

## 添付資料-2

**South Africa Energy Efficiency Awareness Survey**  
**Produced by KLA for *The Institute of Energy Economics, Japan***  
**August 2012**

## **1. Introduction, Objectives and Report Structure**

The overarching objective of this study is to provide an exploratory understanding of the understanding, attitudes and behaviours around energy efficiency within the South African market.

The report is structured according to these areas:

- a) Understanding energy efficiency (Pg 3)**
  - Attitudes towards the energy crisis
  - Electricity billing
  - Perceptions towards billings and usage
  
- b) Energy saving behaviour (Pg 5)**
  - Activities in home
  - Home modifications
  - Activities in the workplace
  
- c) Transport and vehicle ownership (Pg 7)**
  - Mode of transport
  - Mileage and petrol spend
  - Petrol price increases
  
- d) Appliances (Pg 8)**
  - Understanding of 'energy efficient' appliances
  - Energy efficient appliances in home
  - Appliance purchase drivers
  - Appliances in home
  - Future appliance purchase
  
- e) Communication and promotions (Pg 11)**
  - Interest in energy efficiency communication
  - In store activity promoting energy efficiency
  - Eskom communication awareness
  - Eskom 49 Million campaign awareness
  - Power Alert awareness
  - Government involvement in energy efficiency
  
- f) Conclusions and Recommendations (Pg 13)**

## 2. Methodology

A quantitative methodology was employed. Respondents were interviewed using a face-to-face CAPI (computer assisted personal interviews) approach. KLA uses Galaxy tablets to conduct their personal interviews.

## 3. Sample

The sample was selected to be representative of the South African populations as informed through the All Media and Products Survey (AMPS) data 2011. Two major metropolitan areas were selected to represent the sample, due to the different climactic zones present in Johannesburg and Durban.

The SAARF Living Standards Measure (LSM) has become the most widely used segmentation tool in South Africa, and is endorsed by the Southern African Market Research Association (SAMRA). The SAARF LSM divides the population into 10 LSM groups, based on various living standards criteria.

The sample structure, as defined by the various demographic splits is represented below;

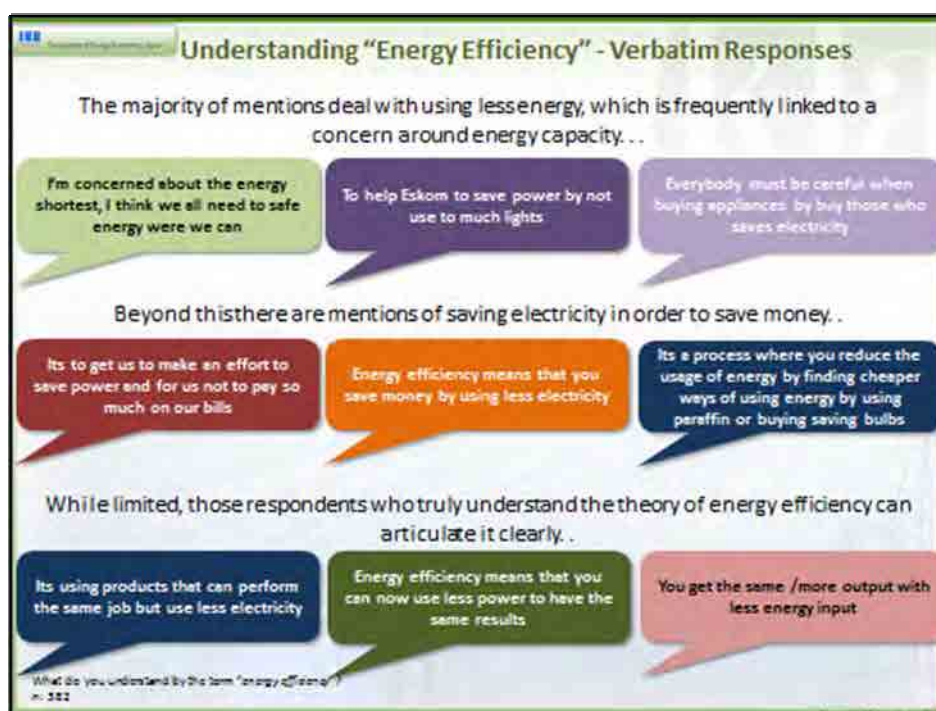
<b>DEMOGRAPHIC TYPE</b>	<b>DEMOGRAPHIC</b>	<b>%</b>	<b>COUNT (n: 415)</b>
<b>RACE</b>	Black	84%	348
	White	8%	35
	Indian	5%	22
	Coloured	2%	10
<b>LSM</b>	5 -6	58%	240
	7 - 8	42%	175
<b>GENDER</b>	Female	52%	217
	Male	48%	198
<b>AGE</b>	18 - 34	50%	207
	35 +	50%	208
<b>REGION</b>	Johannesburg	62%	258
	Durban	38%	157

## 4. Results

### a) Energy Efficiency in Context

#### Understanding of 'Energy Efficiency'

When asked to define 'energy efficiency', the concept is understood at a very generic level, with the majority citing "using less energy or electricity" in explanation of the term. Understanding of "using less energy to get the same results" is articulated at very low levels, indicating a need for market education around the concept of energy efficiency. Once consumers are in a position to fully understand what energy efficiency means, there is greater potential for a behavioural shift within this context.



#### Attitudes towards the energy crisis

A high awareness of the energy crisis is evident, and with this, there is strong awareness and understanding of the need to save energy, and the need to change personal behaviour in this light. While a concern for the country and for Eskom's predicament is evident, respondents tend to make the link between saving energy and saving money. Throughout the study, a trend is evident whereby the more energy saving has a personal impact on consumers (and on their spend), the more engaged they are with the process.

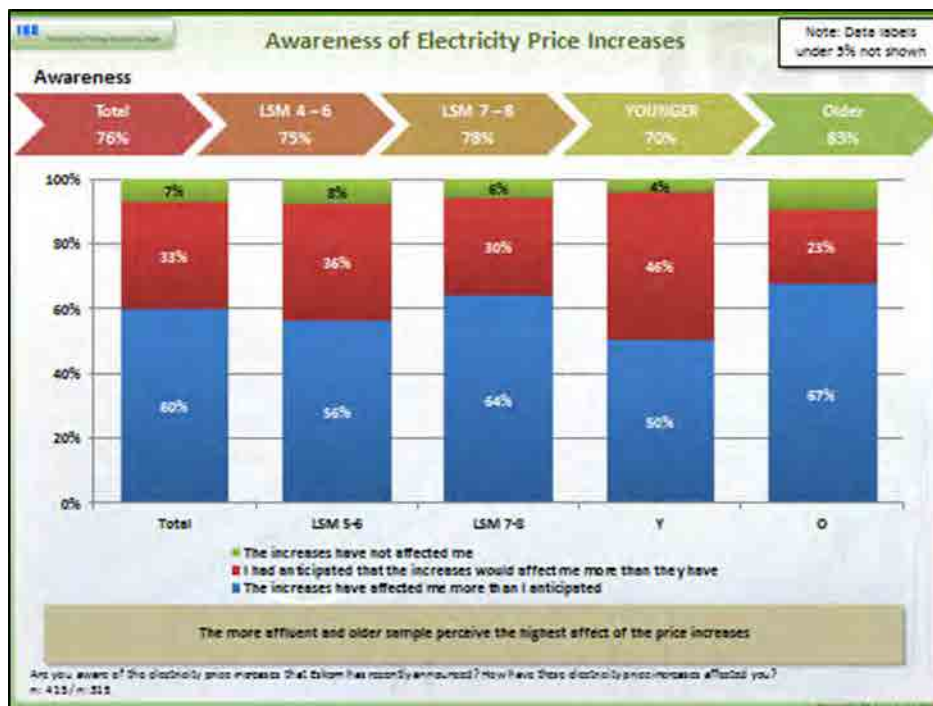
#### Electricity Billing

A high distrust of the billing process is evident. Consumers don't appear to fully understand how they are billed, both in terms of what is owed and how this is calculated, although the calculation elicits lower understanding as compared to what is owed. At a total level, 6% of respondents do not look at their bills at all. This trend is seen most strongly in the older sample who are the most disengaged from the concept of energy efficiency.

### Perceptions towards Billing and Usage

Within this context, there is a very high incidence (61%) of people feeling that they are being over-billed. Electricity price increases are strongly noted at 76%, with the majority claiming that these increases have affected them more than anticipated. Due to the effect these increases have had, electricity monitoring has become far more stringent over the past 4 years, and consumers are generally much more careful with their electricity usage.

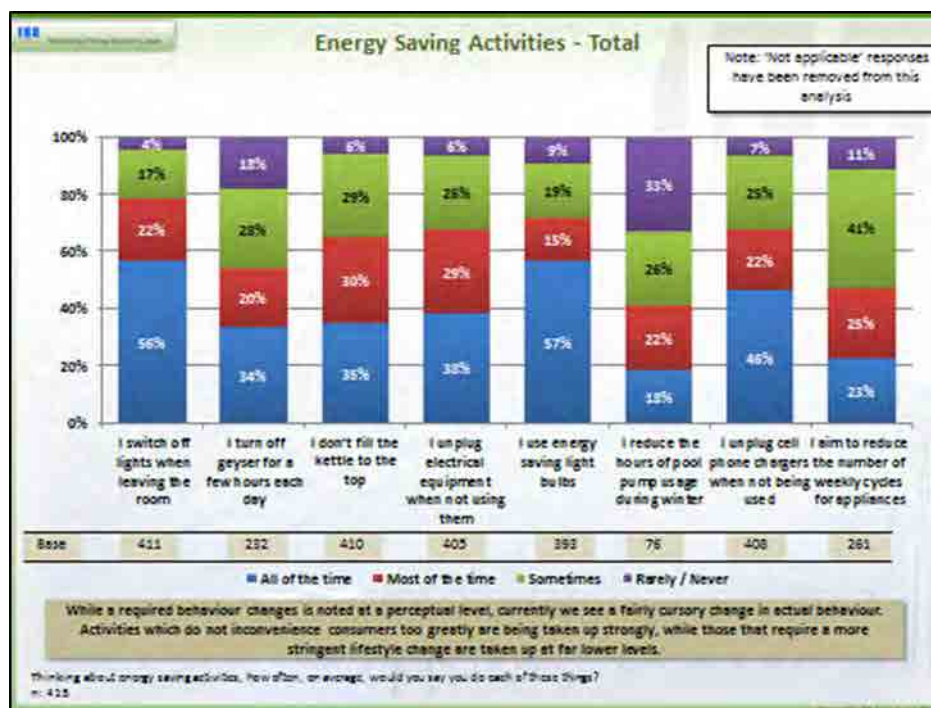
This again highlights the trend that where a personal impact is felt, the likelihood of changing behaviour is greater.



## b) Energy Saving Behaviour

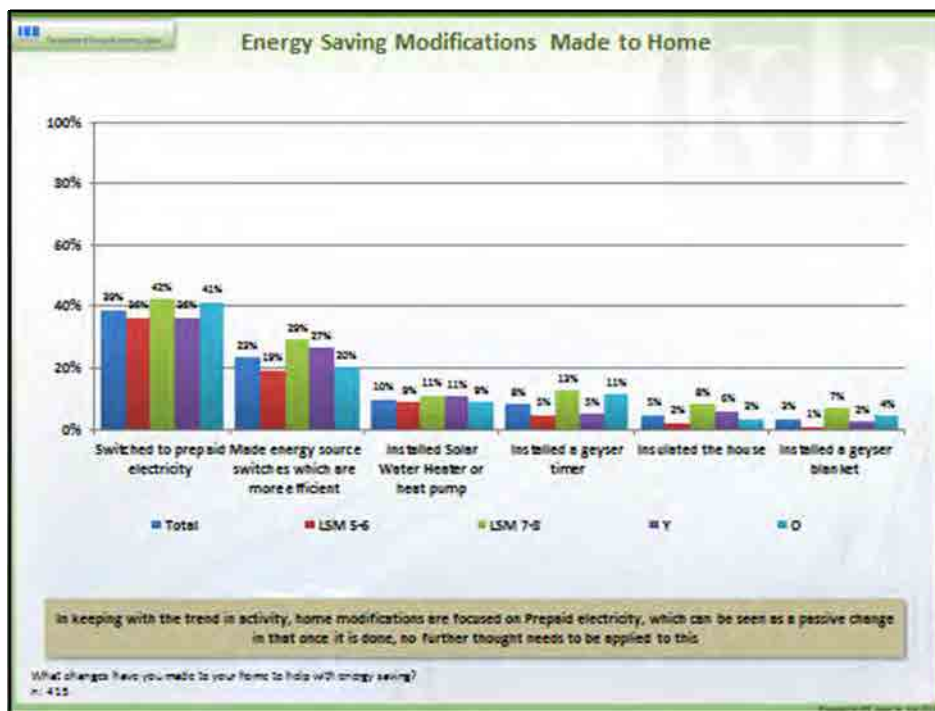
### Activities in Home

In keeping with an understanding that personal behaviour needs to change, everyday activities such as turning off lights and using energy savings bulbs are taken up at fairly high levels. The less affluent and younger sample display the highest incidence of these everyday behaviour changes. We see a lack of engagement amongst the more affluent sample – while these respondents do notice electricity price increases, the impact on their lives is evidently not strong enough, and thus the incentive for real behavioural change is lower.



### Home Modifications

Home modifications are by no means yet the norm. The respondents who appear the least engaged in everyday activities are also the respondents who display the highest incidence of having changed to prepaid electricity. This is indicative of a trend whereby consumers, who can afford to, are more inclined to make a once-off change with a higher cash outlay but lower hassle factor, as opposed to making smaller everyday changes. The mentality here is one of "I have done my bit, and I have solved my personal problem. Now I don't need to worry about the energy crisis".



### Activities in the Workplace

While behaviour is changing in a personal space, active engagement in a work space is limited, due to activities having less of a personal and financial impact. Beyond this, energy saving behaviour in communal spaces is even less prominent. We see again, that where a personal impact is perceived, energy saving behaviour is more prominent and consumers are more engaged with finding ways to reduce their electricity usage and spend. As personal impact decreases, so too do efforts to save energy.

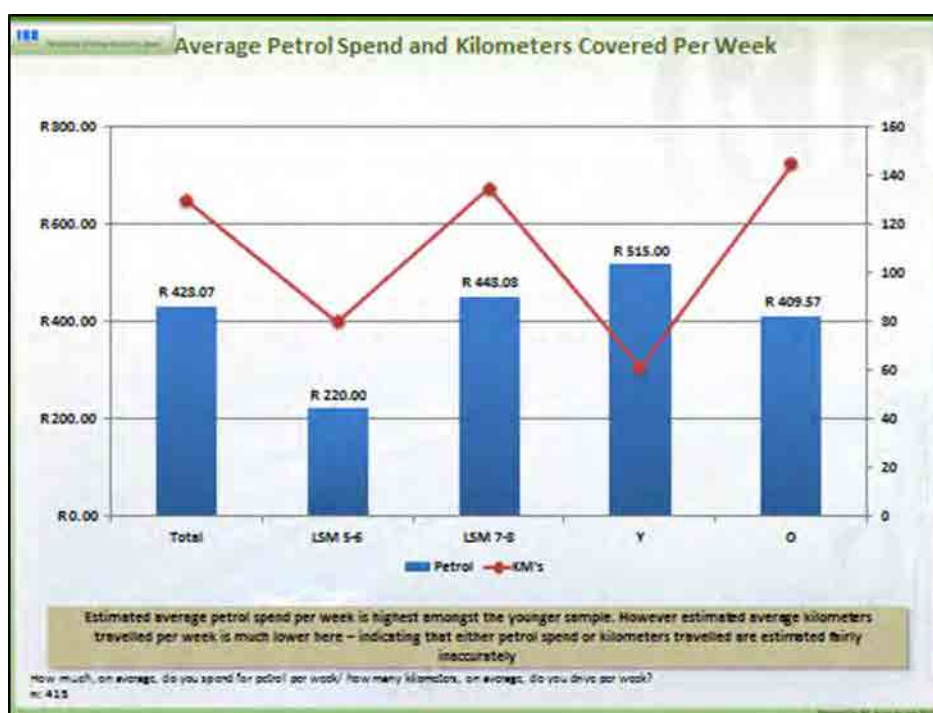
## c) Transport and Vehicle Ownership

### Mode of Transport

The majority of the sample (75%) uses public transport, predominantly taxi's. Of those who own a vehicle, the majority own small passenger vehicles. Very low incidence of diesel cars is noted (8% of total vehicle ownership), with no ownership of hybrid cars.

### Mileage and Petrol Spend

There appears to be a disconnect between perceived petrol spend per week, and kilometers travelled, which begs the question as to which metric vehicle owners are actually paying more attention to. The assumption is that petrol price spend is more accurate, while kilometres travelled are not read or recorded accurately.



### Petrol Price Increases

The increase in petrol price is noted at 69%, with respondents citing making fewer trips and sacrificing other areas of spend as the key behavioural changes in addressing the increase.



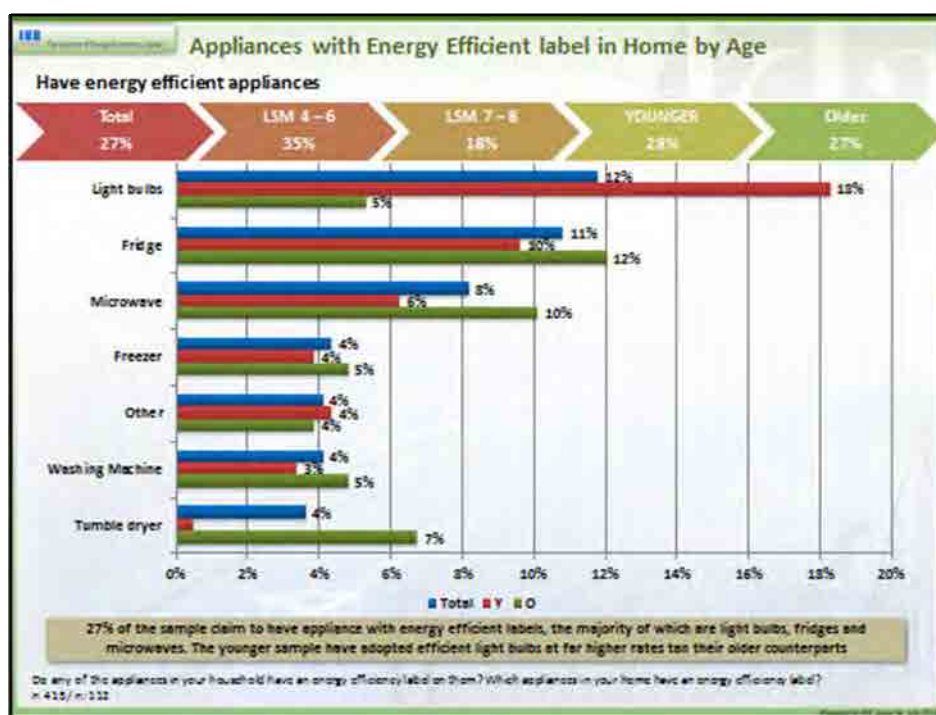
## d) Appliances

### Understanding of 'Energy Efficient Appliances'

Understanding of energy efficiency within the context of an appliance speaks to using less electricity than another appliance, or to using less energy to get the same result. Where on a conceptual level, "energy efficiency" was understood in generic terms, the concept is better understood when applied to an appliance. Once consumers have understood and bought into the benefit of an energy efficient appliance, this could be used in leveraging education around energy efficiency at a broader level.

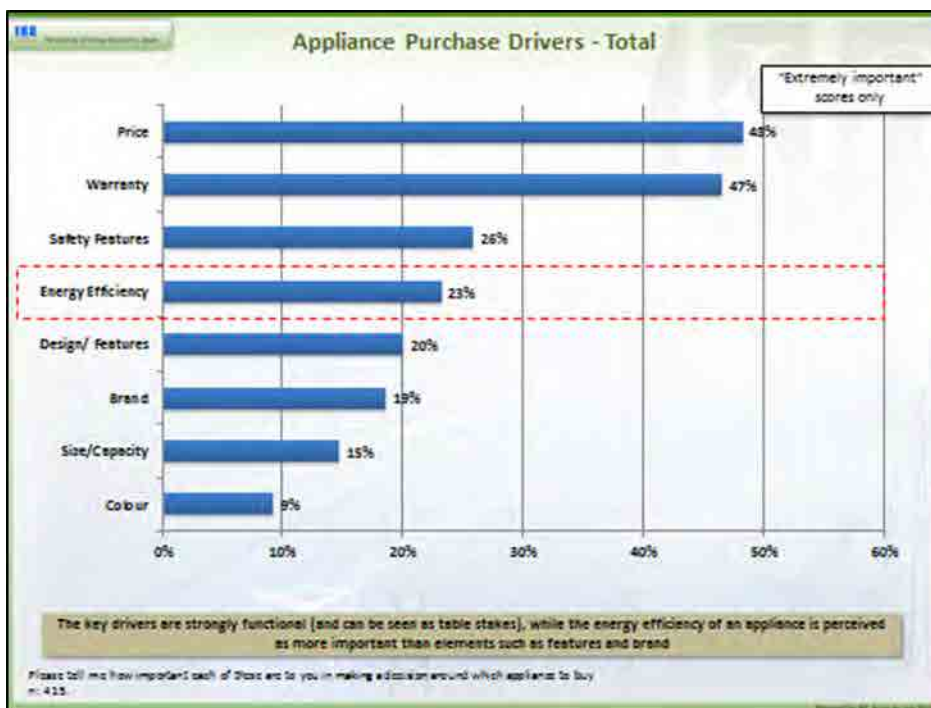
### Energy Efficient Appliances in Home

The incidence of having energy efficient appliances in the home is still quite low, at 27% on a total level. This is driven predominantly through energy saving light bulbs, although fridges and microwaves are the most prominent large appliances that have energy savings labels. The younger sample drive the ownership of energy efficient appliances, which is in keeping with their far higher engagement with the energy crisis and the need to change personal behaviour in combatting this.



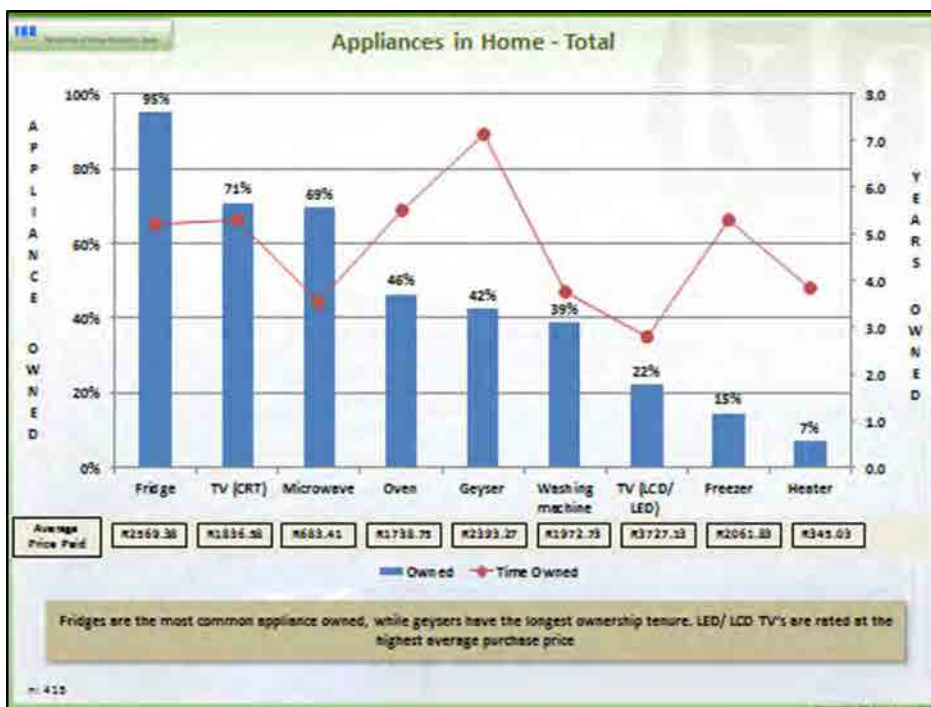
### Appliance Purchase Drivers

As expected, price is the key driver to appliance purchase choice. Warranty is of key importance as well. Energy efficiency comes in as the fourth most important driver, indicating that there is awareness of the long-term benefits of purchasing an energy efficient appliance. As buy-in to the benefit of energy efficient appliances increases, so too should the relative importance of energy efficiency when purchasing a new appliance.

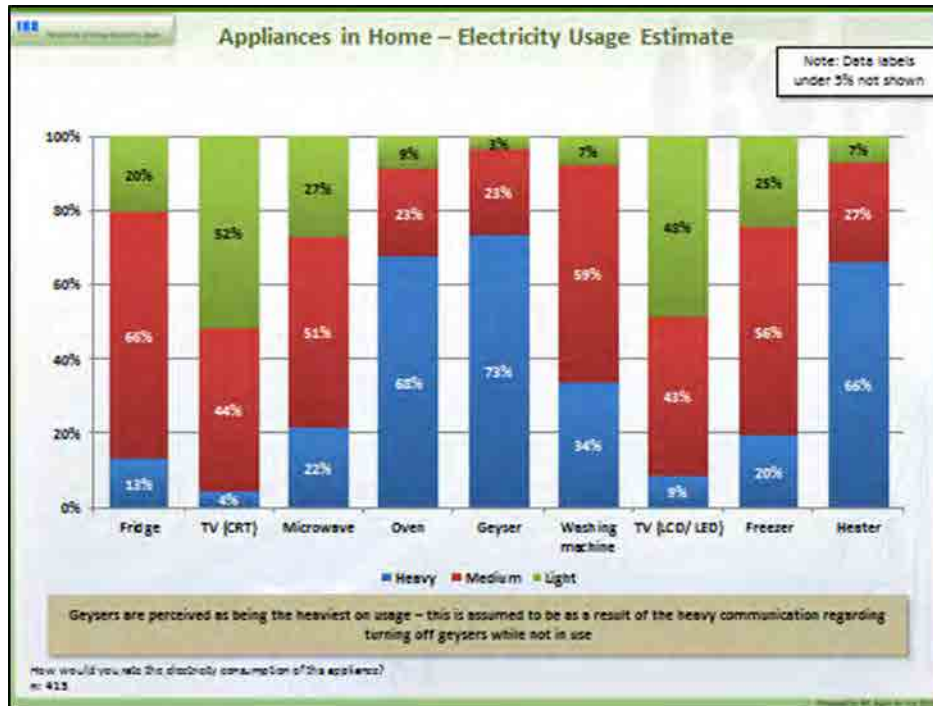


### Appliances in Home

Fridges, followed by CRT TV's and microwaves are the most commonly owned appliances. Ovens and geysers are owned predominantly by the more affluent sample. These two appliances are also perceived as using the highest amount of electricity.



The perception that geysers use the most electricity, while accurate, is clearly driven through the communication regarding switching off geysers when not in use.



### Future appliance purchase

Washing machines drive future purchase intent, while geysers and ovens are cited strongly as a subsequent desired purchase, after the more 'essential' washing machine and microwave.

**e) Communication and Promotions**

Interest in Energy Efficiency Communication

Claimed interest in finding out more about energy efficiency and savings is high at 75% on a total level. Interest is significantly higher in the younger sample (84%) as compared to the older sample who only displays an interest at 64%. Mass media is cited as the most preferred channels for education and communication. It is evident that a two-tiered communication approach is required; mass media is required to inspire the nation to pull together in assisting with the energy shortage. However, a more tactical, 'on-the-ground' approach is required to underpin the mass media.

In store activity promoting Energy Efficiency

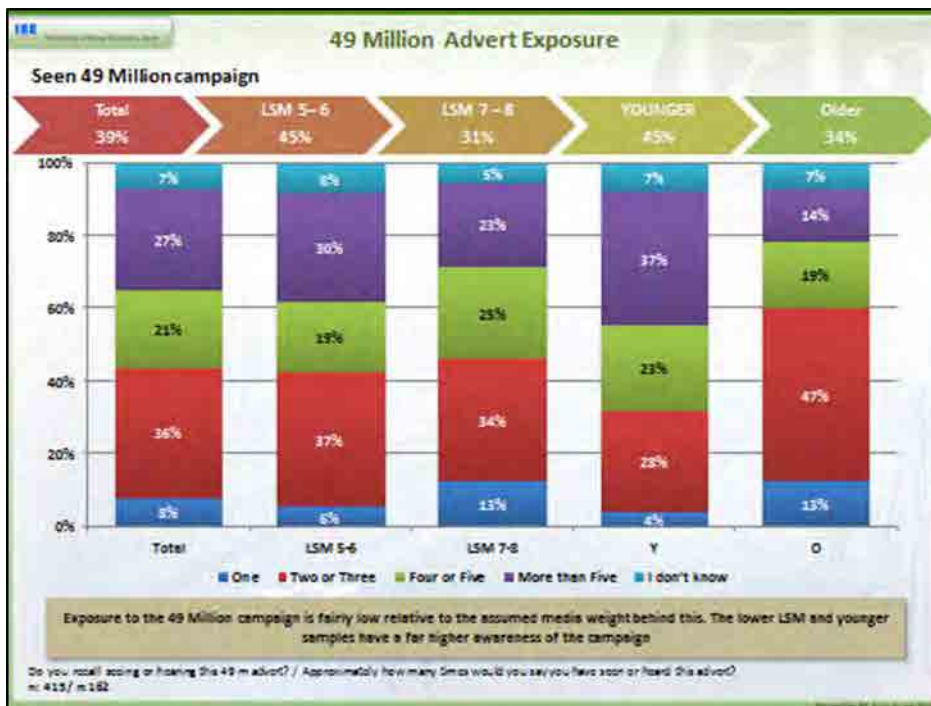
In store activity promoting energy efficiency is not strongly noted. Promotions around energy efficiency are noted higher than salespeople promoting appliances due to their energy efficiency credentials, with only ¼ of the sample having been exposed to this. There is a higher incidence of energy efficiency activity in stores catering to the less affluent market.

Eskom Communication Awareness

Claimed awareness of Eskom communication is at 68%. Again, the younger sample displays a far higher awareness of Eskom branded communication at 80% (as opposed to the older sample at 55%). Awareness is driven predominantly through TV, Radio and print media (newspapers and magazines).

Eskom 49 Million Campaign Awareness

In contrast to the relatively high brand awareness, awareness of the 49 Million campaign is lower, at 39% at a total level. For those aware of the campaign, claimed frequency of exposure is fairly high, ranging between 2 to more than 5 times that respondents have seen or heard the campaign.

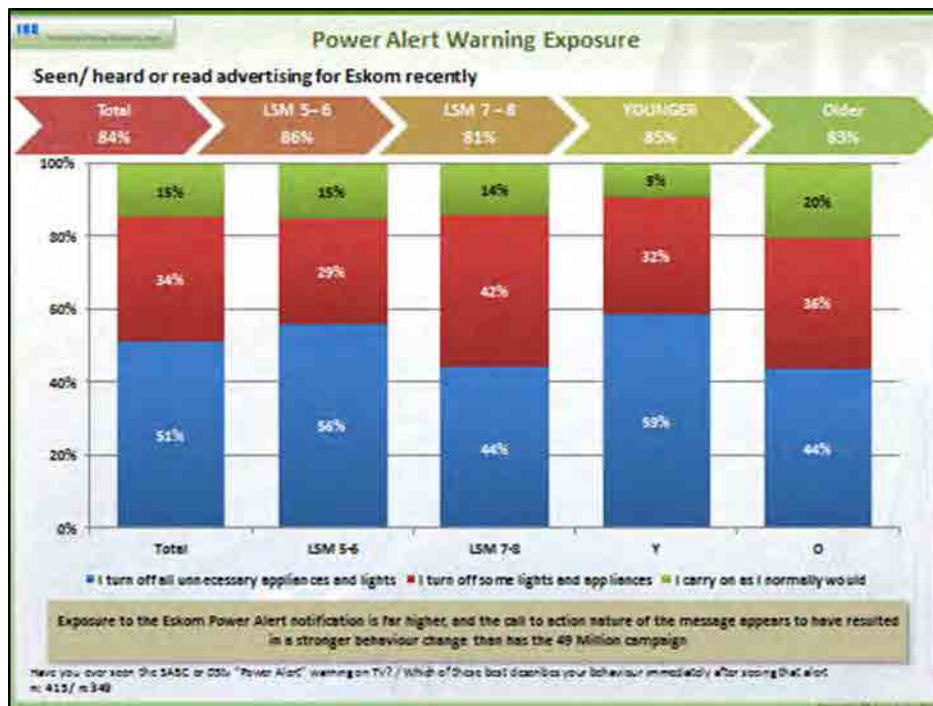


While the campaign has created high awareness of the electricity problem and the need for a collective behaviour change, this has not directly translated into an actual change in behaviour. (64%

of the total sample claim that they are much more aware, while only 43% state that their behaviour has changed in everything that they do).

### Power Alert Awareness

The power alerts are noted at high levels (84%), with the majority claiming that these alerts instigate an instant action, either in turning off all unnecessary lights or appliances, or in turning off some of these. The strong, functional 'call-to-action' nature of this communication resonates well, and works in effecting real-time behaviour change.



### Government involvement in Energy Efficiency

Eskom is perceived as doing a better and more active job in promoting energy saving than is Municipal or National Government. However this is to be expected as the majority of communication around energy efficiency is Eskom branded.

## **f) Conclusions and Recommendations**

### **Barrier: Consumer Mindset**

The significant impact of electricity price increases coupled with a lack of clarity around the billing process leads to increased scepticism. In this context, there is a need for greater transparency and consumer education around electricity billings and price increases. Electricity bills are already seen as a grudge spend, and the challenge is to ensure that energy saving behaviour is not consequently perceived as a grudge activity. This suggests the need to clearly link the benefits to the type of energy saving behaviour the government is trying to instil.

### **Opportunity: Address the billings process**

The market does not appear to have a solid understanding of why Eskom is in this predicament. There appears to be a strong sentiment that Eskom has brought this on themselves through inefficient resource management. In an article titled "Power Crisis Eskom's Problem" ([www.fin24.com](http://www.fin24.com)), Investec Securities strategist Brian Kantor says "Power utility Eskom needs to realise that the electricity crisis is "their problem" and that the government must intervene and take on expensive solutions".

Eskom is also perceived as having prevented private corporations from getting involved in a solution. "If the private sector had been able to respond to the energy crisis – rather than all Eskom's dithering and faffing as well as their laws, regulations and tariff increases – we would have fixed it a long time ago, says Border-Kei Chamber of Business Executive Director Les Holbrook, in the article "Eskom rates cuts a significant relief" ([www.theweekendpost.com](http://www.theweekendpost.com)).

Eskom therefore has an educational job to do in terms of clarifying the following:

1. The reasons behind the rates increase
  - What are the factors that have played into the rates increase
  - What has precipitated the current energy crisis
  - Why rates increases are needed within the context of the energy crisis
2. The billing process
  - How the bill is calculated
  - What consumers should be pay attention to on the bill
  - What channels are available to consumers to query their bills

### **Barrier: Current Behaviour**

The further removed consumers are from seeing and experiencing the personal impact of saving electricity (most notably in money savings), the less engaged they are with energy saving activities. Those who have switched to prepaid are less involved in everyday activities, indicating a mindset of "I have solved my personal issue, and therefore I don't need to be concerned on a broader scale". A generational impact is noted in the younger sample who are far more engaged in the crisis and subsequent energy saving behaviours. In order to effect real behaviour change, there is a need to demonstrate the personal impact of energy savings through functional, single-minded communication.

### **Opportunity: Address home modifications, most notably moving consumers from postpaid to prepaid**

➤ Prepaid/ Postpaid

Estimated average monthly spend on prepaid electricity is significantly lower than on postpaid. While this may be perception to an extent, it is clear that prepaid allows for closer monitoring of electricity usage, and it appears that actual Rand output on the prepaid system is lower. If the objective is to achieve lower overall usage and spend on electricity, Eskom could consider embarking on a national drive to get consumers to switch to prepaid.

➤ Other Home Modifications

Given the resistance seen towards making behavioural changes in areas which affect lifestyle, it is our assumption that consumers may be more willing to make once-off modifications to their homes. Beyond switching to prepaid, Eskom could encourage consumers to install geyser blankets and timers, solar water heaters and to insulate the house.

**Cumulative Barriers - In summary**

While Eskom's 49 Million campaign serves to create awareness for both the brand and energy crisis, the campaign is grounded in the emotive as opposed to the functional. Therefore, while the campaign appears to resonate and inspire, a strong functional message is lacking (in contrast to the Power Alert campaign). The result of this is that despite heavy media weight behind the campaign, action and behaviour has not been shifted to the point that it should have.

Adding to this, the issues and distrust around the billing process appear to undermine the message that the 49 Million campaign aims to promote. While on a more abstract level the campaign paints Eskom's involvement in energy saving in a strongly positive light, the lack of transparency and understanding through the billing process undermines this on a practical, day-to-day level.

Due to a lack of consumer understanding as to the reasons behind the energy crisis, coupled with their scepticism and lack of clarity around billings, there is widespread abdication of personal responsibility and accountability in addressing the problem.

**Overarching Strategic Opportunity – Underpin emotive mass media with tactical solutions and campaigns**

The mass media 49 Million campaign appears to effectively inspire through a strongly emotive message, grounded in the South African concept of "Ubuntu", in which each member of a country or community contributes towards higher ideals and better conditions. However, without strong functional messaging informing consumers of exactly what they should do to help, behavioural change is not effected.

In allowing consumers to take personal ownership of the problem, they should be involved in co-creating the solution. In this light, it is suggested that a more tactical, 'on-the-ground' campaign is rolled out in communities. A campaign of this nature would follow this broad outline:

- a) Consumers are educated as to the concept of energy efficiency, and how to apply this to their everyday lives
- b) Consumers are equipped with practical tools as to everyday energy saving measures, home modifications and appliance purchase guidelines with regards to the long-term benefit of using energy efficient appliances
- c) Consumers are incentivised to implement actions which will ultimately allow them to understand and experience the personal impact and benefits of these actions; thereby instilling strong buy-in to the process.

It is our assumption that through community-specific campaigns such as these, word of mouth will prove to be a powerful tool through which to seed the learnings and benefits experienced, both laterally (across communities), and linearly (into younger and older generations).

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**Thank You**





# Project Ochre

August 2012



## 1. Introduction



## Report Structure

### 1. Introduction

- Background
- Objectives
- Methodology
- Sample

### 2. Energy Efficiency in Context

- Understanding energy efficiency
- Attitudes towards energy efficiency
- Energy Source
- Electricity Spend
- Billing Perceptions
- Electricity price increases
- Key take-outs

### 3. Energy Saving Behaviour

- Home and work activities
- Key take-outs

### 4. Appliances

- Appliance purchase drivers
- Appliances in the home
- Future appliance purchase
- Key take-outs

### 5. Communication

- Key take-outs

### 6. Transport and Vehicle Ownership

- Key take-outs

### 6. Final thoughts

## Background

The following report was commissioned by the Institute of Energy Economics, Japan (IEEJ) in order to better understand the energy consumption patterns, habits, behaviours and attitudes of the South African economy. The report focuses specifically on the South African middle class, between the Living Standards Measures (LSM) of 5 – 8. The sample included in the current report was determined in accordance with being representative of the South African market (as detailed below in the section on sample).

The aim of this report is to provide an exploratory baseline of activity, attitude and behaviour of South Africans in relation to appliance usage, energy consumption, energy awareness and transportation habits.

## Research Objectives

In order to better contextualize the reports research objectives, the following research questions were addressed. The current report's research aimed to answer the following questions in relation to the South African economy between LSM 5 – 8. The report is structured according to these 6 broad sections:

### 2.1. Appliances:

- What appliances do people currently own?
- How often do people replace various appliances?
- What drives purchasing decisions in terms of appliances and electrical goods?
- Do people differentiate between small and large appliances in terms of electricity consumption?

### 2.2. Energy billing:

- How are people billed for electricity?
- Are people happy with how they are billed, do they understand it?
- What price do people pay for electricity?
- Do people monitor kWhrs on their electricity bills or only Rand amounts?
- What is the current energy mix between electricity / coal / gas?

## Research Objectives

### 2.3. Behaviour & Awareness:

- How do people understand electricity? (Price, origin, usage and scarcity)
- What are peoples sentiments on the on electricity price increases?
- Do people think Government (local and national) are doing enough to help people reduce energy consumption?
- Have people changed their behaviour in relation to the current 49m Eskom advertising campaign?

### 2.4. In the home:

- What is the average household floor space?
- Children – do children cooperate with electricity consumption initiatives? Are children aware of energy efficiency?

### 2.5. Outside the home:

- Do people carry their energy saving behaviour out of the home to their office or factory?
- Where does one work? Office versus Factory – do they have energy efficiency programmes in place at the place of work?

### 2.6. Transport:

- What car do they drive? Are they concerned about fuel efficiency?
- Number and type of cars in household?

## Methodology and Sample Approach

### Methodology:

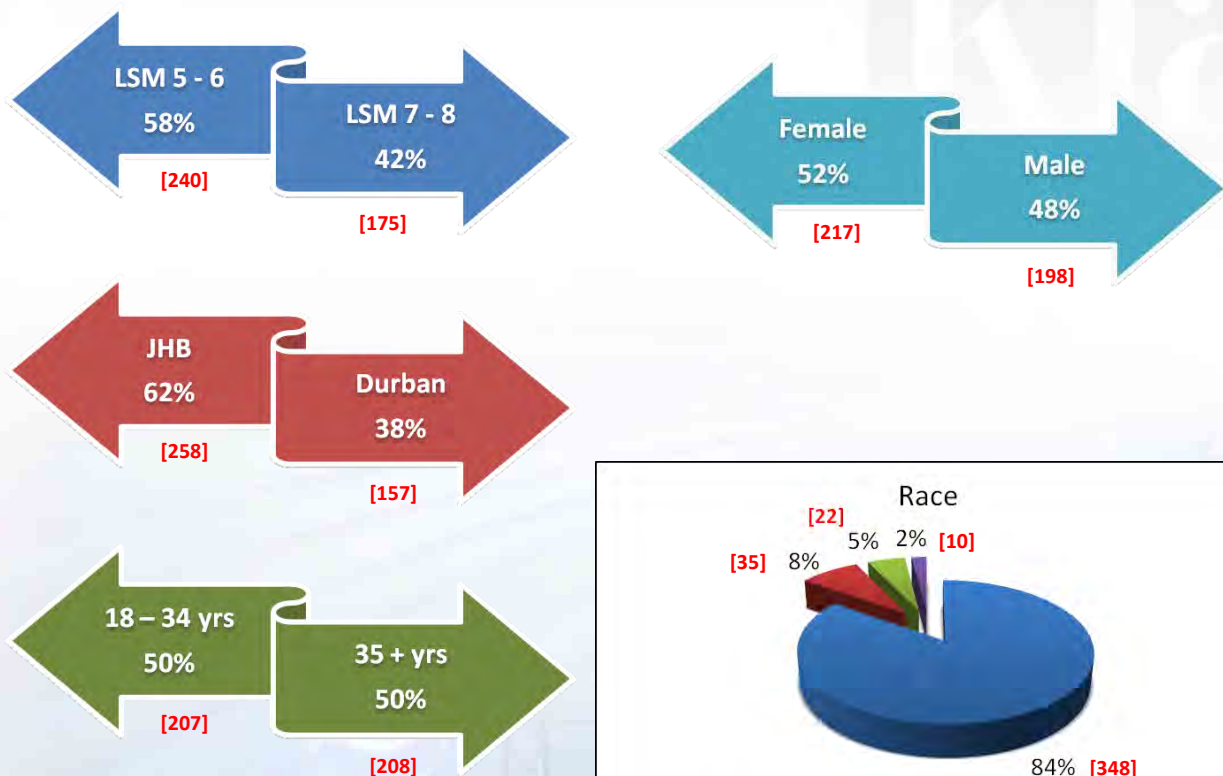
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### Sample:

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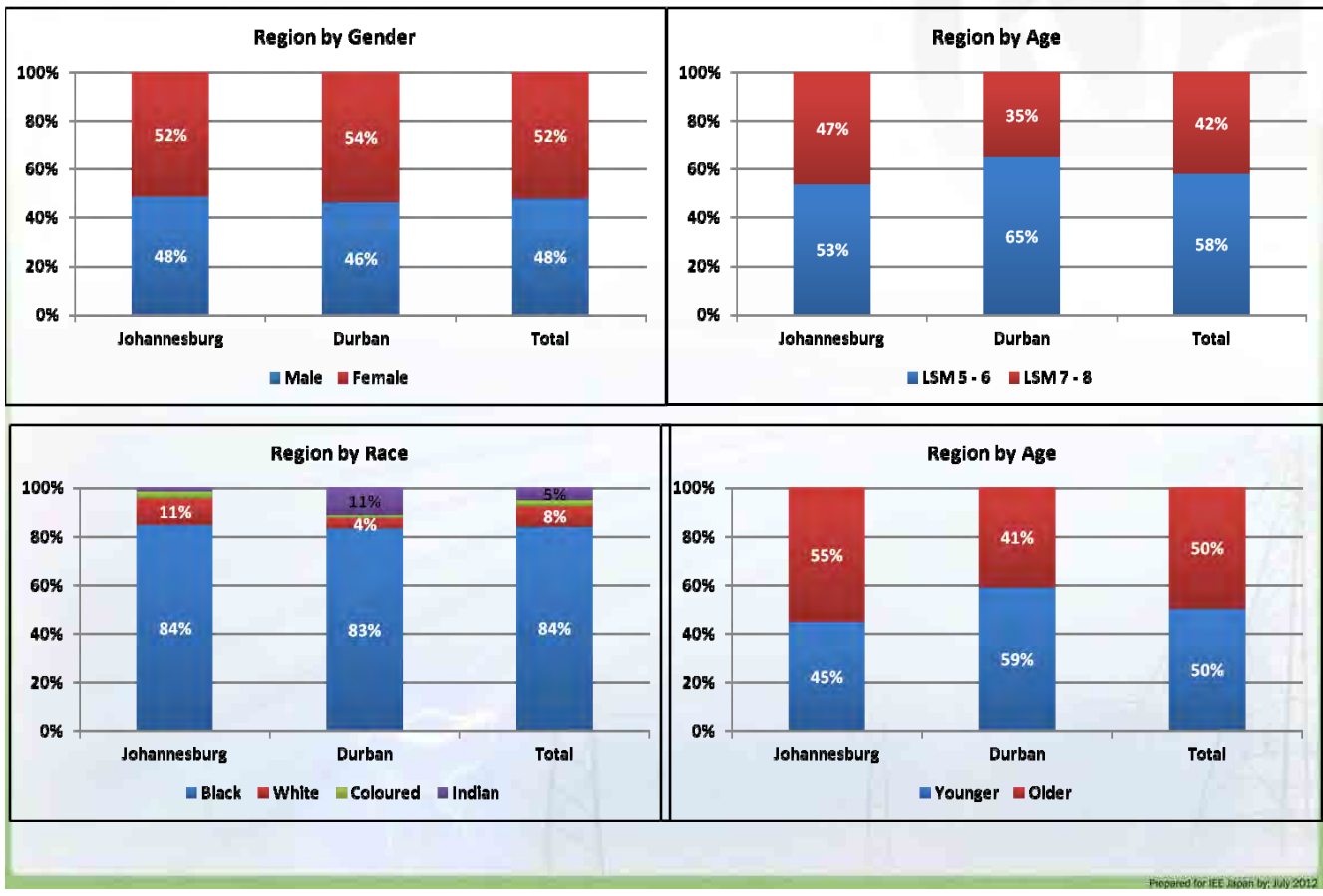
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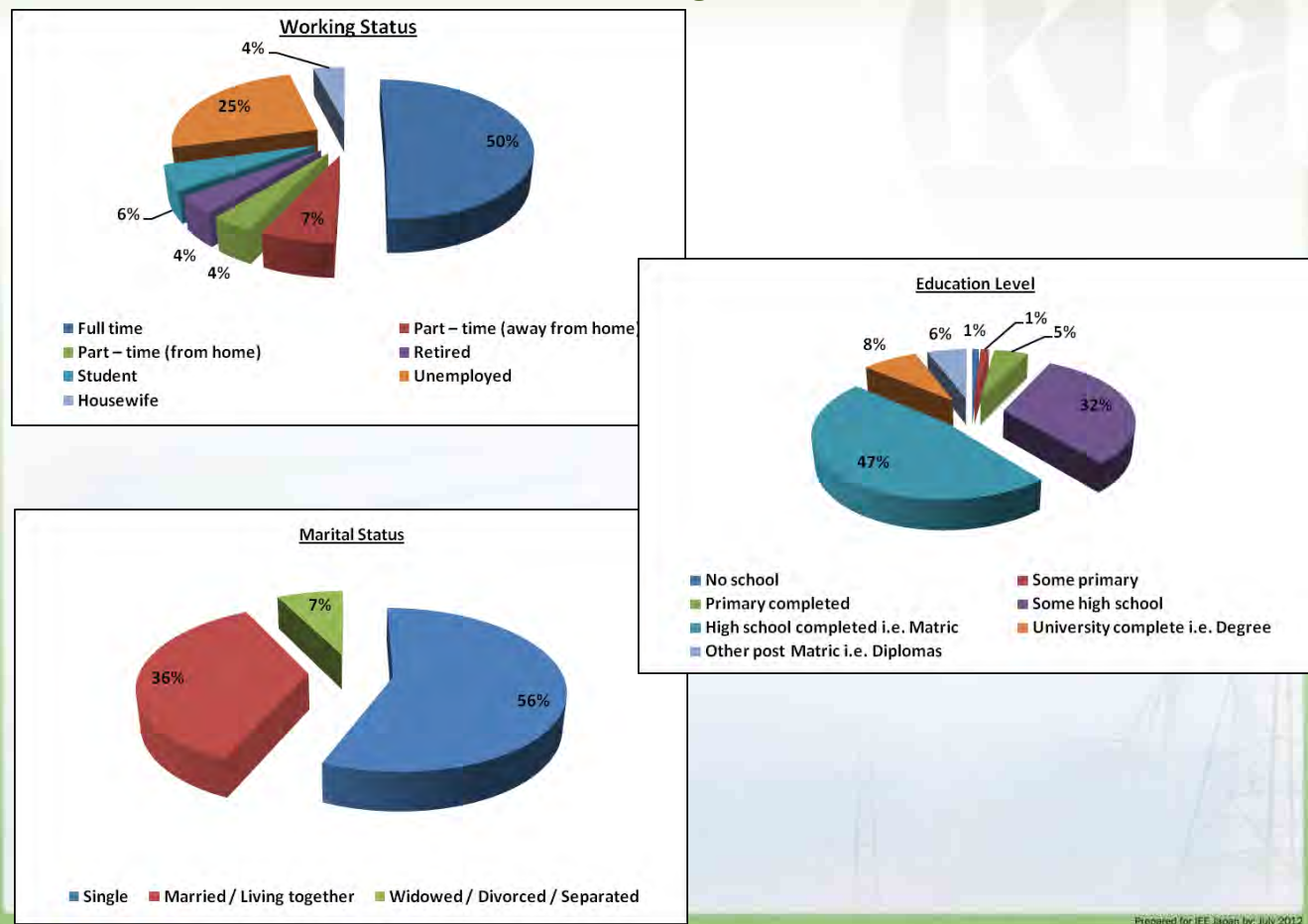


[Count of respondents in red]

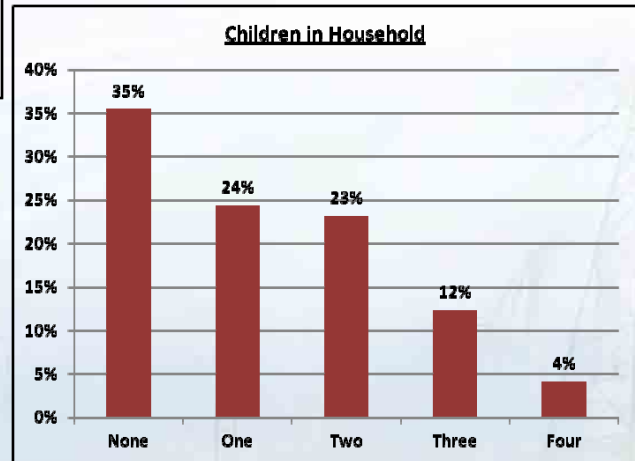
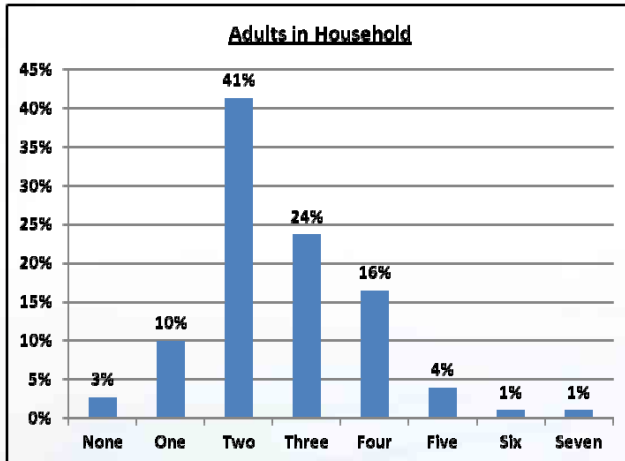
## Sample Structure by Regional Split



## Life Stage



## People living in the Home



## Sample

REGION	RACE	AGE	LSM 5		LSM 6		LSM 7		LSM 8		GENDER TOTAL		SUB-TOTAL Total
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Johannesburg	Black	18 - 34	3	3	26	27	9	17	12	3	50	50	100
		35+	14	6	22	29	11	14	10	12	57	61	118
		<b>Total</b>	<b>17</b>	<b>9</b>	<b>48</b>	<b>56</b>	<b>20</b>	<b>31</b>	<b>22</b>	<b>15</b>	<b>107</b>	<b>111</b>	<b>218</b>
	White	18 - 34	0	0	1	0	0	2	4	3	5	5	10
		35+	1	0	1	2	3	2	3	6	8	10	18
		<b>Total</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>7</b>	<b>9</b>	<b>13</b>	<b>15</b>	<b>28</b>
	Colour ed	18 - 34	0	0	0	1	1	1	0	0	1	2	3
		35+	0	0	1	1	0	0	1	2	2	3	5
		<b>Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>8</b>
	Indian	18 - 34	0	0	0	0	1	1	0	0	1	1	2
		35+	0	0	0	0	1	0	0	1	1	1	2
		<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>4</b>
<b>Total</b>			<b>18</b>	<b>9</b>	<b>51</b>	<b>60</b>	<b>26</b>	<b>37</b>	<b>30</b>	<b>27</b>	<b>125</b>	<b>133</b>	<b>258</b>
Durban	Black	18 - 34	6	4	25	25	5	12	4	3	40	44	84
		35+	3	1	12	20	4	4	1	2	20	27	47
		<b>Total</b>	<b>9</b>	<b>5</b>	<b>37</b>	<b>45</b>	<b>9</b>	<b>16</b>	<b>5</b>	<b>5</b>	<b>60</b>	<b>71</b>	<b>131</b>
	White	18 - 34	0	0	0	0	0	1	1	0	1	1	2
		35+	0	0	0	0	0	0	3	2	3	2	5
		<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>7</b>
	Colour ed	18 - 34	0	0	0	0	1	0	0	0	1	0	1
		35+	0	0	0	0	0	1	0	0	0	1	1
		<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>
	Indian	18 - 34	0	0	2	1	0	1	1	1	3	3	6
		35+	0	0	1	2	1	3	3	2	5	7	12
		<b>Total</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>8</b>	<b>10</b>	<b>18</b>
<b>Total</b>			<b>9</b>	<b>5</b>	<b>40</b>	<b>48</b>	<b>11</b>	<b>22</b>	<b>13</b>	<b>10</b>	<b>73</b>	<b>85</b>	<b>158</b>
<b>GRAND TOTAL</b>			<b>41</b>		<b>199</b>		<b>96</b>		<b>80</b>	<b>198</b>	<b>218</b>	<b>416</b>	



## 2. Energy Efficiency in Context

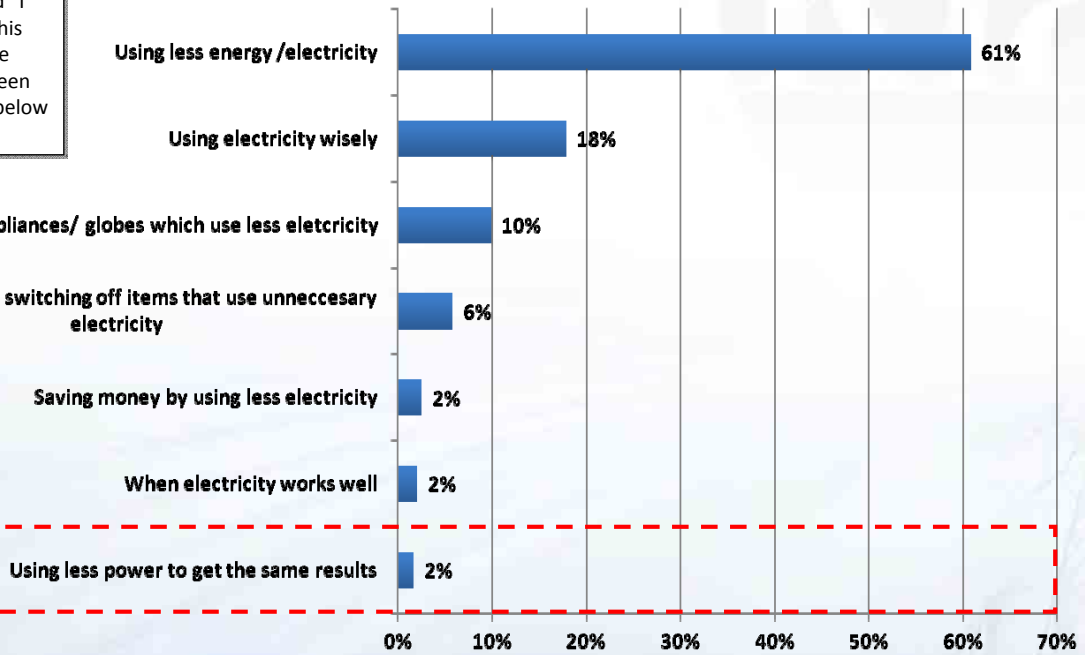


## Understanding of Energy Efficiency



## Understanding of "Energy Efficiency"

Note that 8% of the sample answered "I don't know" to this question. These responses have been excluded from the below analysis



Energy efficiency is understood in fairly generic terms at a total level, with very low spontaneous mention of "using less for the same results"

What do you understand by the term "energy efficiency"?  
N: 382

## Understanding "Energy Efficiency" - Verbatim Responses

The majority of mentions deal with using less energy, which is frequently linked to a concern around energy capacity. . .

I'm concerned about the energy shortest, I think we all need to safe energy were we can

To help Eskom to save power by not use to much lights

Everybody must be careful when buying appliances by buy those who saves electricity

Beyond this there are mentions of saving electricity in order to save money. .

Its to get us to make an effort to save power and for us not to pay so much on our bills

Energy efficiency means that you save money by using less electricity

Its a process where you reduce the usage of energy by finding cheaper ways of using energy by using paraffin or buying saving bulbs

While limited, those respondents who truly understand the theory of energy efficiency can articulate it clearly. .

Its using products that can perform the same job but use less electricity

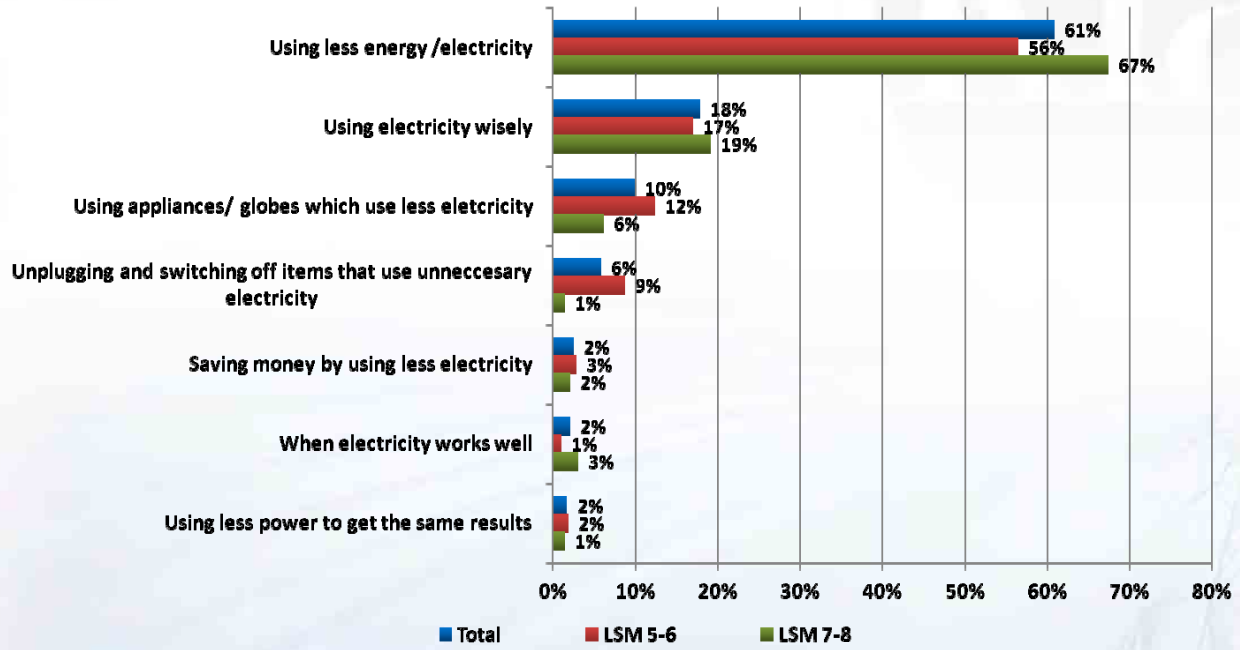
Energy efficiency means that you can now use less power to have the same results

You get the same /more output with less energy input

What do you understand by the term "energy efficiency"?  
n: 382



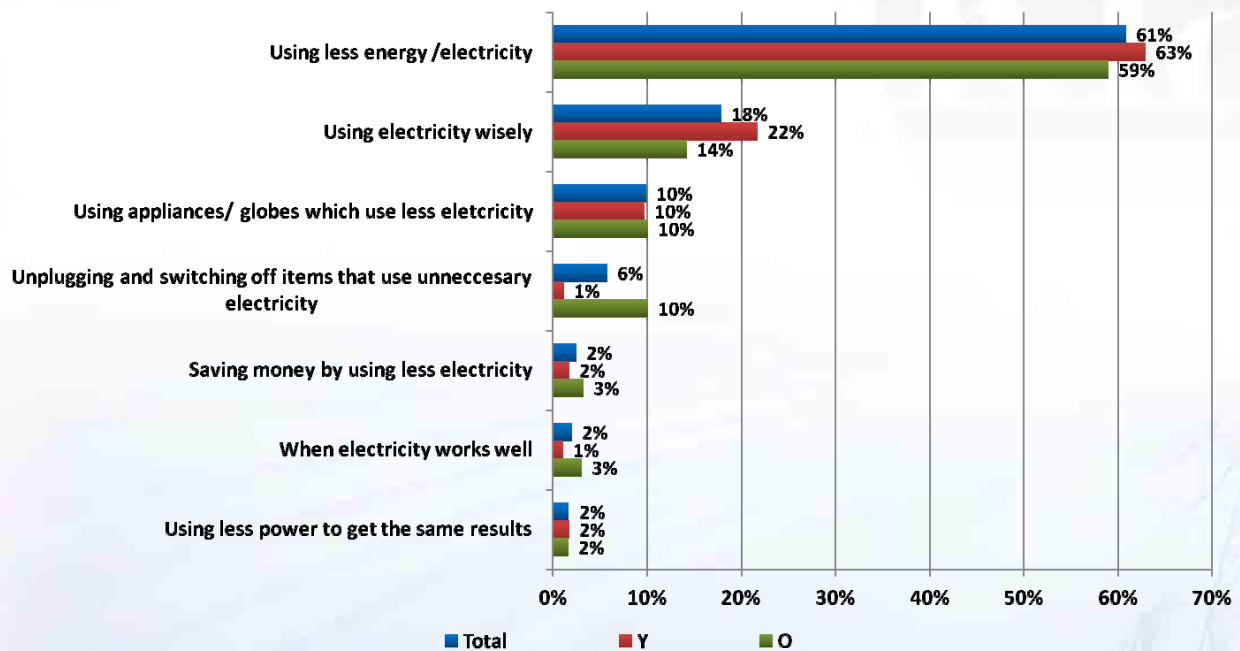
## Understanding of "Energy Efficiency" by LSM



What do you understand by the term "energy efficiency"?  
N: 382

Prepared for IEE Japan by: July 2012

## Understanding of "Energy Efficiency" by Age



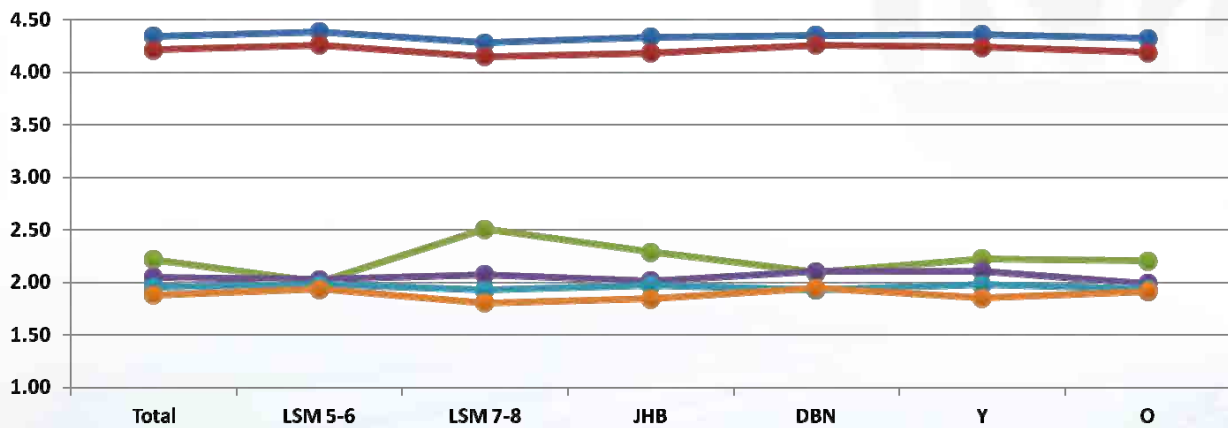
What do you understand by the term "energy efficiency"?  
n: 382

Prepared for IEE Japan by: July 2012

## Attitudes towards Energy Efficiency



## Energy Efficiency Attitudes



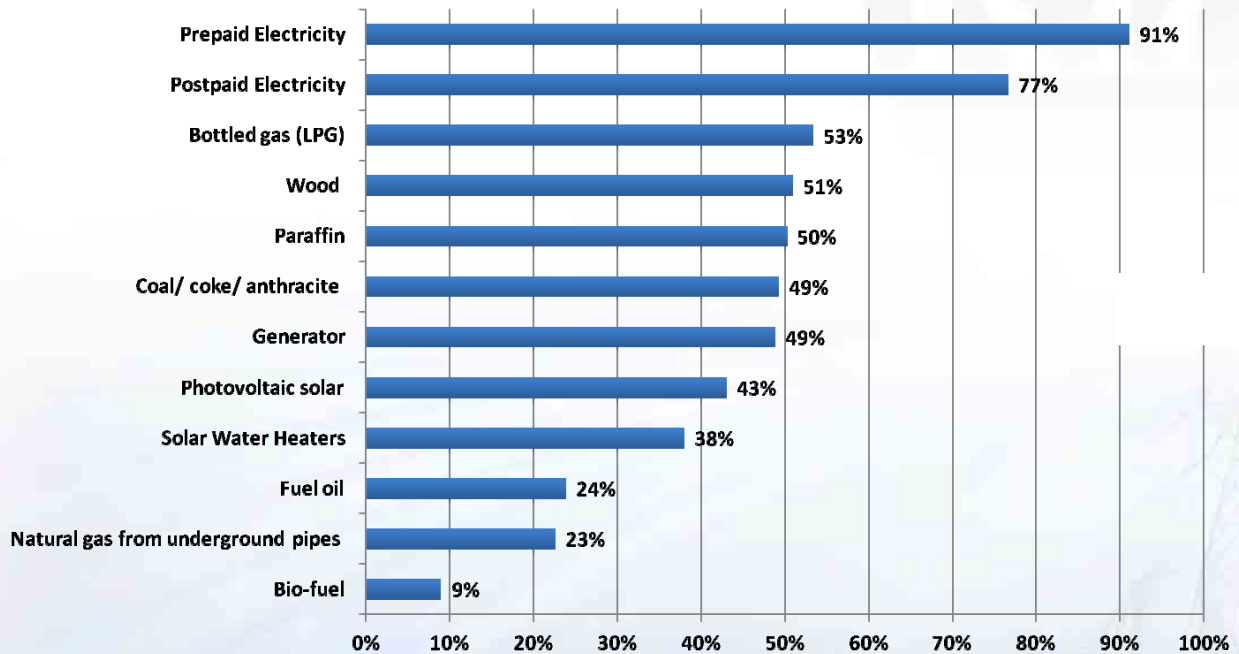
- I am aware that it is important to save energy, I do what I can to save it
- Saving energy is very important to me and I do everything I can to reduce my usage
- While I know there is an energy problem, I don't really know what to do to make a difference in saving electricity
- While I know there is an energy problem, I have not yet changed my behaviour as it hasn't affected me yet
- I don't really think there is an energy problem, so don't do anything to save energy
- I don't really have time to be concerned about saving electricity

Attitudes towards energy efficiency indicate high awareness of the problem and acknowledgement of a need for personal action in this regard

## Energy Sources

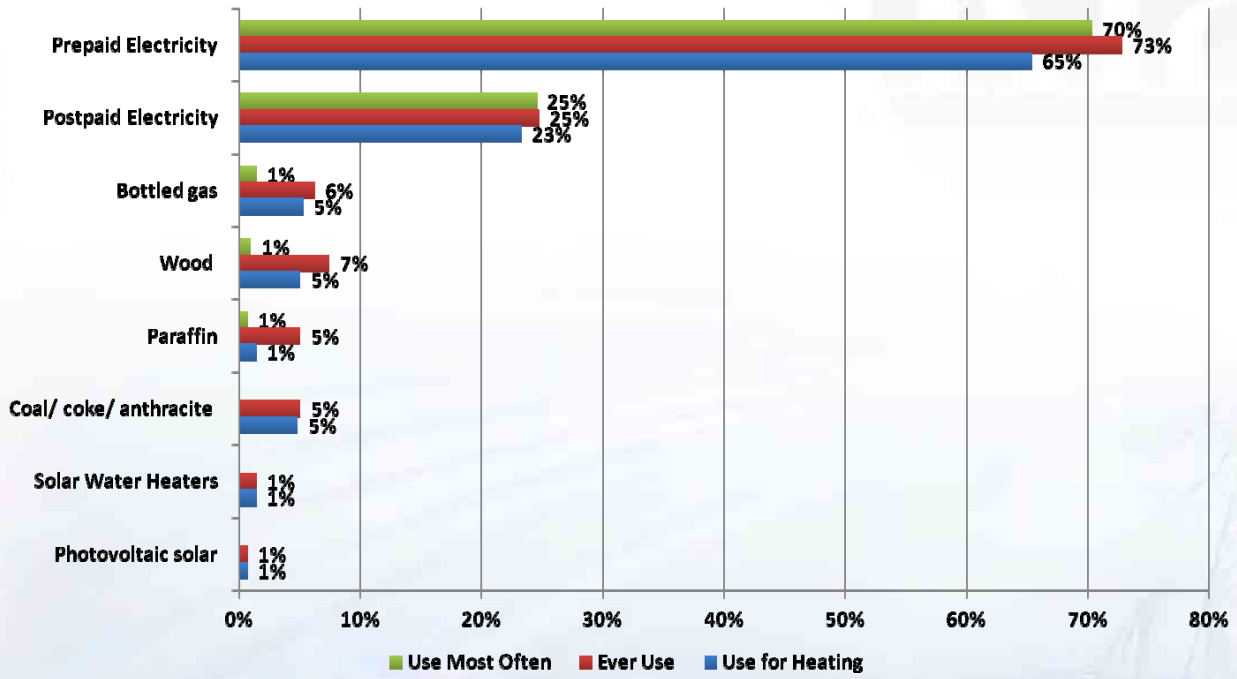


## Energy Source Awareness - Total



Awareness of the less commonly used energy sources is fairly high, indicating that the market is aware of alternative sources, even if they are not actively pursuing usage of these sources

### Energy Source Usage - Total

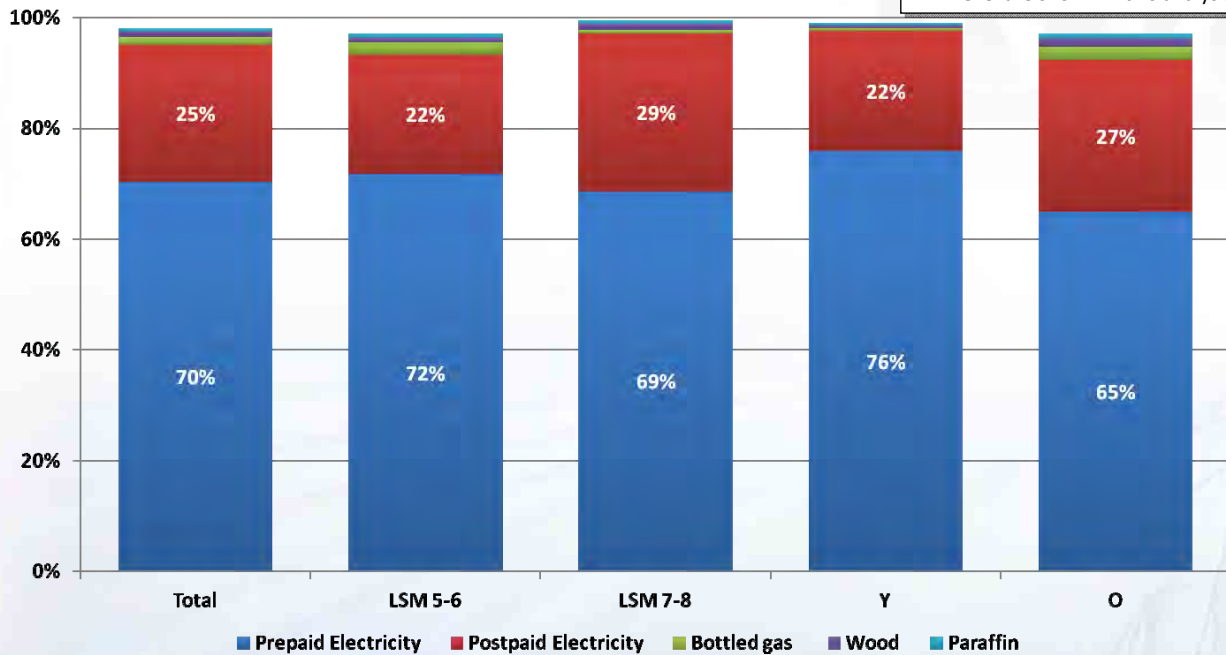


While awareness across the sources is high, relative usage is low for sources other than electricity

Which sources of energy have you ever used/ do you use most often/ do you use for heating?  
n: 415

### Energy Source Used Most Often

Note: Data labels under 5% not shown. Only Sources used most often at a total level are shown in this analysis



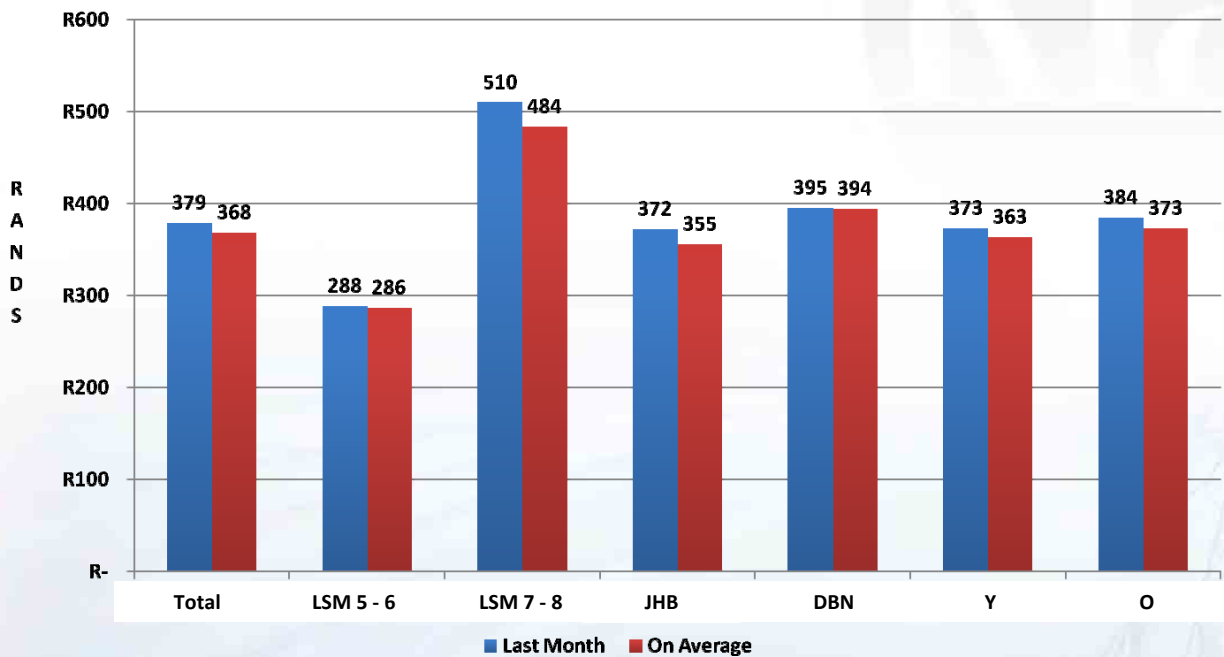
Postpaid usage is highest among the more affluent and older sample

Which source of energy do you use most often?  
n: 415

## Electricity Spend

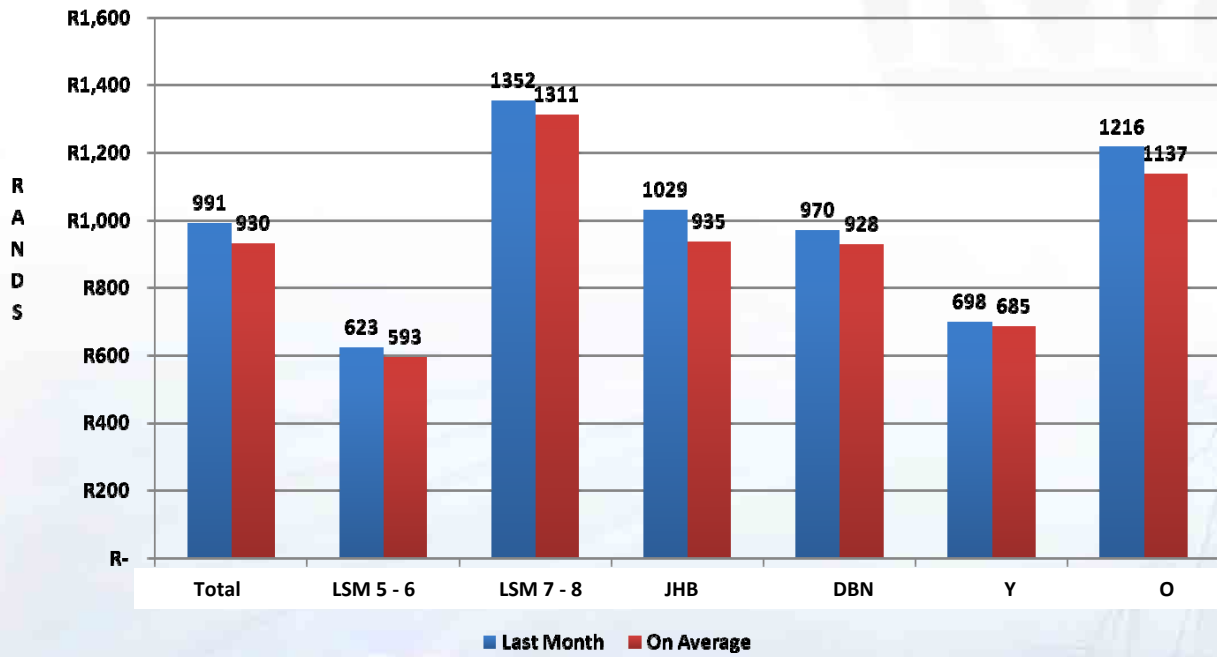


## Spend – Prepaid Electricity



Electricity spend in Rands is significantly higher amongst the more affluent sample, with slightly higher recorded spend in Durban

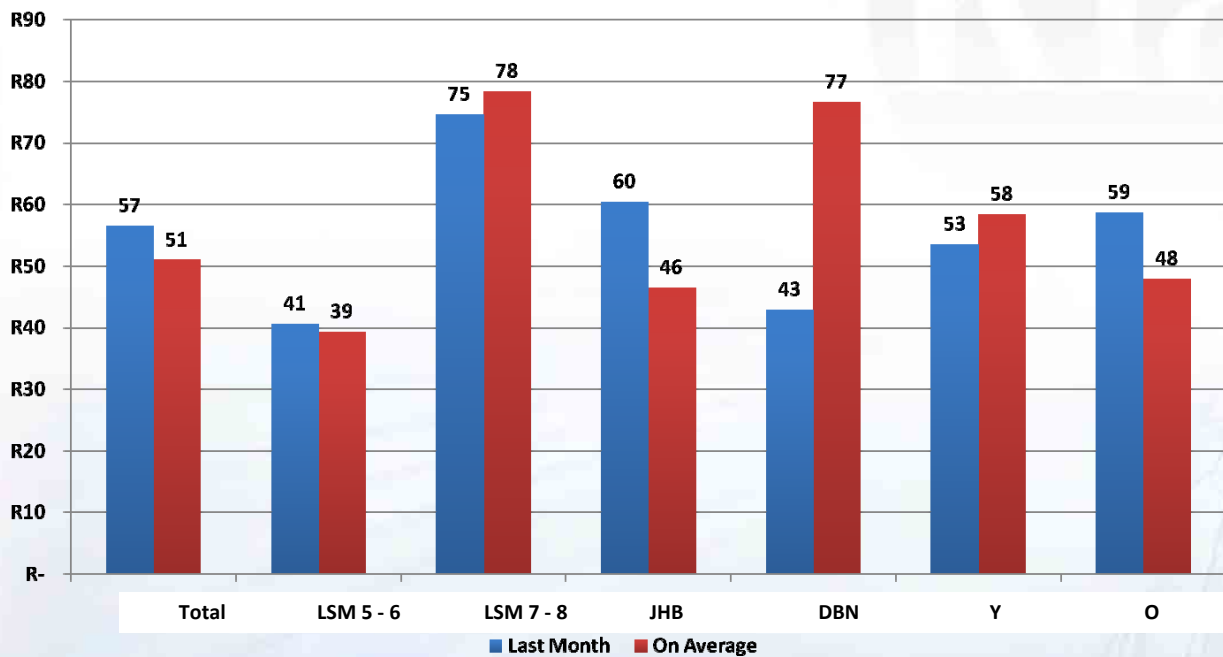
## Spend – Postpaid Electricity



The older sample perceives a distinctly higher Rand output in Postpaid electricity relative to Prepaid

How much did you spend in Rands last month / on average on post-paid electricity?  
n:99

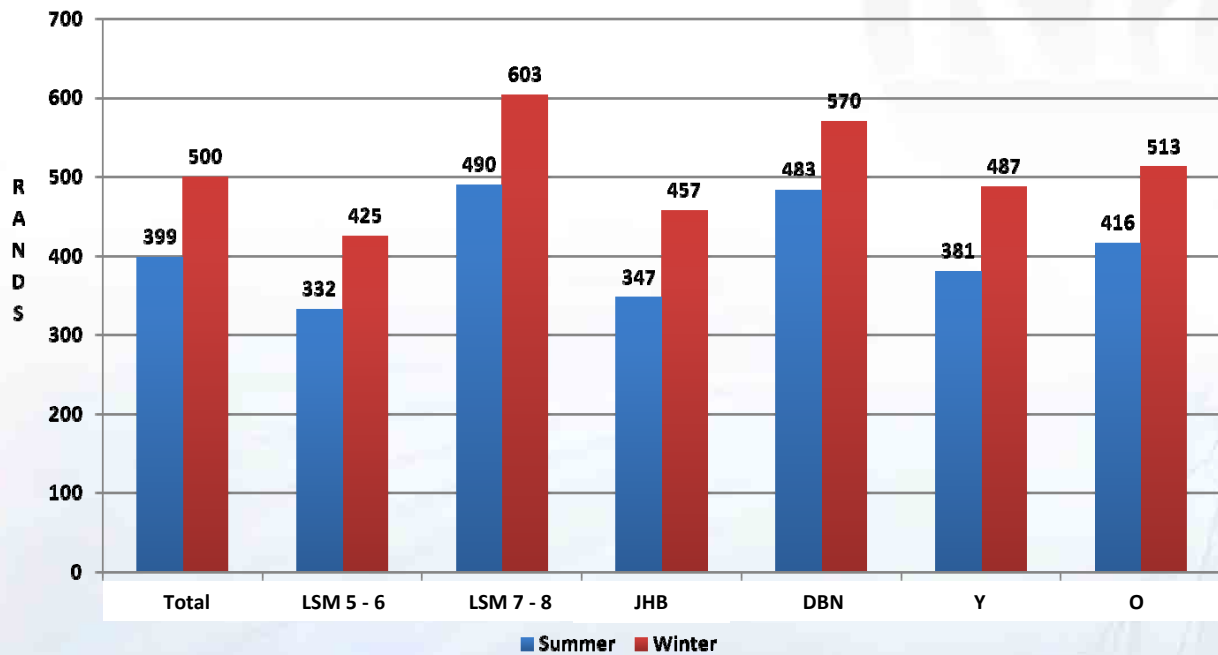
## Spend – Wood



Wood spend is highest in Durban, and interestingly is also higher amongst the more affluent sample – this could be due to these consumers purchasing wood consistently while the lower income consumers could be gathering/ collecting wood more often

How much did you spend in Rands last month / on average on wood?  
n:32\*\* CAUTION: Small Base Size

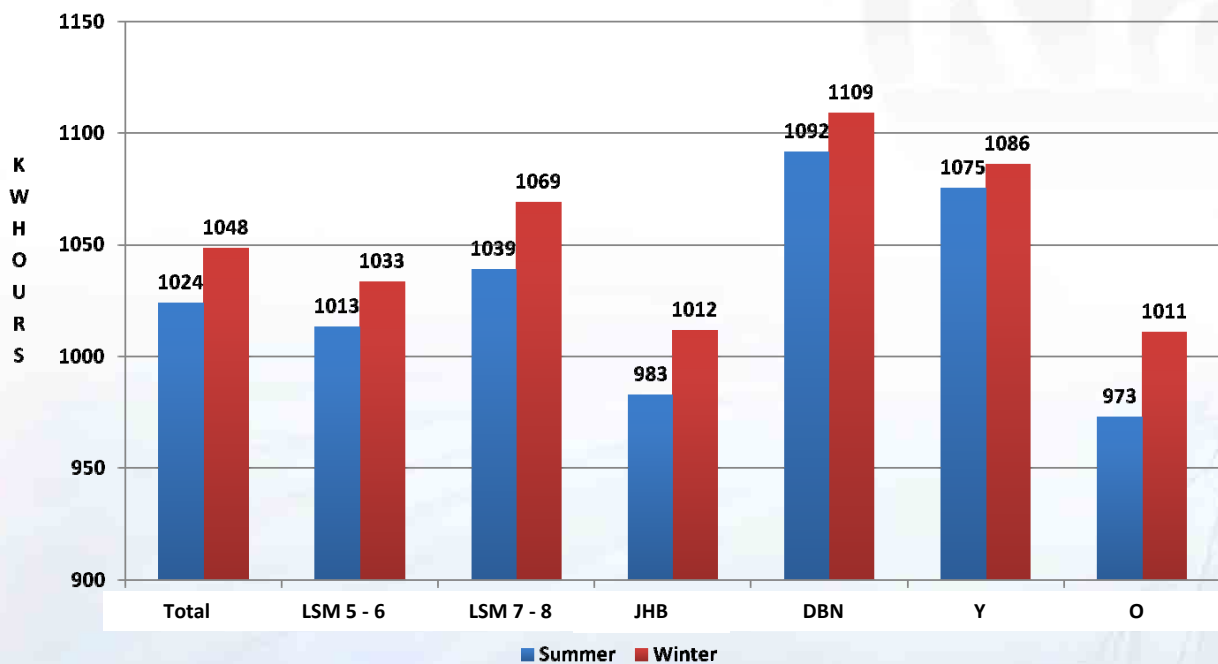
## Electricity Spend - Rands



The discrepancy between Summer and Winter spend is perceived fairly consistently across the sample

What bracket does your electricity amount fall into per month in Rands and KWhours (if available) for both Summer and Winter?  
n: 415

## Electricity Spend - KWHours



Mirroring the trend in Rand spend, KWHour spend is consistently higher in winter

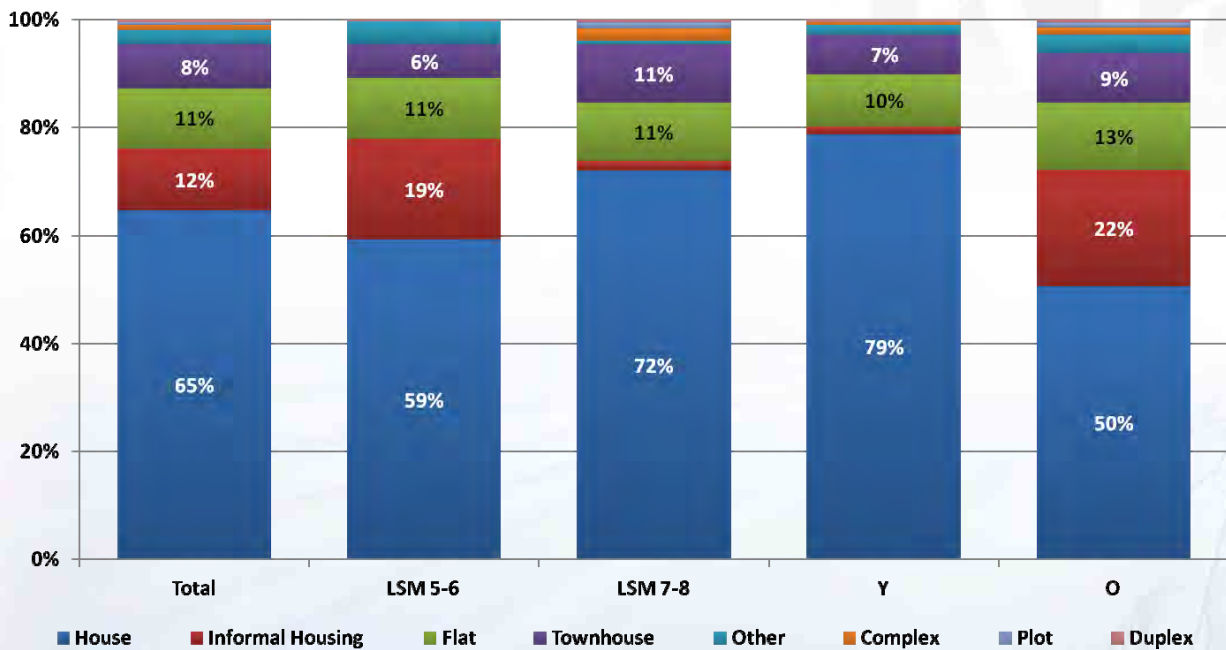
What bracket does your electricity amount fall into per month in Rands and KWhours (if available) for both Summer and Winter?  
n: 415

## Billing Perceptions



## Dwelling Type

Note: Data labels under 5% not shown

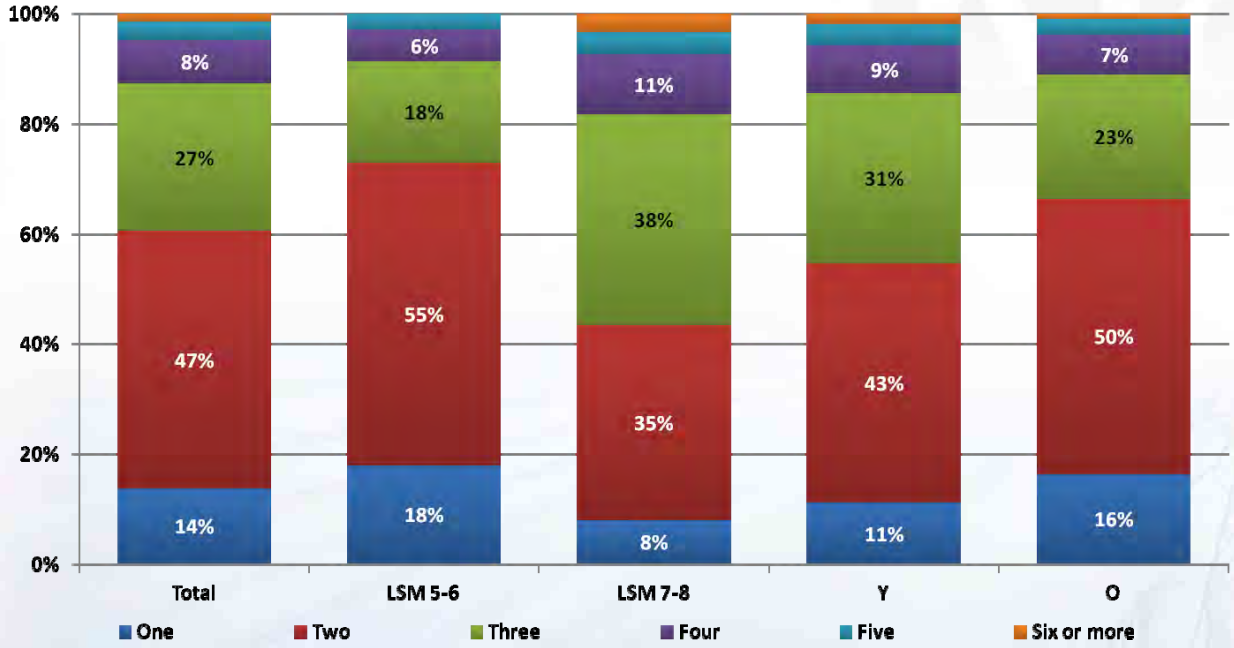


Informal housing is most common among the lower LSM group as is to be expected, and also amongst the Older sample



### Number of bedrooms in home

Note: Data labels under 5% not shown

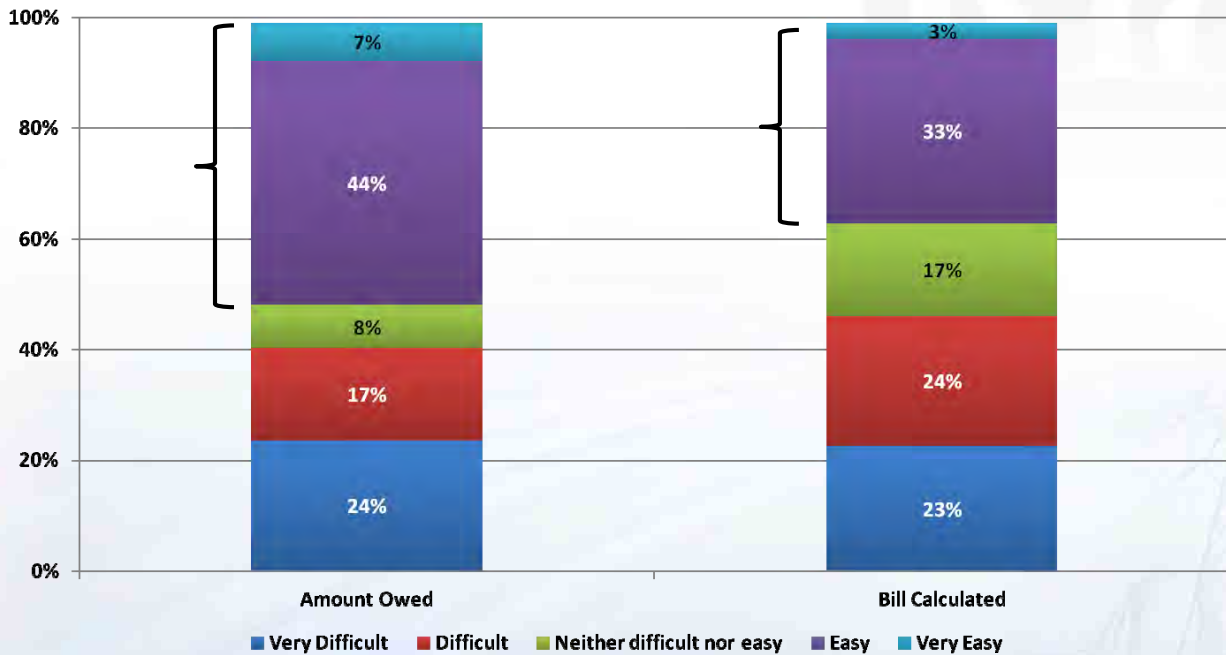


Two bedrooms in the home is most common, while the more affluent and younger consumers tend more towards 3 bedrooms

How many bedrooms does your home have?  
n: 415

### Electricity Bill; Ease of Understanding - Total

Note: 70% of the sample are on prepaid billing. These respondents are excluded from the analysis below

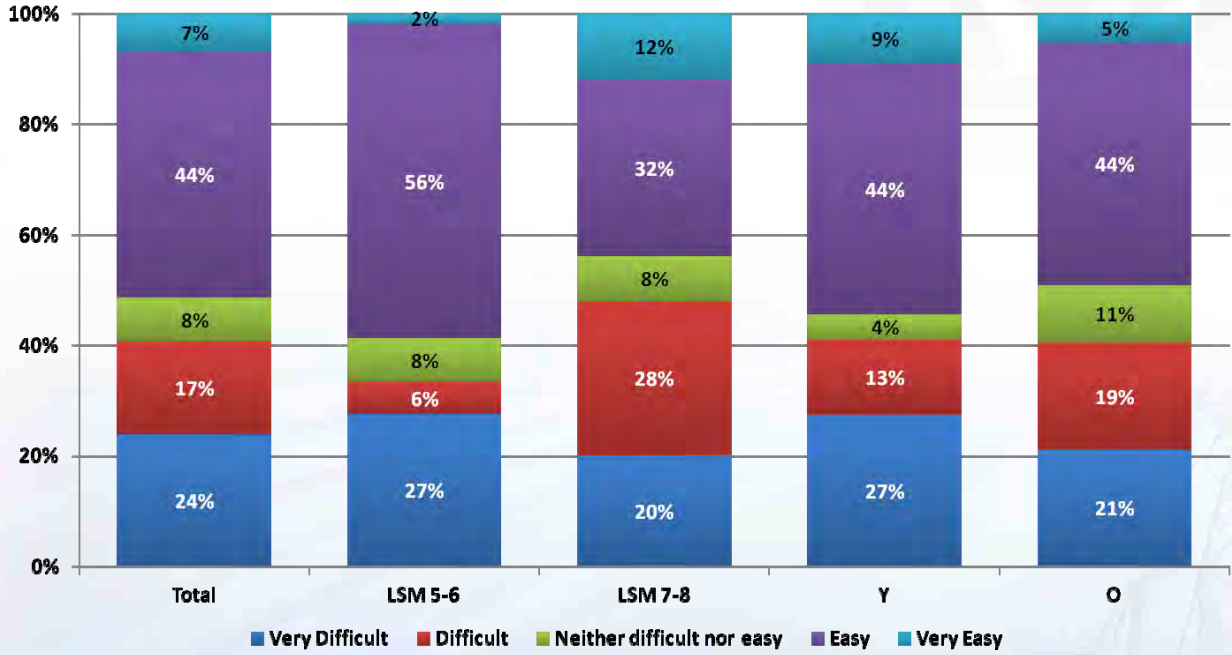


Understanding of electricity bills is fairly low, with almost half the sample being unsure as to how to interpret these. Higher understanding is evident for what is owed, relative to how bill is calculated.

How easy or how difficult would you say your electricity bill is to understand in terms of what you owe?  
How easy or how difficult would you say your electricity bill is to understand in terms of how they worked out your bill  
n: 124

## Electricity Bill; Ease of Understanding what is owed

Note: 70% of the sample are on prepaid billing. These respondents are excluded from the analysis below

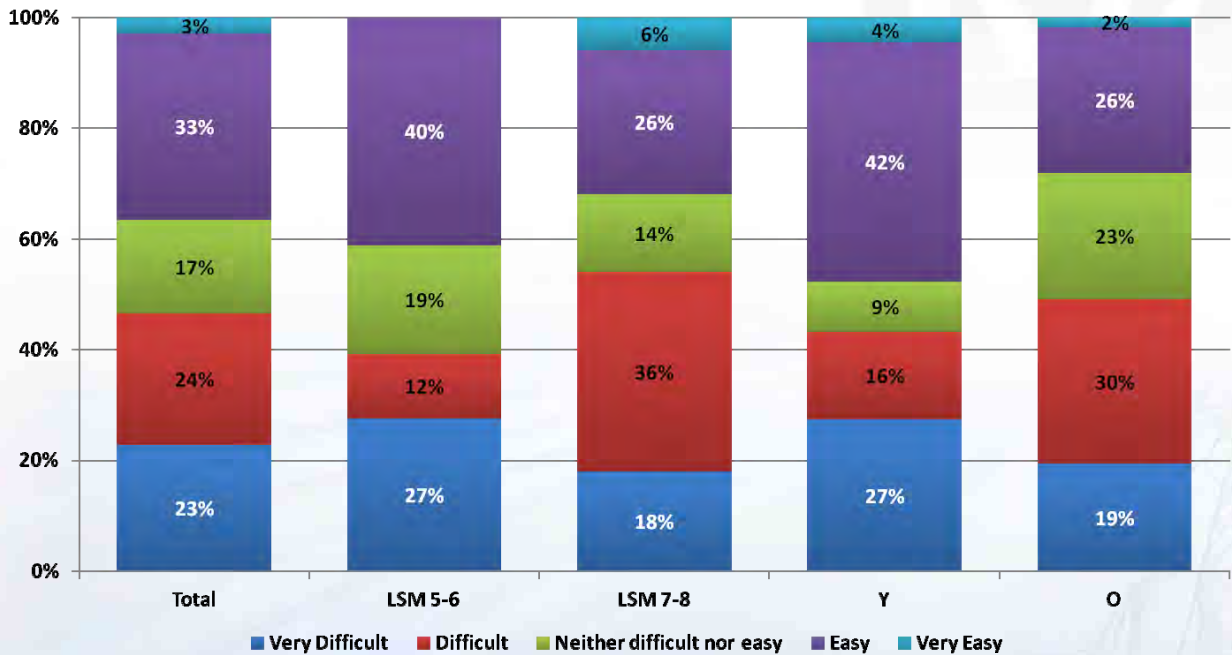


The more affluent and older consumers indicate the lowest understanding of what is owed, possibly due to a perception that they are being over-billed

How easy or how difficult would you say your electricity bill is to understand in terms of what you owe?  
n: 124

## Electricity Bill; Ease of Understanding how bill is calculated

Note: 70% of the sample are on prepaid billing. These respondents are excluded from the analysis below

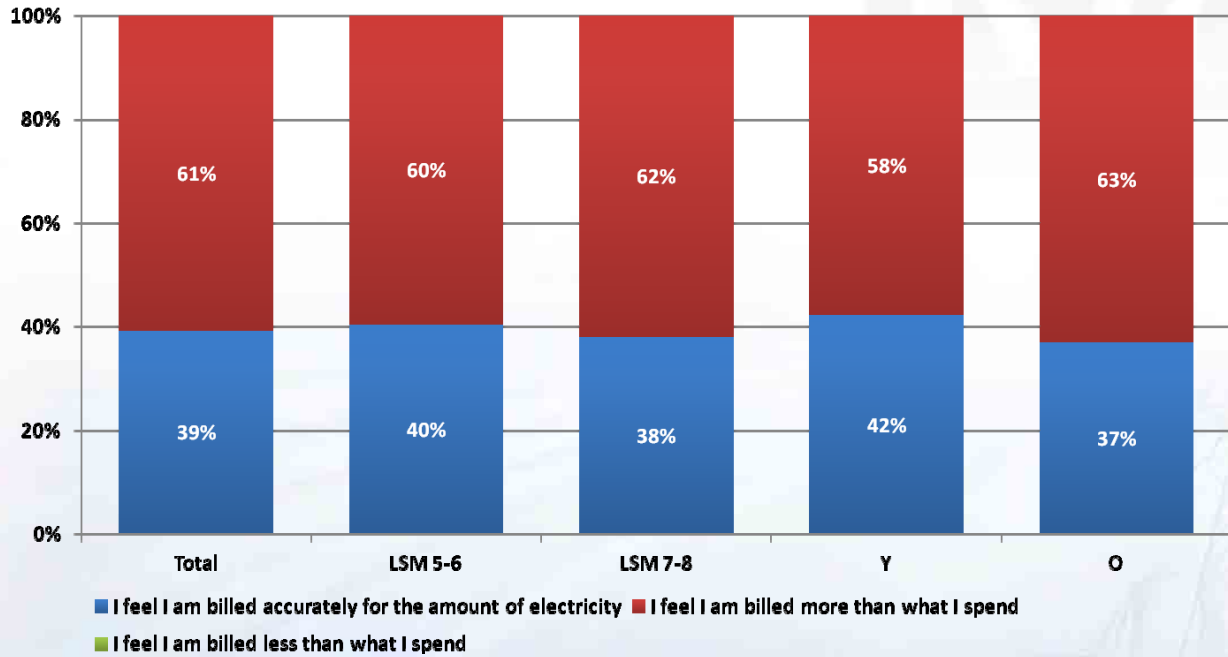


Again here, the same respondent groups indicate the lowest understanding

How easy or how difficult would you say your electricity bill is to understand in terms of how your bill is calculated?  
n: 124

## Perceived Billing Accuracy

Note: 70% of the sample are on prepaid billing. These respondents are excluded from the analysis below

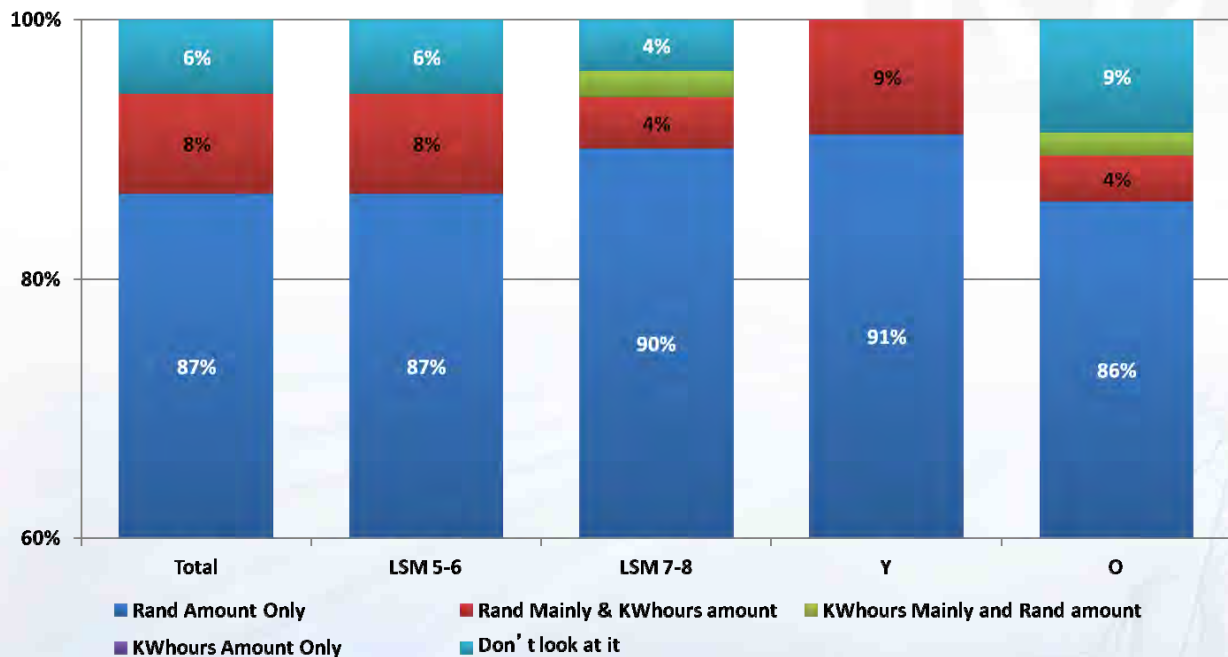


There is a strong perception over 'over-billing' across the sample

How easy or how difficult would you say your electricity bill is to understand in terms of what you owe?  
n: 124

## Electricity Bill – Items Observed

Note: Data labels under 5% not shown



However the older sample also sees the highest incidence of not looking at their bill.

What do you look at on your electricity bill each time you are billed?  
n: 124

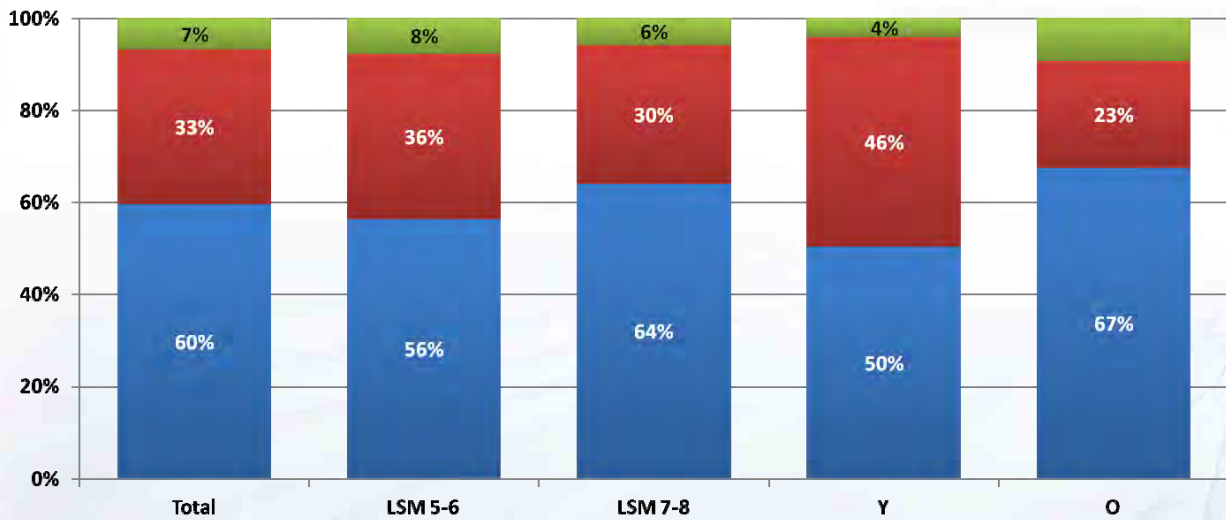
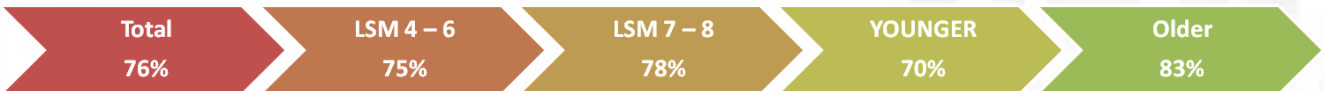
## Electricity Price Increases



## Awareness of Electricity Price Increases

Note: Data labels under 5% not shown

### Awareness



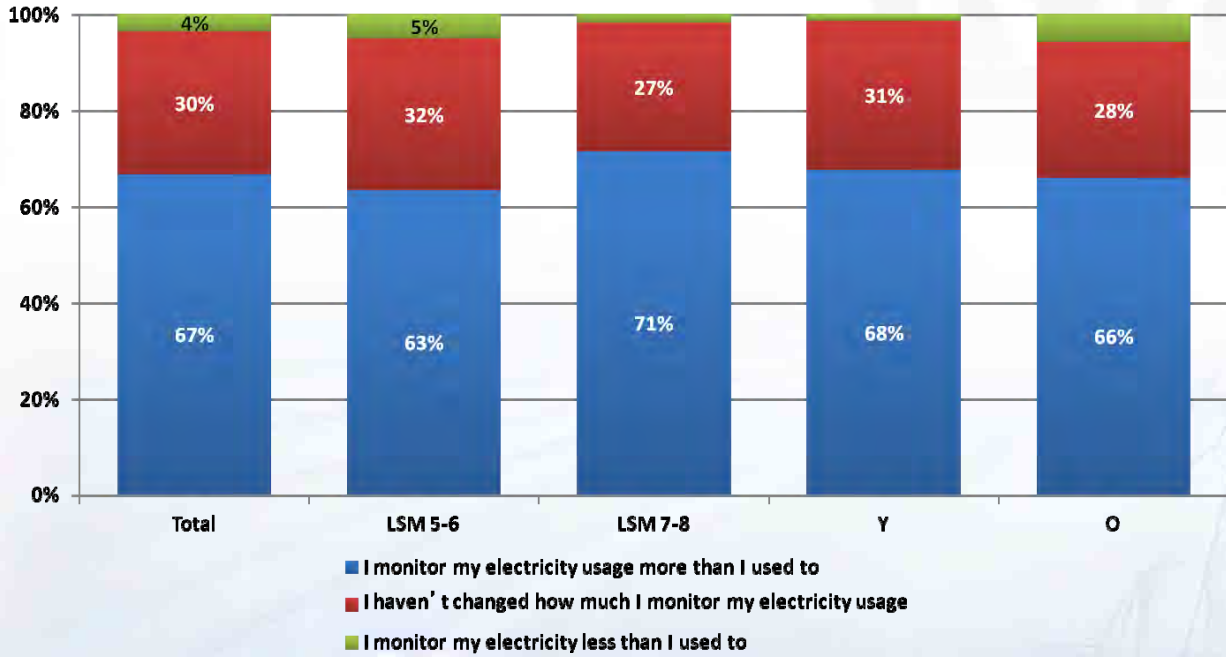
- The increases have affected me more than I anticipated
- I had anticipated that the increases would affect me more than they have
- The increases have not affected me

The more affluent and older sample perceive the highest affect of the price increases

Are you aware of the electricity price increases that Eskom has recently announced? How have these electricity price increases affected you?  
n: 415/ n: 315

## Electricity Monitoring Behaviour

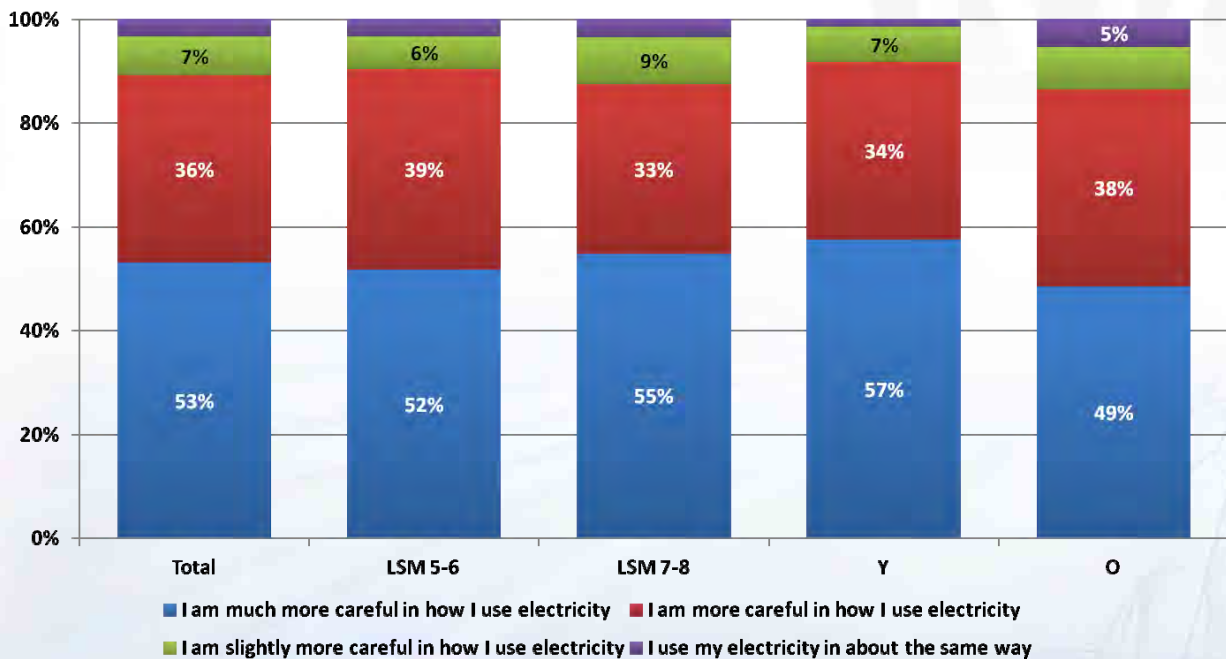
Note: Data labels under 5% not shown



Rates of increased usage monitoring are in line with rates of being more affected – those who feel most strongly affected appears to be monitoring usage more closely

In the last 4 years, how would describe how your household behaviour has changed regarding the way you monitor your electricity usage?  
n: 315

## Electricity Usage Behaviour



Across the board a change in behaviour is evident over the past 4 years

In the last 4 years, how would describe how your household behaviour has changed regarding the way you use electricity?  
n: 315

- The concept of energy efficiency is understood at a very generic level
- Consumers understand that energy needs to be saved, and frequently make the link between using less electricity and paying less for it
- A high awareness of the energy crisis is evident, and with this, an acknowledgement of the need to change behaviour (either to assist with the country's energy crisis or to personally save money)
- Generally, people are distrustful of the electricity billing process, driven through a lack of understanding of how to interpret the electricity bill. Beyond this, the interpretation of the bill is driven predominantly through the Rand amount, with little attention paid to KWHours. 6% are not looking at their bills at all, which is likely driven through the lack of understanding
- Within this context, there is high incidence of people feeling that they are being over-billed
- Electricity price increases have been strongly noted, especially within the older sample relative to the younger
- The increases are perceived to have had a notable effect, and due to this, monitoring of usage has increased, while usage behaviour has become far more considered over the past 4 years



### 3. Energy Saving Behaviour

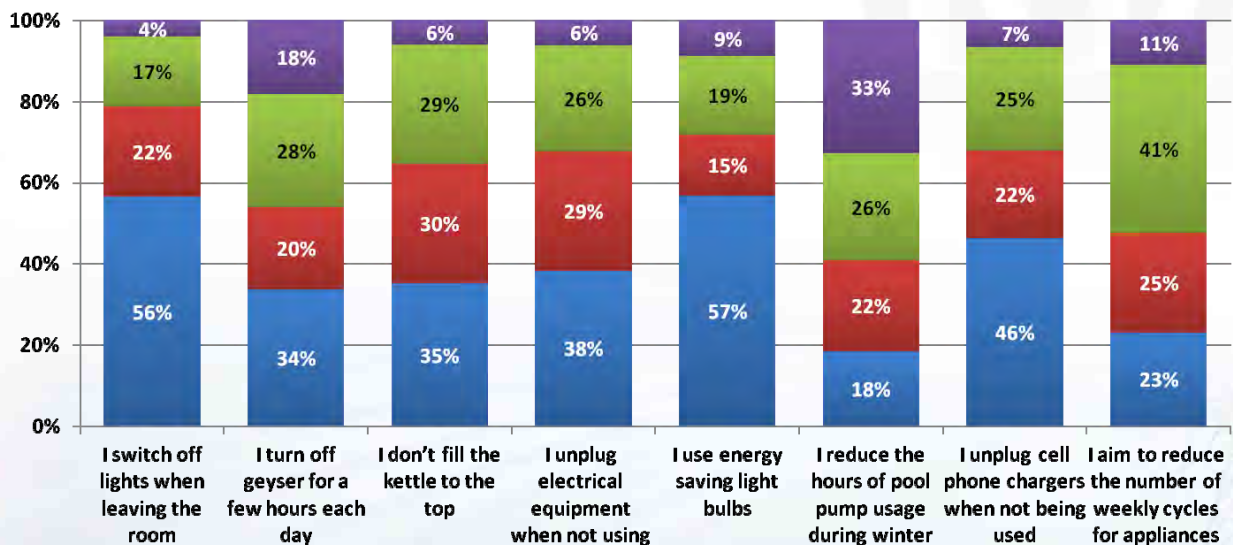


## Home and Work Activities



## Energy Saving Activities - Total

Note: 'Not applicable' responses have been removed from this analysis



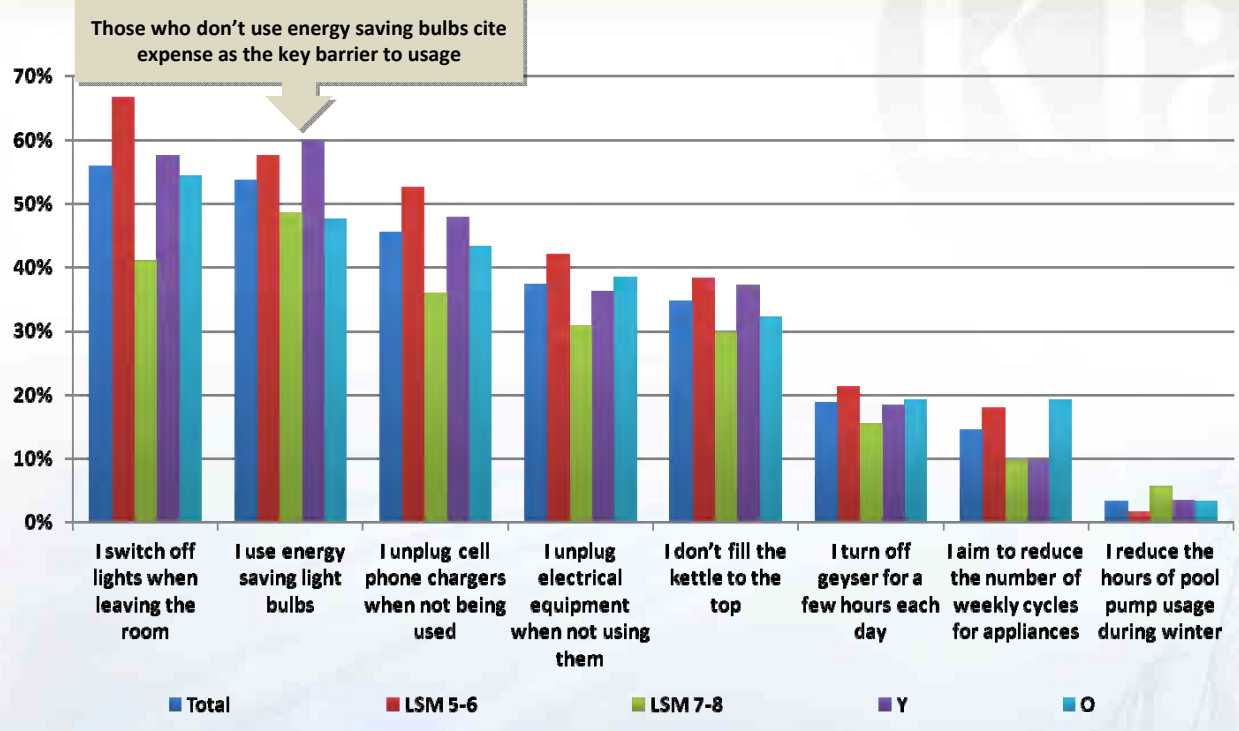
Base	411	232	410	405	393	76	408	261
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■ All of the time ■ Most of the time ■ Sometimes ■ Rarely / Never

While a required behaviour changes is noted at a perceptual level, currently we see a fairly cursory change in actual behaviour. Activities which do not inconvenience consumers too greatly are being taken up strongly, while those that require a more stringent lifestyle change are taken up at far lower levels.

Thinking about energy saving activities, how often, on average, would you say you do each of these things?  
n: 415

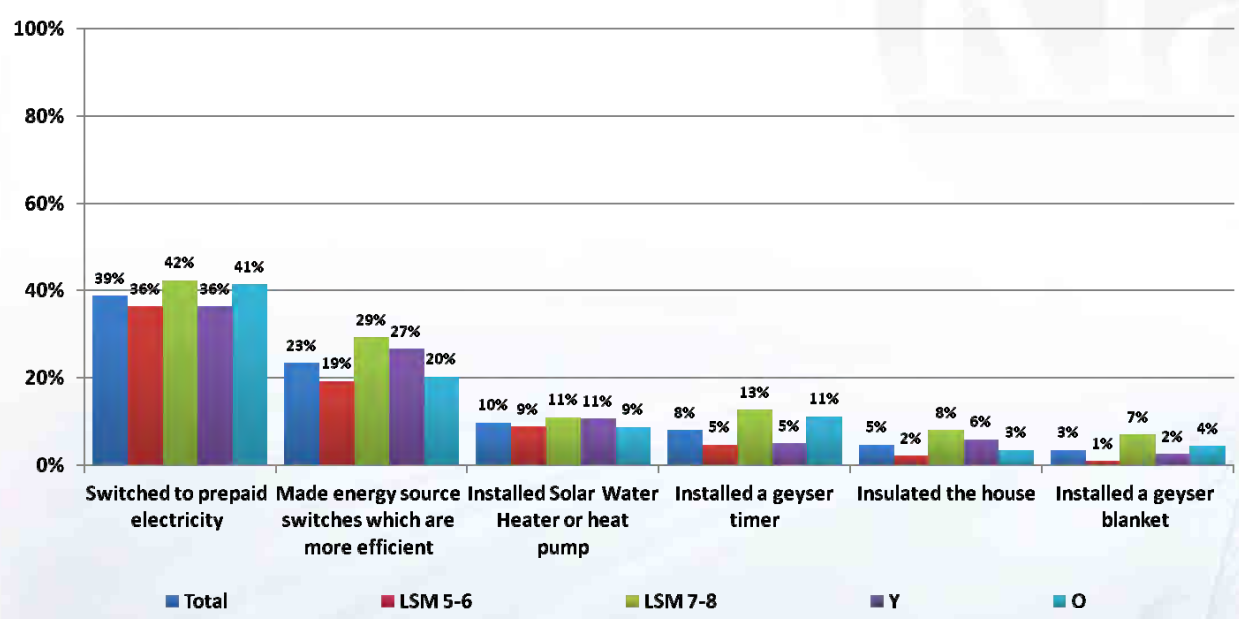
## Energy Saving Activities



A far greater uptake of energy saving activities is seen in the Younger sample, who appear far more aware of the energy crisis and the concept of energy efficiency

Thinking about energy saving activities, how often, on average, would you say you do each of these things?  
n: 415

## Energy Saving Modifications Made to Home

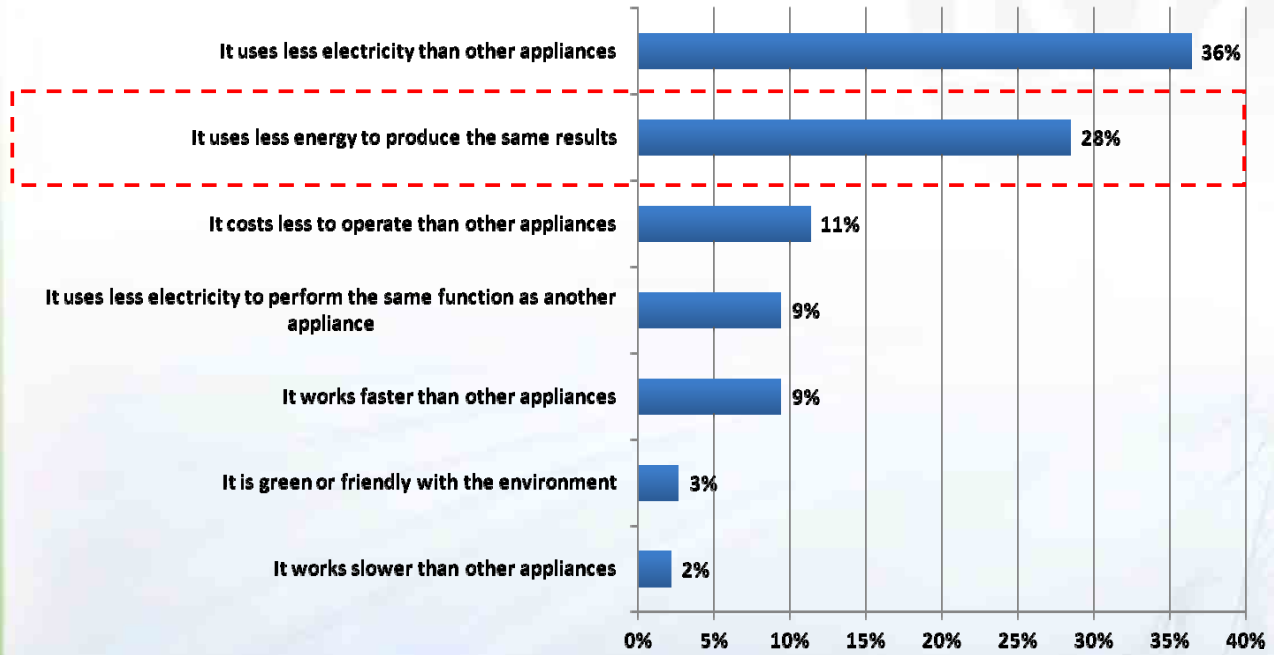


In keeping with the trend in activity, home modifications are focused on Prepaid electricity, which can be seen as a passive change in that once it is done, no further thought needs to be applied to this

What changes have you made to your home to help with energy saving?  
n: 415



## Understanding of Energy Efficient Appliance

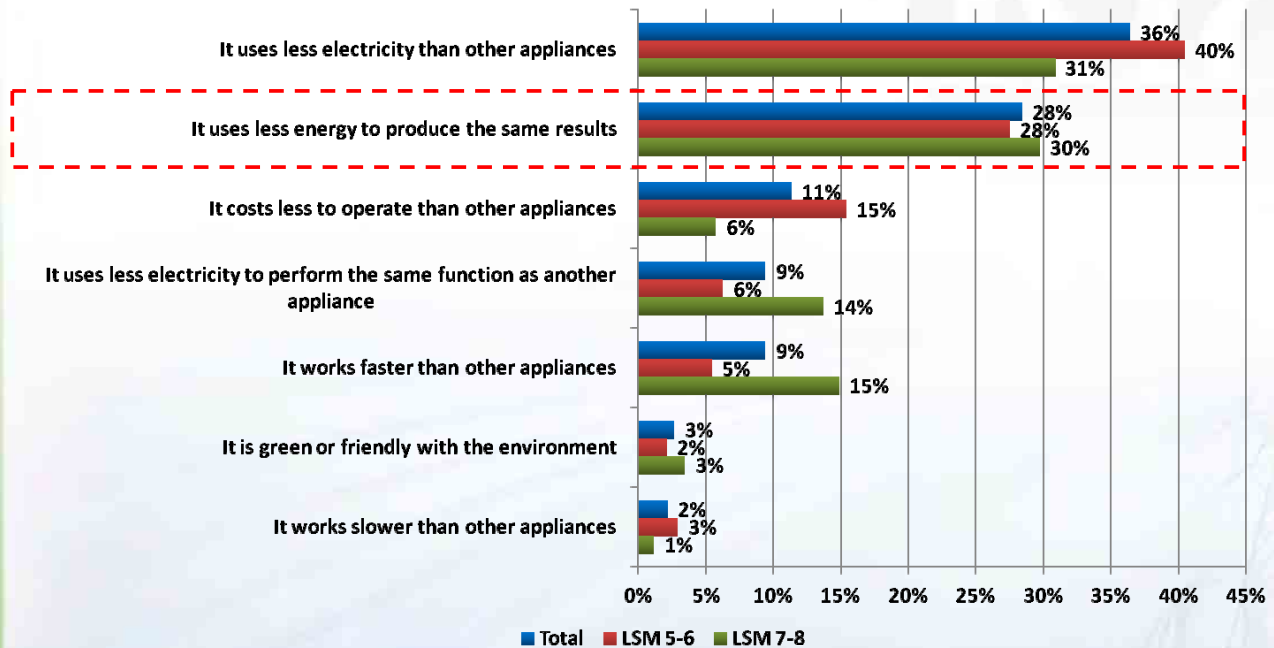


The top two mentions speak to much the same point, as “using less electricity to produce the same result” can not be excluded from “using less electricity than other appliances” in the mind of the consumer

Of these, which would you say is the best explanation of an energy efficient appliance?  
n: 415

Prepared for IEE Japan by: July 2012

## Understanding of Energy Efficient Appliance by LSM

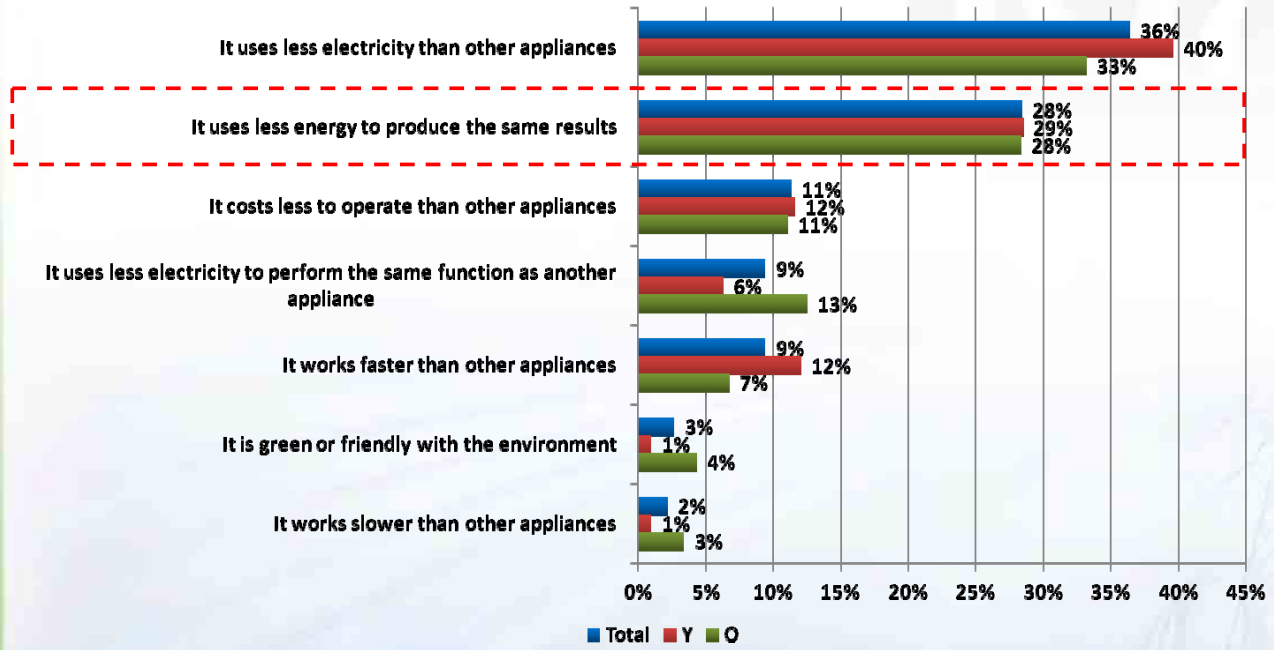


In keeping with the trend in activity, home modifications are focused on Prepaid electricity, which can be seen as a passive change in that once it is done, no further thought needs to be applied to this

Of these, which would you say is the best explanation of an energy efficient appliance?  
n: 415

Prepared for IEE Japan by: July 2012

## Understanding of Energy Efficient Appliance by Age

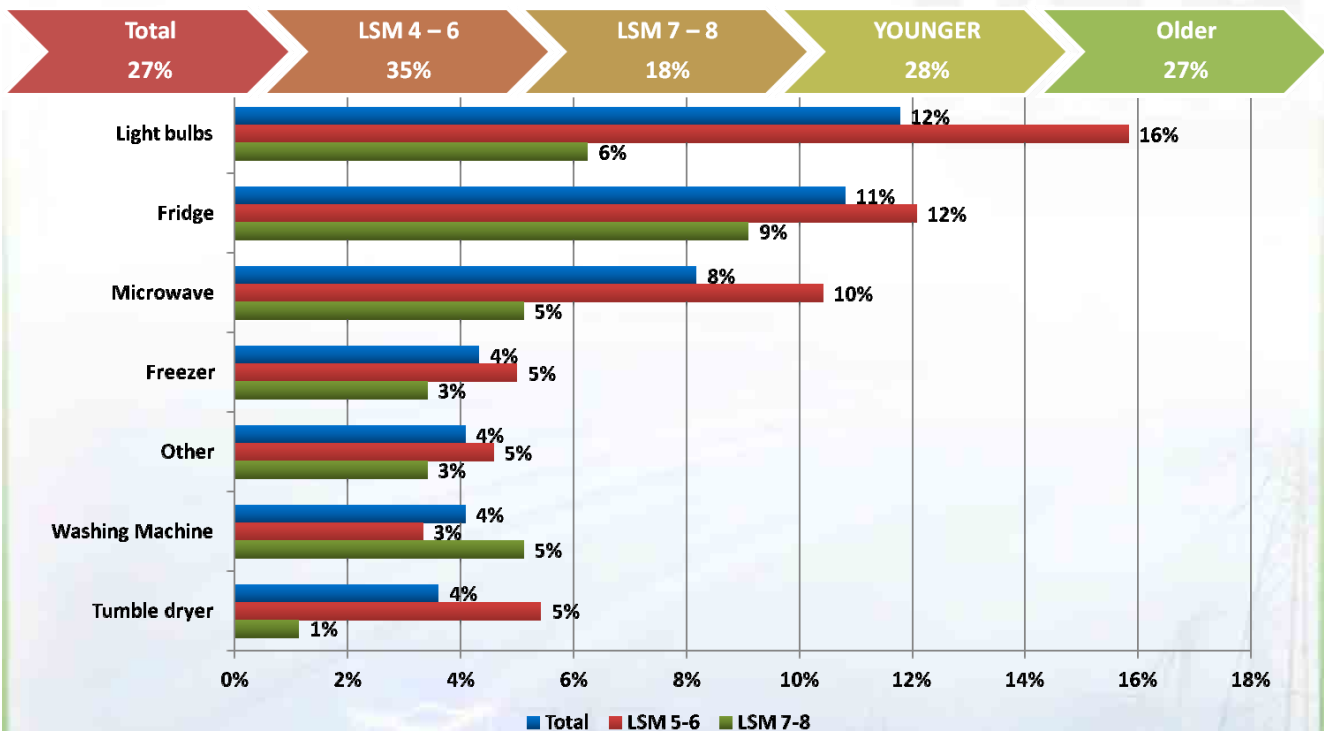


Of these, which would you say is the best explanation of an energy efficient appliance?  
n: 415

Prepared for IEE Japan by: July 2012

## Appliances with Energy Efficient label in Home by LSM

Have energy efficient appliances



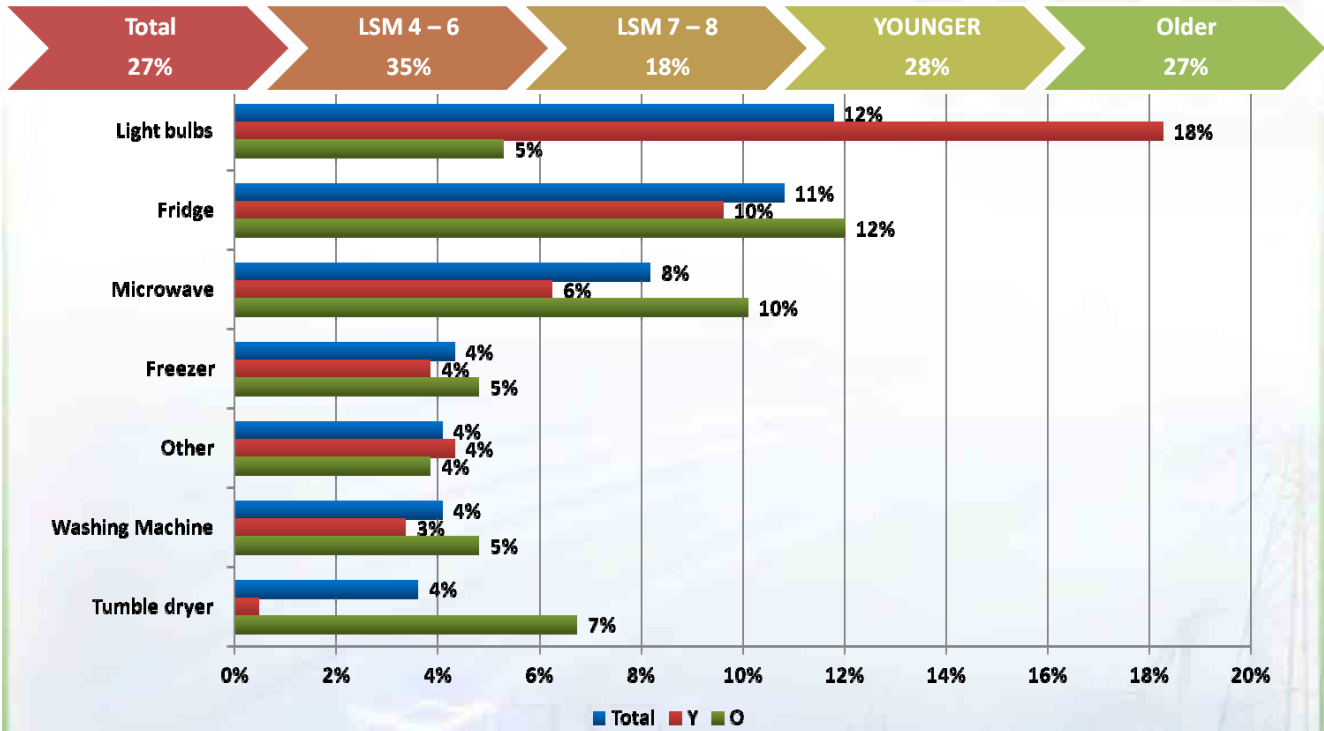
27% of the sample claim to have appliance with energy efficient labels, the majority of which are light bulbs, fridges and microwaves. The incidence of these appliances in home is driven by the lower LSM group

Do any of the appliances in your household have an energy efficiency label on them? Which appliances in your home have an energy efficiency label?  
n: 415/ n: 112

Prepared for IEE Japan by: July 2012

## Appliances with Energy Efficient label in Home by Age

Have energy efficient appliances

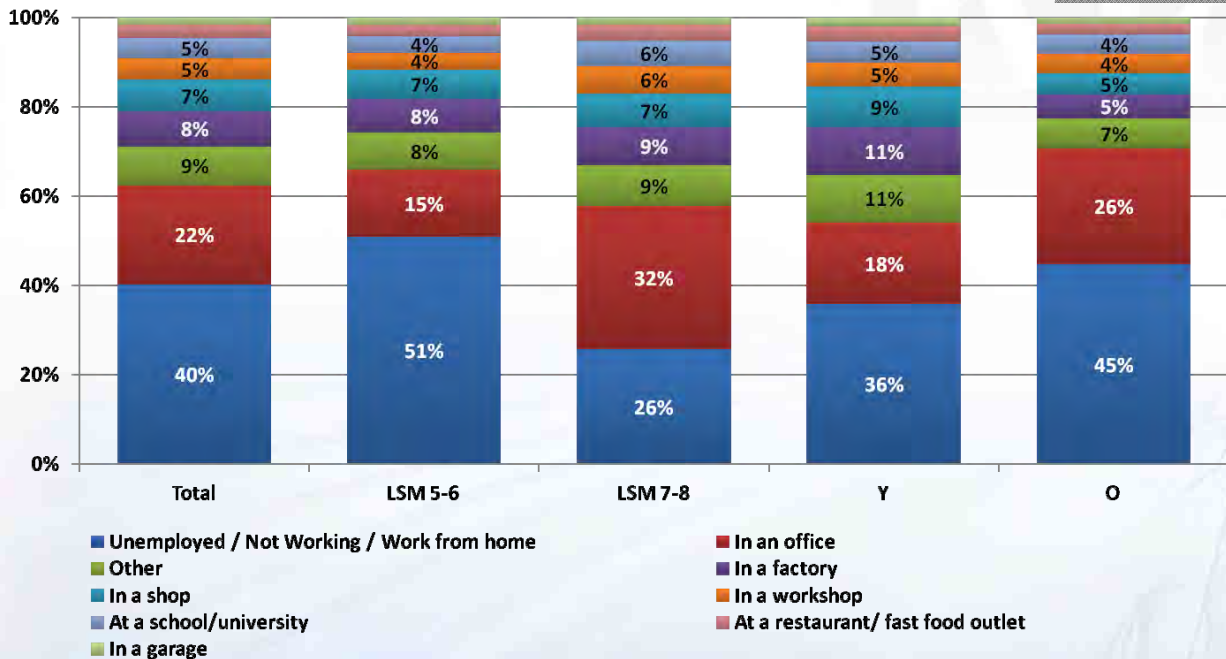


27% of the sample claim to have appliance with energy efficient labels, the majority of which are light bulbs, fridges and microwaves. The younger sample have adopted efficient light bulbs at far higher rates than their older counterparts

Do any of the appliances in your household have an energy efficiency label on them? Which appliances in your home have an energy efficiency label?  
n 415/ n: 112

## Work Environment

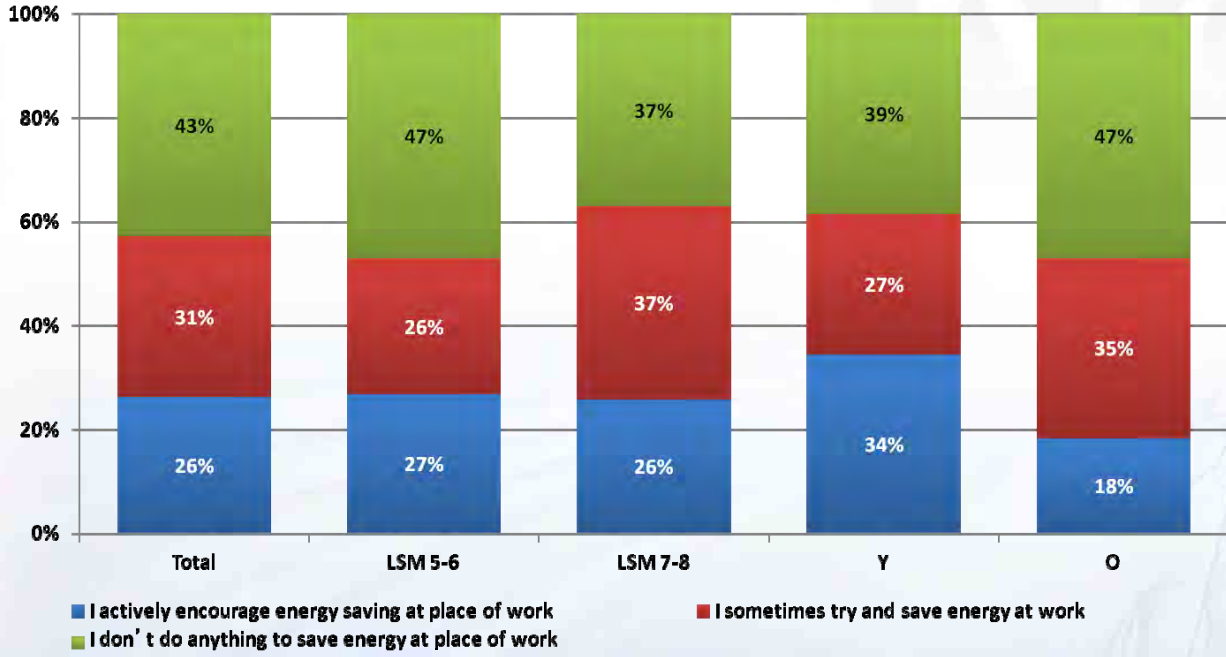
Note: Data labels under 5% not shown



XXX

Where do you work?  
n: 415

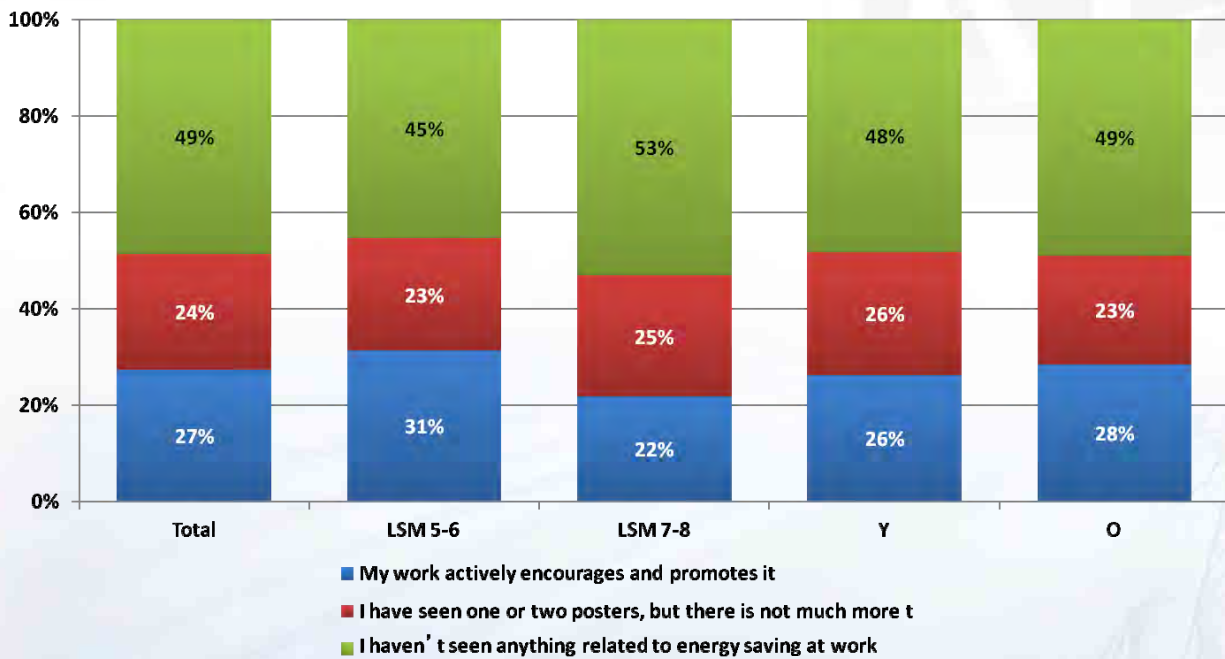
## Energy Saving Activities at Work



While behaviour has changed (on the less 'invasive' measures), a change in behaviour is far less evident in the work place. We see therefore that behaviour change is only really affected where a personal influence (particular in light of money saving) is perceived

To what extent do you personally carry out energy saving behaviour in your place of work?  
n: 415

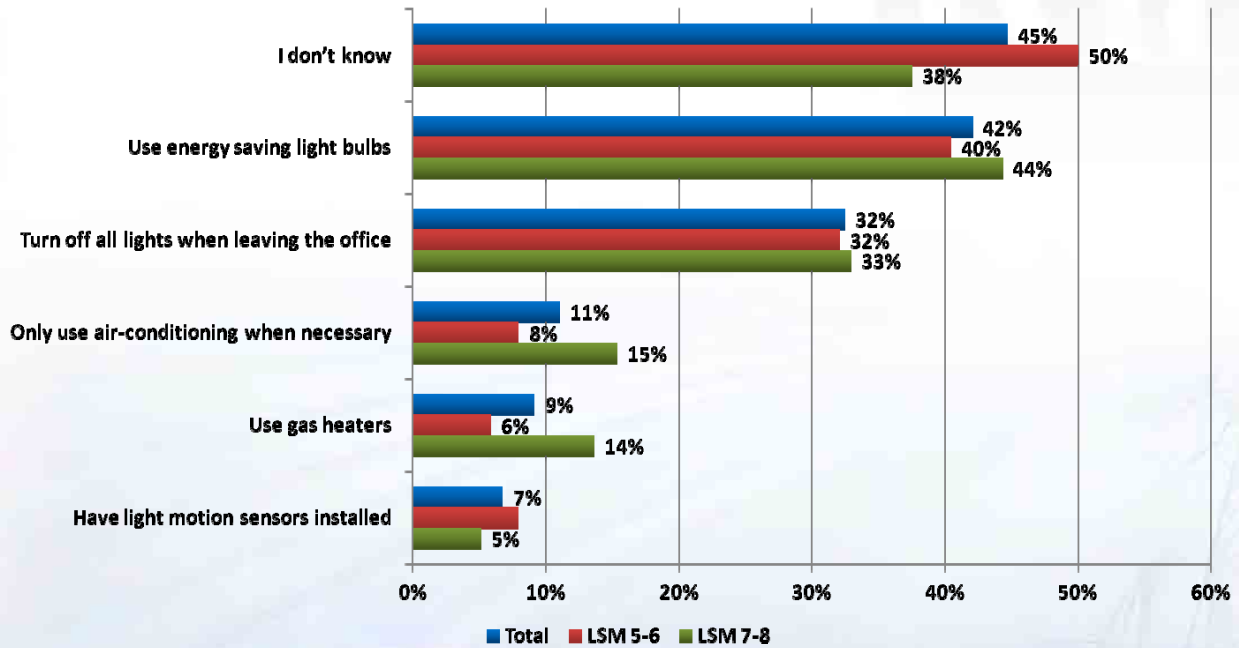
## Encouragement of Energy Saving Activities at Work



Beyond what was seen in the previous slide, work places are not perceived to be actively pursuing energy saving activities, which further promotes a lack of personal active engagement in this sphere

To what extent does your place of work encourage energy saving?  
n: 415

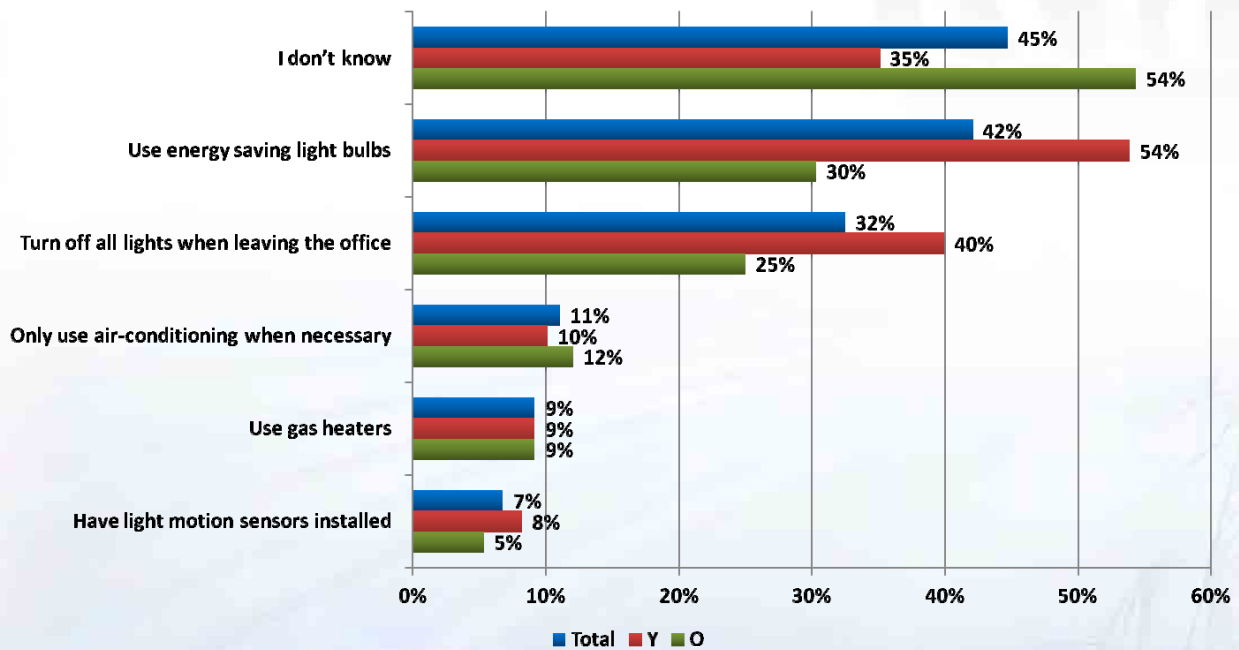
## Energy Saving Activities at Work by LSM



The majority of respondents don't know what their work place is doing to save energy, again indicating both a lack of engagement from an employer's and an employee's perspective

What energy saving activities/routines/policies does your place of work perform or have?  
n: 415

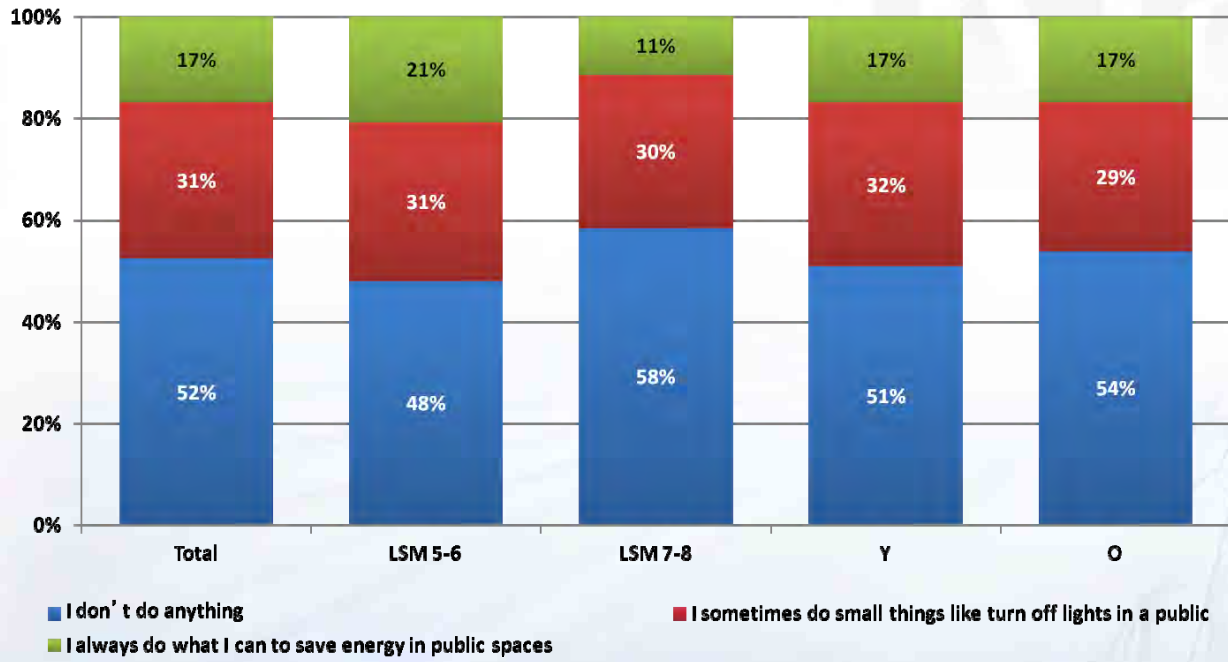
## Energy Saving Activities at Work by Age



The older sample display a particularly high lack of awareness and engagement in energy saving activities at work

What energy saving activities/routines/policies does your place of work perform or have?  
n: 415

## Energy Saving Activities in Communal Spaces

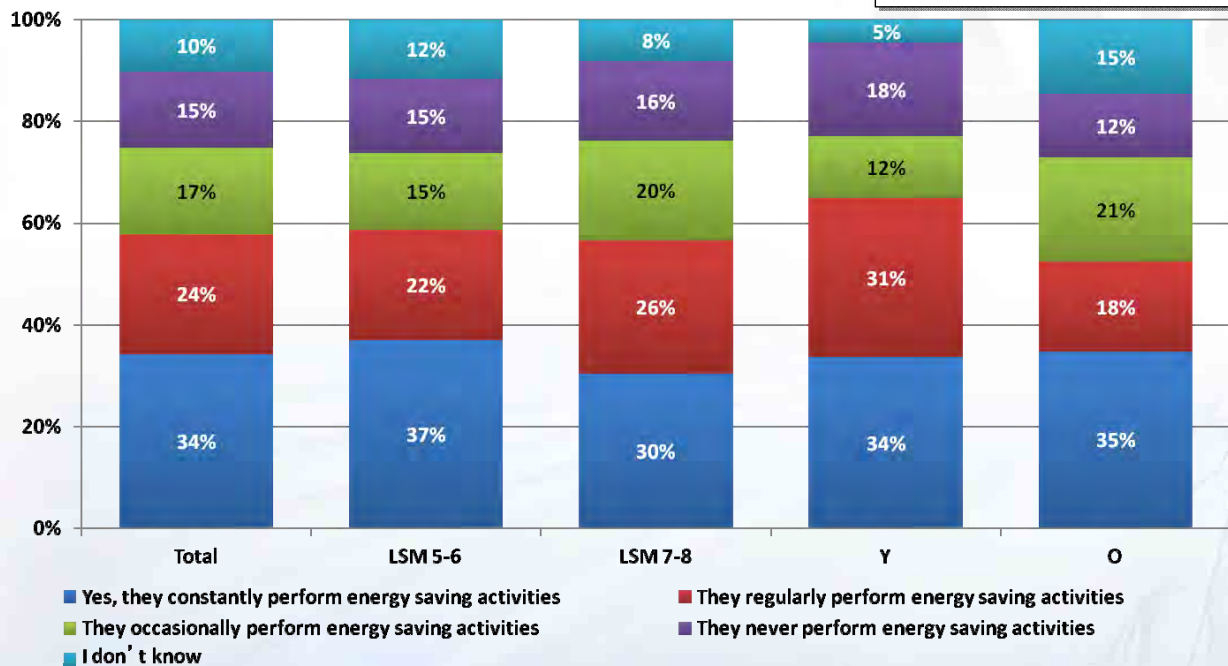


Taking the lack of engagement outside of a personal space even further, energy saving in communal spaces is not a focus, although the lower income group display the highest engagement in this

To what extent do you carry your own energy saving behaviour to communal places?  
n: 415

## Energy Savings Activities in Children

Note: 73% of the sample had children. Those who do not are excluded from the analysis below

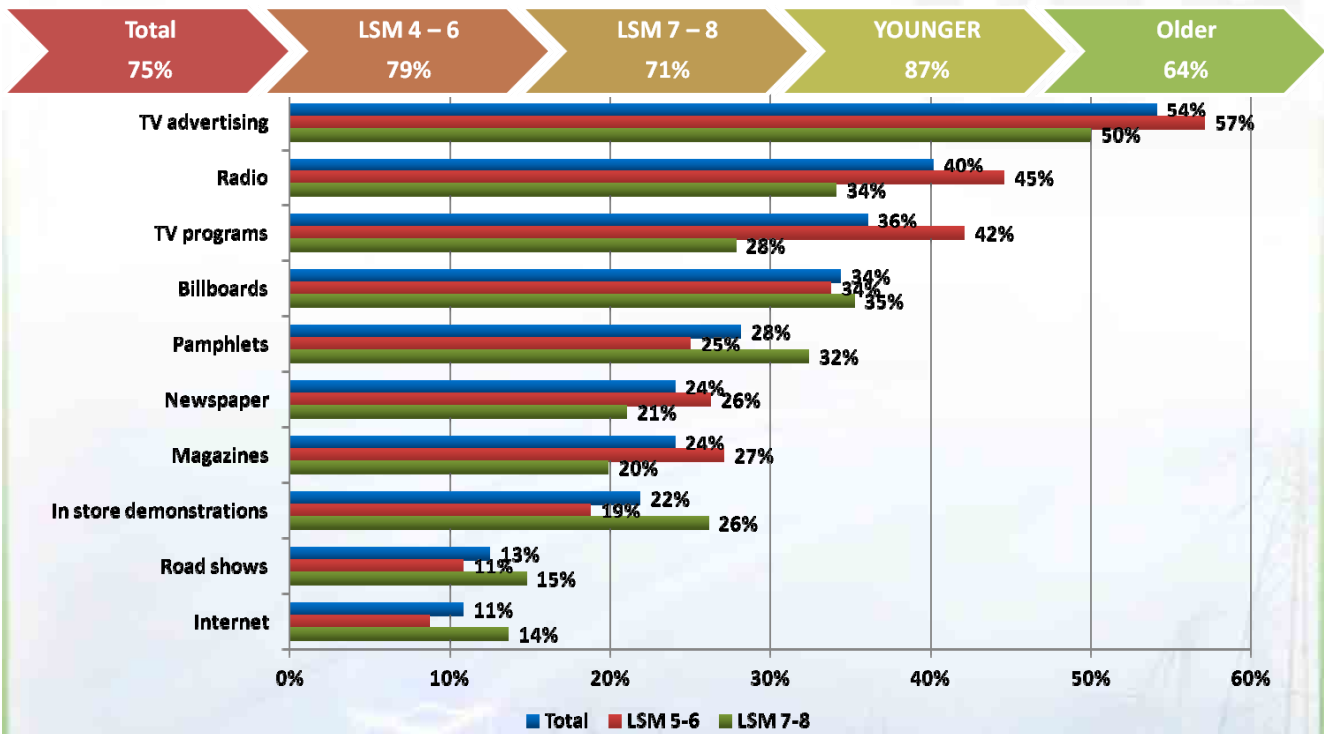


The younger sample appear to encourage energy saving activities in their children more, in keeping with their higher engagement in this in their own lives

Do your children encourage or perform any energy saving activities?  
n: 112

## Interest in energy efficiency Communication by LSM

Interested in finding out more about energy efficiency

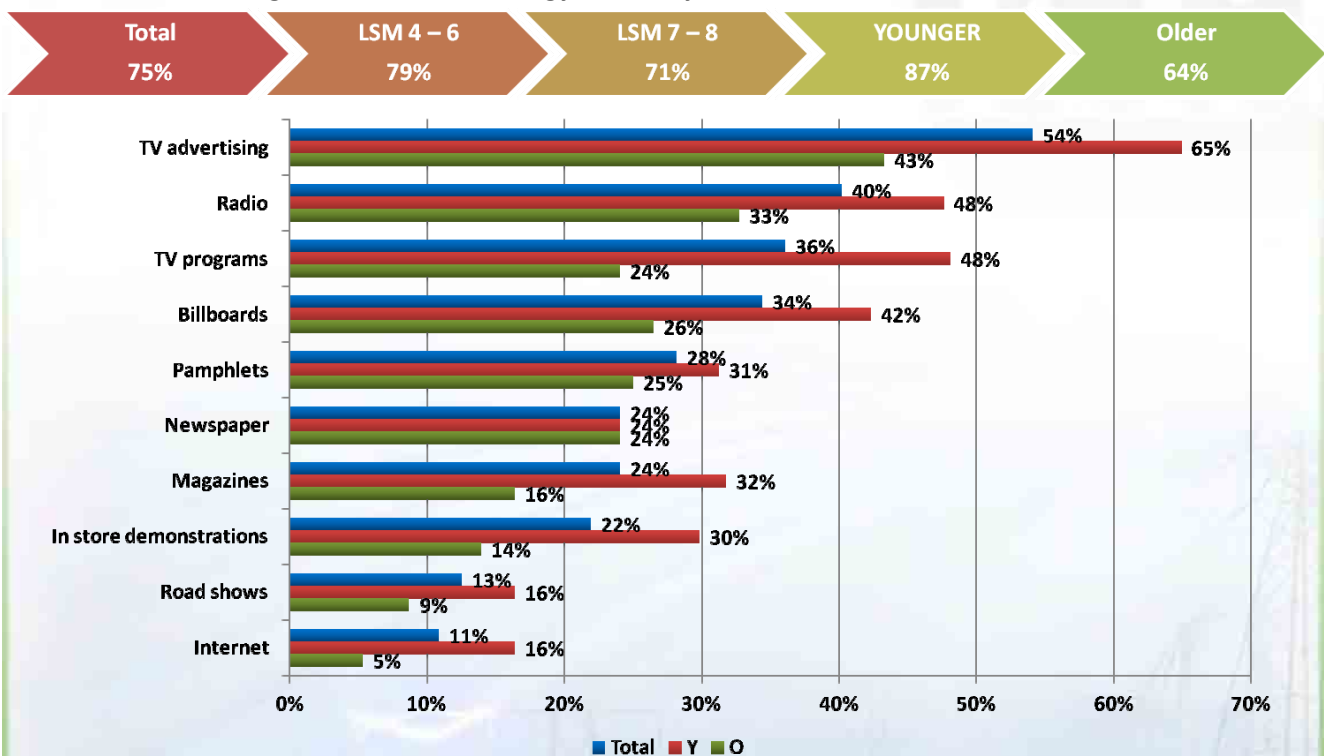


Interest in finding out more is high, although is significantly lower for the older sample. Mass media is perceived as optimal for communicating this message

Would you be interested in finding out more information on energy efficiency, and through which channels?  
n: 415/ n: 311

## Interest in Energy Efficiency Communication by Age

Interested in finding out more about energy efficiency



In keeping with the trend, the younger sample display a far higher interest across the possible channels

Would you be interested in finding out more information on energy efficiency, and through which channels?  
n: 415/ n: 311

- While a change in the more 'passive', everyday measures is noted, activities such as turning off geysers and aiming to reduce overall appliance usage is not yet the norm
- The less affluent and younger sample display a higher incidence of energy saving activities, demonstrating a lack of engagement amongst the more affluent sample – evidently the effect of electricity prices on this sample is less of an issue in real terms
- Home modifications have been fairly low to date – the respondents who participate the least in the 'passive' activities discussed display the highest incidence of having changed to Prepaid electricity – indicating a need to make a once-off change that does not require continual active engagement. There is an attitude here of "I have solved my issue, and don't have to worry further about the energy crisis"
- Understanding of energy efficiency within the appliance context speaks to using less electricity than another appliance, or to get the same result. Where we saw that on a conceptual level "energy efficiency" was understood in generic terms, the idea takes on a more concrete form when applied to appliances
- The incidence of energy efficient appliances in home is low at 27%, with light bulbs driving this to a strong extent
- While behaviour is seen to be changing in a personal space, active engagement in a work or communal space is low, indicating that engagement in saving electricity is cursory, and kept to where it has a personal benefit (i.e. saving money)
- Claimed interest in finding out more is high, most notably amongst the younger sample who are the most engaged in energy saving activities



## 4. Appliances

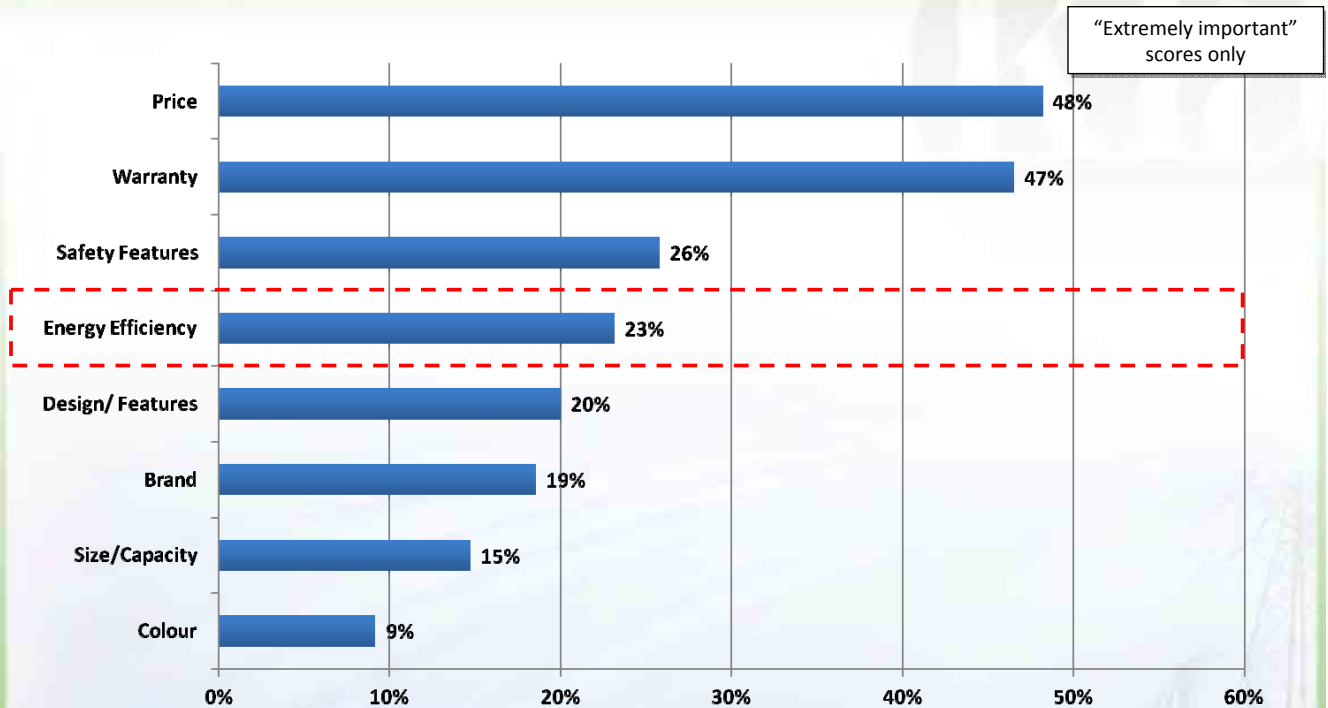




## Appliance Purchase Drivers



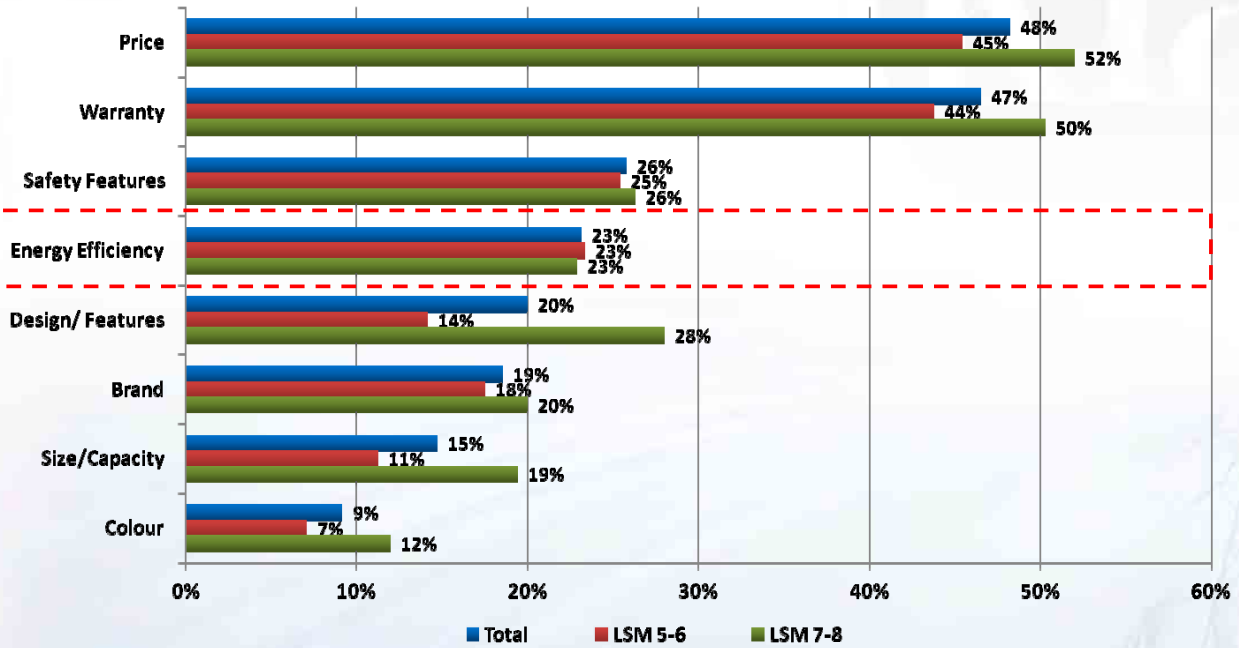
### Appliance Purchase Drivers - Total



The key drivers are strongly functional (and can be seen as table stakes), while the energy efficiency of an appliance is perceived as more important than elements such as features and brand

Please tell me how important each of these are to you in making a decision around which appliance to buy  
n: 415.

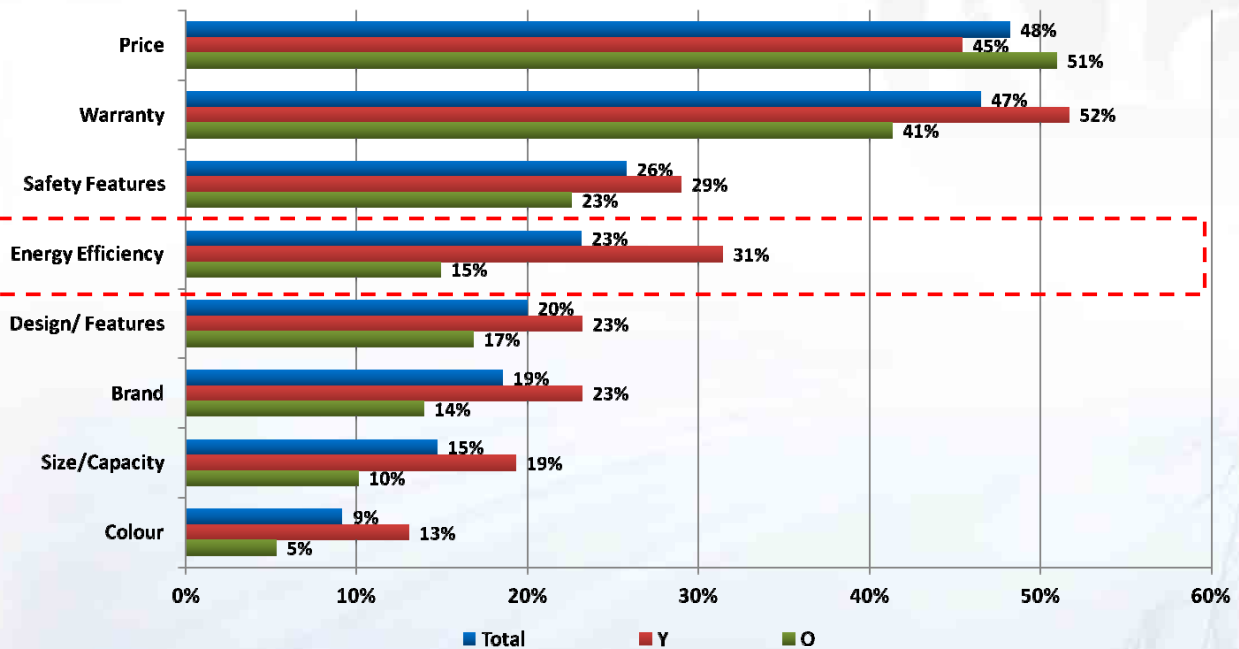
### Appliance Purchase Drivers by LSM



Design and features as well as size/ capacity is a stronger driver among the more affluent market

Please tell me how important each of these are to you in making a decision around which appliance to buy  
n: 415.

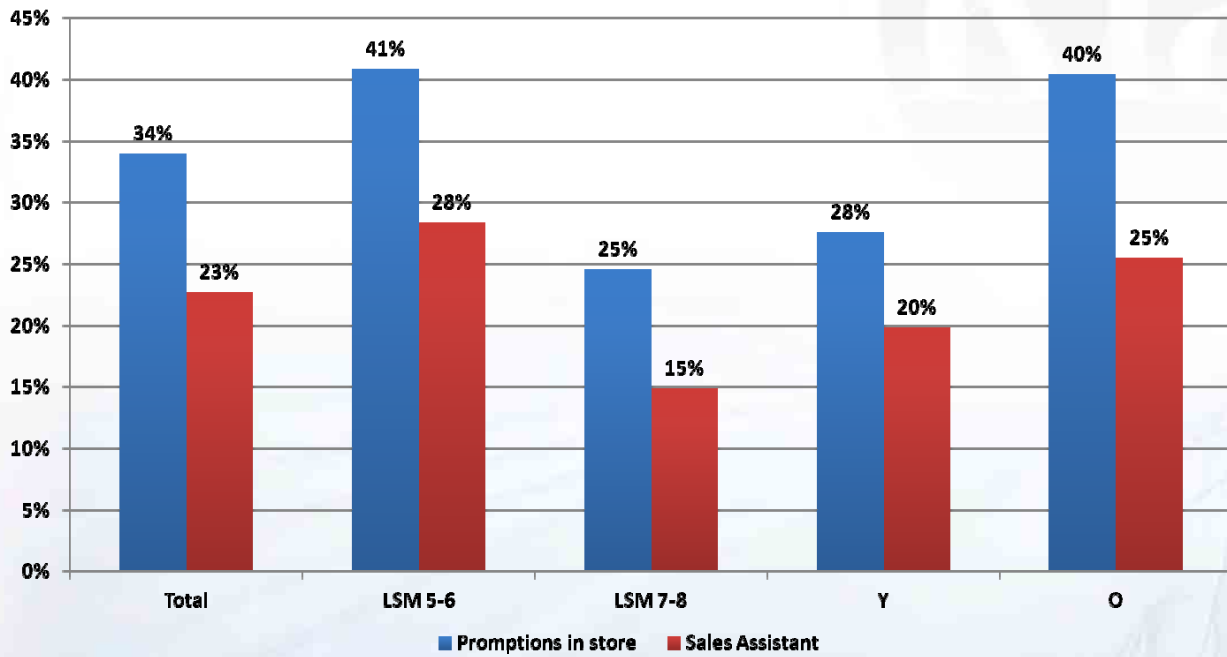
### Appliance Purchase Drivers by Age



While warranty and energy efficiency drive purchase choice amongst the younger market

Please tell me how important each of these are to you in making a decision around which appliance to buy  
n: 415.

## In Store Activity promoting Energy Efficiency



Promotions in store and having a sales person sell an appliance based on its energy efficiency credentials is still quite low in store, but is noted at higher levels amongst the less affluent – this could be a factor of different store choice in the lower LSM groups

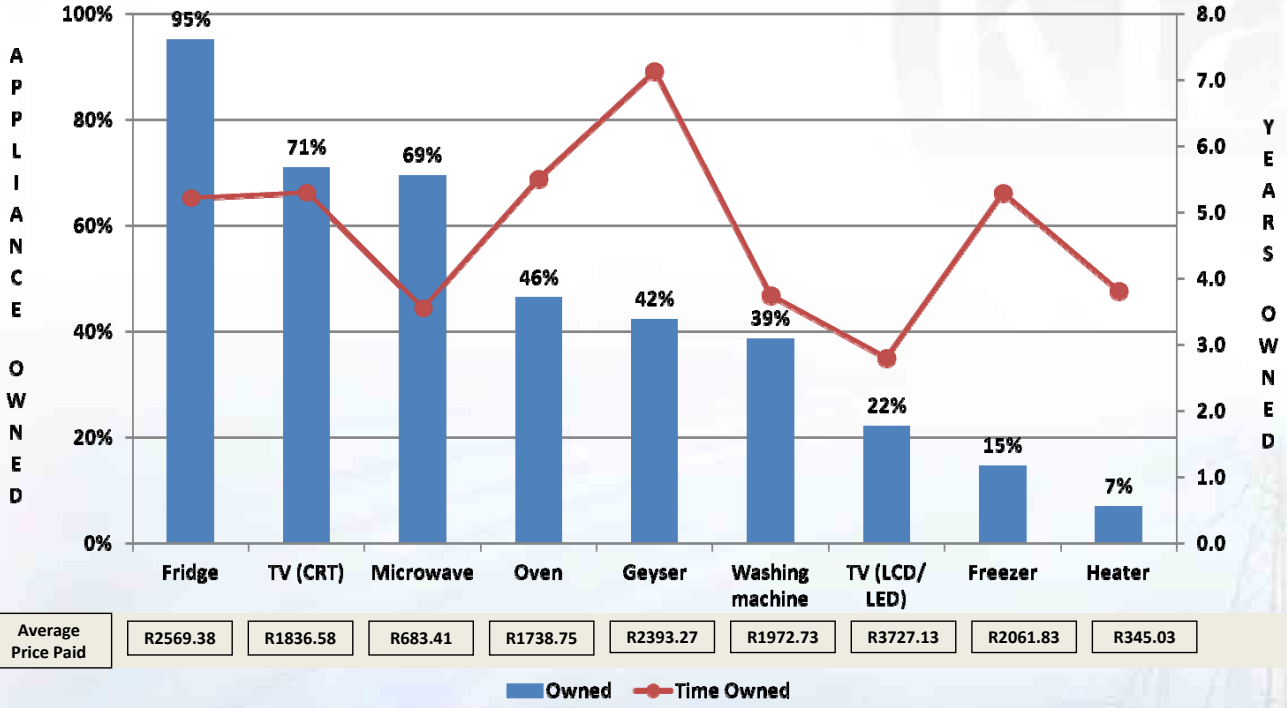
Have you seen promotions in store specifically about appliances that are more energy efficient than others?  
 When purchasing an appliance from a store, has any sales person ever tried to sell you an appliance because it is 'energy efficient'?  
 n: 415



## Appliances in the home



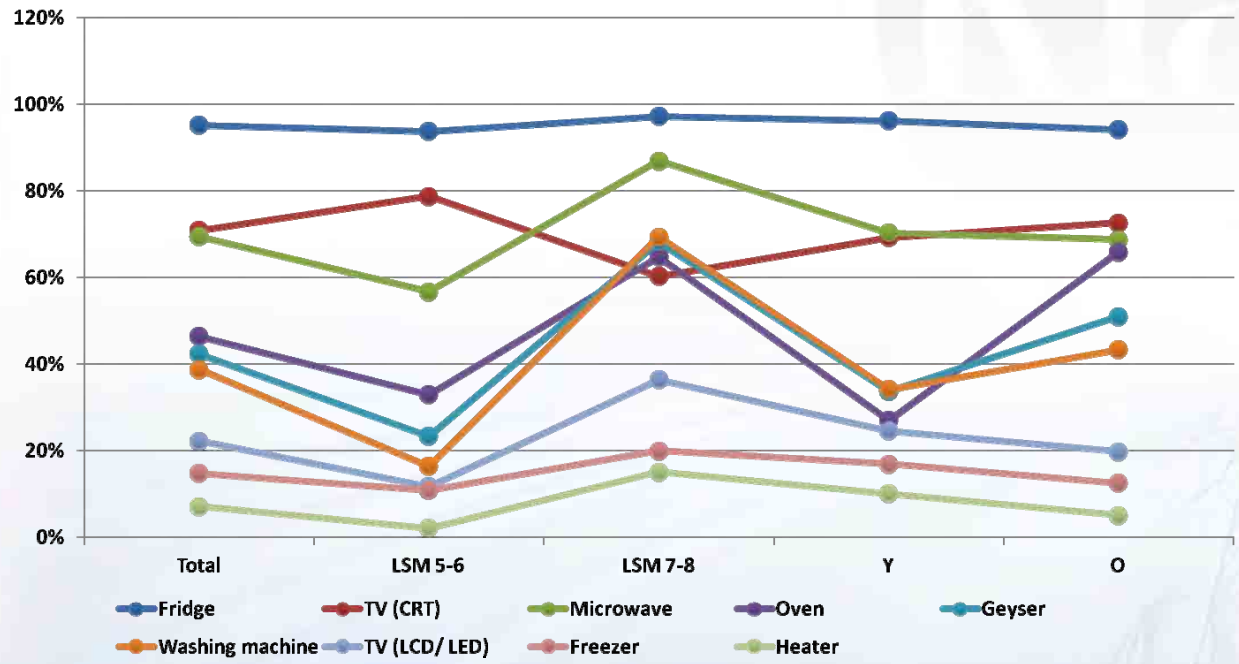
### Appliances in Home - Total



Fridges are the most common appliance owned, while geysers have the longest ownership tenure. LED/ LCD TV's are rated at the highest average purchase price

n: 415

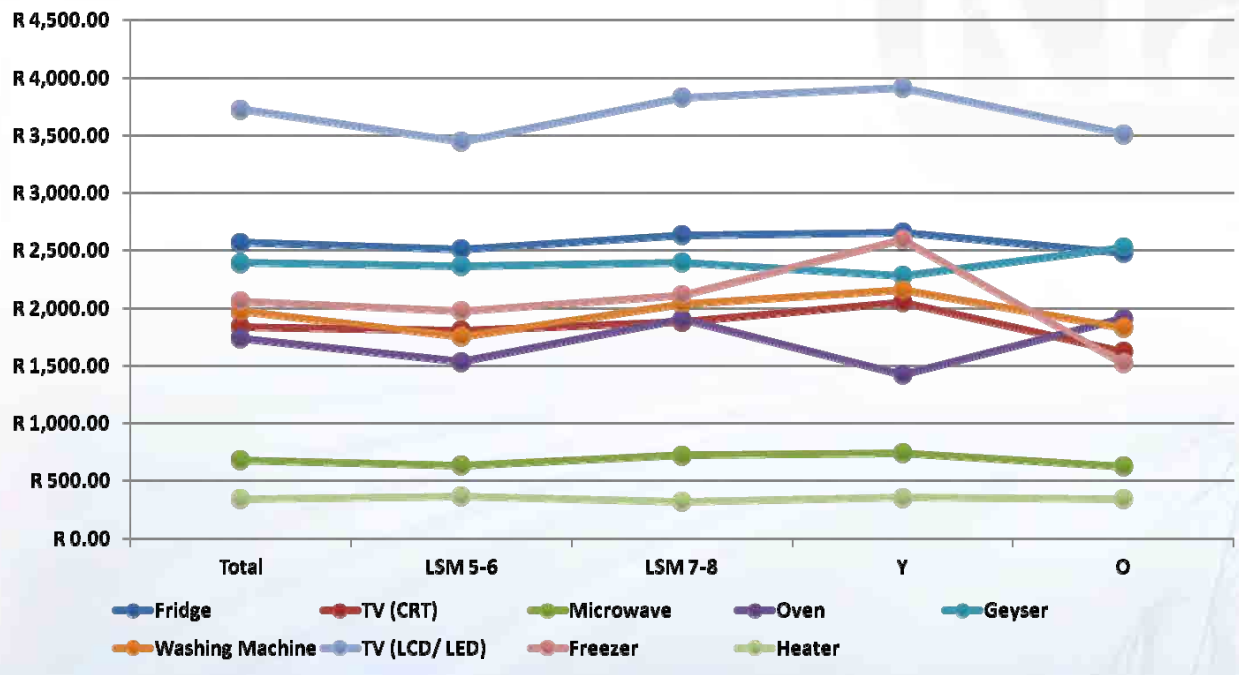
### Appliance Ownership



Microwaves, washing machines and ovens have a strong ownership skew towards the more affluent sample, while CRT TV's are far more prominent amongst the lower LSM group

Which of the following appliances do you have in your home ?  
n: 415

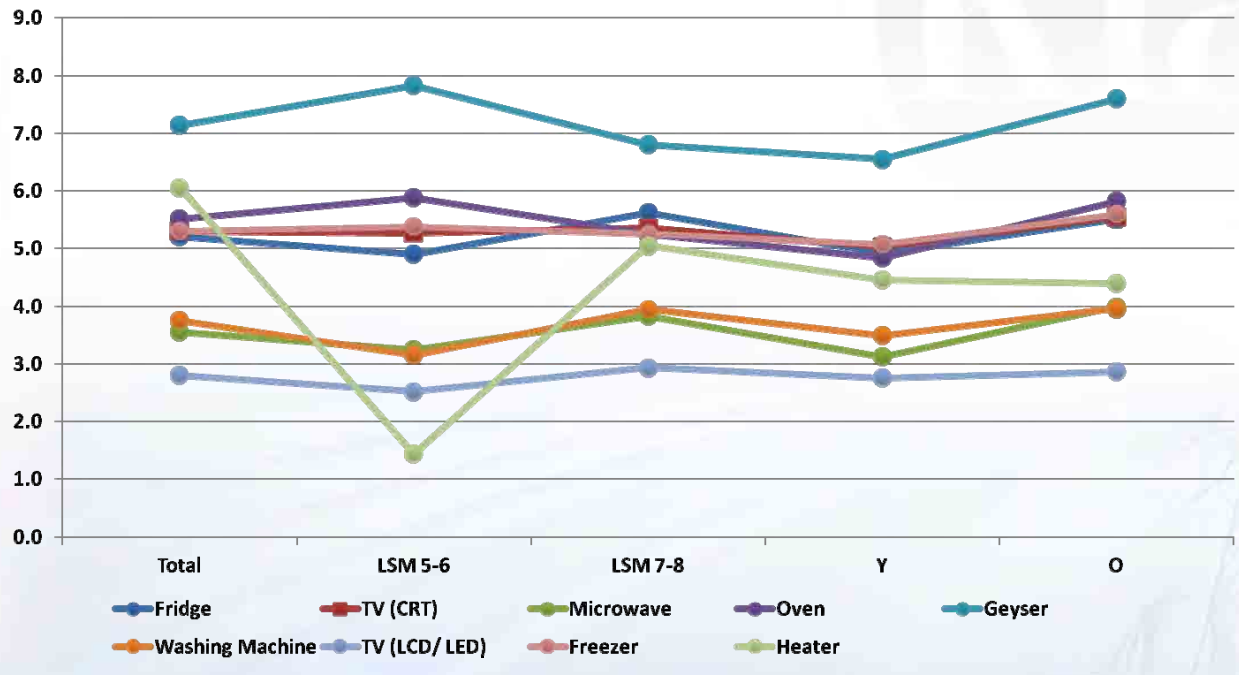
### Average Appliance Purchase Price (Rands)



CRT TV's are perceived as the most expensive appliance, with microwaves and heaters being the least costly

How much, approximately, did you pay for this appliance?  
n: 415

### Average Duration of Appliance Ownership (Years)

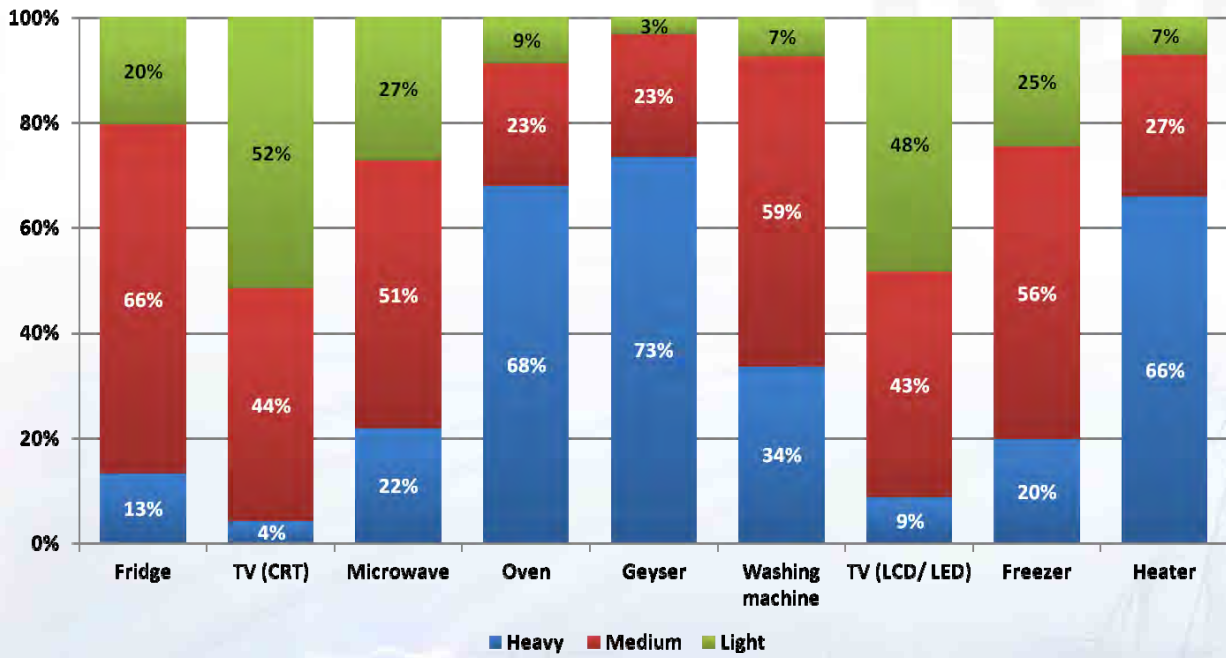


Across the board appliance ownership tenure is slightly higher for the older sample who would have had their own discretionary spend for longer

How long have you had this appliance for?  
n: 415

## Appliances in Home – Electricity Usage Estimate

Note: Data labels under 5% not shown



Geysers are perceived as being the heaviest on usage – this is assumed to be as a result of the heavy communication regarding turning off geysers while not in use

How would you rate the electricity consumption of this appliance?  
n: 415

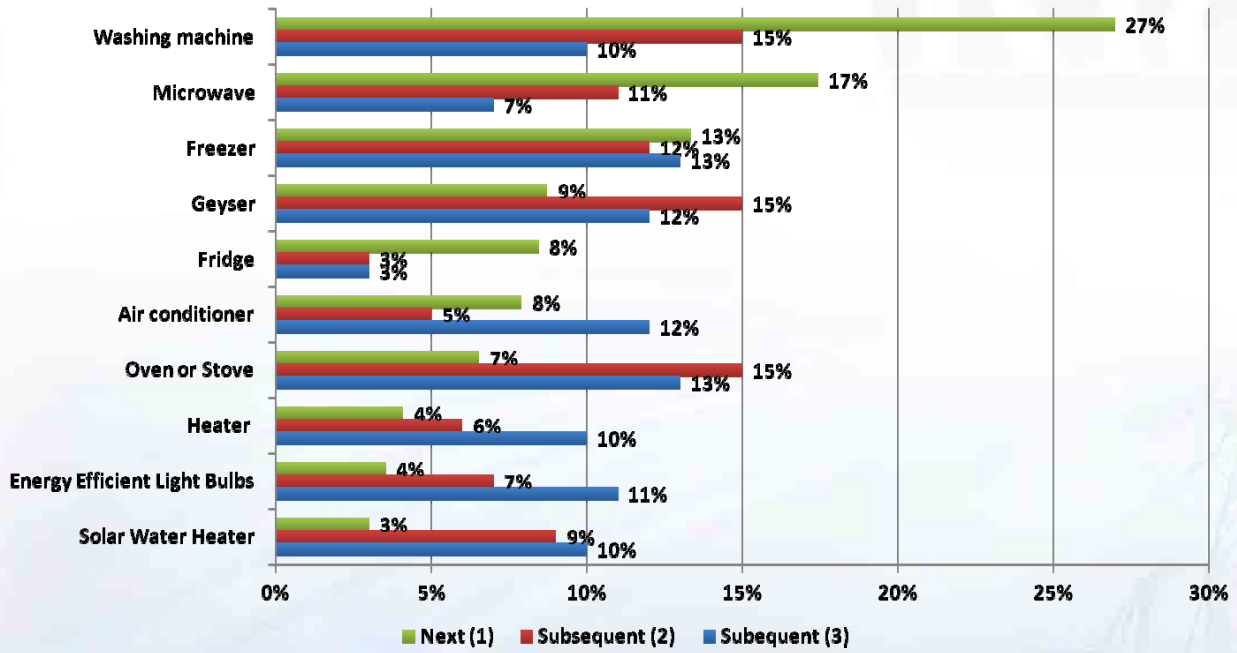
Prepared for IEE Japan by: July 2012



## Future Appliance Purchase



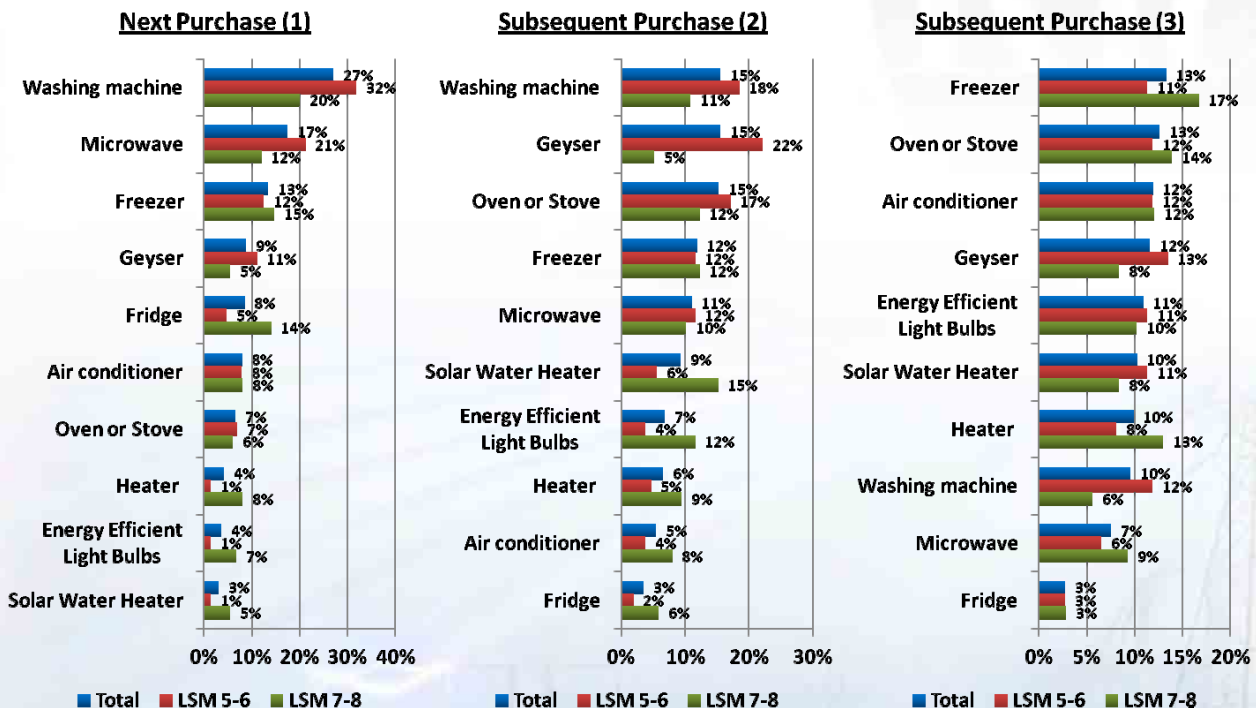
## Future Appliance Purchase - Total



Washing machines dominates future appliance purchase as an immediate next purchase, followed by a geyser as a second purchase and a freezer and oven as a 3<sup>rd</sup> purchase

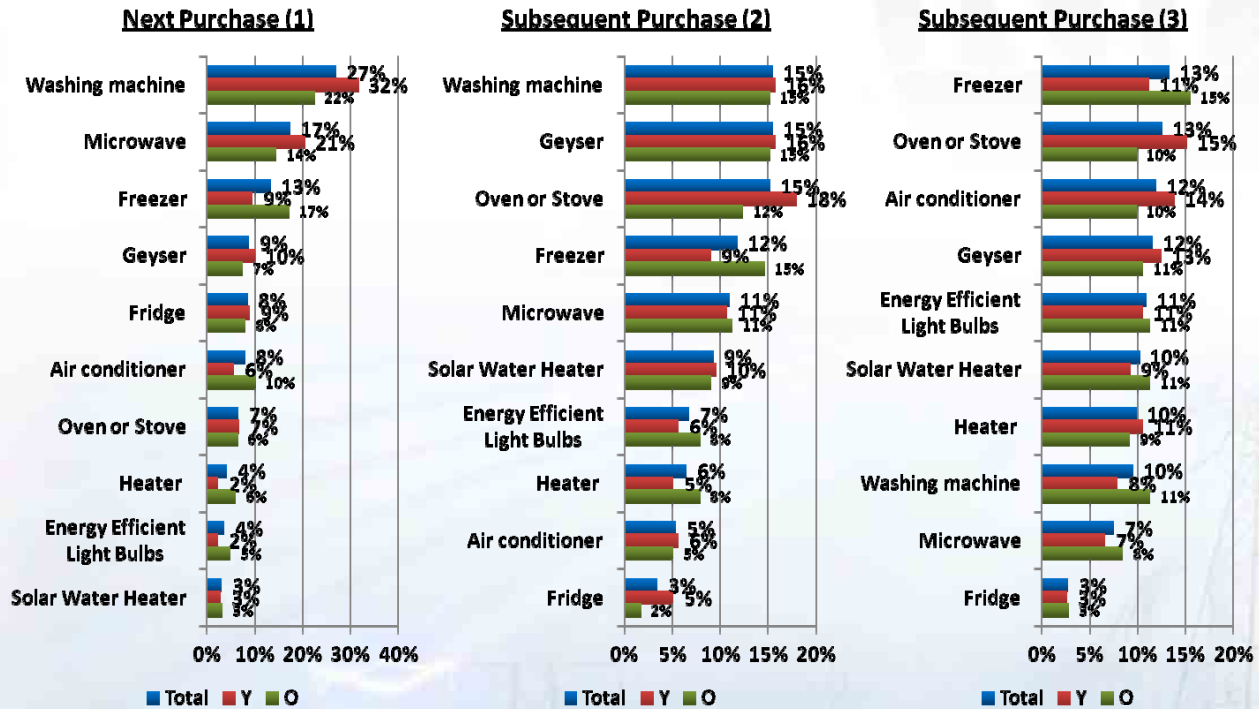
Which appliance will you buy next?  
n: 415

## Future Appliance Both by LSM



Which appliance will you buy next?  
n: 415

## Future Appliance Both by Age



Which appliance will you buy next?  
n: 415

Prepared for IEE Japan by: July 2012

## Appliances – Key Findings

- While the functional drivers dominate purchase decision, energy efficiency is perceived as a relatively important driver, indicating an awareness of the long-term benefit of purchasing these appliances
- In store activity is not highly noted however, but is far more prominent amongst the lower LSM sample, indicating that activities in stores which cater to these markets is evidently higher
- Fridges, CRT TV's and microwaves are the most commonly owned appliance, while ovens and geysers are only owned by half the sample, driven predominantly through the more affluent
- These are the two appliances which are also perceived as the heaviest on electricity usage
- A washing machine, geyser and oven are highest for the lower LSM sample in terms of future appliance purchase

Prepared for IEE Japan by: July 2012



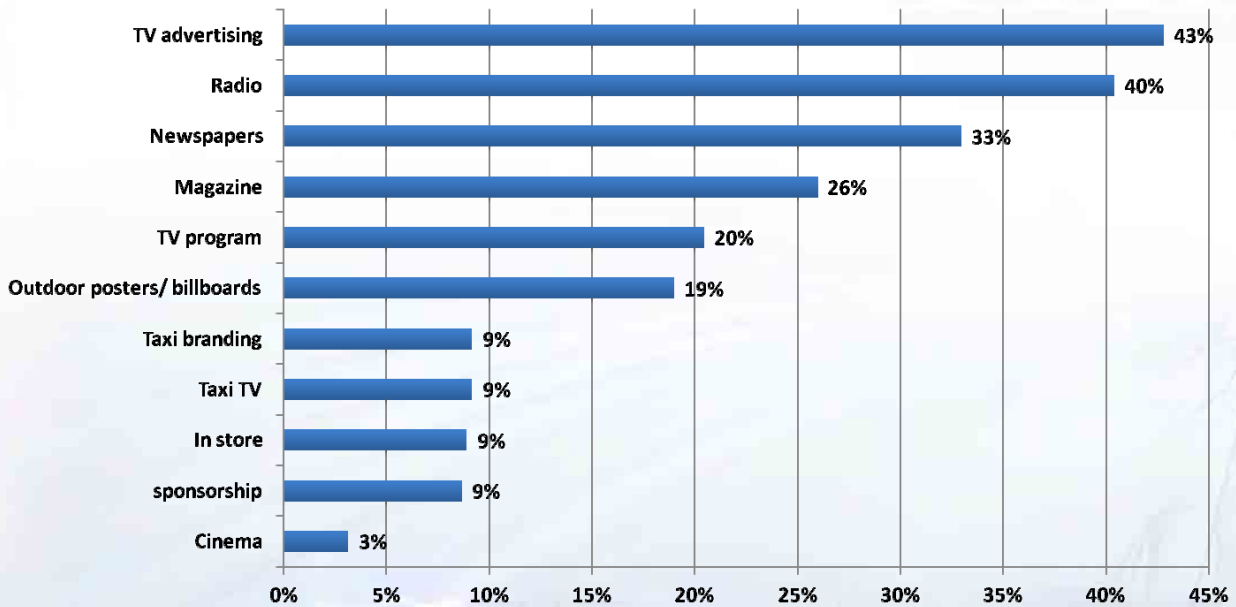
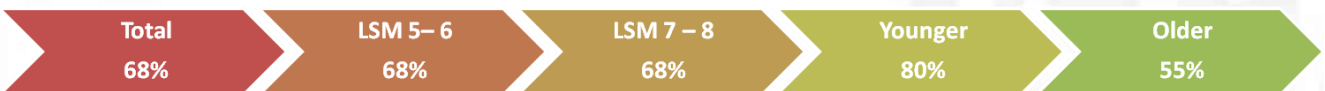


## 5. Communication



### Eskom Advertising Awareness and Channel

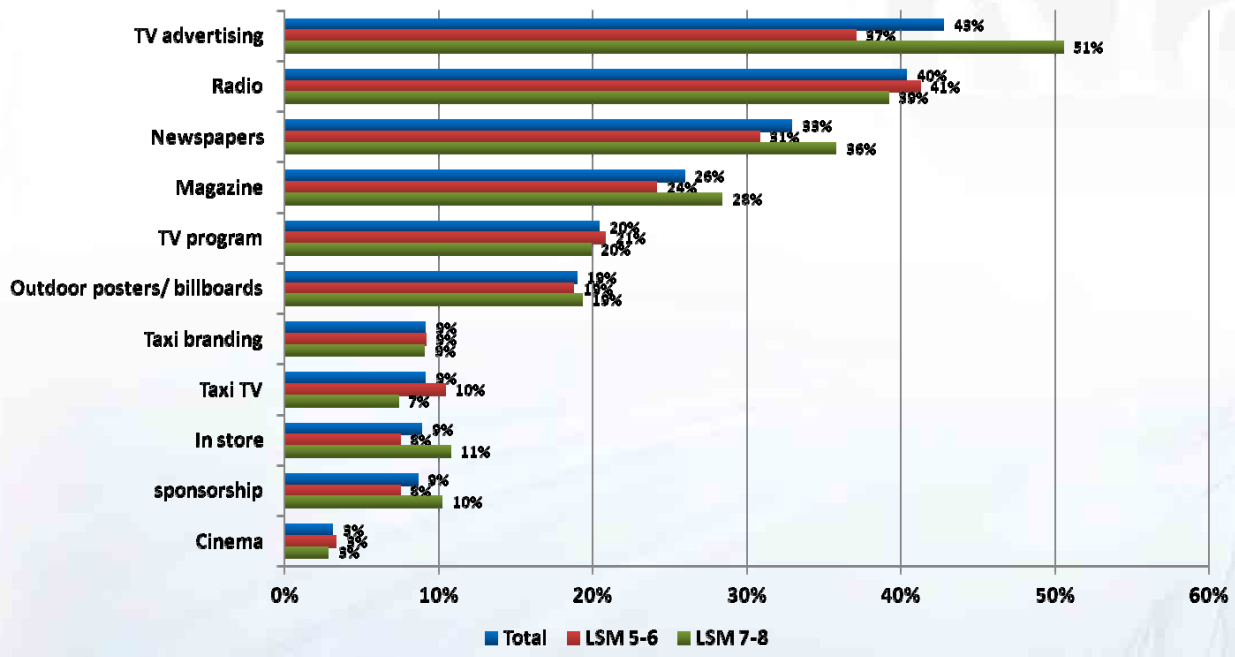
Seen/ heard or read advertising for Eskom recently



Awareness of Eskom communication is significantly higher amongst the younger, more engaged sample, and is high for radio relative to TV which usually sees large over claim

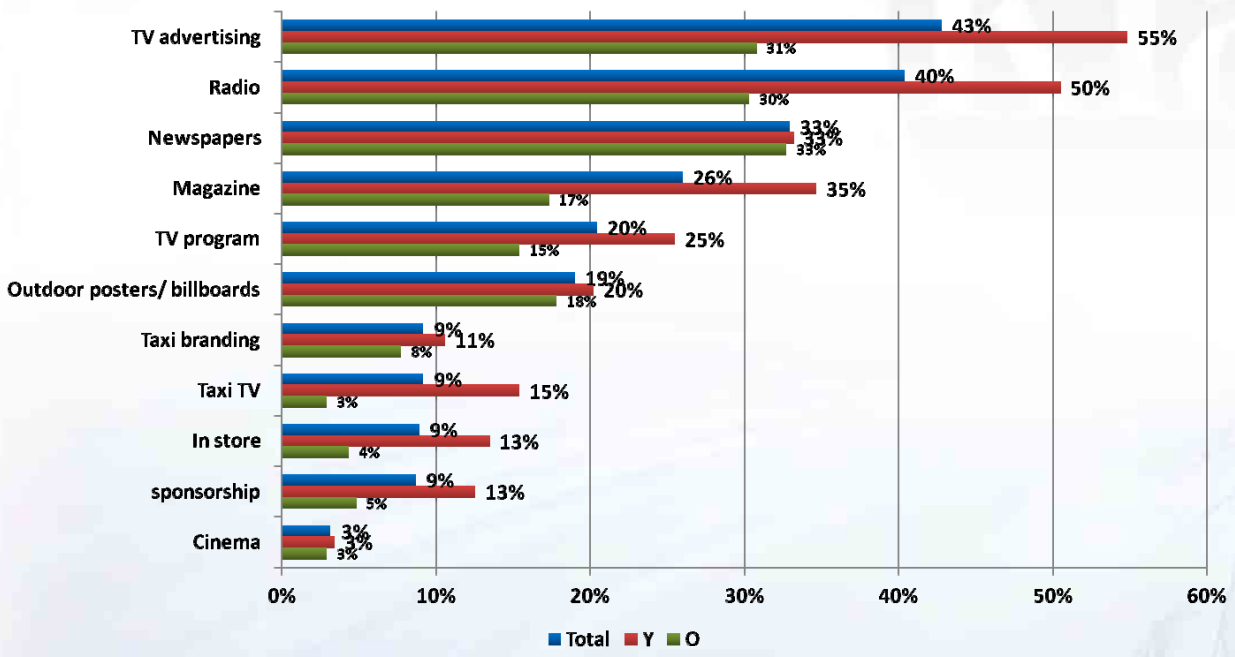
Where did you see, hear or read about these brands? Please select all the places you have seen, heard or read about these brands?  
n: 303

## Eskom Advertising Awareness and Channel by LSM



Where did you see, hear or read about these brands? Please select all the places you have seen, heard or read about these brands?  
n: 303

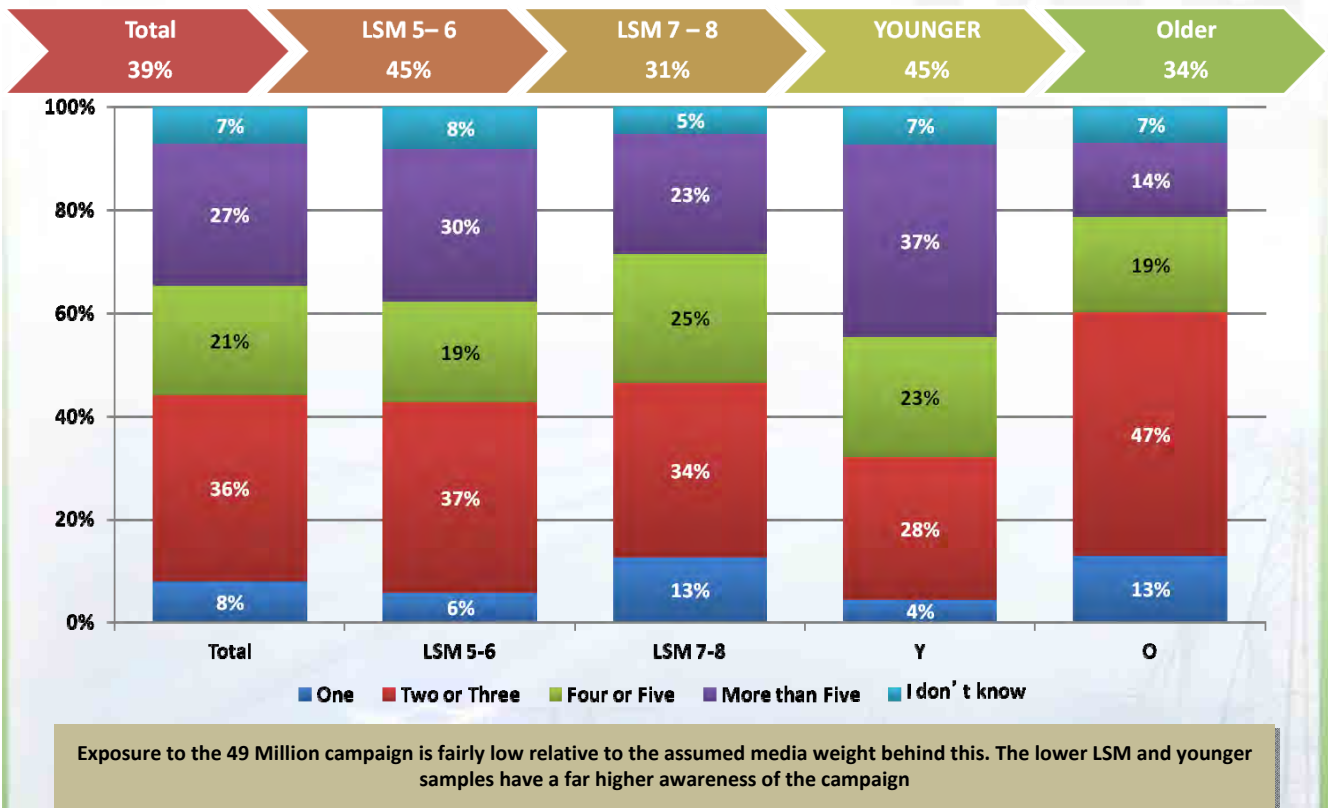
## Eskom Advertising Awareness and Channel by Age



Where did you see, hear or read about these brands? Please select all the places you have seen, heard or read about these brands?  
n: 303

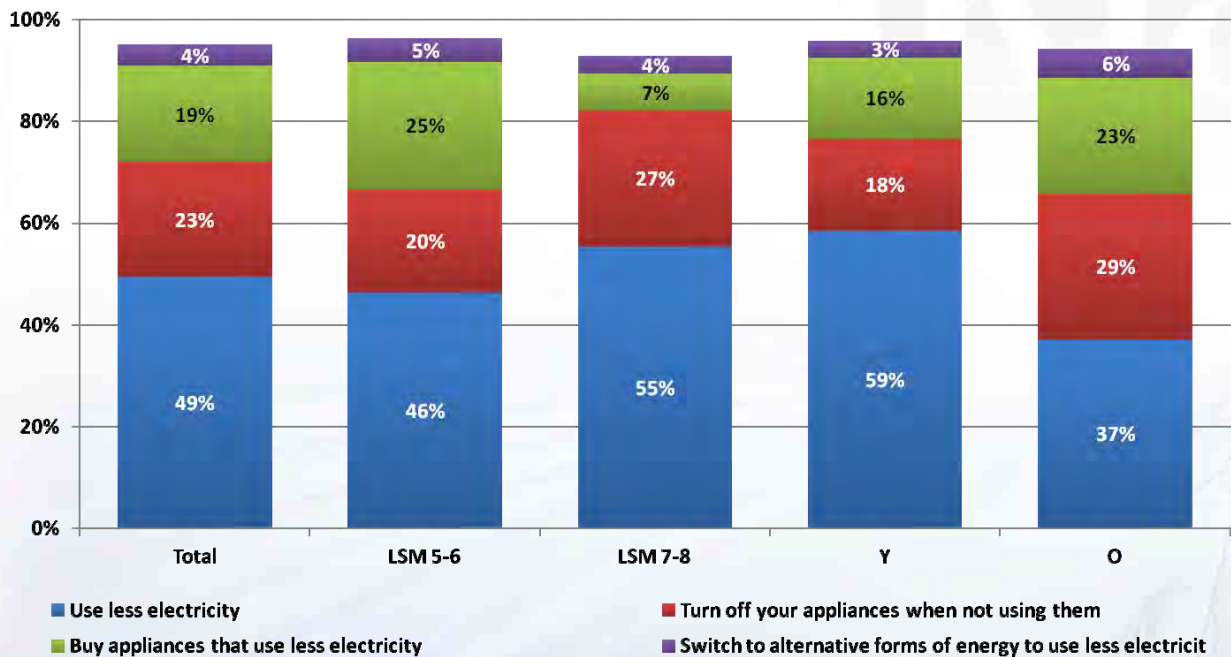
## 49 Million Advert Exposure

Seen 49 Million campaign



Do you recall seeing or hearing this 49 m advert? / Approximately how many times would you say you have seen or heard this advert?  
n: 415/ n: 162

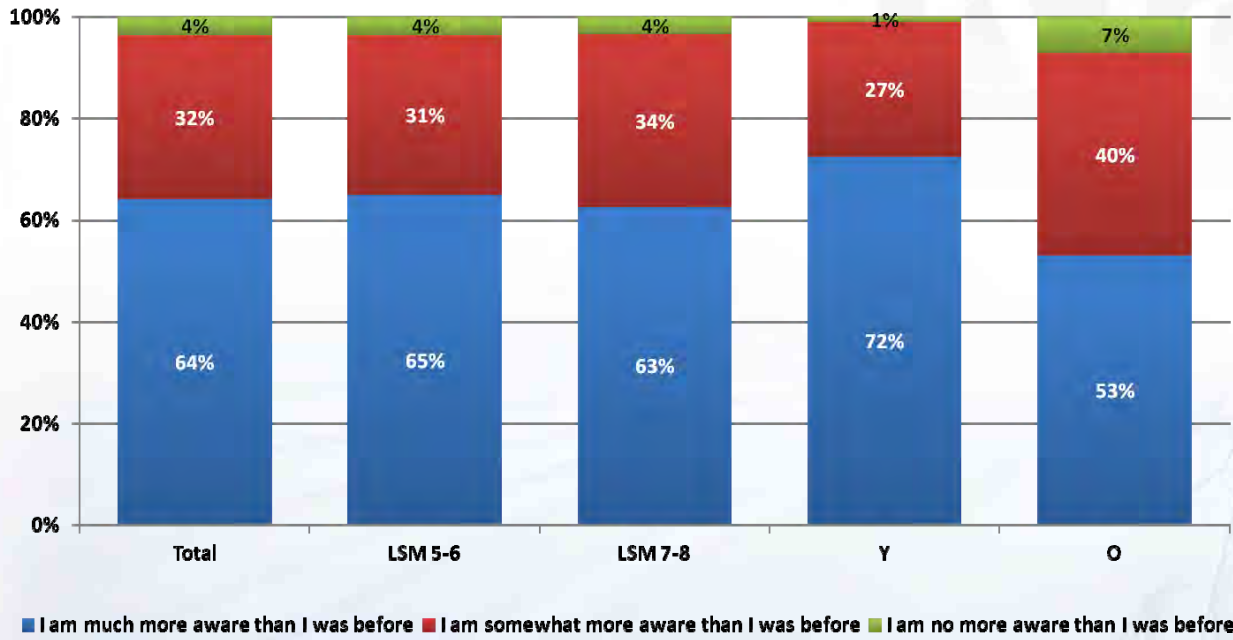
## Main Message - Prompted



Key message take-out is driven through the all-encompassing "use less electricity" message, while the message of buying energy efficient appliance resonates most strongly amongst the lower LSM, and older sample

Where did you see, hear or read about these brands? Please select all the places you have seen, heard or read about these brands?  
n: 162

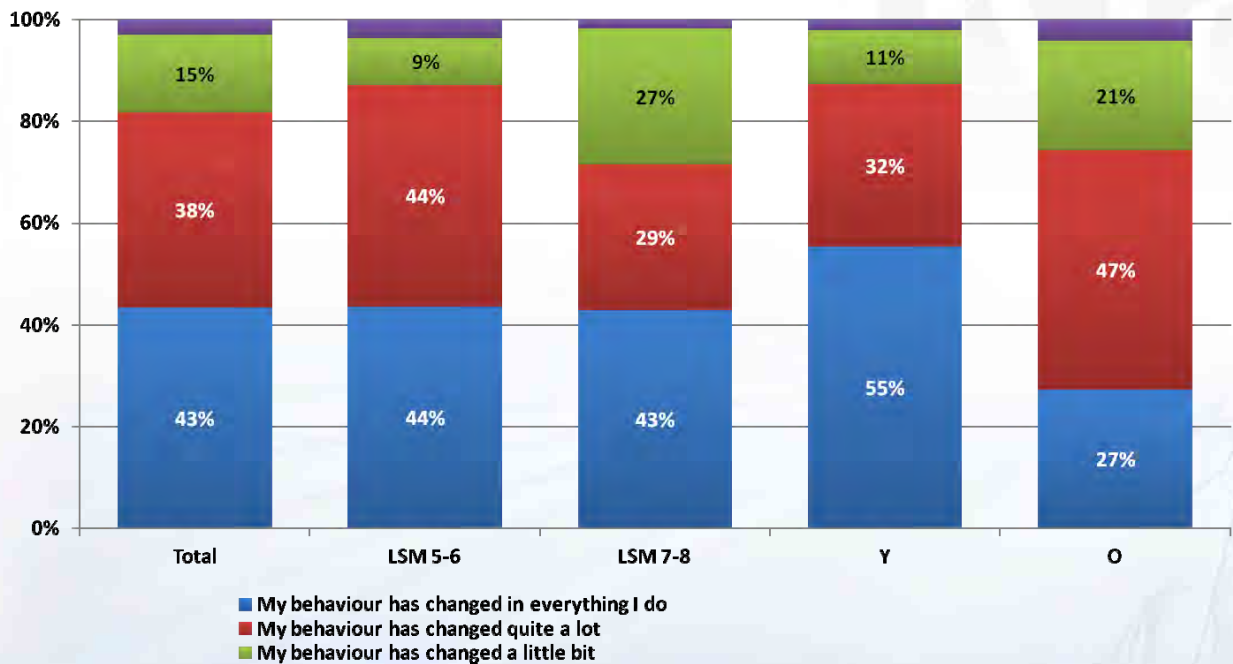
## Awareness Shift Post Ad Exposure



The campaign does appear to have driven strong awareness, specifically amongst the younger sample

After hearing or seeing this Eskom advert, how would describe how your awareness regarding saving electricity has changed?  
n: 162

## Behaviour Change Post Ad Exposure

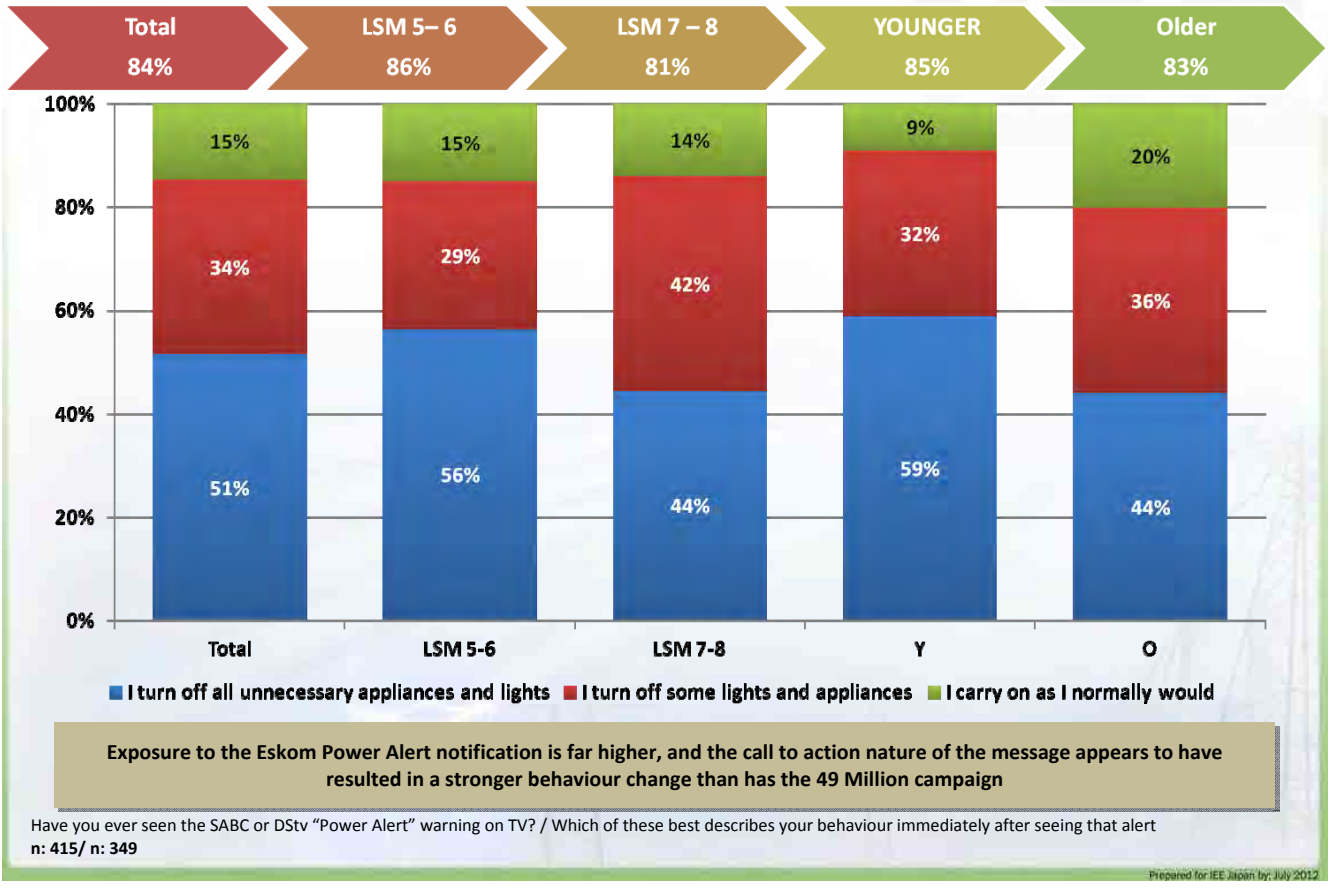


However, despite a change in awareness, this has not directly translated to a behaviour change in as much as it might have done

After hearing or seeing this Eskom advert, how would you describe how your behaviour has changed regarding saving electricity  
n: 162

## Power Alert Warning Exposure

Seen/ heard or read advertising for Eskom recently



## Government's Involvement in Energy Saving



Eskom is perceived as doing a more active job in terms of energy saving, relative to both municipal and national government

How do you feel about the government's involvement in energy saving?  
n: 162

- Claimed awareness of Eskom communication is at 68%, while exposure to the 49 Million campaign is noted at far lower levels (39%)
- The 49 Million ad appears to have created high awareness around the energy crisis but this has not necessarily translated into an active behaviour change
- The power alerts, however, are noted at far higher levels, presumably due to the frequent airing strategy. These do appear to have created a direct change in the 'passive' behaviour measures such as turning off lights that are not in use. The strong functional 'call-to-action' message clearly resonates well
- Ultimately, Eskom is perceived as being more actively involved in energy saving than is the government, presumably due to the branding of the above communication

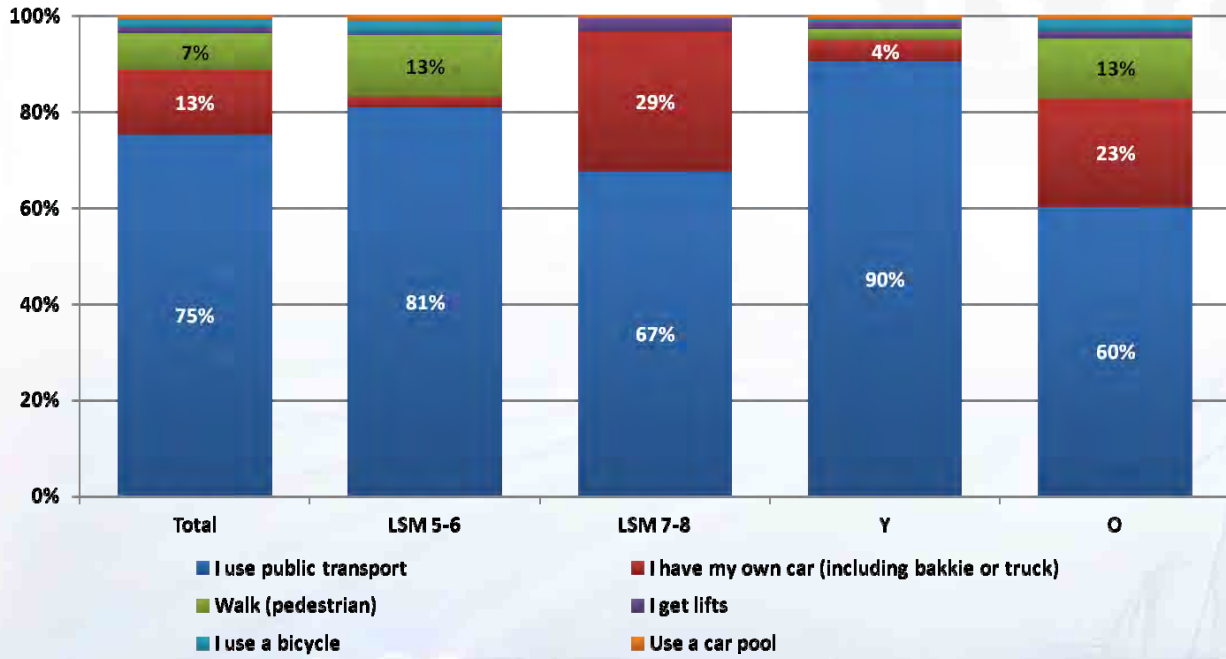


## 6. Transport and Vehicle Ownership



## Primary Mode of Transport

Note: Data labels under 5% not shown

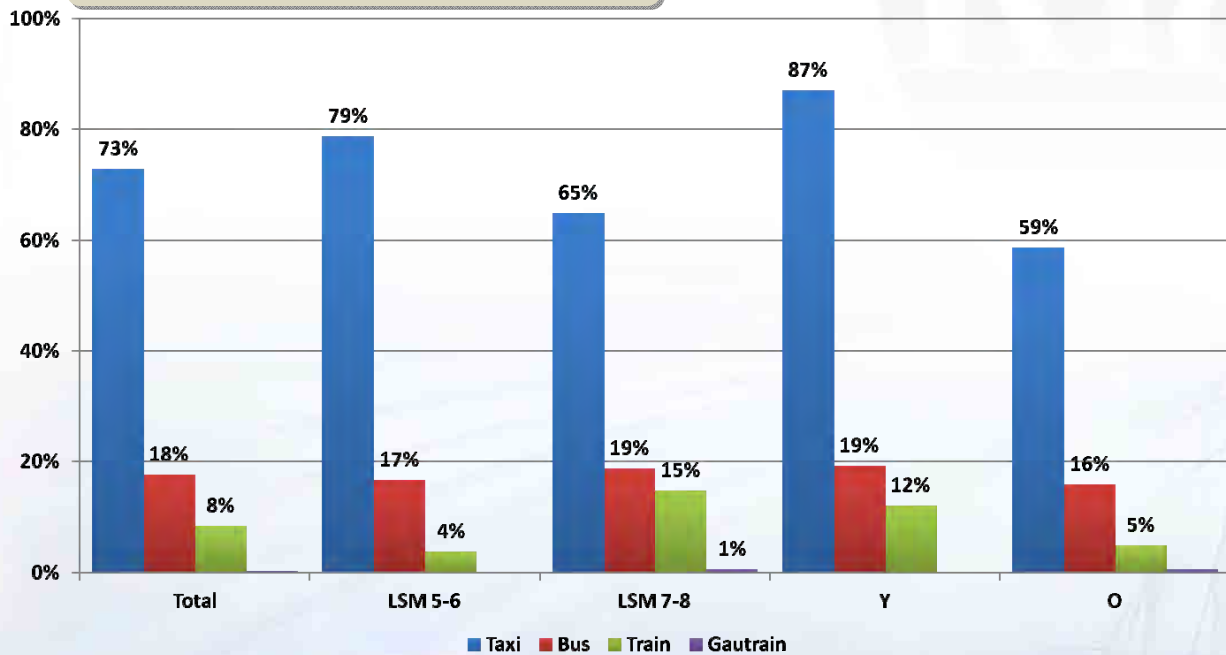


Public transport is the dominant primary mode of getting around, with a higher incidence amongst the less affluent, younger sample

What is your primary mode of transport?  
n: 415

## Public Transport Usage

73% of the sample use public transport as their primary transport mode

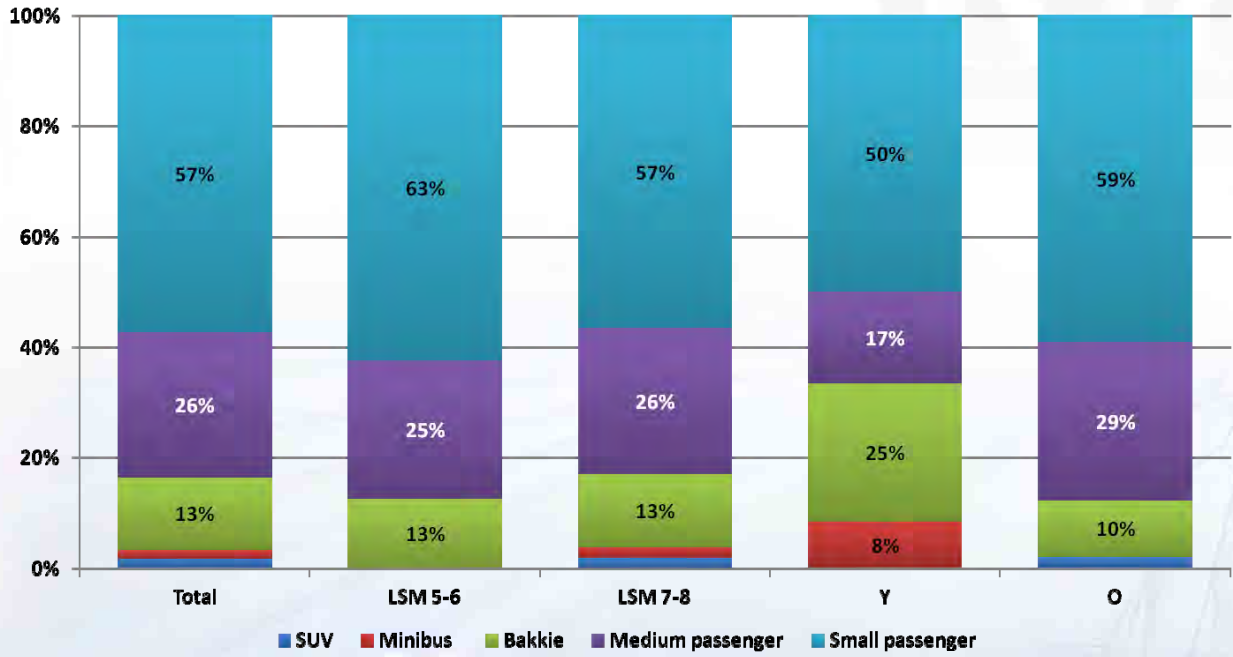


Taxi's dominates the public transport arena, with a higher incidence of train usage amongst the younger sample

What type of public transport do you use?  
n: 303

### Primary Vehicle Type

Note: Data labels under 5% not shown

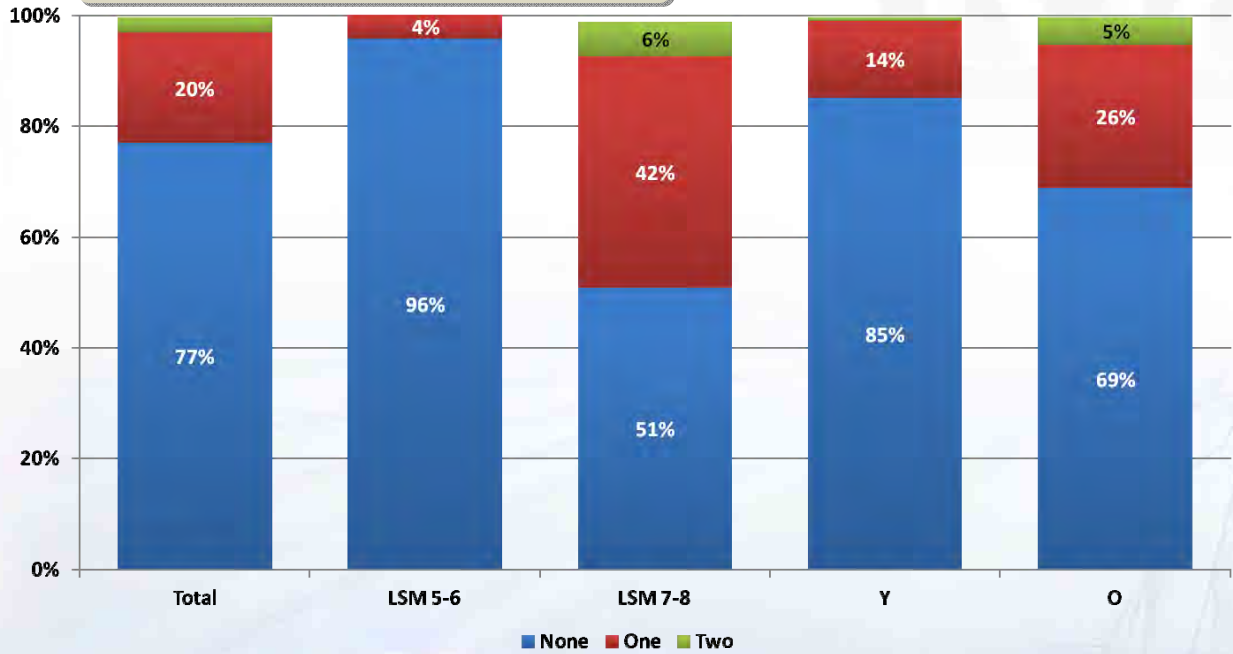


Small passenger cars are most common, with a skew towards minibuses and bakkies in the younger sample

Which type of vehicle do you use predominately?  
n: 54

### Number of Vehicles in Household

92% of cars owned run on petrol while 8% run on Diesel. No ownership of hybrid cars is noted

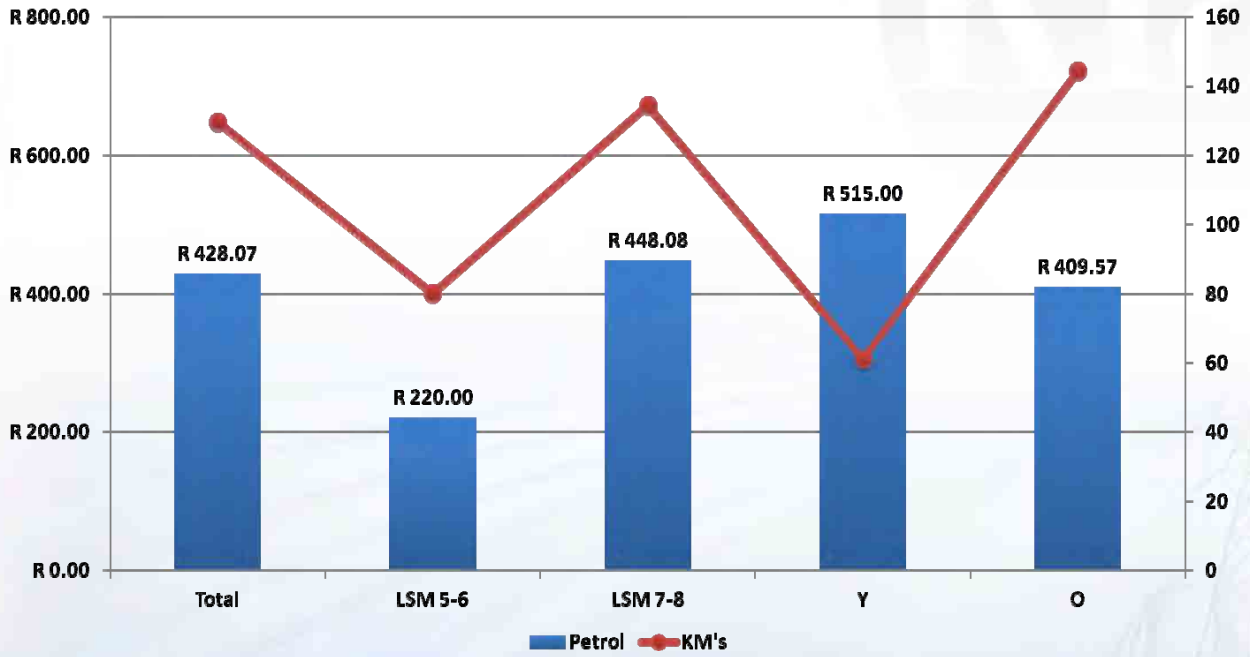


One car per household is the norm amongst vehicle owners

How many vehicles do you have in your household?  
n: 415



## Average Petrol Spend and Kilometers Covered Per Week

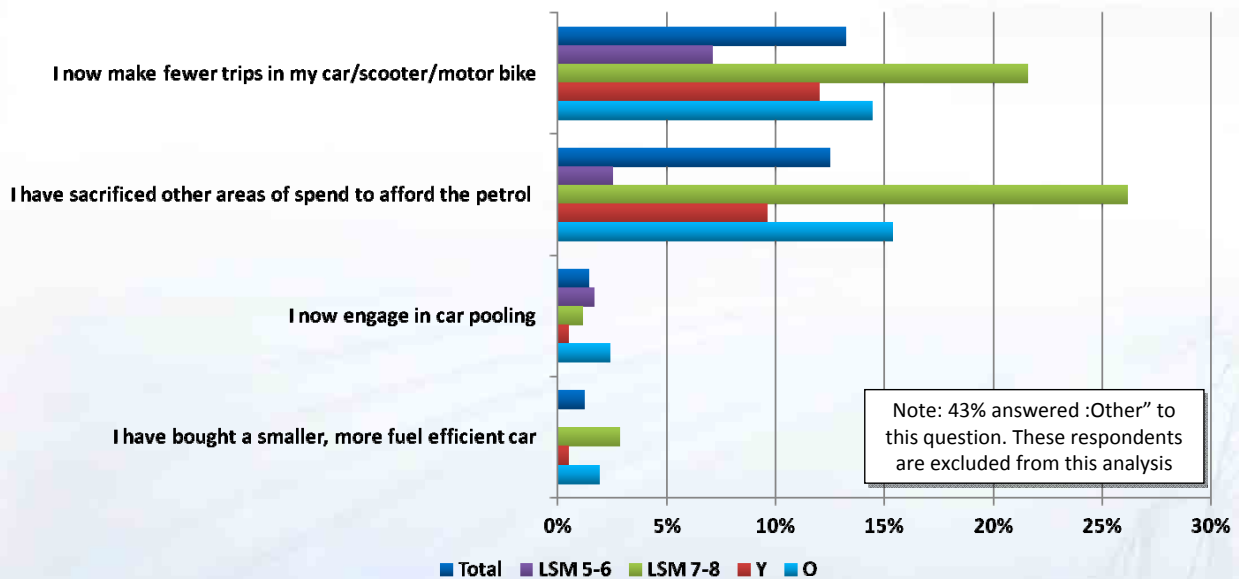


Estimated average petrol spend per week is highest amongst the younger sample. However estimated average kilometers travelled per week is much lower here – indicating that either petrol spend or kilometers travelled are estimated fairly inaccurately

How much, on average, do you spend for petrol per week/ how many kilometers, on average, do you drive per week?  
n: 415

## Petrol Price Increases

### Noticed increase in petrol price



Note: 43% answered "Other" to this question. These respondents are excluded from this analysis

Petrol price increases have been noted at far higher levels by the more affluent sample – this could be indicative of the fact that this sample consumes more media and is thus more aware of this at a perceptual level

Have you noticed the recent increases in the petrol price? How have the petrol price increase affected you?  
n: 415/ n: 327

- With the majority of the sample using public transport, own vehicle ownership is fairly low, and far more common amongst the higher LSM, older sample
- There appears to be a disconnect between perceived petrol spent per week, and kilometers travelled, which begs the question as to which metric vehicle owners are actually paying more attention to – the assumption would be that petrol price spend is more accurate, while a misconception exists around kilometers travelled
- The increase in petrol price is noted at 69%, with respondents citing making fewer trips and sacrificing other areas of spend as the key behavioural changes in addressing the increase



## 7. Final Thoughts



### Consumer Mindset

- The significant impact of electricity price increases coupled with a lack of clarity around the billing process leads to increased scepticism
  - *This drives a strong need for greater transparency and consumer education around electricity billing, so as to avoid the mentality of electricity and energy efficiencies being seen as a grudge purchase and activity*

### Behaviour

- The further removed consumers are from a personal impact (most notably in money savings), the less engaged they are with energy efficiencies
- Those who have switched to prepaid are less involved in everyday activities, indicating a mindset of “I have solved my personal issue, and therefore I don’t need to be concerned on a broader scale”
- A generational impact is noted in the younger sample who are far more engaged in the crisis and subsequent energy saving behaviours
  - *To shift behaviour on more than a cursory level, there is a need to demonstrate personal impact more strongly*

### Communication

- While awareness of the energy crisis is created through the 49 Million ad, behaviour change does not correlate

***Ultimately, it appears that the issues and distrust around the billing process may serve to undermine the message that the 49 Million campaign aims to promote. While the campaign creates positive brand linkage to Eskom, effecting behavioural shift will be hamstrung without greater transparency and education around the billing process, with a strong focus on the illustration of personal impact***



# Thank You

