.05	30.16	17.07	12.57	7.48
Refused to Answer	%	9.66	20.30	13.07	10.04	15.30	13.49	18.10	24.13	12.87	7.59
Concession cards											
Has a concession card	%	54.86	6.75	33.37	5.59	20.43	10.99	25.83	18.88	35.61	4.11
Has a pensioners concession card	%	49.58	7.49	30.90	5.89	18.95	11.51	22.15	20.88	32.68	4.40
Has a Veterans' Affairs gold health card	%	4.51	25.82	1.49	34.58	1.57	44.66	2.36	69.94	2.12	19.53
Has a concession card but not sure what it is called	%	2.01	45.31	1.71	35.39	0.24	99.94	1.31	99.34	1.56	27.51
Awareness of energy concessions for concession card holders											
Yes	%	94.33	1.99	92.63	1.78	86.83	4.75	95.42	4.69	92.77	1.28
No	%	3.35	33.85	5.10	25.13	10.40	36.06	4.58	97.86	4.97	18.13
Unsure	%	2.32	65.39	2.27	47.41	2.76	70.47	0.00	---	2.27	35.44
Awareness of water concessions for concession card holders											
Yes	%	84.08	4.63	84.85	2.89	79.82	6.11	85.77	8.89	84.26	2.29
No	%	5.92	31.92	9.47	21.76	12.97	31.43	9.65	67.31	8.67	16.27
Unsure	%	9.99	36.01	5.69	26.33	7.21	43.56	4.58	97.86	7.07	20.43
Claims energy concession if aware											
Yes	%	93.97	2.12	92.33	1.94	91.77	3.89	95.20	4.93	92.86	1.37
No	%	4.77	38.95	5.81	26.17	4.63	57.20	4.80	97.77	5.38	20.36
Unsure	%	1.27	58.42	1.86	53.95	3.61	69.42	0.00	---	1.76	37.98
Claims water concession if aware											
Yes	%	91.94	2.56	83.22	3.42	87.82	4.98	94.66	5.50	86.44	2.21
No	%	6.21	34.79	12.45	21.17	6.53	49.09	5.34	97.51	9.98	17.60
Unsure	%	1.85	50.58	4.33	29.82	5.64	56.23	0.00	---	3.58	24.12
Renters who pay quarterly water usage charges	%	58.95	13.04	43.72	8.80	75.59	7.25	84.26	9.87	50.90	6.30
Renters who pay quarterly water usage charges directly to the water supplier	%	5.84	79.74	17.70	20.15	11.86	35.78	5.57	97.51	13.77	17.79
Proportion of households that approached the supplier because of payment difficulties:											
Gas	%	3.19	85.10	3.63	23.70	5.66	31.12	0.00	---	3.67	21.18
Electricity	%	3.13	43.39	8.75	13.03	11.24	15.77	12.15	29.75	8.09	10.17
Water	%	0.91	50.51	1.70	28.33	3.02	30.08	6.24	43.41	1.87	18.99
Proportion of households that were offered the following help when discussed											
Gas											
Allowed to pay off in installments	%	0.00	---	24.75	36.59	20.26	64.62	0.00	---	19.82	34.30
Extended the due date on the bill	%	100.00	0.00	82.48	9.36	45.58	35.11	0.00	---	77.29	9.50
Other (Specify)	%	0.00	---	3.18	101.06	11.24	94.95	0.00	---	4.42	72.18
No help offered	%	0.00	---	0.00	---	22.92	61.91	0.00	---	4.96	71.47

Table 6
Combined Dwellings by Water Consumption

Feature	Units	Water Consumption Category								Total	
		0 - 100 kL		101 - 300 kL		301 - 500 kL		> 500 kL			
Electricity											
Allowed to pay off in installments	%	20.91	62.80	38.14	18.01	19.29	32.68	20.81	62.92	32.53	15.97
Extended the due date on the bill	%	70.89	22.60	63.52	10.82	69.67	10.81	79.19	16.53	65.97	7.89
Referred me to an emergency relief agency	%	8.21	101.85	0.63	100.62	8.19	55.64	0.00	---	2.56	45.31
Other (Specify)	%	0.00	---	2.54	50.77	0.00	---	0.00	---	1.76	50.41
No help offered	%	0.00	---	0.00	---	5.81	68.77	0.00	---	1.07	70.99
Water											
Allowed to pay off in installments	%	28.19	84.09	25.63	39.44	19.13	64.71	21.57	88.78	24.04	29.42
Extended the due date on the bill	%	43.63	57.06	67.88	16.70	59.23	26.03	78.43	24.42	64.87	12.91
Referred to an emergency relief agency	%	28.19	84.09	0.00	---	0.00	---	0.00	---	2.69	100.33
No help offered	%	0.00	---	6.49	72.74	21.64	62.11	0.00	---	8.40	50.27
Proportion of households who sought financial help in the last three years	%	1.68	74.52	3.12	21.38	3.94	27.37	4.73	48.89	3.00	17.25
Proportion of households who have had the gas or electricity disconnected or water restricted											
Gas	%	0.26	100.04	0.25	50.23	0.24	99.94	0.00	---	0.24	41.29
Electricity	%	1.42	59.73	1.48	36.46	1.24	62.54	2.36	69.94	1.46	27.30
Water	%	0.00	---	0.34	41.02	0.00	---	1.18	99.47	0.26	37.94
Electricity, Gas and Water Consumption											
Average electricity consumption	kWh	5,199	3.80	7,235	1.94	10,368	2.80	11,888	6.84	7,340	1.63
Average gas consumption	MJ	12,422	10.33	21,149	4.68	33,709	5.61	56,857	11.65	22,847	3.89
Average water consumption	kL	69	2.87	181	1.04	371	0.79	678	3.99	201	1.70
Household Appliances											
Average number of											
Single flush toilets	No.	0.54	9.47	0.54	4.88	0.65	7.95	0.66	15.08	0.56	3.77
Dual flush toilets	No.	0.98	6.78	1.19	3.10	1.40	4.69	1.64	9.10	1.19	2.42
Indoor showers	No.	1.27	2.89	1.42	1.49	1.70	2.55	1.94	5.49	1.44	1.19
Proportion of households with											
Dishwasher	%	25.11	12.64	43.88	4.37	55.62	5.10	58.09	9.50	42.23	3.46
Washing machine	%	90.82	2.50	97.54	0.80	99.44	0.40	98.82	1.19	96.52	0.70
Bath	%	77.01	4.35	85.52	1.64	86.00	2.27	88.78	3.98	84.03	1.38
Bath with Spa Jets	%	5.47	33.89	5.92	12.32	9.78	17.28	9.15	35.99	6.45	9.96
Spa	%	2.52	45.71	3.14	14.16	6.57	21.87	3.84	56.69	3.50	11.94
Swimming pool	%	3.80	28.66	9.78	8.32	21.11	10.92	32.88	16.05	10.86	6.34
Sauna	%	0.20	100.10	0.41	38.02	0.58	71.36	1.35	99.31	0.42	30.36
Water and Energy Efficiency											
Proportion of households watering the garden with hand-held hose during permitted hours											
Usually	%	21.01	14.21	23.77	6.25	28.51	8.95	32.06	16.25	24.13	4.89
Sometimes	%	26.16	12.20	31.22	5.38	38.70	7.17	35.16	15.23	31.35	4.19
Never	%	36.49	9.48	24.37	6.48	29.71	8.79	31.59	16.53	27.68	4.64
Proportion of households aware of the two-part water tariff	%	49.28	7.53	49.90	3.93	54.30	5.21	62.57	8.66	50.78	2.98

Table 6
Combined Dwellings by Water Consumption

Feature	Units	Water Consumption Category									
		0 - 100 kL		101 - 300 kL		301 - 500 kL		> 500 kL		Total	
Proportion of households who changed the amount of water used because of the new tariff											
Yes	%	18.94	19.40	32.60	7.43	34.56	10.56	48.55	14.60	30.93	5.84
No	%	80.66	4.58	63.41	3.98	61.66	6.07	49.56	14.30	65.87	2.85
Don't know	%	0.40	100.21	3.99	28.58	3.78	37.56	1.89	99.16	3.19	23.67
Proportion of households willing to pay 10% more to have water shut down less frequently	%	17.13	17.62	11.86	10.60	10.43	16.69	10.93	31.57	12.66	8.17
Proportion of households with retrofits	%	49.41	7.53	33.09	5.51	28.18	9.00	26.34	18.75	35.41	4.12
Proportion of households that received DIY kits	%	2.18	51.84	2.94	25.17	1.18	50.09	5.02	48.82	2.62	20.36
Proportion of households with rainwater tanks	%	2.41	39.58	2.48	15.25	3.19	30.03	1.18	99.47	2.52	13.22
Average ratings of water service characteristics important to households											
Overall cost	(1 Most - 8 Least)	4.65	3.66	4.29	1.92	4.18	3.18	4.75	5.31	4.36	1.50
Quality of water	(1 Most - 8 Least)	2.80	5.38	2.45	2.62	2.71	3.85	2.45	7.40	2.55	2.08
Pressure of water	(1 Most - 8 Least)	4.67	3.40	4.50	1.89	4.34	2.56	4.55	5.09	4.51	1.44
Continuity of water supply	(1 Most - 8 Least)	3.38	4.22	3.51	2.22	3.48	3.60	3.06	6.89	3.46	1.73
Customer service	(1 Most - 8 Least)	5.47	2.91	5.64	1.48	5.56	2.17	5.34	4.52	5.59	1.15
Incentives to reduce water use	(1 Most - 8 Least)	4.96	2.91	5.03	1.51	5.26	1.99	5.29	3.51	5.06	1.15
Flexibility of billing arrangements	(1 Most - 8 Least)	6.20	2.09	6.31	1.05	6.09	1.83	6.29	3.70	6.26	0.83
Good environmental management of water	(1 Most - 8 Least)	3.85	3.99	4.26	2.02	4.38	2.72	4.27	5.43	4.20	1.57
Proportion of households that received energy efficient packs	%	46.04	8.05	48.65	4.03	39.16	7.12	42.65	13.00	46.69	3.22
Average number of energy efficient light bulbs	No.	6.32	4.89	6.50	2.55	6.37	4.62	6.16	7.68	6.44	2.03
Average number of energy efficient light bulbs installed	No.	3.29	8.13	3.28	3.83	3.44	7.08	3.05	13.18	3.29	3.12
Proportion of households that describe the light bulbs that have not been installed as											
Plan to install some of them	%	22.24	25.64	9.09	15.82	13.70	27.22	12.26	54.13	12.16	12.87
Plan to install all of them eventually	%	63.64	10.13	73.79	3.74	71.00	6.97	72.23	12.40	71.53	3.24
Do not plan to install them	%	11.17	33.67	15.03	16.29	10.96	30.39	11.74	54.43	13.77	13.45
Don't know	%	2.95	80.69	2.08	34.46	4.35	49.66	3.78	98.29	2.54	28.02
Proportion of households that received the following number of water-saving showerheads											
One	%	34.00	14.78	51.49	5.35	53.59	8.54	47.08	18.22	48.22	4.56
Two	%	6.89	37.54	6.16	21.10	5.36	37.06	6.23	68.40	6.21	16.59
Three or more	%	0.43	100.23	0.26	71.06	0.00	---	0.00	---	0.25	57.94
None	%	53.73	10.14	40.94	6.59	39.58	11.31	46.69	18.36	43.42	5.02
Don't know	%	4.96	55.92	1.16	31.83	1.47	71.11	0.00	---	1.89	32.18
Proportion of households that installed at least one water-saving showerhead	%	66.18	10.88	45.02	7.99	60.78	9.68	68.08	15.99	50.65	5.87
Proportion of households that installed at least one water-saving showerhead but have removed or are planning to remove it	%	12.48	45.14	4.09	22.77	7.99	46.01	5.20	97.66	5.81	20.33

Table 6
Combined Dwellings by Water Consumption

Feature	Units	Water Consumption Category								Total	
		0 - 100 kL		101 - 300 kL		301 - 500 kL		> 500 kL			
Proportion of households that are not planning to install water-saving showerheads	%	9.72	33.96	13.84	18.58	11.00	32.16	10.40	67.28	12.80	15.18

Table 7
Houses by Water Consumption

Feature	Units	Water Consumption Category									
		0 - 100 kL		101 - 300 kL		301 - 500 kL		> 500 kL		Total	
Estimated population	No.	248,127	---	776,667	---	201,024	---	50,991	---	1,276,809	---
Proportion of households	%	19.43	---	60.83	---	15.74	---	3.99	---	100.00	---
Sample size	No.	268	---	1121	---	318	---	81	---	1788	---
Demographic characteristics											
Region											
Sydney	%	79.78	3.99	86.05	1.38	88.51	2.03	96.45	2.09	85.64	1.17
Blue Mountains	%	6.44	26.58	3.70	20.23	3.50	29.81	0.00	---	4.06	14.50
Illawarra	%	13.78	20.86	10.24	9.46	7.99	19.00	3.55	56.78	10.31	8.30
Dwelling type											
Separate House	%	70.57	5.79	79.67	2.56	92.79	1.65	96.20	2.24	80.63	1.91
Dwelling/Non-dwelling combined and Semi-detached	%	29.43	13.88	20.33	10.02	7.21	21.26	3.80	56.69	19.37	7.95
Land size (houses only)											
Small (Less than 500 square metres)	%	24.38	13.96	22.49	6.91	18.51	12.61	19.53	453.06	21.95	5.46
Medium (500 to 900 square metres)	%	59.77	6.55	64.81	2.75	65.57	4.30	49.42	570.92	63.36	2.20
Large (More than 900 square metres)	%	15.85	19.08	12.69	10.48	15.91	13.42	31.04	527.78	14.69	7.21
Household structure											
Single person (young, middle and mature)	%	58.48	6.44	11.31	11.32	4.71	28.21	2.73	69.89	19.24	6.70
Single parent (young, middle and mature family)	%	4.73	23.84	14.27	10.41	10.12	17.19	10.49	33.56	11.60	8.59
Couple with children (young, middle and mature family)	%	8.82	24.27	43.28	4.32	72.42	3.63	80.26	5.72	42.43	3.37
Couple no children (young and mature)	%	27.97	12.39	31.14	5.82	12.75	15.29	6.52	43.35	26.72	5.07
Ownership status											
Owned fully/ Fully paid off	%	68.42	5.42	51.32	3.71	42.05	6.73	53.29	10.49	53.26	2.76
Buying/ Paying off home	%	10.78	21.55	25.52	6.45	35.86	7.71	21.52	21.49	24.13	5.05
Renting - Private	%	10.11	22.73	15.15	9.92	13.34	14.73	15.35	26.55	13.89	7.78
Renting - Public/Housing Commission	%	10.69	26.41	8.02	14.00	8.75	18.22	9.84	33.65	8.73	10.58
Average number of times moved in last three years	No.	0.24	22.16	0.34	10.67	0.25	14.66	0.20	45.34	0.30	8.49
Average number of bedrooms	No.	2.79	2.06	3.23	0.99	3.70	1.43	3.91	3.27	3.25	0.82
Average number of people in household	No.	1.59	4.09	2.94	1.83	4.08	2.06	4.73	3.75	2.93	1.55
Average number of people aged 15 and over	No.	1.48	3.39	2.25	1.62	2.94	2.35	3.42	4.71	2.25	1.37
Average number of people aged less than 15 years	No.	0.11	25.18	0.70	5.98	1.14	6.71	1.32	13.29	0.68	4.60
Average number of people who spend most days of the week at home	No.	1.15	5.01	1.72	3.07	2.11	5.03	2.32	10.23	1.70	2.39
Income, Concession and Payment Characteristics											
Annual household income											
less than \$31,200	%	57.75	6.59	29.68	5.96	18.63	11.87	18.41	23.41	32.95	4.31
\$31,201-\$52,000	%	13.80	18.53	17.93	8.59	18.54	11.99	18.73	23.32	17.26	6.57
\$52,001-\$104,000	%	12.83	21.02	24.85	6.16	29.06	9.01	14.60	26.78	22.77	5.10
more than \$104,000	%	3.72	44.18	13.29	8.93	18.33	11.99	30.16	17.07	12.90	6.97
Refused to Answer	%	11.91	19.91	14.24	9.75	15.44	13.61	18.10	24.13	14.13	7.31

Table 7
Houses by Water Consumption

Feature	Units	Water Consumption Category								Total	
		0 - 100 kL		101 - 300 kL		301 - 500 kL		> 500 kL			
Concession cards											
Has a concession card	%	58.05	6.56	29.68	5.96	18.63	11.87	18.41	23.41	37.75	3.90
Has a pensioners concession card	%	51.54	7.47	24.85	6.16	29.06	9.01	14.60	26.78	34.50	4.21
Has a Veterans' Affairs gold health card	%	5.57	25.63	13.29	8.93	18.33	11.99	30.16	17.07	2.04	17.07
Has a concession card but not sure what it is called	%	2.48	45.15	14.24	9.75	15.44	13.61	18.10	24.13	1.92	27.40
Awareness of energy concessions for concession card holders											
Yes	%	93.40	2.32	91.98	1.97	87.47	4.77	95.42	4.69	92.12	1.42
No	%	3.90	33.72	6.01	24.90	9.64	38.96	4.58	97.87	5.64	18.23
Unsure	%	2.71	65.16	2.02	53.99	2.89	70.43	0.00	---	2.24	37.86
Awareness of water concessions for concession card holders											
Yes	%	83.07	5.09	84.83	2.94	81.83	5.86	85.77	8.89	84.08	2.37
No	%	5.29	29.27	9.13	22.11	12.33	33.37	9.65	67.31	8.27	16.28
Unsure	%	11.64	35.37	6.04	27.04	5.84	49.13	4.58	97.87	7.66	21.04
Claims energy concession if aware											
Yes	%	94.63	1.74	90.91	2.30	91.45	4.04	95.20	4.93	92.20	1.49
No	%	3.88	35.81	6.88	25.87	4.81	57.15	4.80	97.77	5.75	20.26
Unsure	%	1.49	58.33	2.20	53.76	3.75	69.37	0.00	---	2.05	37.87
Claims water concession if aware											
Yes	%	92.44	2.21	82.58	3.76	87.57	5.09	94.66	5.50	86.24	2.35
No	%	5.38	31.93	12.60	22.84	6.67	49.06	5.34	97.51	9.78	18.86
Unsure	%	2.18	50.43	4.82	30.80	5.76	56.19	0.00	---	3.98	24.64
Renters who pay quarterly water usage charges	%	75.33	9.63	69.65	6.28	82.91	5.50	84.26	9.87	73.36	4.32
Renters who pay quarterly water usage charges directly to the water supplier	%	7.59	78.89	17.88	19.56	12.08	35.74	5.57	97.52	14.35	17.32
Proportion of households that approached the supplier because of payment difficulties											
Gas	%	3.81	84.59	4.38	23.49	5.68	31.11	0.00	---	4.26	21.03
Electricity	%	3.86	43.11	10.35	12.76	11.59	15.72	12.15	29.75	9.36	9.92
Water	%	1.12	50.44	2.19	28.17	3.11	30.06	6.24	43.41	2.29	18.90
Proportion of households that were offered the following help when discussed											
Gas											
Allowed to pay off in installments	%	0.00	---	24.75	36.59	20.26	64.62	0.00	---	19.82	34.30
Extended the due date on the bill	%	100.00	0.00	82.48	9.36	45.58	35.11	0.00	---	77.29	9.50
Other (Specify)	%	0.00	---	3.18	101.06	11.24	94.95	0.00	---	4.42	72.18
No help offered	%	0.00	---	0.00	---	22.92	61.91	0.00	---	4.96	71.47
Electricity											
Allowed to pay off in installments	%	20.91	62.80	37.23	18.63	19.29	32.68	20.81	62.93	31.57	16.37
Extended the due date on the bill	%	70.89	22.60	63.73	10.89	69.67	10.81	79.19	16.53	66.26	7.82
Referred me to an emergency relief agency	%	8.21	101.85	0.69	100.57	8.19	55.64	0.00	---	2.72	45.22
Other (Specify)	%	0.00	---	2.78	50.65	0.00	---	0.00	---	1.87	50.34
No help offered	%	0.00	---	0.00	---	5.81	68.78	0.00	---	1.13	70.93

Table 7
Houses by Water Consumption

Feature	Units	Water Consumption Category								Total	
		0 - 100 kL		101 - 300 kL		301 - 500 kL		> 500 kL			
Water											
Allowed to pay off in installments	%	28.19	84.09	25.63	39.44	19.13	64.71	21.57	88.78	24.04	29.42
Extended the due date on the bill	%	43.63	57.06	67.88	16.70	59.23	26.03	78.43	24.42	64.87	12.91
Referred to an emergency relief agency	%	28.19	84.09	0.00	---	0.00	---	0.00	---	2.69	100.33
No help offered	%	0.00	---	6.49	72.74	21.64	62.11	0.00	---	8.40	50.27
Proportion of households who sought financial help in the last three years	%	2.07	74.25	3.34	22.04	4.07	27.34	4.73	48.89	3.27	17.56
Proportion of households who have had the gas or electricity disconnected or water restricted											
Gas	%	0.32	100.01	0.32	50.19	0.25	99.94	0.00	---	0.30	41.26
Electricity	%	0.81	58.24	1.23	43.86	1.28	62.52	2.36	69.94	1.20	30.75
Water	%	0.00	---	0.44	40.97	0.00	---	1.18	99.47	0.32	37.91
Electricity, Gas and Water Consumption											
Average electricity consumption	kWh	5,477	3.80	7,671	1.79	10,472	2.83	11,888	6.85	7,782	1.55
Average gas consumption	MJ	13,084	10.60	22,904	4.00	33,822	5.63	56,857	11.66	24,491	3.57
Average water consumption	kL	67	2.94	187	1.07	372	0.79	678	3.99	213	1.82
Household Appliances											
Average number of											
Single flush toilets	No.	0.55	10.59	0.54	5.21	0.63	8.21	0.66	15.08	0.56	4.01
Dual flush toilets	No.	1.06	6.90	1.31	2.78	1.44	4.57	1.64	9.10	1.30	2.24
Indoor showers	No.	1.33	3.20	1.50	1.52	1.71	2.57	1.94	5.49	1.51	1.22
Proportion of households with											
Dishwasher	%	26.63	12.63	48.72	3.88	56.80	5.01	58.09	9.50	46.07	3.14
Washing machine	%	97.12	0.95	98.84	0.55	99.42	0.41	98.82	1.19	98.59	0.39
Bath	%	81.60	3.93	86.49	1.40	85.90	2.31	88.78	3.98	85.54	1.20
Bath with Spa Jets	%	5.23	33.74	7.03	11.74	10.09	17.24	9.15	35.99	7.25	9.40
Spa	%	3.10	45.48	4.05	13.99	6.78	21.83	3.84	56.69	4.29	11.82
Swimming pool	%	4.69	28.48	12.25	7.82	21.78	10.85	32.88	16.05	13.11	6.06
Sauna	%	0.25	100.08	0.53	37.96	0.60	71.36	1.35	99.31	0.52	30.32
Water and Energy Efficiency											
Proportion of households watering the garden with hand-held hose during permitted hours											
Usually	%	24.03	14.02	29.46	5.65	29.17	8.92	32.06	16.25	28.46	4.53
Sometimes	%	28.29	11.86	38.76	4.72	39.24	7.13	35.16	15.23	36.66	3.79
Never	%	44.99	8.50	31.21	5.82	30.66	8.70	31.59	16.53	33.82	4.19
Proportion of households aware of the two-part water tariff	%	54.56	6.98	52.73	3.60	54.31	5.25	62.57	8.66	53.72	2.72
Proportion of households who changed the amount of water used because of the new tariff											
Yes	%	19.37	19.42	33.45	6.90	35.65	10.41	48.55	14.60	31.72	5.50
No	%	80.18	4.72	62.37	3.87	60.45	6.28	49.56	14.30	64.99	2.80
Don't know	%	0.45	100.18	4.18	28.97	3.90	37.52	1.89	99.16	3.29	23.54
Proportion of households willing to pay 10% more to have water shut down less frequently	%	18.69	17.69	11.61	10.22	10.07	16.70	10.93	31.57	12.70	8.03

Table 7
Houses by Water Consumption

Feature	Units	Water Consumption Category									
		0 - 100 kL		101 - 300 kL		301 - 500 kL		> 500 kL		Total	
Proportion of households with retrofits	%	47.58	8.16	36.36	5.04	28.73	8.98	26.34	18.75	36.94	3.92

Table 7
Houses by Water Consumption

Feature	Units	Water Consumption Category									
		0 - 100 kL		101 - 300 kL		301 - 500 kL		> 500 kL		Total	
Proportion of households that received DIY kits	%	1.74	59.56	3.55	25.83	1.21	50.07	5.02	48.82	2.89	21.14
Proportion of households with rainwater tanks	%	2.97	39.41	3.21	15.10	3.29	30.01	1.18	99.47	3.09	13.13
Average ratings of water service characteristics important to households											
Overall cost	(1 Most - 8 Least)	4.79	3.59	4.30	1.94	4.17	3.24	4.75	5.31	4.39	1.50
Quality of water	(1 Most - 8 Least)	2.63	5.09	2.49	2.39	2.73	3.88	2.45	7.40	2.55	1.89
Pressure of water	(1 Most - 8 Least)	4.83	3.34	4.50	1.71	4.31	2.59	4.55	5.09	4.54	1.33
Continuity of water supply	(1 Most - 8 Least)	3.36	4.58	3.49	2.17	3.44	3.57	3.06	6.89	3.44	1.71
Customer service	(1 Most - 8 Least)	5.48	2.86	5.61	1.46	5.60	2.16	5.34	4.52	5.57	1.12
Incentives to reduce water use	(1 Most - 8 Least)	4.93	3.07	5.05	1.49	5.25	2.02	5.29	3.51	5.06	1.13
Flexibility of billing arrangements	(1 Most - 8 Least)	6.16	2.25	6.29	0.99	6.08	1.87	6.29	3.70	6.23	0.81
Good environmental management of water	(1 Most - 8 Least)	3.81	4.24	4.26	1.99	4.41	2.70	4.27	5.43	4.19	1.54
Proportion of households that received energy efficient packs	%	43.43	8.75	49.55	3.82	38.09	7.31	42.65	13.00	46.28	3.15
Average number of energy efficient light bulbs	No.	6.27	4.56	6.56	2.58	6.33	4.81	6.16	7.68	6.46	2.01
Average number of energy efficient light bulbs installed	No.	3.45	8.19	3.36	3.77	3.47	7.22	3.05	13.18	3.38	3.07
Proportion of households that describe the light bulbs that have not been installed as											
Plan to install some of them	%	20.59	24.08	10.21	14.29	14.96	26.91	12.26	54.13	12.66	11.18
Plan to install all of them eventually	%	69.47	8.32	74.56	3.41	70.69	7.26	72.23	12.40	73.12	2.86
Do not plan to install them	%	9.08	32.22	13.21	16.19	9.59	34.08	11.74	54.44	12.00	13.27
Don't know	%	0.86	100.27	2.02	31.66	4.75	49.50	3.78	98.30	2.22	25.10
Proportion of households that received the following number of water-saving showerheads											
One	%	40.12	13.92	52.42	5.03	53.23	8.72	47.08	18.23	50.08	4.25
Two	%	6.84	38.76	6.81	19.52	5.68	36.97	6.23	68.40	6.65	15.65
Three or more	%	0.56	100.15	0.32	70.99	0.00	---	0.00	---	0.31	57.90
None	%	50.32	11.38	38.98	6.53	39.53	11.53	46.69	18.36	41.40	5.04
Don't know	%	2.16	98.54	1.47	31.69	1.56	71.06	0.00	---	1.55	33.10
Proportion of households that installed at least one water-saving showerhead	%	66.11	11.03	52.15	6.83	61.44	9.50	68.08	16.00	56.06	5.10
Proportion of households that installed at least one water-saving showerhead but have removed or are planning to remove it	%	9.64	51.27	5.04	22.45	8.48	45.76	5.20	97.66	6.21	19.66
Proportion of households that are not planning to install water-saving showerheads	%	11.04	33.68	12.90	17.57	11.67	31.92	10.40	67.28	12.37	14.03

Table 8
Units by Water Consumption

Feature	Units	Water Consumption Category							
		0 - 100 kL		101 - 200 kL		> 200 kL		Total	
Estimated population	No.	57,779	---	188,663	---	43,573	---	290,016	---
Proportion of households	%	19.92	---	65.05	---	15.02	---	100.00	---
Sample size	No.	23	---	60	---	35	---	118	---
Demographic characteristics									
Region									
Sydney	%	95.97	4.14	96.98	2.19	100.00	0.00	97.23	1.64
Illawarra	%	4.03	98.65	3.02	70.11	0.00	---	2.77	57.49
Dwelling type									
Low rise flats/units	%	49.22	21.67	55.60	11.85	50.88	19.26	53.62	9.34
Flats (3 storeys and above)	%	50.78	21.00	44.40	14.83	49.12	19.95	46.38	10.80
Household structure									
Single person (young, middle and mature)	%	65.32	15.53	45.48	14.90	51.07	22.12	50.41	10.42
Single parent (young, middle and mature family)	%	4.03	98.70	11.68	36.12	5.69	97.27	9.32	32.43
Couple with children (young, middle and mature family)	%	0.00	---	16.47	30.88	33.92	31.59	15.05	24.75
Couple no children (young and mature)	%	30.65	32.17	26.36	22.93	9.32	64.86	25.22	18.37
Ownership status									
Owned fully/ Fully paid off	%	37.14	28.22	20.99	25.71	14.53	45.88	23.24	18.42
Buying/ Paying off home	%	4.03	98.65	16.65	29.36	8.52	67.59	12.91	26.53
Renting - Private	%	38.70	26.76	57.53	11.34	61.04	15.61	54.30	9.20
Renting - Public/Housing Commission	%	20.13	40.74	4.84	53.68	15.91	44.66	9.55	27.79
Average number of times moved in last three years	No.	0.75	30.45	0.61	18.95	0.57	34.13	0.63	14.65
Average number of bedrooms	No.	1.61	6.42	1.94	3.85	2.31	4.24	1.93	2.99
Average number of people in household	No.	1.43	7.37	2.02	5.60	2.65	11.15	1.99	4.69
Average number of people aged 15 and over	No.	1.43	7.37	1.79	4.69	2.01	9.61	1.75	3.85
Average number of people aged less than 15 years	No.	0.00	---	0.23	33.08	0.64	26.61	0.24	23.51
Average number of people who spend most days of the week at home	No.	0.55	24.41	0.91	13.17	1.49	14.12	0.92	9.83
Income, Concession and Payment Characteristics									
Annual household income									
less than \$31,200	%	49.22	21.67	33.61	18.72	32.43	27.99	36.54	13.28
\$31,201-\$52,000	%	24.16	36.38	26.24	22.41	37.26	25.33	27.48	16.20
\$52,001-\$104,000	%	18.57	46.09	16.65	29.36	20.21	39.99	17.56	21.70
more than \$104,000	%	8.05	68.46	14.63	31.34	0.00	---	11.12	28.84
Refused to Answer	%	0.00	---	8.88	42.03	10.10	58.69	7.29	35.77

Table 8
Units by Water Consumption

Feature	Units	Water Consumption Category						Total	
		0 - 100 kL		101 - 200 kL		> 200 kL			
Concession cards									
Has a concession card	%	41.16	25.74	20.99	25.71	28.73	30.21	26.17	16.76
Has a pensioners concession card	%	41.16	25.74	18.97	27.20	27.57	31.33	24.68	17.35
Has a Veterans' Affairs gold health card	%	0.00	---	3.53	70.44	1.16	101.19	2.47	66.15
Has a concession card but not sure what it is called	%	0.00	---	0.00	---	0.00	---	0.00	---
Awareness of energy concessions for concession card holders									
Yes	%	100.00	0.00	100.00	0.00	81.13	17.30	96.89	2.65
No	%	0.00	---	0.00	---	4.05	103.73	0.67	102.81
Unsure	%	0.00	---	0.00	---	14.82	92.39	2.44	101.01
Awareness of water concessions for concession card holders									
Yes	%	90.22	10.57	85.59	11.33	75.63	19.46	85.40	7.50
No	%	9.78	97.51	14.41	67.30	4.05	103.73	11.25	52.86
Unsure	%	0.00	---	0.00	---	20.33	70.57	3.35	78.81
Claims energy concession if aware									
Yes	%	90.22	10.58	100.00	0.00	100.00	0.00	96.84	3.28
No	%	9.78	97.61	0.00	---	0.00	---	3.16	100.47
Claims water concession if aware									
Yes	%	89.16	11.86	98.32	1.80	46.47	45.15	87.71	6.49
No	%	10.84	97.54	1.68	105.26	46.36	45.26	11.24	49.56
Unsure	%	0.00	---	0.00	---	7.17	103.29	1.05	103.20
Renters who pay quarterly water usage charges	%	34.22	37.16	12.61	41.21	9.61	62.86	16.03	26.88
Renters who pay quarterly water usage charges directly to the water supplier	%	0.00	---	19.23	92.92	0.00	---	9.61	97.90
Proportion of households that approached the supplier because of payment difficulties									
Gas	%	0.00	---	0.00	---	0.00	---	0.00	---
Electricity	%	0.00	---	3.53	70.44	1.56	100.79	2.53	64.88
Water	%	0.00	---	0.00	---	0.00	---	0.00	---
Proportion of households that were offered the following help when discussed									
Gas									
Allowed to pay off in installments	%	0.00	---	0.00	---	0.00	---	0.00	---
Extended the due date on the bill	%	0.00	---	0.00	---	0.00	---	0.00	---
Other (Specify)	%	0.00	---	0.00	---	0.00	---	0.00	---
No help offered	%	0.00	---	0.00	---	0.00	---	0.00	---

Table 8
Units by Water Consumption

Feature	Units	Water Consumption Category							
		0 - 100 kL		101 - 200 kL		> 200 kL		Total	
Electricity									
Allowed to pay off in installments	%	0.00	---	42.80	99.07	100.00	0.00	48.09	82.64
Extended the due date on the bill	%	0.00	---	57.20	74.13	100.00	0.00	61.16	62.82
Referred me to an emergency relief agency	%	0.00	---	0.00	---	0.00	---	0.00	---
Other (Specify)	%	0.00	---	0.00	---	0.00	---	0.00	---
No help offered	%	0.00	---	0.00	---	0.00	---	0.00	---
Proportion of households who sought financial help in the last three years	%	0.00	---	1.81	84.87	4.26	98.05	1.82	65.25
Proportion of households who have had the gas or electricity disconnected or water restricted									
Gas	%	0.00	---	0.00	---	0.00	---	0.00	---
Electricity	%	4.03	98.65	1.81	84.87	4.26	98.05	2.62	54.45
Water	%	0.00	---	0.00	---	0.00	---	0.00	---
Electricity, Gas and Water Consumption									
Average electricity consumption	kWh	4,001	11.87	5,204	7.35	7,090	11.99	5,276	5.88
Average gas consumption	MJ	8,422	34.52	6,482	31.03	14,131	37.21	8,304	20.99
Average water consumption	kL	75	8.11	146	2.51	244	3.14	147	3.45
Household Appliances									
Average number of									
Single flush toilets	No.	0.51	21.00	0.57	13.70	0.59	17.91	0.56	10.24
Dual flush toilets	No.	0.62	21.78	0.73	13.91	0.82	19.85	0.72	10.46
Indoor showers	No.	1.04	3.82	1.14	4.00	1.23	6.93	1.13	2.97
Proportion of households with									
Dishwasher	%	18.57	46.09	30.27	20.03	12.82	48.23	25.32	17.53
Washing machine	%	63.76	15.70	93.44	3.44	92.47	5.61	87.38	3.61
Bath	%	57.27	18.36	80.01	6.71	92.60	5.06	77.37	5.48
Bath with Spa Jets	%	6.49	96.10	1.51	99.80	4.26	98.05	2.92	59.22
Spa	%	0.00	---	0.00	---	0.00	---	0.00	---
Swimming pool	%	0.00	---	1.51	99.80	0.00	---	0.98	99.96
Sauna	%	0.00	---	0.00	---	0.00	---	0.00	---
Water and Energy Efficiency									
Proportion of households watering the garden with hand-held hose during permitted hours									
Usually	%	8.05	68.46	5.04	57.11	1.16	101.19	5.06	43.18
Sometimes	%	17.00	52.60	5.35	54.16	7.43	69.06	7.98	34.77
Never	%	0.00	---	0.00	---	4.26	98.05	0.64	100.31

Table 8
Units by Water Consumption

Feature	Units	Water Consumption Category							
		0 - 100 kL		101 - 200 kL		> 200 kL		Total	
Proportion of households aware of the two-part water tariff	%	26.62	35.70	43.19	15.20	29.22	30.65	37.79	12.99

Table 8
Units by Water Consumption

Feature	Units	Water Consumption Category						Total	
		0 - 100 kL		101 - 200 kL		> 200 kL			
Proportion of households who changed the amount of water used because of the new tariff									
Yes	%	15.13	94.53	25.24	35.13	29.22	30.65	25.96	28.18
No	%	84.87	16.85	71.26	12.89	0.00	---	71.43	10.55
Don't know	%	0.00	---	3.50	99.76	43.71	42.32	2.60	100.02
Proportion of households willing to pay 10% more to have water shut down less frequently	%	10.52	68.25	14.12	31.44	7.76	68.93	12.47	26.72
Proportion of households with retrofits	%	57.27	18.36	23.22	24.49	14.36	48.67	28.67	16.00
Proportion of households that received DIY kits	%	4.03	98.65	0.00	---	4.26	98.05	1.44	71.15
Proportion of households with rainwater tanks	%	0.00	---	0.00	---	0.00	---	0.00	---
Average ratings of water service characteristics important to households									
Overall cost	(1 Most - 8 Least)	4.01	12.22	4.34	5.98	3.81	10.06	4.20	4.87
Quality of water	(1 Most - 8 Least)	3.59	15.13	2.23	10.03	2.65	14.62	2.55	7.66
Pressure of water	(1 Most - 8 Least)	3.94	11.90	4.70	6.47	3.67	12.99	4.40	5.32
Continuity of water supply	(1 Most - 8 Least)	3.47	10.71	3.57	7.32	3.63	10.91	3.56	5.49
Customer service	(1 Most - 8 Least)	5.46	9.61	5.70	4.92	5.68	5.93	5.65	3.83
Incentives to reduce water use	(1 Most - 8 Least)	5.10	7.98	4.91	4.90	5.42	8.08	5.02	3.77
Flexibility of billing arrangements	(1 Most - 8 Least)	6.38	5.32	6.55	3.44	5.69	6.17	6.39	2.69
Good environmental management of water	(1 Most - 8 Least)	4.05	10.64	4.00	7.07	5.45	6.63	4.23	5.11
Proportion of households that received energy efficient packs	%	57.27	18.36	44.40	14.83	54.56	17.90	48.49	10.36
Average number of energy efficient light bulbs	No.	6.49	14.42	6.01	7.25	7.43	17.34	6.36	6.43
Average number of energy efficient light bulbs installed	No.	2.76	24.02	3.07	14.01	2.71	17.37	2.94	10.61
Proportion of households that describe the light bulbs that have not been installed as									
Plan to install some of them	%	26.37	58.21	4.28	99.24	7.65	97.67	10.36	49.93
Plan to install all of them eventually	%	49.09	31.67	72.87	13.36	66.02	21.00	65.80	11.49
Do not plan to install them	%	16.36	66.42	22.85	40.31	16.38	62.92	20.17	31.24
Don't know	%	8.18	97.60	0.00	---	9.96	95.22	3.68	71.08
Proportion of households that received the following number of water-saving showerheads									
One	%	14.06	66.90	54.55	18.23	27.25	43.36	40.41	17.67
Two	%	7.03	97.82	4.55	98.28	0.00	---	4.37	71.60
None	%	64.85	20.43	40.90	23.91	72.75	16.24	51.92	13.88
Don't know	%	14.06	66.90	0.00	---	0.00	---	3.31	70.45

Table 8
Units by Water Consumption

Feature	Units	Water Consumption Category						Total	
		0 - 100 kL		101 - 200 kL		> 200 kL			
Proportion of households that installed at least one water-saving showerhead	%	66.67	41.79	15.40	65.86	21.36	93.15	21.70	42.90
Proportion of households that installed at least one water-saving showerhead but have removed or are planning to remove it	%	33.33	83.57	0.00	---	0.00	---	3.70	101.06
Proportion of households that are not planning to install water-saving showerheads	%	0.00	---	19.22	53.91	0.00	---	15.12	54.75

B Overview of the survey design and methodology

A face-to-face (door to door) interview methodology was used for this survey. This approach was adopted to:

- ▼ Ensure maximum comparability with past surveys.
- ▼ Obtain consent signatures from respondents to permit water, gas and electricity agencies to release their billing data for inclusion in the analysis.

Interviews were conducted from August to October 2006.

B.1 Sample size

A total of 2,631 door to door interviews were completed across the Sydney Water Corporation areas with 600 of the total interviews being specifically samples from low income areas to ensure a minimum low income sample of at least 600 respondents.

B.2 Sample selection

The 2006 survey utilised a random selection of Census Collector Districts (CDs) from Statistical Local Areas (SLAs).

The full list of all of the postcodes included in the survey is shown below. The number of interviews was divided proportionally by the number of residents in each of the four key regions covered by Sydney Water. These proportions are shown in the table below.

Postcodes were matched to SLAs and CDs were randomly select within each SLA. The number of CDs selected within each SLA was proportional to the number of dwellings within each SLA²¹.

²¹ This information was obtained from the Australian Bureau of Statistics publication: Census of Population and Housing Selected Social and Housing Characteristics for Statistical Local Areas, New South Wales and Jervis Bay Territory, 2001.

Table B.1 Postcodes for Sydney Water Sampling

Central Sydney	Northern Sydney	Illawarra	Greater Western Sydney (incl. Blue Mountains)
2000-2050	2060-2080	2500-2508	2115-2115
2130-2139	2081-2114	2515-2519	2125
2190-2195	2119-2122	2525-2534	2140-2156
2203-2234	2126		2160-2164
	2157-2159		2165-2177
			2196-2200
			2558-2574
			2745-2786
Percentage of Sydney Water Region			
31%	20%	7%	42%

B.3 Selecting households

B.3.1 2,000 randomly selected households

A total of 260 Census Collectors' Districts (CDs) were randomly selected. The number of CDs selected in each SLA was proportional to the size of the SLA. Five interviews were conducted in each CD with a skip pattern of at least 3 dwellings between successful interviews to minimise serial correlations.

Start points were selected through random identification of a street intersection. A random number from 1-10 was allocated representing the number of dwellings away from the intersection where the first call was to be made.

Interviewers called on every third dwelling until a minimum of five interviews have been conducted in that CD.

B.3.2 Incremental 600 low-income households:

An additional 120 low income CDs were selected to provide an additional 600 interviews with low income households. Additional low income households were included to enable more in-depth analysis of energy and water usage for those households. A threshold of \$31,200 was selected as this represents the threshold used by the ABS for the lower income groupings. Information on the Census Collector Districts (CDs) with severe disadvantage was obtained from the ABS and 120 additional CDs were selected from amongst these.

B.4 Pre-survey letter

As an initial strategy to increase the response rate and to verify the official nature of the survey, a formal letter on the Tribunal's letterhead was left at each household providing an invitation to participate and an explanation of the survey prior to the interviewer calling on the household.

The letter provided an IPART telephone number to call in case of need or for verification in addition to Taverner's number.

B.5 Piloting

An initial 24 face-to-face pilot interviews were conducted in Sydney, the Illawarra and Blue Mountains during August 2006. Changes were made to the questionnaire based on problems identified during piloting.

B.6 Response Rate

An overall response rate of 27 per cent was achieved. This is based on households which were eligible but refused to participate when interviewers called. The response rate varied significantly between Sydney, the Illawarra and the Blue Mountains reflecting the characteristically greater willingness of households outside of large metropolitan areas such as Sydney to participate in surveys of this nature. The response rates for the three areas were as follows:

- ▼ Blue Mountains - 42 per cent.
- ▼ Illawarra - 42 per cent.
- ▼ Sydney - 26 per cent.

In total 13,291 households were visited where no one was home.

The total number of interviews in each of the three areas is summarized in the table below. This includes the additional households which were in low income CDs.

Table B.2 Interviews conducted in each of the three survey areas

Survey area	Number of interviews	% of sample
Sydney	2257	86
Illawarra	289	11
Blue Mountains	85	3
Total	2631	100

B.7 Weighting

In order to overcome any biases in the survey data due to over-sampling of low income households, data have been weighted according to the household income distribution of households in the three areas represented in the survey. Average household incomes for the three areas were obtained from the Australian Bureau of Statistics (ABS) and weights calculated for each survey household based on the average household income for their SLA.

In addition, to ensure that the consumption profiles for electricity, gas and water matched the known distribution of consumption within the survey area, consumption weights were generated for each observation. This ensures that the random sample of 2,031 respondents is representative of the population according to each of the services provided. Population consumption (ie, a profile of total residential consumption) was obtained from the relevant electricity, gas and water providers within the survey area, as the basis for calculating the consumption weights.

Most of the results presented in this report have been generated from the data obtained from the consumption weighted random sample of 2,031 respondents, adjusted for any non-responses to the particular questions reported. In some instances, we were unable to obtain consumption data for a respondent, and these respondents were therefore excluded where results were reported by consumption category.

Where results are presented in the report by income category, we have used the full sample of 2,631, applying the income weights to remove any biases associated with the additional low-income sampling.

B.8 Potential sample biases

Weighting of the survey data helps to overcome some of the sampling bias which may occur in a survey of this nature. Even though weights have been applied it is important to consider the potential biases within the survey sample when interpreting the data. Potential biases might include:

1. Response rates in metropolitan locations are traditionally lower than in non-metropolitan locations.
2. Response rates may have been affected by a heightened state of concern over privacy issues and giving of personal information.
3. As discussed previously, a greater proportion of low income households were included in the sample to enable more in-depth analysis for this group. However, the household income weighting which have been applied to the data should correct for any biases due to over sampling of low income households.
4. Unit and apartments are likely to be underrepresented in the survey sample for the following reasons:

- a) Many are difficult to access because they are security buildings.
- b) There is a greater proportion of units in metropolitan locations where the response rate is lower than in non-metropolitan locations.

B.9 Consumption and billing information from utilities

In order to obtain billing and consumption data for electricity, gas and water, survey participants were asked to sign a consent form allowing the relevant utilities to release that information to Taverner Research for inclusion in the data analysis. Participants who refused permission were not included in the survey.

For those who gave permission, a signed consent form was forwarded to the relevant utilities in exchange for billing and consumption data. Account numbers were sought from respondents to facilitate the utilities accessing their information, however, a number of respondents were unable to provide account numbers because they had disposed of their bills. This made data retrieval more difficult for the utilities and hence not all billing and consumption data for respondents were obtained.

The following table provides a breakdown of the number of respondents who gave permission for their information to be accessed and the percentage of customers for whom the utilities were able to provide consumption and billing data.

Table B.3 Response rates from utilities for customer billing and consumption data

Survey area	Number of Respondents giving permission for data to be accessed	Respondents for which data was provided by utilities
Sydney Water Corporation	2,598	2,472 (95%)
EnergyAustralia Electricity	1,190	924 (78%)
EnergyAustralia Gas	267	144 (54%)
AGL Gas	1,038	631 (61%)
Other Electricity	529	410 (78%)
Integral Energy	912	787 (86%)

B.10 Annualised billing and consumption data

Billing and consumption data were provided for each quarter by the utilities. Quarters added to 365 days for some, but not for others. For those for whom quarters did not add to 365 days, the data were annualised. This involved dividing the total consumption and billing for all four quarters by the number of days represented by all four quarters and then multiplying that amount by 365 days. Billing and consumption data are, therefore, reported on an 'annualised' or 'per annum' basis (ie, over 365 days) for water, gas and electricity.

B.11 Income groups

For the purposes of this report, all households earning less than \$31,200 have been defined as low income households. Just over one third of the survey sample (35 per cent) said they earned less than \$31,200 per annum. As described in the Sample Selection section above, the increased percentage of low income households in the survey is explained by the 600 additional interviews conducted in low income areas which were included in order to provide sufficient low income households to enable more detailed analysis of this income group.

The highest income group which made up six per cent (6 per cent) of the total sample earned more than \$156,000 per year. About 12 per cent of households refused to provide their annual income.

C | The 2006 questionnaire

CUSTOMER VIEW POINT SURVEY

START TIME | ____:____ |

Region | ____ |

Statistical Area Code | ____ | ____ |

Suburb Code | ____ | ____ | ____ | ____ |

SURVEY ON ELECTRICITY, GAS, AND WATER

S1 Code best description of structure containing household

- Separate house..... 1
- Dwelling/Non-dwelling combined eg shop houses..... 2
- Semi-detached/terrace/house/villa unit/town house/duplex..... 3
- "Granny flat" 4
- 'Low rise' flats/units (1 or 2 storeys)..... 5
- Flats (3 storeys) 6
- 'High rise' flats/units (4 or more storeys)..... 7
- Mobile or improvised dwelling **DO NOT INTERVIEW**

*Interviewer Note: If dwelling and shop/business combined, obtain only energy consumption information for home not business.

INTRODUCTION

Good (...). I'm (...) from TAVERNER Research Company, the national market research company. Today we are conducting a survey on electricity, gas and water. (You may have received a letter about it in the last couple of days?)

We would like to speak to the person who normally pays the household bills.

S2. Is this your permanent residence or a holiday home?

- Permanent 1 Proceed
- Holiday 2 Terminate

S3. Have you lived at this address since at least the end of July last year?

- Yes..... 1 Proceed
- No 2 Terminate

S4. If separate house ask: Can you tell me the approximate size of your block of land?

- Small (Less than 500 square metres) 1
- Medium (500 to 900 square metres) 2
- Large (More than 900 square metres) 3

S5. If the respondent does not have good English language skills, ask if they would like an interpreter. If Yes, then ask LANGUAGE AND MAKE AN APPOINTMENT TIME FOR AN INTERPRETER:

What is the language which you speak at home?

- | | | | |
|------------------|---|---------------------|---|
| Italian | 1 | Spanish..... | 5 |
| Greek | 2 | Turkish..... | 6 |
| Vietnamese | 3 | Cantonese..... | 7 |
| Arabic..... | 4 | Mandarin..... | 8 |
| | | Other Specify | 9 |

Appointment for interpreter to conduct interview:

Respondent Name: _____

Phone number: _____

SECTION 1: ELECTRICITY AND GAS CONSUMPTION

Q1. Do you use gas, either mains or cylinder gas, for your regular household usage?

Yes, mains..... 1
Yes, cylinder (large, not portable)..... 2
No..... 3

*Interviewer Note: Cylinder must be outside and non-portable

IF DO NOT HAVE MAINS GAS, ASK ONLY ABOUT ELECTRICITY IN THE FOLLOWING SECTION

Q2. What is the name of the (...) supplier to this dwelling?

	Electricity	Gas
EnergyAustralia	1	1
AGL	2	2
Integral Energy	3	*
Don't Know / Can't recall/unsure ..	4	4
Other name given (Specify)	5	5
Do not have gas		6

Q3. Are you aware that you can choose your (...) supplier?

	Electricity	Gas
Yes	1	1
No.....	2	2

Q4 You have been able to choose your supplier or enter into a contract with your current supplier since January 2002. Have you been approached by your original (...) supplier to enter into a contract?

Interviewer Note: 'Approach' must be phone call, visit, a specific letter addressed to occupants or a 'flyer' in the letter box. A general notice attached to a bill is not defined as an 'approach'.

	Electricity	Gas	
Yes	1	1	IF YES TO EITHER ASK Q5
No.....	2	2	IF NO TO BOTH GO TO Q6
Don't know/Can't remember	3	3	IF DK TO BOTH GO TO Q6

Q5 As a result did you enter into a (...) contract with your original supplier?

	Electricity	Gas
Yes	1	1
No.....	2	2

Q6. Have you been approached by another (...) supplier to switch your supplier?

Interviewer Note: 'Approach' must be phone call, visit, a specific letter addressed to occupants or a 'flyer' in the letter box. A general notice attached to a bill is not defined as an 'approach'.

	Electricity	Gas	
Yes	1	1	IF YES TO EITHER ASK Q7
No.....	2	2	
Don't know/Can't remember	3	3	

Q7. As a result did you switch your (...) supplier?

	Electricity	Gas
Yes	1	1
No.....	2	2

IF YES IN Q5 OR Q7 ASK Q8 – OTHERS GO TO Q9

Q8. What was the main reason that you entered into (...) a contract with your (original supplier or switched (...) supplier)?

DO NOT AID (SINGLE RESPONSE)

	Electricity	Gas
It was cheaper	1	1
Combined electricity and gas bill offered	2	2
The salesperson was persuasive	3	3
The other supplier offered better service	4	4
I was unhappy with my original supplier	5	5
Other (specify):	6	6

IF NO IN Q5 OR Q7 ASK Q9 – OTHERS GO TO Q10

Q9. What was the main reason that you did not enter into a (...) contract with your (original supplier or switch (...) suppliers)?

DO NOT AID (SINGLE RESPONSE)

	Electricity	Gas
It was no cheaper	1	1
I was happy with my current supplier.....	2	2
I had never heard of the other supplier.....	3	3
It was too much trouble to switch	4	4
Did not want to be locked into a contract.....	6	5
Other (specify):	5	6

Q10. CONSENT FORMS

One of the aims of this survey is to see how much electricity, gas and water households use, and relate this to the appliances they have and the size of the household.

To do this we wish to find out how much water, gas and electricity your household has used in the last 12 months and how much you pay to the utilities. We need your permission to obtain this information.

HAND RESPONDENT ELECTRICITY, WATER AND GAS (IF HAVE GAS) CONSENT FORMS.

Interviewer Notes:

- IF SWITCHED ELECTRICITY OR GAS SUPPLIERS IN THE LAST 18 MONTHS GET RESPONDENT TO SIGN TWO CONSENT FORMS FOR PREVIOUS AND CURRENT ELECTRICITY SUPPLIERS OR TWO FOR PREVIOUS AND CURRENT GAS SUPPLIER..
- THE PERSON WHOSE NAME IS ON THE BILL MUST BE THE PERSON WHO SIGNS THE CONSENT FORMS. IF THAT PERSON IS UNAVAILABLE, MAKE AN APPOINTMENT TO COME BACK WHEN THEY ARE HOME. DO NOT CONTINUE THE INTERVIEW IF THE PERSON WHOSE NAME IS ON THE BILLS IS NOT AVAILABLE TO SIGN.
- IF THE BILL NUMBERS ARE UNAVAILABLE, A SIGNATURE AND STREET ADDRESS IS SUFFICIENT. [BUT PLEASE STRESS IMPORTANCE OF ACCOUNT AND NMI NUMBERS]
- SHOW RESPONDENT THE ADDITIONAL INFORMATION ON THE BACK OF THE LETTER WHICH EXPLAINS WHAT WILL HAPPEN TO THEIR BILLING INFORMATION.
- **IMPORTANT!!!** EMPHASISE THAT THE INFORMATION AND THEIR SIGNATURE IS ONLY BEING UTILISED FOR THIS RESEARCH PROJECT. ALL PERSONAL INFORMATION WILL BE DESTROYED AT THE END OF THIS RESEARCH PROJECT IN DECEMBER THIS YEAR.

Would you please sign these forms, which permit your electricity, gas and water suppliers to provide us with this information.

We will not release your name to anyone else and as soon as the billing information is provided to us from the energy suppliers we will delete your name from our records.

IF REFUSED TO GIVE PERMISSION SAY:

This survey is being conducted on behalf of the Independent Pricing Tribunal. The Tribunal is concerned that its decisions should be fair. Therefore we need to have the consumer viewpoint from all sections of the community. We would very much ask that you give permission for us to obtain information on your electricity, gas and water consumption by signing these forms.

If you prefer, your account number could be used rather than your name.

q10a.	Water authorisation signed and returned to interviewer	1
	Water authorisation not signed.....	2
Q10b.	Electricity authorisation signed and returned to interviewer	1
	Electricity authorisation not signed.....	2
	Electricity generated locally by private generator/not on national grid.....	3
Q10c.	Gas authorisation signed and returned to interviewer	1
	Gas authorisation not signed.....	2

SECTION 2: CONCESSION CARD INFORMATION

Q11. Do you hold any of the following concession cards? READ OUT

Pensioner Concession Card	1	
Veterans' Affairs Gold Health Card	2	
Have a concession card but not sure what it is called	3	
No	4	GO TO Q13

Q12. (a) Are you aware that concessions are available to concession card holders for payment of (...) bills?

	Yes	No	Unsure
i) Energy	1	2	3
ii) Water	1	2	3

NOTE TO INTERVIEWER: ENERGY CONCESSIONS APPEAR ON THE ELECTRICITY ACCOUNT ONLY

IF YES TO ANY OF ABOVE, ASK:

(b) Do you, or does anyone in your household currently claim the concessions for your (...) bill?

	Yes	No	Unsure
ii) Energy	1	2	3
ii) Water	1	2	3

SECTION 3: HOT WATER SYSTEMS

Q13. What is the main energy source used in your home for HOT WATER? (SINGLE RESPONSE ONLY)

Electric.....	1	ASK Q14
Gas.....	2	
Solar	*	ASK - IS IT ELECTRIC OR GAS BOOSTED?
Solar only.....	3	
Solar – Electric boosted.....	4	ASK Q14
Solar – Gas boosted.....	5	
Wood, solid fuel.....	6	
Other	7	

IF ELECTRIC

Q14. Is that an off peak system or a standard electric?

Off Peak 1
Standard electric..... 2
Don't know..... 3

*Interviewer Note: If necessary define 'off-peak' as "water is only heated at night." If off-peak will be indicated on electricity bill.

SECTION 4: HOUSEHOLD APPLIANCES

Q15. ASK EVERYONE

What is(are) the main energy source(s) used in your home for COOKING?
(MULTIPLE RESPONSES ACCEPTED)

Electricity 1
Gas..... 2
Other (Specify) 3

Q16. Which of these appliances do you use in your home?

READ OUT (ACCEPT MULTIPLES)

	Yes	No
Clothes Dryer.....	1	1
Dishwasher.....	2	2
Washing machine.....	3	3
Microwave	4	4
Second refrigerator.....	5	5
None of the above	6	6

SECTION 5: HEATING

Q17. What kinds of room heating do you have? PROMPT IF NECESSARY (MULTIPLES ACCEPTED)

IF MORE THAN ONE HEATING TO Q18:

Q18. Which kind of heating do you use most often?(SINGLE RESPONSE)

	Q17 Have	Q18 Use most often
Reverse cycle air conditioning.....	1	1
Electric (not air conditioning)	2	2
Gas.....	3	3
Oil.....	4	4
Wood, Solid Fuel	5	5
Kerosene	6	6
Ducted air (ie central heating in multi-dwelling unit)	7	7
Other heating (Specify)	8	8
<hr/>		
No heating	9	

Q19. a) Apart from electric fans, do you have any air conditioning or air cooling in this dwelling?

Yes 1 GO TO Q20
No..... 2 CONTINUE

b) Are you considering installing an air conditioner?

Yes 1 GO TO Q23
No..... 2 GO TO Q23

Q20. Are you planning to upgrade your current air conditioning system?

Yes 1
No..... 2

Q21 How often do you use your air conditioner?

	Summer	Winter (if reverse cycle)
Only on very hot/cold days	1	1
On most hot/cold days.....	2	2
On most days	3	3
Not applicable/do not use	4	4

Q22 If the price you paid for electricity were, say, 25% higher on very hot days would you switch your air conditioner off?

- | | |
|--------------------------------|---|
| Yes, for short periods | 1 |
| Yes, for most of the day | 2 |
| Yes, all day | 3 |
| No | 4 |
| Don't know | 5 |

SECTION 6: WATER USAGE

Q23. ASK EVERYONE

How many single flush and how many dual flush toilets do you have?

No. SINGLE flush: |__|__|

No. DUAL flush: |__|__|

Q24 How many indoor showers do you have?

Number : |__|__|

SHOWCARD Q25

Q25. Looking at this Card, which of these items do you have? (ACCEPT MULTIPLES)

- | | |
|--------------------------|---|
| Bath | 1 |
| Bath with Spa Jets | 2 |
| Spa | 3 |
| Swimming pool | 4 |
| Sauna | 5 |
| None of the above | 6 |

INTERVIEWER NOTE: IF DO NOT HAVE GARDEN GO TO Q27

Q26. Do you water your garden with a hand-held hose during the hours you are permitted to?

1. USUALLY
2. SOMETIMES
3. NEVER

Q27. Do you know that there is a two-part tariff, so that you now pay more per kL of water that you use in excess of 100kL per quarter?

1. YES
2. NO

If no to Q29

Q28. Have you changed the amount of water you use because of this new tariff structure?

1. YES
2. NO
3. DON'T KNOW

SHOWCARD Q29

Q29. Looking at this card, can you rank from 1 to 8 the most to least important thing in terms of your water and sewage services? (1 being the most important through to 8 being the least important.)

5. Customer service Customer service	<input type="text"/>
3. Pressure of water	<input type="text"/>
7. Flexibility of billing arrangements	<input type="text"/>
2. Quality of water	<input type="text"/>
4. Continuity of water supply	<input type="text"/>
6. Incentives to reduce water use	<input type="text"/>
8. Good environmental management of water	<input type="text"/>
1. Overall cost	<input type="text"/>

Q30 From time to time the water supply system breaks down or the water supply needs to be shut down for more than 2 hours for maintenance. With additional resources, Sydney Water could reduce the frequency of these events Let us say you face an average of 1 shut down per year. Would you be willing to pay 10% more for water to have a shut down only once in two years?

1. YES
2. NO

SECTION 7: ENERGY EFFICIENT PACKS

Thinking now about energy efficient light bulbs and water-saving showerheads. Over the past year or so, there have been special offers giving away packs of energy efficient light bulbs, which may have also included a water-saving showerhead, for free.

Q32 As far as you know, has anyone in your household received or obtained any of these free giveaway packs of energy efficient light bulbs, that may or may not have included a showerhead?

- | | | |
|-----------------|---|---------------------|
| Yes | 1 | CONTINUE |
| No..... | 2 | GO TO Q39 Section 8 |
| Don't know..... | 3 | GO TO Q39 Section 8 |

Q33 Each free pack included between four and six individual energy efficient light bulbs, and some households could have received more than one of these giveaway packs. As far as you know, about how many individual light bulbs, in total, did your household receive, from these giveaway packs? For example, if you received one pack of six light bulbs, the answer would be six.

(If don't know, ask approximately how many)

Number:

Q34 And as far as you know, about how many of these free individual energy efficient light bulbs have been used or installed in your household so far?

(If don't know, ask approximately how many)

Number:

Q35 How would you describe the light bulbs that have not been installed:

- | | |
|--|---|
| Plan to install some of them | 1 |
| Plan to install all of them eventually | 2 |
| Do not plan to install them | 3 |
| Don't know..... | 4 |

Q36 Some of these packs included a free water-saving showerhead. As far as you know, how many showerheads has your household received, in total, from these giveaway packs?

- | | | |
|-----------------|---|---------------------|
| 1 | 1 | GO TO Q37 |
| 2 | 2 | GO TO Q38 |
| 3 or more | 3 | GO TO Q38 |
| none | 4 | GO TO Q39 Section 8 |
| Don't know..... | 5 | GO TO Q39 Section 8 |

SHOWCARD 37

Q37 Which of the following best describes this free water-saving showerhead?

- Installed 1
- Planning to install it 2
- Installed but have or will remove it 3
- Installed but removed or will remove the flow restrictor 4
- Already had water efficient shower head(s) 5
- Not planning to install it 6
- Don't know..... 7

SHOWCARD 38

Q38 Which of the following best describes these free water-saving showerheads?

- All installed 1
- At least one installed, planning to install more..... 2
- At least one installed, not planning to install more..... 3
- At least one installed but have or will remove it..... 4
- At least one installed but removed or will remove the flow restrictor 5
- Already had water efficient shower head(s) 6
- Not planning to install any 7
- Don't know..... 8

SECTION 8: RESIDENCE INFORMATION

SHOWCARD Q39

Q39. Is this dwelling owned fully or being paid off by you or any of the usual residents of this household or are you renting or paying board?

IF RENTING ASK: "Is that Housing Commission rental or private?"

- | | | |
|--|---|-----------|
| Owned fully/ fully paid off..... | 1 | GO TO Q41 |
| Buying / paying off home | 2 | GO TO Q41 |
| Renting – Private | 3 | CONTINUE |
| Renting – Public/Housing Commission..... | 4 | CONTINUE |
| Boarding..... | 5 | GO TO Q41 |
| Other | 6 | GO TO Q41 |

IF RENTING PREMISES

Q40. a) Do you pay for the quarterly water usage charges?

- | | | |
|-----------|---|-----------|
| Yes | 1 | CONTINUE |
| No..... | 2 | GO TO Q41 |

IF YES

b) Do you pay direct to the water supplier or not?

Direct 1

Not direct 2

Q41. **ASK EVERYONE**

How many times have you moved house in the past three years?

NUMBER OF TIMES MOVED: |__| |__|

Q42. a) How many bedrooms are in this dwelling?

NUMBER OF BEDROOMS: _____

Interviewer Note: Include rooms that can be used as either a bedroom or a study.

SECTION 9: PAYMENT DIFFICULTIES

Q43. In the past three years have you approached your supplier because you have been unable to pay your bills?

	Gas	Electricity	Water	
Yes	1	1	1	
No.....	2	2	2	GO TO Q45
Refused	3	3	3	GO TO Q45

Q44. What sort of help did the (...) supplier offer? (DO NOT READ OUT)

	Gas	Electricity	Water
Allowed to pay off in installments	1	1	1
Extended the due date on the bill	2	2	2
Referred me to an emergency relief agency.....	3	3	3
Referred me to a financial counselor	4	4	4
No help offered	5	5	5
Other (Specify)	6	6	6

Q45. In the past 3 years, did you seek financial relief to help you cope with utility bills, for example, from charities like St Vincent de Paul or the Salvation Army?

Yes 1
No..... 2
Refused 3

Q46 **ASK EVERYONE**

In the past three years have you had the electricity or gas disconnected, or the water restricted, for not paying your bill?

	Gas	Electricity	Water
Yes	1	1	1
No.....	2	2	2
Refused	3	3	3

SECTION 10: CLASSIFICATION DATA

Q47. Sex (RECORD AUTOMATICALLY)

Male 1
Female..... 2

- Q48. (a) What is the total number of people in this household including yourself? _____
- (b) How many are aged 15 and over? _____
- (c) How many are aged less than 15 years? _____
- (d) How many would spend most days of the week at home? _____
- Interviewer Note: Infants to be included

SHOWCARD Q49

Q49. HOUSEHOLD STRUCTURE

Which of these groups would best describe your household structure?

SHOWCARD Q50

Q50. HOUSEHOLD INCOME

Using this card, could you please give me the number which best describes the total income of this household, before taxes last year?

Interviewer NOTES:

- REMIND Respondent: When calculating household income, please include income from all sources, including salaries, interest, dividends, bonuses, capital gains, profits and so on.
- If respondent refuses say: *"This information is important because the Tribunal needs to understand the impacts of price changes on the various customer groups, including pensioners and low-income households. One of the main purposes of this survey is to find out how much water, gas and electricity households from the different income groups use."*

TELEPHONE

Just in case my supervisor needs to check or validate my work, could you please tell me your telephone number?

STD

Write in number

Refused to give telephone number 1

Does not have a phone 2

RESPONDENT'S NAME

Mr/Mrs/Miss/MS(First name & Family Name)

Address:(Street No. & Name)

.....(Suburb)

Postcode:

INTERVIEWER'S NAME

INTERVIEWER'S NUMBER

.....
(PLEASE PRINT)

WHEN INTERVIEW CONDUCTED

Monday - Friday	1
Saturday - Sunday	2
AM	3
PM	4

_____ / _____ / 2006

(Day) (Month)

LOCATION OF INTERVIEW (SUBURB AND SUBURB NUMBER)

To be filled in by Interviewer (refer to call sheet) _____

INTERVIEWER DECLARATION

I certify this is a correct record of the interview which has been completed in accordance with my interviewing guidelines and conducted according to the ICC/ESOMAR International Code of Marketing and Social Research Practice.

Signed: _____

RECORD FINISH TIME NOW | ____:____ |

SHOWCARD Q25

Bath.....	1
Bath with Spa Jets.....	2
Spa	3
Swimming pool	4
Sauna	5
None of the above.....	6

SHOWCARD Q29

- 5. Customer service
- 3. Pressure of water
- 7. Flexibility of billing arrangements
- 2. Quality of water
- 4. Continuity of water supply
- 6. Incentives to reduce water use
- 8. Good environmental management of water
- 1. Overall cost

SHOWCARD Q37

Installed	1
Planning to install it	2
Installed but have or will remove it.....	3
Installed but removed or will remove the flow restrictor	4
Already had water efficient shower head(s)	5
Not planning to install it	6
Don't know.....	7

SHOWCARD Q38

- All installed 1
- At least one installed, planning to install more 2
- At least one installed, not planning to install more 3
- At least one installed but have or will remove it..... 4
- At least one installed but removed or will remove the flow restrictor 5
- Already had water efficient shower head(s) 6
- Not planning to install any 7
- Don't know 8

SHOWCARD Q39

Owned fully / fully paid off	1
Buying / Paying off home	2
Renting – Private.....	3
Renting – Public / Housing Commission.....	4
Boarding	5
Other	6

SHOWCARD Q49

1.	Young single person.....	Persons under 35 years of age living alone or sharing accommodation in a house or flat.
2.	Middle single person	Between 35 and 59 years old living alone or sharing accommodation in a house or flat.
3.	Mature single person	Over 59 years old living alone or sharing accommodation in a house or flat.
4.	Single parent - Young family.....	Single parent with mostly pre-school children.
5.	Single parent - Middle family	Single parent with most children aged from <u>6 to 15 years</u> and still at home
6.	Single parent - Mature family	Single parent with most children <u>over 15 years</u> and still living at home.
7.	Couple - Young family	Couple with mostly pre-school children.
8.	Couple - Middle family	Couple with most children aged from <u>6 to 15 years</u> and still at home.
9.	Couple - Mature family.....	Couple with most children <u>over 15 years</u> and still living at home.
10.	Young couple, no children	Young couple with no children.
12.	Mature couple, no children	Family or couple in middle or late age with no children or none at home.
13.	Other (Please specify)	

SHOWCARD Q50

Note: When calculating household income, please include income from all sources, including salaries, interest, dividends, bonuses, capital gains, profits and so on.

Note: categories may change to reflect inflation. Taverner and IPART to discuss, depending on how the weighting would work

Total fortnight	Total Year
1. Less than \$400	Less than \$10,400
2. \$400 to \$800	\$10,400 to \$20,800
3. \$801 to \$1,200	\$20,801 to \$31,200
4. \$1,201 to \$1,600	\$31,201 to \$41,600
5. \$1,601 to \$2,000	\$41,601 to \$52,000
6. \$2,001 to \$3,000	\$52,001 to \$78,000
7. \$3,001 to \$4,000	\$78,001 to \$104,000
8. \$4,001 to \$6,000	\$104,001 to \$156,000
9. More than \$6,000	More than \$156,000

Glossary

Adult	Person 15 years and over
Children	Persons aged less than 15 years
High consumption	For electricity, consumption above 12,000kWh per annum. For gas, consumption above 35,000MJ per annum. For water consumption above 500 kL per annum.
High income	Household income above \$104,000 per annum
House	Separate house, combined dwelling/non-dwelling, and semi-detached/terrace/house/villa unit/town house/ duplex
Household	A small group of persons who share the same living accommodation, who pool some, or all, of their income and wealth and who consume certain types of goods and services collectively, mainly housing and food (www.abs.gov.au)
Household income	Total income of the household (not respondent), before taxes, from all sources including income from salaries, interest, dividends, bonuses, capital gains, profits and so on
Indoor amenity	Facilities located inside the dwelling including toilets, showers, baths, spas, dishwashers and washing machines
Large energy using appliance	Dishwasher, washing machine, clothes dryer and air conditioner. The survey did not ask about entertainment appliances (such as VCRs, DVD players, TVs and stereos)
Large land size	Land more than 900 square metres
Low consumption	For electricity, consumption below 4,000kWh per annum. For gas, consumption below 5,000MJ per annum. For water, consumption below 100 kL per annum.
Low income	Household income below \$31,200 per annum
Medium land size	Land between 500 to 900 square metres
Middle family	Family with most children aged from 6 to 15 years and still at home

Mature family	Family with most children over 15 years and still living at home
Population	All households in the Sydney, Blue Mountains and Illawarra regions
Price structure	The mix of fixed charges, usage charges and price steps
Relative standard error	A measure of an estimate's reliability obtained by dividing the standard error of the estimate by the estimate itself. This quantity is expressed as a per cent of the estimate. Estimates with large RSEs are considered unreliable
Renters	Customers paying rental for their primary place of residence
Residential customers	Customers in private dwellings, not including commercial and industrial customers
Sample	Surveyed households in the Sydney, Blue Mountains and Illawarra regions
Significant	95 per cent probability that something is true
Single person	Person living alone or sharing accommodation in a house or flat
Small land size	Land less than 500 square metres
Standard error of the mean	An estimate of the standard deviation of the sampling distribution of means, based on the data from one or more random samples
Unit	Granny flat, 'low rise' flats (less than 3 storeys), flats (3 storeys) and 'high rise' flats (more than 3 storeys)
Young family	Family with mostly pre-school children