

# AusNet Bringing Residential Customer Segments to Life: Final Report

**AusNet**

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# Background & Approach



# Why did AusNet segment its customer base?

## Project Background

In order to supplement work on its submission for the Electricity Distribution Price Review (EDPR), AusNet required an in-depth understanding of its residential customers, including their needs, preferences, a profile of their current devices and electricity usage, and motivations for behaviour change. This understanding is to assist AusNet in planning a suitable level of investment in its network, customer services and charges for the period between 1<sup>st</sup> July 2026 and 30<sup>th</sup> June 2031.

AusNet had undertaken a segmentation of its residential customers using electricity consumption patterns from smart meter data and data from internal customer databases. Painted Dog was selected to help to enhance its understanding of these segments, and turn them into meaningful and actionable customer personas.



## Strategic Aim & Objectives



*To help AusNet understand its customer segments and bring them to life via personas, which will help drive behaviour change at a connection level and assist with EDPR priorities.*

**In order to meet the strategic aim, this research must answer a number of key questions:**

1. What is the profile of each residential customer segment? How do the segments differ?
2. What are the unique needs, attitudes or motivations of each segment that can be leveraged to influence behaviour change?
3. Which segments should be prioritised for behavior change?
4. Why do the segments use electricity in the way that they do? How willing are they to change their behaviour and what are the motivators or barriers to change?
5. Which segments have a high prevalence of DER customers or a high likelihood to take up solar, wind or battery solutions in the future?
6. Which segments have a high prevalence of CALD customers, outage prone customers, life-support customers, or financially stretched customers? And what are their unique needs?

## How is an effective segmentation solution defined?

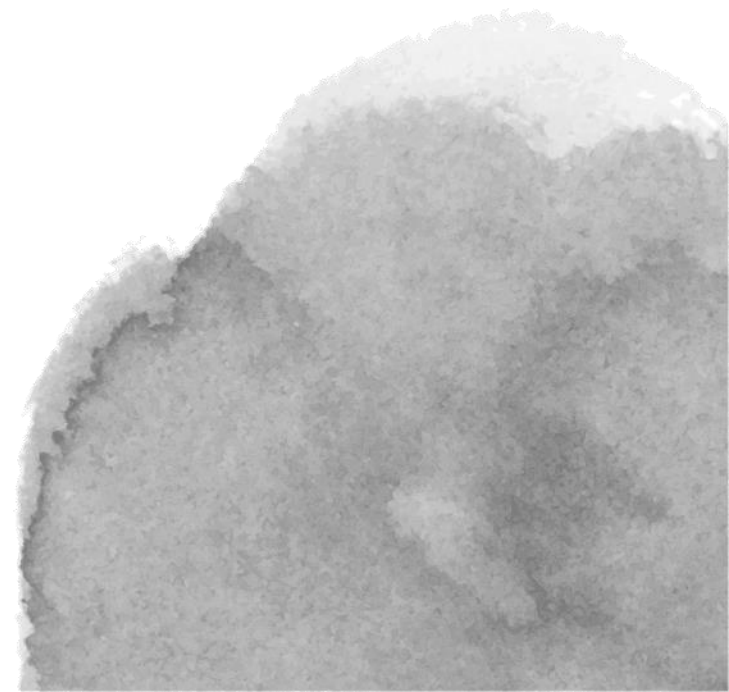
- Provides insight into the characteristics of the household (i.e. connection level) rather than an individual
- Is built on a combination of operational and customer data so that actionable insight can be utilised by multiple BUs to drive outcomes
- Has a clear link to EDPR priorities, including influencing customer behaviour, network planning and management
- Provides an understanding of customer motivations that drive behaviour change, including an understanding of needs and attitudes related to electricity consumption and the extent of desire for self-sufficiency through solar, wind and battery solutions
- Has long term applicability and won't become obsolete in a short period of time
- Is well understood by, and meaningful for, stakeholders and easily able to become embedded in the organisation



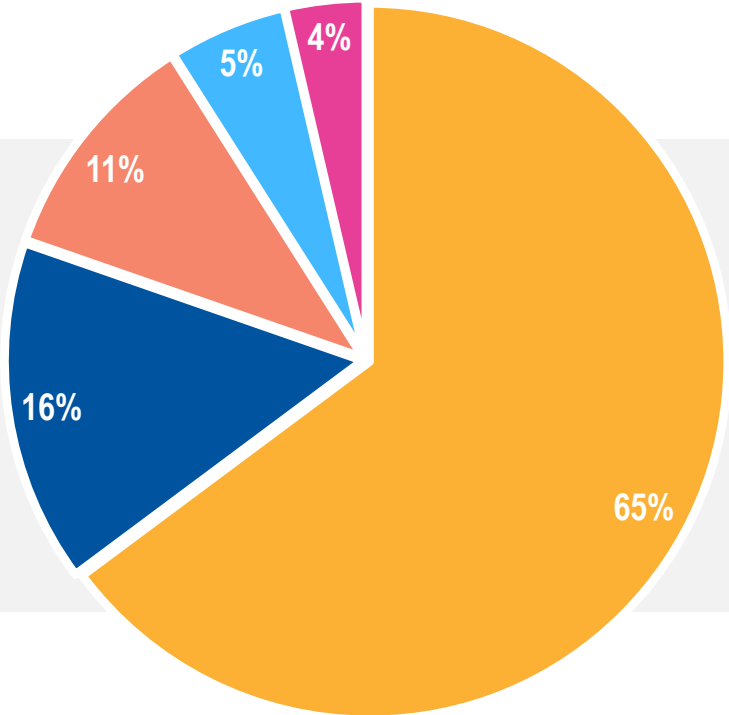
## How the current model has been derived...

The segmentation model has been based on real household usage data – AusNet has the ability to understand different usage patterns at a customer (household) level, clustering customers together based on this:

- Usage is recorded at 30-minute intervals.
- Segments have been derived based on usage data from Oct 2021-Sept 2022.
- There are five 'macro' segments.



Time Surfers represent the largest segment, and make up around two thirds.

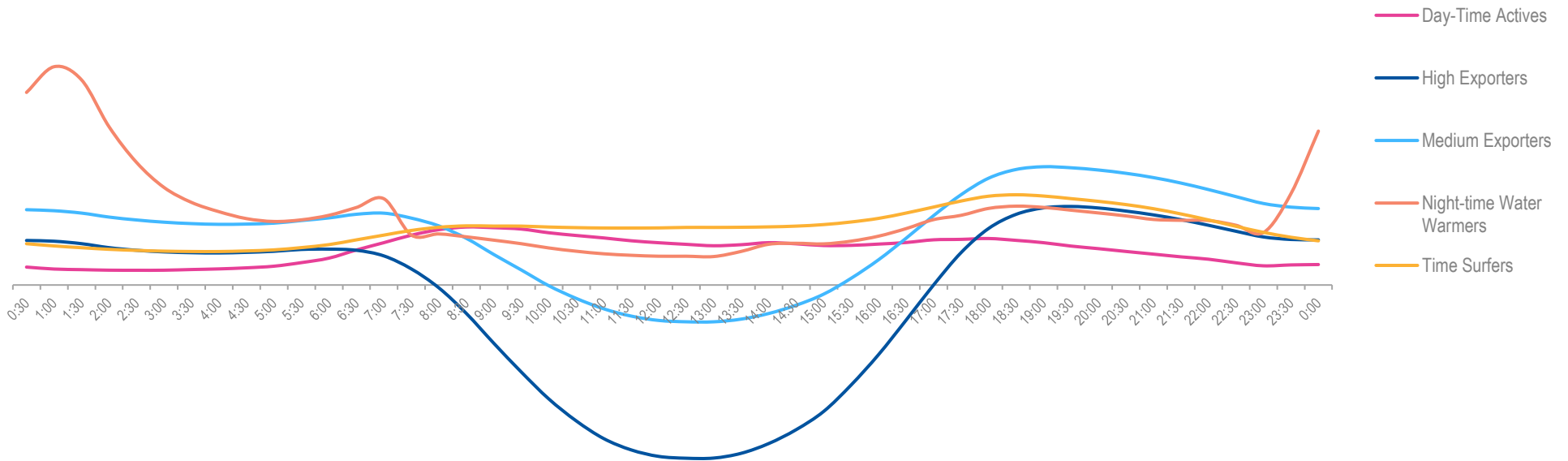


Percentage of customer base belonging to each segment:

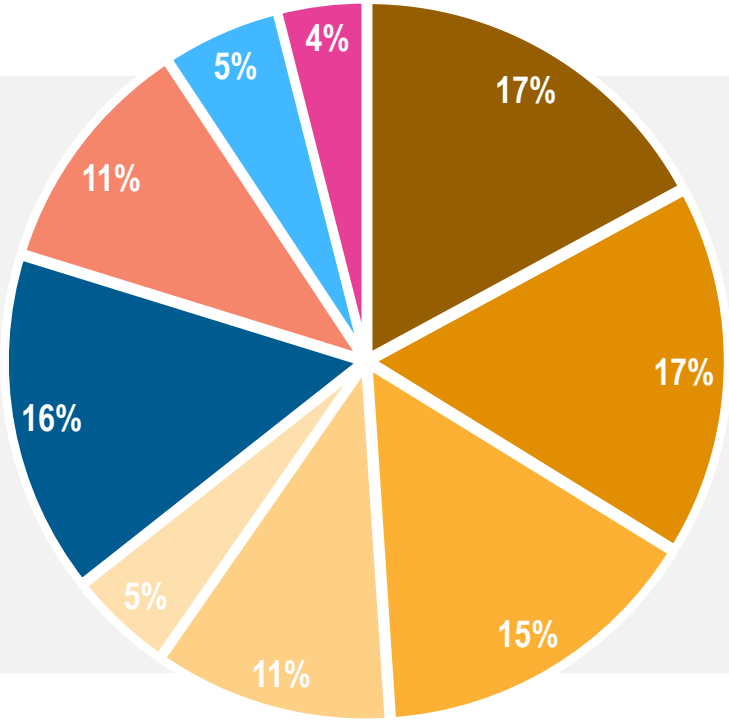
Time Surfers	65%
High Exporters	16%
Night-time Water Warmers	11%
Medium Exporters	5%
Day-Time Actives	4%



Each segment is defined by their usage in 30-minute intervals, over a 12 month period.



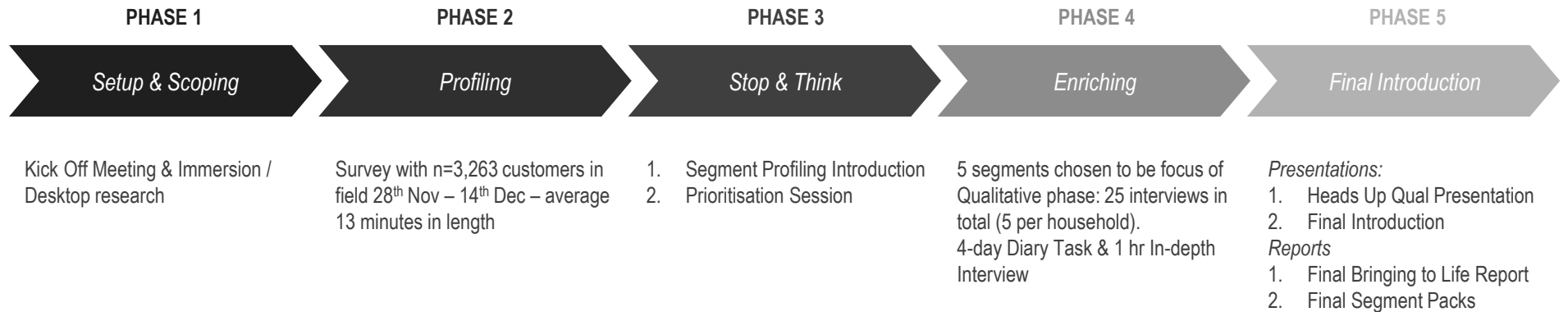
Within the 'macro' segments – there are also some 'micro' segments.



Percentage of customer base belonging to each segment:

Time Surfers 4+7	17%
Time Surfers 5+6	17%
Time Surfers 2+8	15%
Time Surfers 1+3	11%
Time Surfers 9	5%
High Exporters	16%
Night-time Water Warmers	11%
Medium Exporters	5%
Day Time Actives	4%

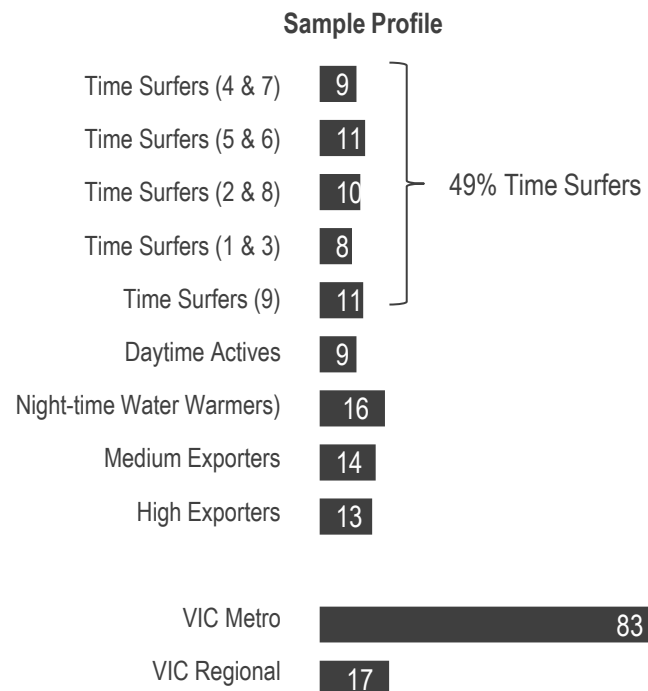
What was the process we undertook to bring these residential customer segments to life?



## Details of the large profiling survey that was undertaken with AusNet's customer base.

By utilising a comprehensive survey dissemination approach, a large and robust sample of each of the different segments was achieved, providing the ability to profile reliably.

- Survey sends were targeted to particular segments via batches, all of which were adjusted accordingly throughout fieldwork to reflect response rates.
- To provide added legitimacy to customers, all survey sends were from AusNet.
- Due to limitations in the number of times customers could be contacted, no reminders were sent during data collection.
- The average survey length was 13-minutes.
- There was an overall response rate of 3.1%.
- Data collection occurred from 28<sup>th</sup> November – 14<sup>th</sup> December 2022.
- A total sample of n=3,263 was achieved.



To enrich the insights on key segments, Qualitative research was undertaken in Phase 4.

The AusNet and Painted Dog teams identified five segments to gather further understanding of, after Phase 2 Quantitative Profiling was completed.

Within each, an attempt to resemble some typical household compositions based on the profiling data was made; further to including a mixture of the following variables:

- Metro / Regional;
- Culturally and Linguistically Diverse;
- Life Support



	High Exporters	Medium Exporters	Time Surfers 4+7	Time Surfers 2+8	Time Surfers 9
n=	5	5	5	5	5

# Energy Attitudes & Knowledge



Let's start by looking at  
knowledge of the energy  
category



Knowledge around energy is not necessarily tied to segment.





The majority likely sit within the middle – they have a good understanding of energy in order to keep the cost down month to month.

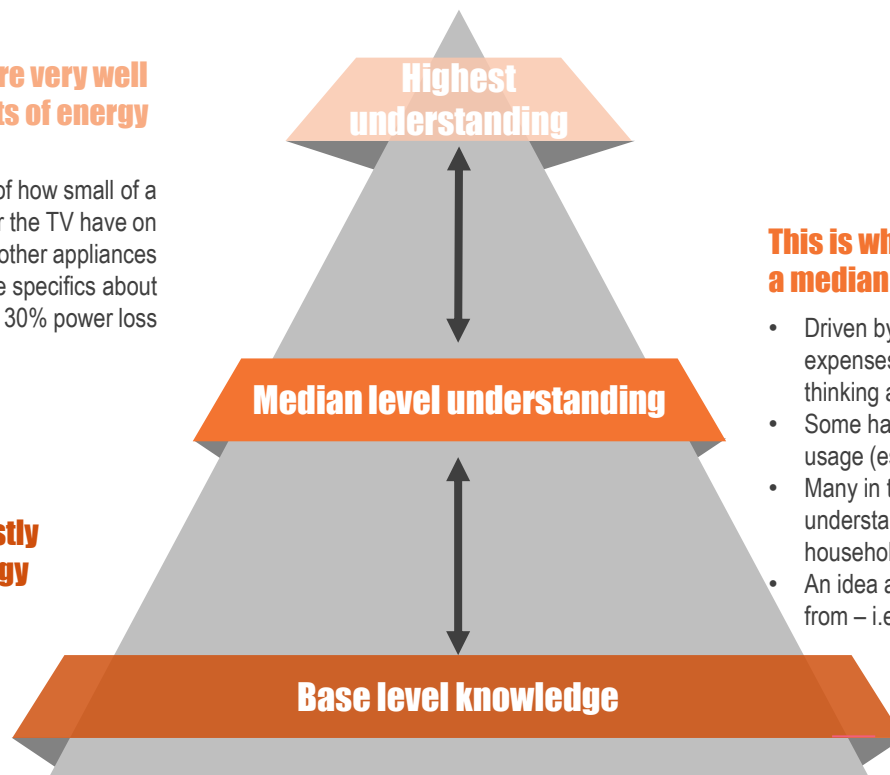
A base level of understanding around which appliances use the most energy – is likely the amount of knowledge Victorians have at a minimum.

**A smaller number are very well aware of all aspects of energy**

- This includes an understanding of how small of a difference things such as lights or the TV have on usage compared to other appliances
- More advanced understanding of the specifics about power getting to the property – e.g., 30% power loss

**This is a level of knowledge that mostly everyone has when it comes to energy**

- Which appliances use the most energy (H/C, washing machine, dishwasher)
- A basic understanding of why their usage is higher or lower in a particular month
- High level understanding of what the bill means

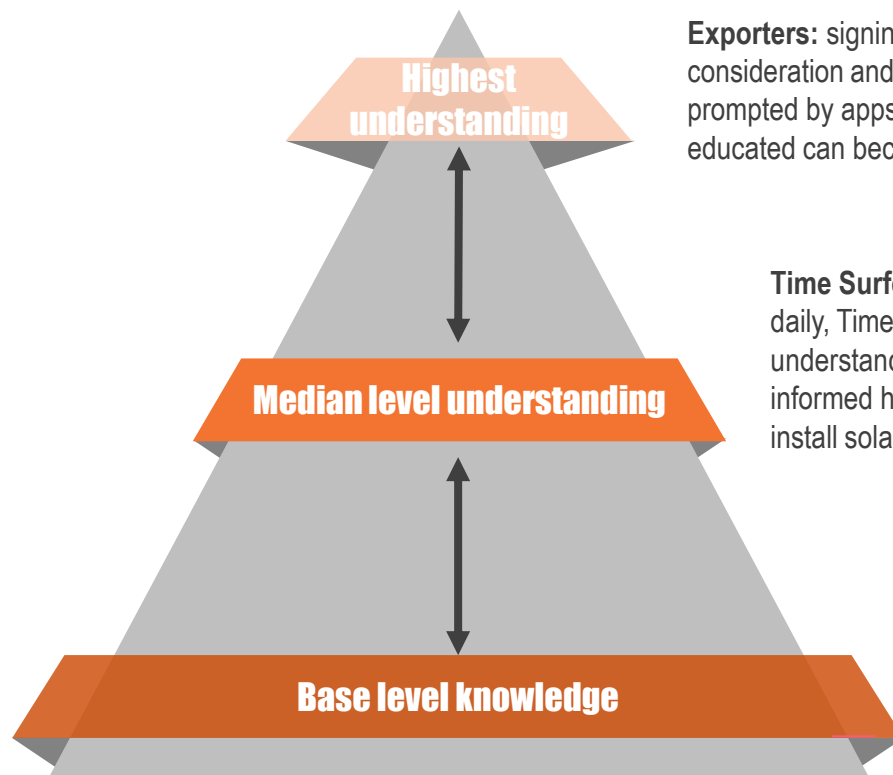


**This is where a majority of people sit – a median level of knowledge**

- Driven by cost of energy and the desire to keep expenses low, many are a bit more advanced in their thinking about what is being used and when
- Some have smart monitors which keep track of their usage (especially the Exporters)
- Many in this category also feel they have a good understanding of how their usage compares to other households
- An idea about where their energy off the grid comes from – i.e., coal power plants

We do see nuances across households.

This higher understanding has been driven by the implementation of solar on their properties...



**Exporters:** signing up to solar prompts a higher consideration and learning of energy dynamics - often prompted by apps / tracking software: the previously lower-educated can become a lot more connected to their usage.

**Time Surfers:** Being less engaged with energy daily, Time Surfers more likely have average understanding – but we did hear from a few well informed households that *couldn't* or *chose not to* install solar at home!

**Less engaged decision makers:** Some members of the household were less educated around all elements of energy at home.

What are some key findings around energy attitudes?

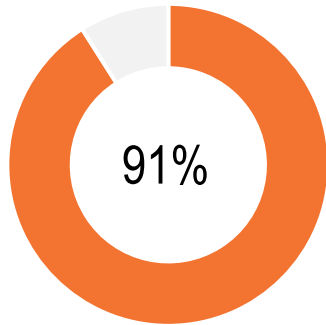


# Concern for rising energy costs is high among customers.

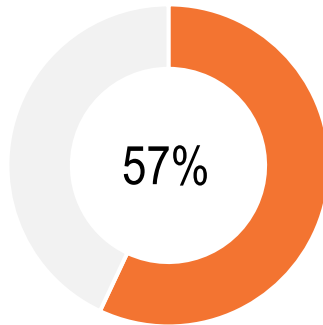
More than half are concerned about energy running out in the future, with a similar proportion agreeing they could be doing more to save energy.

Around two in five are aiming to be as independent from the grid as possible.

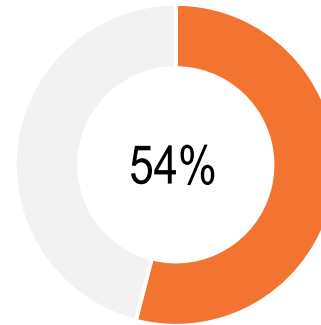
## ATTITUDES (AGREE)



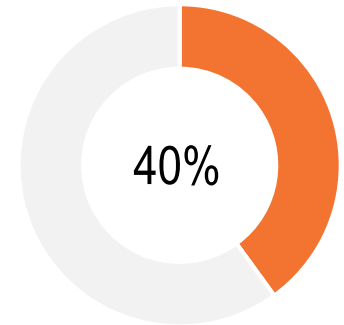
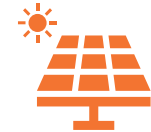
We're concerned about the rising cost of energy and associated living costs



I'm very concerned about there not being enough energy in the near future



We could be doing more to save energy in our household



A goal of our household is to be independent from the grid as much as possible

Further richness to these insights was established in the qualitative analysis, where attitudes towards energy mainly come down to cost of living pressures and the environment...

#### Cost of living pressures

- For all, rising cost of living is top of mind – it's one of, if not the most important factor impacting everyone's lives, and energy plays a critical role in helping to keep things manageable
- Energy costs are going up and people want to keep them down as much as possible to save money

#### Environmental concerns

- Closely following cost of living increases, environmental concerns are very important to Victorians – moving towards a renewable and sustainable future is a top priority
- For many, the key reason this is a worry is due to the impact these changes will have on their children and grandchildren – there is a worry about the future generations
- There is a feeling that everyone should do their part for the environment as much as possible, but there are varying degrees of understanding on exactly *how* they can...

#### Wanting to use things when they want, whenever they want

- Victorians feel busier than ever – and while cost of living and environment are crucial, there is an acknowledgment that they should be able to use things whenever they want as well
- Most feel they are relatively conscious – while acknowledging that they are not perfect, very few feel they are wasting energy. With this in mind, there is a sense that they therefore should be able to use things to have convenience and comfort sometimes!

...Having said that, with busy lifestyles and a more 'hedonistic' view of life – especially for younger residents etc, there is an acknowledgment that they should be able to use things when they want...



*"My parents come from a time when you saved everything you could, and you were careful with money. And I was born in '56. Throughout the 60s, I was brought up to turn the light out. You know, when you're finished with the television, turn it off when you do this or that turn off whatever you're not using."*  
– **High Exporter**



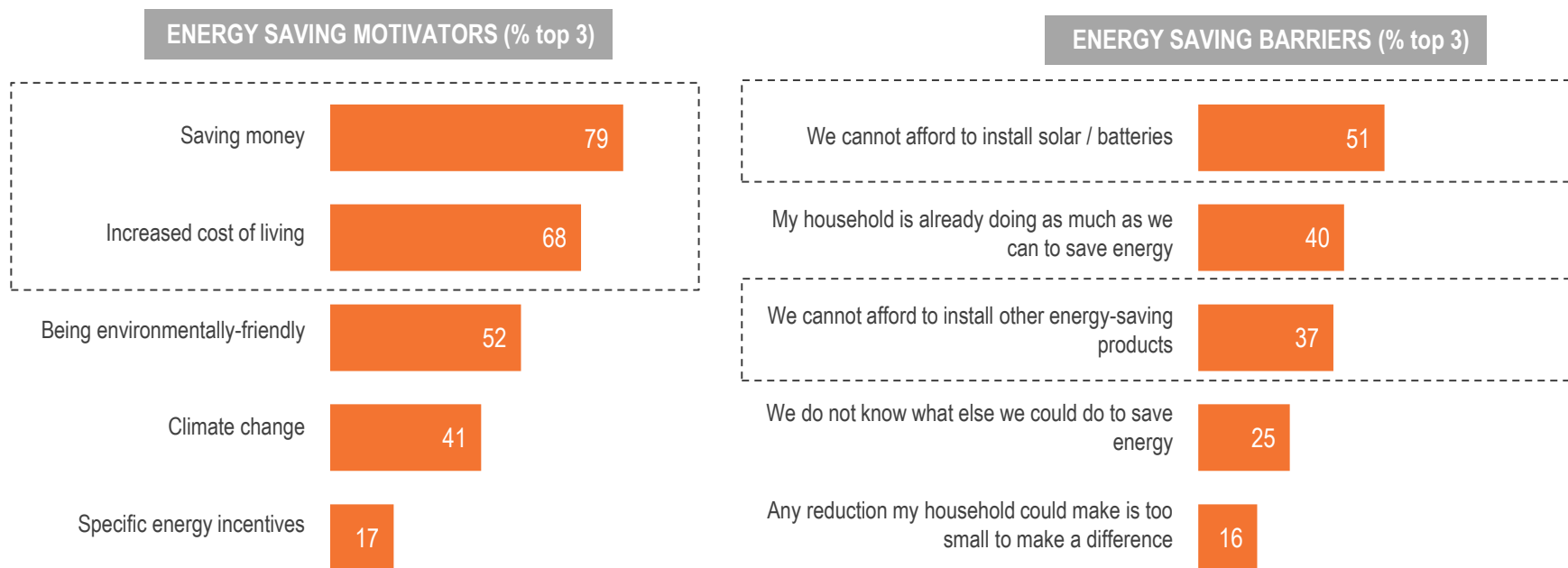
*"I do worry about climate change, it bothers me that as a country that we're so dependent on fossil fuels, that we're really quite far behind in sustainable, reliable renewable energy that I worry what's going to happen in 50 years."*  
– **Time Surfer 9**



*"We try and be conscious about energy use but not to the point where we let it define what we do. Because we pay for it, I feel like we should be allowed to use it when we want."*  
– **Time Surfer 9**

Cost of living and affordability can be seen in both the top drivers and barriers of energy saving.

This clearly identifies how cost of living is strongly in the minds of customers.

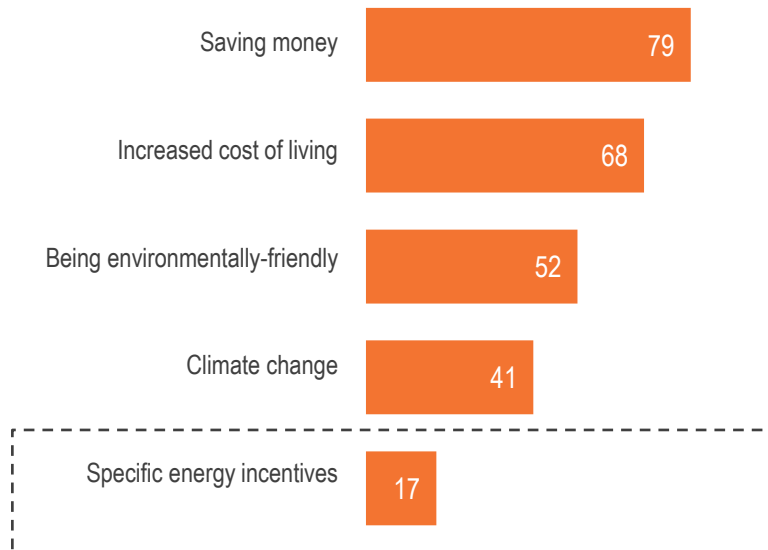


A4. Which of the following motivate you to use less energy and/or be more energy efficient around the household?

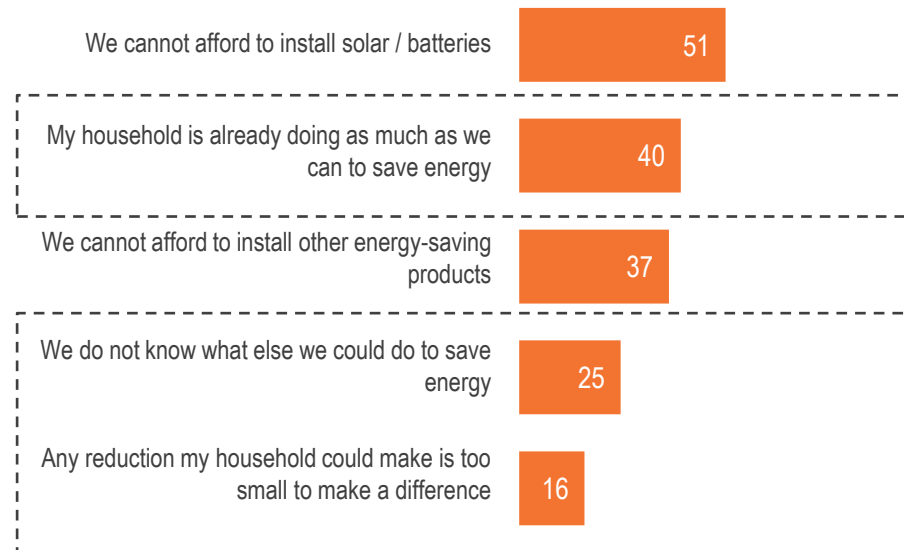
A5. Which of the following is stopping you from using less energy and/or being more energy efficient around the household? Base: Those who have lived in their property more than 6 months (n=3,172)

Increasing knowledge of incentives and other initiatives appears to have large potential to impact on energy use.

#### ENERGY SAVING MOTIVATORS (% top 3)



#### ENERGY SAVING BARRIERS (% top 3)

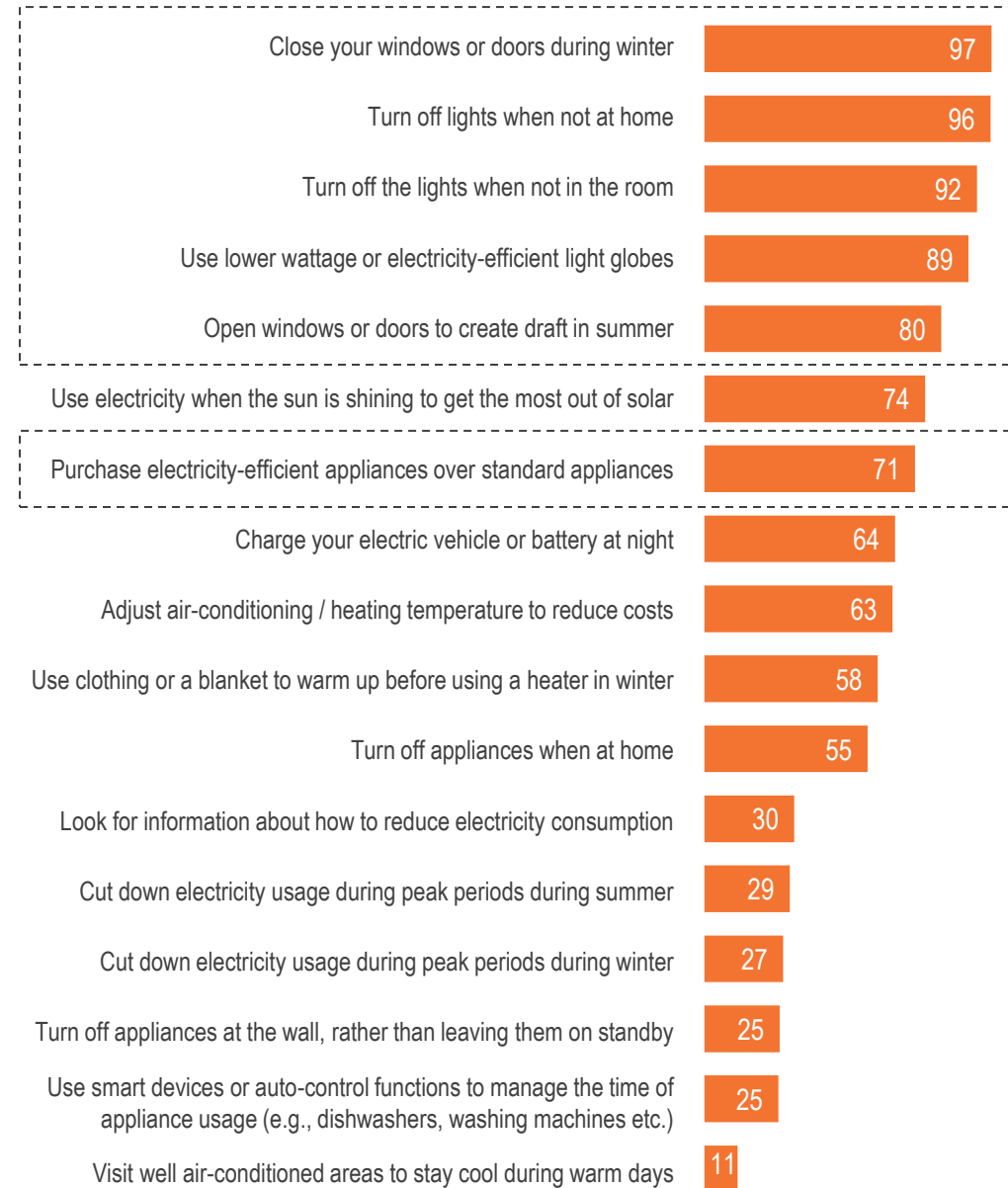


A4. Which of the following motivate you to use less energy and/or be more energy efficient around the household?

A5. Which of the following is stopping you from using less energy and/or being more energy efficient around the household? Base: Those who have lived in their property more than 6 months (n=3,172)

Simple energy saving actions are undertaken by most customers.

## ENERGY SAVING BEHAVIOURS (most / all the time)





With over 7 in 10 saying they like to purchase energy efficient appliances, key motivators and barriers were uncovered in Phase 4.

While an important part of the decision, often it is only one of the factors when buying – it's not always on top of their decision making criteria. Price and reliability are first and foremost – and of course the need to buy something new only when what they have is old / broken!

### Motivators for energy efficient appliances

- 👍 Less expensive to run – especially for things running all the time such as fridges and lights / entertainment devices
- 👍 Better for the environment – using less energy means using less resources / creating less pollution
- 👍 More cost effective in the long run / you'll get your 'money back'

### Barriers to energy efficient appliances

- ✘ The upfront cost of purchasing can sometimes be higher
- ✘ If it ain't broke, don't fix it mentality – won't replace if old one isn't broken
- ✘ Sometimes newer / more efficient appliances are less reliable / robust
- ✘ A feeling that an appliance which is 5-10 years old, is not significantly less efficient than the latest and greatest – there isn't a point to change it



"We're willing to pay premium for efficiency because over the lifetime I feel that I'm saving more money using them with less energy."  
- Time Surfer 9



"If I was replacing an appliance, I would consider energy efficiency but otherwise I wouldn't do anything that is going to cost me."  
- Time Surfer 9

What about  
understanding of peak  
demand and its impact?



There is a strong understanding of peak demand and generally this impacts usage to varying degrees.



Mostly everyone knows what *and when* peak demand is, and what they should do – be more mindful of usage at this time...

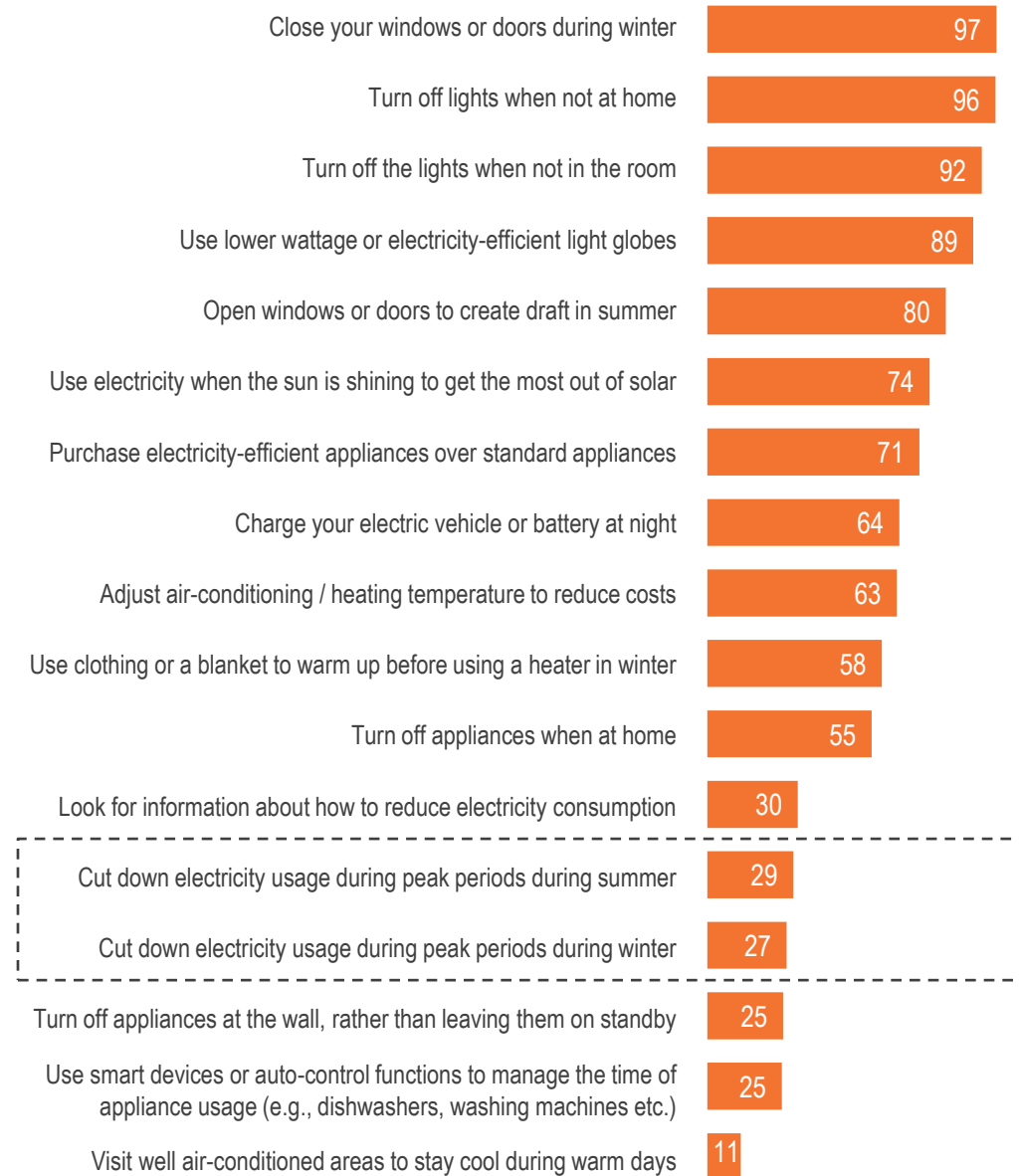
All understand why peak demand is when it is, and there's concern about how this will continue becoming more of a challenge, given the increasing population and density in particular areas.

### What does peak demand mean for our household?

- Reducing energy at that time – built into our mindsets that we should be conscious about our usage
- The school rush, it makes sense why so much is being used at this time – it's when everyone comes home
- The concern of blackouts – have seen this happen in other areas
- Increasing population, the concern if infrastructure doesn't continue getting better and how this will be a challenge
- Thinking twice about whether things are necessary to use at this time
- Time of use tariffs – usage is more expensive at this time compared to off peak – financial benefits
- Solar generation is lower, especially from around 5pm when it gets darker – therefore grid reliance, and thus cost to the household increases

Under a third are cutting down usage in peak times to some degree.

## ENERGY SAVING BEHAVIOURS (most / all the time)



Many households feel they are already doing enough in their homes to reduce usage in peak times as much as possible...

... and those who do mention potential changes followed up by saying this was hypothetical and very unlikely.

Having said this, some compelling reasons to change their usage would be significant cost savings, hearing more / seeing the consequences such as blackouts, and also improving their home with insulation and automation could help.



### The challenges

- While it's something they may want to change, given the time of day some get home from work / school – it might not be practical
- Newer appliances with timers / automation are also expensive to purchase / time consuming to set
- Some things like turning devices off at the wall, they could do, but will make such a little difference that it's not worth it
- Even if willing to change usage times for devices, the infrastructure should be made to handle peak usage if it can't already



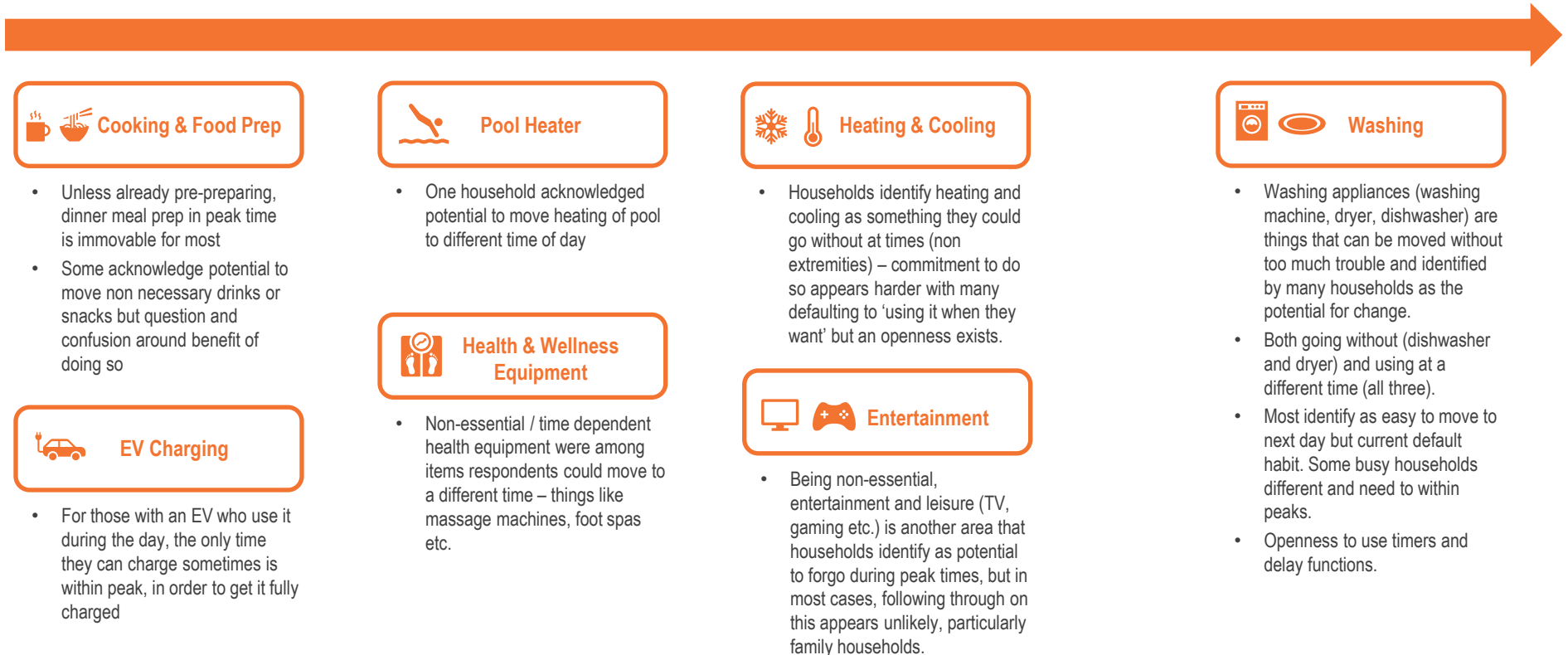
### The solution ideas

- If there was significant amounts of money to be saved / there were appealing incentives
- Hearing more about the consequences of what can happen (i.e. blackouts)
- Better insulation to help reduce usage of H/C
- More automation where possible

## Washing (both dishes and clothes) are the easiest win when it comes to changing energy behaviours

Many also acknowledge utilising heating and cooling as peak behaviours that could be changed in their household – a potential opportunity to make greater change across the Victorian energy situation.

### Potential to change from peak time usage



What is our future  
outlook?

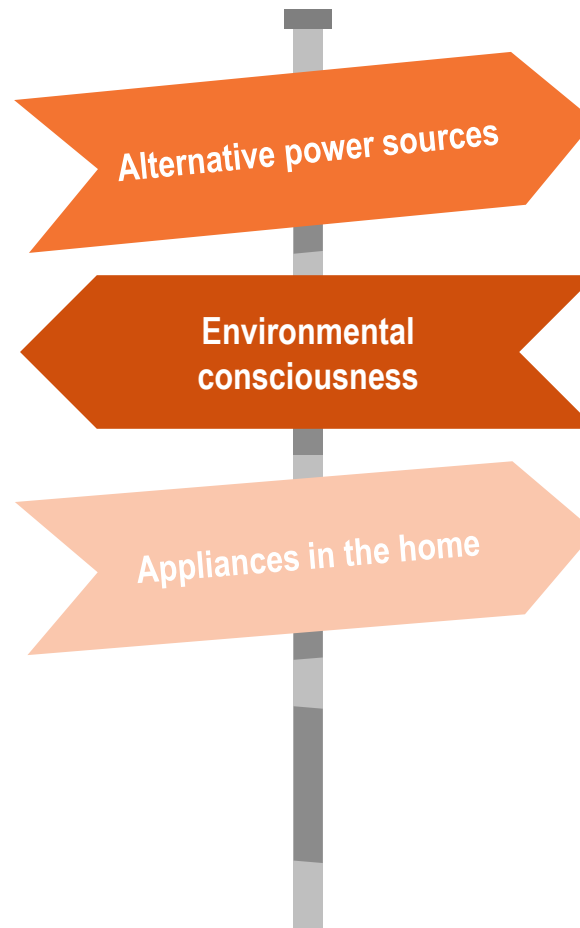




When it comes to the future outlook of households, there's a feeling that while their views won't change drastically, they will only get more environmentally conscious.

Most feel that they will have moved more towards green energy, with many suggesting that they will have solar and batteries and have either a fully electric or hybrid vehicle. While most are already pretty energy efficient, the complexion of usage in Victoria may begin to change more and more.

- With so many thinking about the environment in their day to day lives, not least when it comes to energy consciousness, there is sense that their care factor for the environment will stay the same.
- There might be more understanding and views will get stronger, but environment will be just as important as now – very!

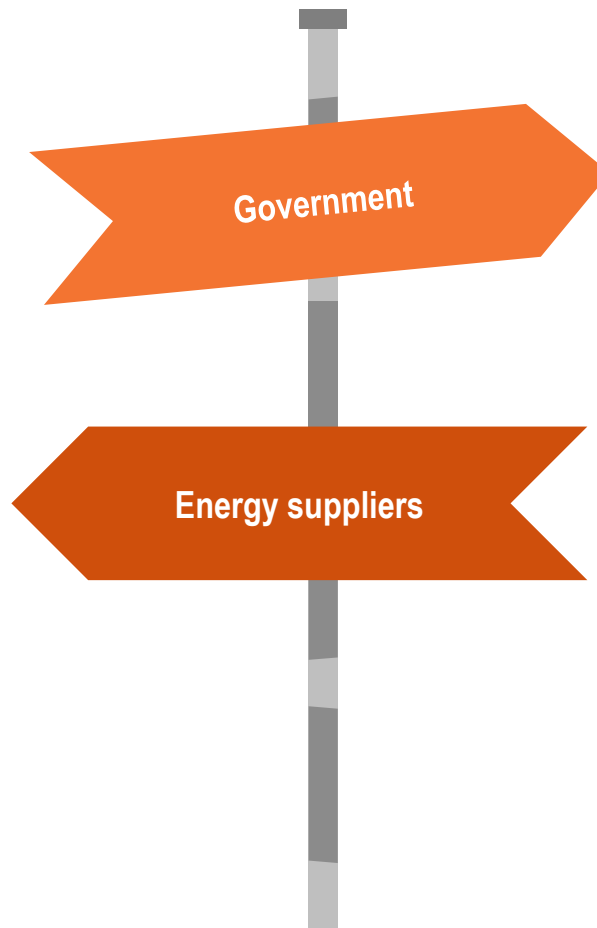


- A very high amount of support towards changing their energy sources – solar energy will be implemented by many, with some (often those who are less knowledgeable) also keen to have batteries
- Most feel that they will move away from gas as a source of energy by the end of the decade – it's seen as a clear unsustainable source with health risks due to the gas emitted
- There is a strong sense that there will be significant changes in the types of energy sources used.

- A smaller number suggest that their next car will also be either full electric, or part electric – if not already!
- This may change the complexion of energy usage in Victoria drastically...
- They also feel that there are going to be more advancements in the appliances in the home, with things getting more efficient and bringing down that usage in the home

The roles that the major players in energy will have to undertake are a little different too...

- There is some level of scepticism over the role that AusNet can realistically play in supporting the reduction of usage – private corporations who make money off usage logically would want people to use more!
- But most said they have had very little to do with AusNet, they've heard very little from them!
  - They want to know what AusNet is doing with the infrastructure to ensure a sustainable future – changing towards renewables and ensuring that increasing populations won't have a negative effect re blackouts etc.
- They also think that reminders and tips about how to be energy efficient, and why, would be good ways for AusNet to support – simple and easy things advertised on TV was a suggestion... e.g. ads saying "do you need the TV on right now?"



- Government will play the biggest role when it comes to being a thought leader and driving changes in the energy sector
- While many are sceptical of the voices driving change – feeling they have their own agendas – government is poised to be the most convincing voice to a more energy conscious future
- Many feel that energy should, if not fully be, at least more strongly controlled by government.

# Segment Comparisons



In order to understand AusNet's customer base, seeing the differences on core profiling variables by segment is crucial...



As we know, the segment data is based off 12 months of usage...

...however, not all have lived in their property for the majority of this time – with Day Time Actives having the highest number who have been in their property for under three months.

For the purposes of profiling – anyone who has not lived (and therefore not been managing power usage) for at least 6 months has been removed.

TENURE OF OCCUPANCY	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
Less than 3 months	1%	0%	18%	0%	0%	1%
Between 3 to 6 months	2%	2%	2%	2%	2%	0%
Between 6 to 12 months	4%	5%	4%	5%	2%	2%
Between 1 to 3 years	13%	14%	14%	12%	8%	10%
More than 3 years	80%	79%	62%	81%	89%	87%

What do we know about their energy sources and usage?



Mains gas usage is highest among Time Surfers, and lowest among Night-time Water Warmers and Day Time Actives...

Night-time Water Warmers rely on bottled gas the most of all segments.

ENERGY SOURCES IN HOUSEHOLD	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers
Electricity (from the grid)	100%	100%	100%	100%
Mains gas	83%	91%	66%	36%
Solar / Rooftop solar panels	33%	11%	20%	41%
Bottled gas (e.g. LPG)	9%	6%	16%	26%
Electricity Generator (diesel or petrol)	9%	9%	4%	12%
Home Battery	4%	1%	5%	8%
Other	2%	1%	4%	4%



Naturally, solar is utilised by all the Exporters (even if they don't know it!).

One in ten Exporters also have Home Batteries.

ENERGY SOURCES IN HOUSEHOLD	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
Electricity (from the grid)	100%	100%	100%	100%	100%	100%
Mains gas	83%	91%	66%	36%	82%	84%
Solar / Rooftop solar panels	33%	11%	20%	41%	98%	99%
Bottled gas (e.g. LPG)	9%	6%	16%	26%	12%	7%
Electricity Generator (diesel or petrol)	9%	9%	4%	12%	9%	7%
Home Battery	4%	1%	5%	8%	10%	10%
Other	2%	1%	4%	4%	1%	1%





What appliances do the segments have?



Time Surfers have the highest reliance on gas in general compared to other households.

APPLIANCES IN HOUSEHOLD	Overall	Time Surfers
Gas hot water system	77%	88%
Reverse cycle air conditioner	59%	55%
Gas heater	59%	63%
Evaporative air conditioner	24%	24%
Electric hot water system	19%	9%
Other heater	18%	17%
Refrigerated air conditioner	11%	12%
Fan-forced heater	10%	11%
Pool	10%	9%
Spa (inside/outside)	8%	7%
Oil-filled heater	7%	7%
Other air conditioner	5%	5%
Solar hot water system	4%	2%
Unsure of air con type	4%	5%
Convection heater	4%	3%
Electric scooter/bike	3%	3%
Radiators	3%	3%
Bar heater	3%	3%
Hybrid electric vehicle (non-plug in)	3%	2%
Fully electric vehicle	2%	1%
Unsure of hot water system type	1%	2%
Plug-in hybrid electric vehicle	0%	0%
None of the above	0%	0%



Night-time Water Warmers have the lowest use of gas appliances (as seen in their sources) and are the highest users of electric hot water systems...

For Night-time Water Warmers, electric hot water system usage might be the key reason for their consumption patterns – possibly due to usage later at night before bed, or the systems heating water overnight.

APPLIANCES IN HOUSEHOLD	Overall	Time Surfers	Night-time Water Warmers
Gas hot water system	77%	88%	9%
Reverse cycle air conditioner	59%	55%	71%
Gas heater	59%	63%	34%
Evaporative air conditioner	24%	24%	8%
Electric hot water system	19%	9%	82%
Other heater	18%	17%	31%
Refrigerated air conditioner	11%	12%	8%
Fan-forced heater	10%	11%	11%
Pool	10%	9%	12%
Spa (inside/outside)	8%	7%	7%
Oil-filled heater	7%	7%	7%
Other air conditioner	5%	5%	5%
Solar hot water system	4%	2%	13%
Unsure of air con type	4%	5%	2%
Convection heater	4%	3%	6%
Electric scooter/bike	3%	3%	4%
Radiators	3%	3%	5%
Bar heater	3%	3%	3%
Hybrid electric vehicle (non-plug in)	3%	2%	3%
Fully electric vehicle	2%	1%	4%
Unsure of hot water system type	1%	2%	1%
Plug-in hybrid electric vehicle	0%	0%	1%
None of the above	0%	0%	0%



Day Time Actives and Medium Exporters are more likely to have pools and spas compared to other segments...

With Medium Exporters also having a high number of appliances.

	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
<b>APPLIANCES IN HOUSEHOLD</b>						
Gas hot water system	77%	88%	64%	9%	77%	80%
Reverse cycle air conditioner	59%	55%	63%	71%	65%	65%
Gas heater	59%	63%	45%	34%	58%	62%
Evaporative air conditioner	24%	24%	22%	8%	32%	33%
Electric hot water system	19%	9%	30%	82%	18%	14%
Other heater	18%	17%	20%	31%	19%	13%
Refrigerated air conditioner	11%	12%	11%	8%	13%	12%
Fan-forced heater	10%	11%	9%	11%	10%	8%
Pool	10%	9%	19%	12%	18%	7%
Spa (inside/outside)	8%	7%	18%	7%	15%	8%
Oil-filled heater	7%	7%	5%	7%	6%	5%
Other air conditioner	5%	5%	2%	5%	4%	4%
Solar hot water system	4%	2%	8%	13%	7%	8%
Unsure of air con type	4%	5%	2%	2%	2%	1%
Convection heater	4%	3%	3%	6%	4%	3%
Electric scooter/bike	3%	3%	2%	4%	4%	4%
Radiators	3%	3%	4%	5%	4%	2%
Bar heater	3%	3%	3%	3%	2%	2%
Hybrid electric vehicle (non-plug in)	3%	2%	2%	3%	5%	5%
Fully electric vehicle	2%	1%	2%	4%	3%	2%
Unsure of hot water system type	1%	2%	1%	1%	2%	0%
Plug-in hybrid electric vehicle	0%	0%	1%	1%	1%	0%
None of the above	0%	0%	1%	0%	1%	1%



Now let's take a look at  
property details...



The Exporters are most likely to have a higher number of bedrooms and bathrooms.

	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
<b>NUMBER OF BEDROOMS</b>						
One	1%	1%	2%	1%	1%	1%
Two	8%	9%	14%	12%	4%	3%
Three	47%	48%	43%	46%	39%	47%
Four or more	43%	42%	40%	41%	55%	49%
Median #	3.4	3.4	3.3	3.4	3.7	3.5
<b>NUMBER OF BATHROOMS</b>						
One	33%	36%	32%	36%	19%	24%
Two	56%	53%	54%	55%	62%	65%
Three	10%	9%	11%	8%	16%	10%
Four or more	1%	1%	3%	1%	3%	1%
Median #	1.8	1.8	1.9	1.7	2.0	1.9



Day Time Actives have the highest likelihood to have newer homes (built after 2000)...

And are also the most likely to own the property but not have it as their primary residence.

Exporters have a higher incidence of owners and roof insulation, while Time Surfers have more tenants and are less likely to have glazed windows.

	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
<b>AGE OF HOME</b>						
Earlier than 1960	12%	13%	16%	13%	11%	7%
1960 – 1969	10%	10%	10%	12%	13%	5%
1970 – 1979	25%	25%	16%	25%	29%	23%
1980 – 1989	29%	29%	20%	26%	32%	33%
1990 – 1999	10%	9%	11%	12%	7%	13%
2000 – 2009	9%	8%	13%	8%	6%	17%
2010 – 2019	1%	0%	3%	2%	1%	1%
2020+	0%	0%	7%	0%	0%	0%
I don't know	4%	4%	4%	2%	2%	2%
<b>OWNERSHIP STATUS</b>						
I own and live in this property (mortgage/own outright)	84%	80%	78%	85%	97%	97%
I am a tenant in this property (renting)	14%	18%	9%	11%	3%	2%
I own this property as an investment and do not live in it	0%	0%	0%	0%	0%	0%
I own this property but it is not my primary residence	2%	1%	13%	4%	0%	0%
I previously owned or lived in this property	0%	0%	0%	0%	0%	0%
None of the above	0%	0%	0%	0%	0%	0%
<b>PROPERTY FEATURES</b>						
Glazed windows	32%	28%	41%	37%	41%	37%
Wall insulation	41%	40%	48%	40%	45%	42%
Roof insulation	82%	79%	81%	83%	92%	90%



Day Time Actives and Night-time Water Warmers are more likely to be in regional areas.

LOCATION	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
Metro	89%	95%	56%	64%	93%	90%
Regional	11%	5%	44%	36%	7%	10%





How does household composition differ?



# Time Surfers have the lowest number of residents aged 65+...

	Overall	Time Surfers
<b>HOUSEHOLD COMPOSITION</b>		
A family household (single or couple with children living at home)	43%	45%
Single or couple living alone with no children	36%	36%
Single or couple living alone with children who are not living at home	16%	14%
A share house or friends living together (multiple adults, no children)	3%	3%
Other	2%	3%
<b>HOUSEHOLD AGES</b>		
Adult over the age of 65	38%	33%
Adult aged between 35 and 64	66%	68%
Adult aged between 18 and 34	27%	30%
Child aged between 12 and 17	12%	14%
Child aged between 7 and 11	11%	13%
Children under the age of 7	13%	14%



While Night-time Water Warmers and High Exporters have the most 65+ year olds.

	Overall	Time Surfers	Night-time Water Warmers	High Exporters
<b>HOUSEHOLD COMPOSITION</b>				
A family household (single or couple with children living at home)	43%	45%	33%	40%
Single or couple living alone with no children	36%	36%	40%	37%
Single or couple living alone with children who are not living at home	16%	14%	22%	20%
A share house or friends living together (multiple adults, no children)	3%	3%	2%	2%
Other	2%	3%	3%	1%
<b>HOUSEHOLD AGES</b>				
Adult over the age of 65	38%	33%	49%	49%
Adult aged between 35 and 64	66%	68%	57%	62%
Adult aged between 18 and 34	27%	30%	22%	20%
Child aged between 12 and 17	12%	14%	9%	9%
Child aged between 7 and 11	11%	13%	7%	12%
Children under the age of 7	13%	14%	10%	12%



Medium Exporters are the most likely to be a family household.

...while Night-time Water Warmers and Day Time Actives are least likely to have children in the household.

	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
<b>HOUSEHOLD COMPOSITION</b>						
A family household (single or couple with children living at home)	43%	45%	26%	33%	50%	40%
Single or couple living alone with no children	36%	36%	52%	40%	30%	37%
Single or couple living alone with children who are not living at home	16%	14%	16%	22%	16%	20%
A share house or friends living together (multiple adults, no children)	3%	3%	2%	2%	2%	2%
Other	2%	3%	4%	3%	3%	1%
<b>HOUSEHOLD AGES</b>						
Adult over the age of 65	38%	33%	48%	49%	45%	49%
Adult aged between 35 and 64	66%	68%	52%	57%	66%	62%
Adult aged between 18 and 34	27%	30%	15%	22%	29%	20%
Child aged between 12 and 17	12%	14%	8%	9%	17%	9%
Child aged between 7 and 11	11%	13%	5%	7%	11%	12%
Children under the age of 7	13%	14%	8%	10%	13%	12%
Median # of People in Household	2.6	2.7	2.3	2.4	2.9	2.6



Time Surfers and Medium Exporters are most likely to be working or volunteering.

With video gamers, and those who work or study from home, also highest within Medium Exporters and Time Surfers.

7% of customers have health support equipment, and this is slightly higher among the Exporters.

	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
<b>EMPLOYMENT STATUSES</b>						
Working or volunteering	72%	76%	55%	64%	74%	63%
Tertiary study	6%	7%	4%	6%	7%	4%
School study	22%	24%	13%	14%	23%	20%
Home duties	10%	11%	8%	8%	10%	11%
Retired	35%	30%	48%	44%	43%	47%
Unemployed	6%	6%	4%	5%	5%	6%
<b>WORK OR STUDY SITUATIONS</b>						
Work from home (some or all the time)	38%	39%	31%	31%	39%	35%
Study from home (tertiary level)	6%	7%	4%	6%	7%	4%
<b>LIFESTYLE FACTORS</b>						
Runs a business from the property	13%	13%	11%	16%	15%	10%
Is a video 'gamer' or plays video games regularly	27%	30%	13%	18%	31%	21%
Requires health support equipment	7%	6%	4%	7%	9%	9%
None of the above	60%	57%	73%	65%	54%	64%



How do segment attitudes differ?



All segments are highly concerned about the cost of living and rising energy costs.

They also have similar concerns about having enough energy in the future.

**ENERGY ATTITUDES (% agree)**

	<b>Overall</b>	<b>Time Surfers</b>	<b>Day Time Actives</b>	<b>Night-time Water Warmers</b>	<b>Medium Exporters</b>	<b>High Exporters</b>
Were concerned about the rising cost of energy and associated living costs	91%	91%	90%	90%	92%	91%
I'm very concerned about there not being enough energy in the near future	57%	57%	61%	54%	56%	59%



Exporters are most likely to want to be independent from the grid.

	ENERGY ATTITUDES (% agree)					
	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
Were concerned about the rising cost of energy and associated living costs	91%	91%	90%	90%	92%	91%
I'm very concerned about there not being enough energy in the near future	57%	57%	61%	54%	56%	59%
We could be doing more to save energy in our household	54%	57%	47%	51%	50%	47%
A goal of our household is to be independent from the grid as much as possible	40%	33%	36%	44%	57%	59%





# Time Surfers acknowledge they could do more to save energy.

They are most likely to agree that the environment is a low priority, and that they don't pay much attention to usage. Time Surfer's lower focus / consciousness of energy usage presents a key finding around why their usage appears consistently high.

	ENERGY ATTITUDES (% agree)					
	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
Were concerned about the rising cost of energy and associated living costs	91%	91%	90%	90%	92%	91%
I'm very concerned about there not being enough energy in the near future	57%	57%	61%	54%	56%	59%
We could be doing more to save energy in our household	54%	57%	47%	51%	50%	47%
A goal of our household is to be independent from the grid as much as possible	40%	33%	36%	44%	57%	59%
We would find it easy to reduce our energy usage	26%	27%	22%	20%	25%	26%
Green energy is less reliable than other energy sources	23%	22%	25%	24%	25%	25%
We don't pay much attention to the amount of energy we use at home	15%	18%	10%	12%	12%	11%
The environment is a low priority in our household compared to other things	13%	14%	13%	11%	10%	11%
I care more about the aesthetics of the home than saving energy	7%	7%	10%	6%	5%	5%



Night-time Water Warmers would find it more difficult to reduce their energy usage, and Day Time Actives are most likely to care about the aesthetics of their home.

	ENERGY ATTITUDES (% agree)					
	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
Were concerned about the rising cost of energy and associated living costs	91%	91%	90%	90%	92%	91%
I'm very concerned about there not being enough energy in the near future	57%	57%	61%	54%	56%	59%
We could be doing more to save energy in our household	54%	57%	47%	51%	50%	47%
A goal of our household is to be independent from the grid as much as possible	40%	33%	36%	44%	57%	59%
We would find it easy to reduce our energy usage	26%	27%	22%	20%	25%	26%
Green energy is less reliable than other energy sources	23%	22%	25%	24%	25%	25%
We don't pay much attention to the amount of energy we use at home	15%	18%	10%	12%	12%	11%
The environment is a low priority in our household compared to other things	13%	14%	13%	11%	10%	11%
I care more about the aesthetics of the home than saving energy	7%	7%	10%	6%	5%	5%



What are energy saving  
motivators and barriers?



All segments rate saving money as their top motivator for using less energy.

	<b>Overall</b>	<b>Time Surfers</b>	<b>Day Time Actives</b>	<b>Night-time Water Warmers</b>	<b>Medium Exporters</b>	<b>High Exporters</b>
ENERGY SAVING MOTIVATORS (% ranked top 3) Saving money	79%	80%	75%	76%	78%	80%



Time Surfers are particularly money-conscious, as this is a top motivator and barrier for energy saving

They are also most concerned about the increasing cost of living.

	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
<b>ENERGY SAVING MOTIVATORS (% ranked top 3)</b>						
Saving money	79%	80%	75%	76%	78%	80%
Increased cost of living	68%	71%				
Being environmentally-friendly	52%	50%				
Climate change	41%	40%				
Specific energy incentives	17%	17%				
Comparison to similar or average household usage	13%	14%				
Pressure from members in the household	4%	4%				
Something else	1%	1%				
<b>ENERGY SAVING BARRIERS (% ranked top 3)</b>						
My household is already doing as much as we can to save energy	40%	35%				
We cannot afford to install solar / batteries	51%	56%				
We do not know what else we could do to save energy	25%	24%				
We cannot afford to install other energy-saving products	37%	40%				
Any reduction my household could make is too small to make a difference	16%	16%				
Our energy bill isn't expensive enough to worry about reducing our energy use	10%	10%				
I can't get others in my household to change their behaviour	12%	14%				
We have certain energy needs due to health-related circumstances	8%	9%				
Something else	9%	9%				
My household is too busy to be more energy-efficient	8%	9%				
We pay for the energy we use, so we should be able to use as much as we like	5%	5%				
Our household is too big to reduce our energy usage	4%	5%				
We are not interested in saving energy	1%	1%				



The other segments are more likely to feel they are already doing all they can to save energy.

Exporters especially feel they don't know what else they could even do.

ENERGY SAVING MOTIVATORS (% ranked top 3)	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
Saving money	79%	80%	75%	76%	78%	80%
Increased cost of living	68%	71%	63%	64%	64%	61%
Being environmentally-friendly	52%	50%	52%	55%	53%	56%
Climate change	41%	40%	41%	42%	41%	43%
Specific energy incentives	17%	17%	19%	17%	19%	19%
Comparison to similar or average household usage	13%	14%	14%	9%	11%	13%
Pressure from members in the household	4%	4%	1%	5%	5%	3%
Something else	1%	1%	0%	1%	1%	0%

ENERGY SAVING BARRIERS (% ranked top 3)	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
My household is already doing as much as we can to save energy	40%	35%	43%	45%	46%	51%
We cannot afford to install solar / batteries	51%	56%	46%	42%	43%	38%
We do not know what else we could do to save energy	25%	24%	21%	23%	31%	29%
We cannot afford to install other energy-saving products	37%	40%	28%	33%	35%	28%
Any reduction my household could make is too small to make a difference	16%	16%	16%	16%	17%	17%
Our energy bill isn't expensive enough to worry about reducing our energy use	10%	10%	14%	10%	11%	11%
I can't get others in my household to change their behaviour	12%	14%	8%	8%	13%	9%
We have certain energy needs due to health-related circumstances	8%	9%	5%	8%	8%	7%
Something else	9%	9%	7%	8%	5%	6%
My household is too busy to be more energy-efficient	8%	9%	6%	7%	8%	5%
We pay for the energy we use, so we should be able to use as much as we like	5%	5%	6%	5%	4%	4%
Our household is too big to reduce our energy usage	4%	5%	4%	2%	4%	2%
We are not interested in saving energy	1%	1%	0%	1%	0%	1%



How do the segments differ in their energy usage habits?



The top energy saving behaviours are similar across the segments.

This includes closing windows and doors during winter, turning off lights when not at home or in the room, using more energy efficient globes and opening windows and doors in summer.

ENERGY HABITS (% most / all of the time)	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
Close your windows or doors during winter	97%	97%	98%	96%	96%	97%
Turn off lights when not at home	96%	96%	96%	97%	96%	98%
Turn off the lights when not in the room	92%	91%	94%	94%	89%	93%
Use lower wattage or electricity-efficient light globes	89%	87%	90%	90%	93%	94%
Open windows or doors to create draft in summer	80%	80%	83%	77%	79%	80%





# High Exporters are more likely to undertake many energy-conscious behaviours.

They are most likely to purchase electricity-efficient appliances, use electricity when the sun is shining to use solar, cut down their usage in peak periods and look for info on how to reduce their energy use.

This identifies that High Exporters might be most open to communications and behavioural change to the ideal – aligning with their current energy sources.

## ENERGY HABITS (% most / all of the time)

Close your windows or doors during winter	97%
Turn off lights when not at home	96%
Turn off the lights when not in the room	92%
Use lower wattage or electricity-efficient light globes	89%
Open windows or doors to create draft in summer	80%
Use electricity when the sun is shining to get the most out of solar	74%
Purchase electricity-efficient appliances over standard appliances	71%
Charge your electric vehicle or battery at night	64%
Adjust air-conditioning / heating temperature to reduce costs	63%
Use clothing or a blanket to warm up before using a heater in winter	58%
Turn off appliances when at home	55%
Look for information about how to reduce electricity consumption	30%
Cut down electricity usage during peak periods during summer	29%
Cut down electricity usage during peak periods during winter	27%
Turn off appliances at the wall, rather than leaving them on standby	25%
Use smart devices or auto-control functions to manage the time of appliance usage (e.g., dishwashers, washing machines etc.)	25%
Visit well air-conditioned areas to stay cool during warm days	11%

## Overall

97%
96%
92%
89%
80%
74%
71%
64%
63%
58%
55%
30%
29%
27%
25%
25%
11%

## High Exporters

97%
98%
93%
94%
80%
81%
80%
36%
66%
57%
57%
37%
40%
35%
27%
31%
10%

# Day Time Actives also undertake many energy conscious-behaviours.

They are most likely to turn off appliances when not home or turn them off at the wall, and are above average in reducing use in peak periods, and looking for info on how to reduce their use.

## ENERGY HABITS (% most / all of the time)

Close your windows or doors during winter	97%
Turn off lights when not at home	96%
Turn off the lights when not in the room	92%
Use lower wattage or electricity-efficient light globes	89%
Open windows or doors to create draft in summer	80%
Use electricity when the sun is shining to get the most out of solar	74%
Purchase electricity-efficient appliances over standard appliances	71%
Charge your electric vehicle or battery at night	64%
Adjust air-conditioning / heating temperature to reduce costs	63%
Use clothing or a blanket to warm up before using a heater in winter	58%
Turn off appliances when at home	55%
Look for information about how to reduce electricity consumption	30%
Cut down electricity usage during peak periods during summer	29%
Cut down electricity usage during peak periods during winter	27%
Turn off appliances at the wall, rather than leaving them on standby	25%
Use smart devices or auto-control functions to manage the time of appliance usage (e.g., dishwashers, washing machines etc.)	25%
Visit well air-conditioned areas to stay cool during warm days	11%

## Overall

97%  
96%  
92%  
89%  
80%  
74%  
71%  
64%  
63%  
58%  
55%  
30%  
29%  
27%  
25%  
25%  
11%

## Day Time Actives

98%  
96%  
94%  
90%  
83%  
66%  
75%  
50%  
64%  
68%  
68%  
36%  
35%  
31%  
34%  
29%  
15%

# Time Surfers tend to have less energy-conscious habits.

Only about one in four look for information on how to reduce their energy use or cut down use during peak periods.

Although they and the Night-time Water Warmers are more likely than the other segments to adjust their heating and cooling to reduce costs.

ENERGY HABITS (% most / all of the time)	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
Close your windows or doors during winter	97%	97%	98%	96%	96%	97%
Turn off lights when not at home	96%	96%	96%	97%	96%	98%
Turn off the lights when not in the room	92%	91%	94%	94%	89%	93%
Use lower wattage or electricity-efficient light globes	89%	87%	90%	90%	93%	94%
Open windows or doors to create draft in summer	80%	80%	83%	77%	79%	80%
Use electricity when the sun is shining to get the most out of solar	74%	67%	66%	71%	68%	81%
Purchase electricity-efficient appliances over standard appliances	71%	68%	75%	74%	76%	80%
Charge your electric vehicle or battery at night	64%	71%	50%	83%	61%	36%
Adjust air-conditioning / heating temperature to reduce costs	63%	63%	64%	63%	65%	66%
Use clothing or a blanket to warm up before using a heater in winter	58%	59%	68%	60%	51%	57%
Turn off appliances when at home	55%	54%	68%	58%	50%	57%
Look for information about how to reduce electricity consumption	30%	28%	36%	31%	30%	37%
Cut down electricity usage during peak periods during summer	29%	24%	35%	35%	34%	40%
Cut down electricity usage during peak periods during winter	27%	24%	31%	28%	29%	35%
Turn off appliances at the wall, rather than leaving them on standby	25%	24%	34%	29%	19%	27%
Use smart devices or auto-control functions to manage the time of appliance usage (e.g., dishwashers, washing machines etc.)	25%	23%	29%	24%	30%	31%
Visit well air-conditioned areas to stay cool during warm days	11%	12%	15%	7%	8%	10%



How does energy literacy differ?



The Exporters have the highest levels of energy literacy.

	ENERGY LITERACY (% true)					
	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
It's cheaper for me to use energy at certain times of the day	81%	76%	79%	86%	92%	95%
Heating and cooling uses the most energy in the home	81%	82%	75%	78%	82%	83%
You can only use solar energy when the sun is shining	22%	18%	21%	20%	33%	37%
Installing batteries will help our household save money by using less energy from the grid	71%	69%	71%	69%	78%	81%
Solar energy can't be fed back to the grid	5%	6%	6%	5%	4%	4%
The upfront costs of installing solar energy are worth it in the long term	60%	54%	60%	61%	75%	79%
Solar will meaningfully reduce my reliance on the grid	73%	69%	72%	74%	77%	84%
Changing to LED lightbulbs can't a meaningful effect on energy usage	9%	9%	14%	10%	10%	8%
Feeding energy into the grid is always helpful for the grid	50%	49%	50%	52%	53%	54%
An electric vehicle uses a lot more electricity than other household appliances	30%	29%	29%	29%	34%	35%
An electric vehicle can power my home when not in use	24%	20%	23%	24%	30%	36%
It's cheaper to charge an electric vehicle at home than in the street	21%	19%	16%	24%	26%	25%

How do they differ on  
their future intentions?



The High Exporters are most likely to obtain home batteries EVs in the next three years.

Medium Exporters also show above average interest in Home Batteries, while just under one in five Time Surfers are looking to install solar in the next 3 years.

	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
<b>FUTURE ADOPTION OF ENERGY SOURCES NEXT 3 YEARS</b>						
Home Battery	16%	14%	10%	11%	22%	27%
Solar / Rooftop solar panels	13%	17%	12%	11%	0%	0%
Mains gas	1%	0%	1%	1%	1%	1%
<b>FUTURE ADOPTION NEXT 3 YEARS</b>						
Electric scooter/bike	6%	6%	6%	6%	7%	9%
Fully electric vehicle	6%	6%	4%	5%	5%	6%
Hybrid electric vehicle (non-plug in)	3%	3%	3%	3%	4%	5%
Plug-in hybrid electric vehicle	7%	6%	8%	7%	7%	7%
NET Plug-in EV / PHEV	8%	7%	8%	8%	10%	13%



How do they differ on reactions to the propositions?





Ease understanding and perceived impact of the propositions is similar across the segments.

Day Time Actives have a slightly higher belief that Time of Use Tariffs will make a meaningful impact, while High Exporters are less convinced of the impact of Flexible Exports or Third Party Management of Energy.

	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
<b>EASY TO UNDERSTAND (% agree)</b>						
Pre-Set Energy	72%	72%	73%	69%	73%	72%
Time of Use Tariffs	81%	81%	85%	82%	86%	81%
Flexible Exports	49%	49%	44%	46%	52%	53%
Third Party Management of Energy	45%	46%	45%	46%	42%	43%
Third Party Management of Solar	63%	61%	62%	64%	65%	69%
<b>MEANINGFUL IMPACT (% agree)</b>						
Pre-Set Energy	56%	57%	56%	55%	55%	53%
Time of Use Tariffs	64%	64%	69%	61%	61%	61%
Flexible Exports	34%	36%	36%	31%	33%	28%
Third Party Management of Energy	38%	40%	37%	36%	34%	30%
Third Party Management of Solar	49%	48%	49%	50%	50%	52%



Time of Use Tariffs have the highest likelihood of adoption in the short term, with Day Time Actives showing above average interest.

The proposition Flexible Exports has higher appeal among Day Time Actives and Medium Exporters.

Exporters have the highest interest in Third Party Management of Solar.

CONSIDER ADOPTING NOW (% agree)	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
Pre-Set Energy	49%	49%	52%	51%	50%	50%
Time of Use Tariffs	55%	55%	60%	55%	56%	55%
Flexible Exports	23%	23%	27%	23%	30%	23%
Third Party Management of Energy	23%	23%	20%	26%	22%	23%
Third Party Management of Solar	35%	31%	34%	39%	48%	47%



A similar pattern of interest is evident for longer term take-up of the propositions.

Day Time Actives are most interested in Time of Use Tariffs, Flexible Exports has higher appeal among Day Time Actives and Medium Exporters, while Exporters have the highest interest in Third Party Management of Solar.

	Overall	Time Surfers	Day Time Actives	Night-time Water Warmers	Medium Exporters	High Exporters
<b>CONSIDER ADOPTING IN THE FUTURE (% agree)</b>						
Pre-Set Energy	59%	59%	59%	59%	61%	60%
Time of Use Tariffs	62%	62%	68%	64%	61%	59%
Flexible Exports	33%	34%	38%	29%	37%	28%
Third Party Management of Energy	33%	34%	26%	33%	30%	31%
Third Party Management of Solar	52%	49%	47%	54%	60%	60%



What are the key segment differences?



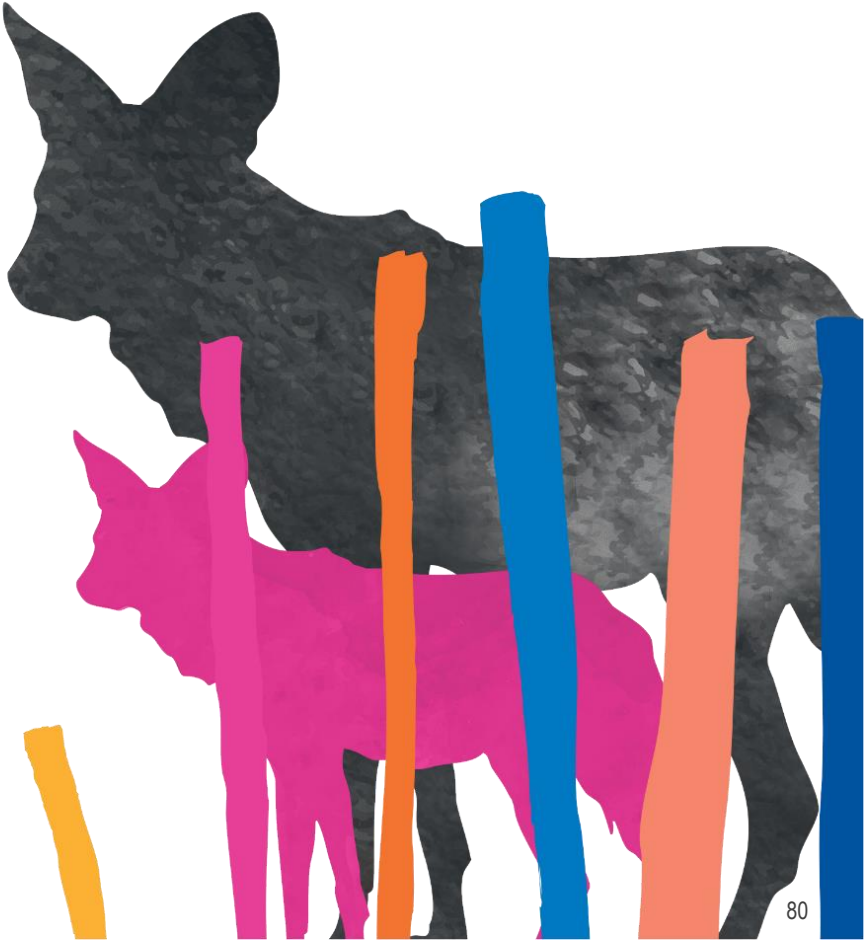
	Time Surfers	High Exporters	Night-time Water Warmers	Medium Exporters	Day-Time Actives
<b>% of Customers</b>	<b>65%</b>	<b>16%</b>	<b>11%</b>	<b>5%</b>	<b>4%</b>
<b># of Customers</b>	424,912 accounts	101,726 accounts	69,957 accounts	35,132 accounts	23,872 accounts
<b>Consumption Pattern</b>					
<b>Who we are</b>	<p>Lowest no. adults aged 65 +</p> <p>More tenants</p> <p>High no. of workers and gamers</p>	<p>High no. of Empty Nesters and 65+</p> <p>Lowest number living in the property</p> <p>Nearly all owners</p>	<p>Highest number of Empty Nesters and high no. of 65+</p> <p>Higher regional locations</p>	<p>Highest no. of families and teens</p> <p>Bigger houses, more people</p> <p>Nearly all owners</p> <p>High pools and spas</p> <p>High no. of workers and gamers</p>	<p>Highest no. of single or couple with no children</p> <p>Newer properties</p> <p>High pools and spas</p> <p>Highest regional locations</p>
<b>Our unique energy sources and appliances</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Highest</b> level of Mains Gas usage</li> <li><input type="checkbox"/> <b>Lowest</b> Solar &amp; Home battery</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Highest</b> level of Solar and Home Battery usage</li> <li><input type="checkbox"/> <b>Highest</b> Evaporative Aircon</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Highest</b> level of Bottled Gas usage</li> <li><input type="checkbox"/> <b>Lowest</b> level of Mains Gas usage and gas appliances</li> <li><input type="checkbox"/> <b>Highest</b> Electric Hot Water</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>High</b> level of Solar and Home Battery usage (after High Exporters)</li> <li><input type="checkbox"/> <b>Highest</b> for Pools &amp; Spas</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Highest</b> level of Mains Grid usage only</li> <li><input type="checkbox"/> <b>Highest</b> for Solar Hot Water System</li> </ul>
<b>Our unique energy behaviours</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Less likely</b> to undertake many energy conscious behaviours, including reducing use during peak periods</li> <li><input type="checkbox"/> <b>More likely</b> to adjust heating and cooling to reduce costs</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>More likely</b> to undertake many energy conscious behaviours</li> <li><input type="checkbox"/> <b>Most likely</b> to purchase electricity-efficient appliances, use electricity when the sun is shining, cut down use in peak periods and look for info on how to reduce their energy use</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>More likely</b> to adjust heating and cooling to reduce costs</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Average</b> in their energy conscious behaviours</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>More likely</b> to undertake many energy conscious behaviours</li> <li><input type="checkbox"/> <b>More likely</b> to turn appliances off at the wall, cut down use in peak periods, and look for info on how to reduce energy use</li> </ul>
<b>Future Intentions</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Highest</b> potential uptake of Solar</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Highest</b> potential uptake of EVs/PHEVs &amp; home batteries</li> <li><input type="checkbox"/> <b>High</b> interest in 3<sup>rd</sup> Party Mgmt of Solar</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Lower to average interest in adopting solar, home batteries, or any of the propositions</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Higher</b> potential uptake of EVs / Part EVs, home batteries</li> <li><input type="checkbox"/> <b>Highest</b> interest in Flexible Exports</li> <li><input type="checkbox"/> <b>High</b> interest in 3<sup>rd</sup> Party Mgmt of Solar</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>More likely</b> to be interested in Time of Use Tariffs and Flexible Exports</li> </ul>
<b>Unique attitudes and literacy levels</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Less</b> likely to pay attention to usage or feel the environment is a priority</li> <li><input type="checkbox"/> <b>Most</b> likely to feel they could be doing more to reduce use</li> <li><input type="checkbox"/> <b>Lower</b> energy literacy</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Most</b> likely to want to be independent from the grid</li> <li><input type="checkbox"/> <b>Least</b> likely to feel they could be doing more to save energy in the household</li> <li><input type="checkbox"/> <b>Highest</b> energy literacy</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>More likely</b> to find it difficult to reduce their usage</li> <li><input type="checkbox"/> Average energy literacy</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>More likely</b> to want to be independent from the grid</li> <li><input type="checkbox"/> <b>Higher</b> energy literacy</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Most</b> likely to care about the aesthetics of the home rather than saving energy</li> <li><input type="checkbox"/> Average energy literacy</li> </ul>
<b>Unique Motivators and Barriers to Reduce Use</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Most likely</b> to be motivated by cost and have cost as a barrier</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Most likely</b> to feel they are doing as much as they can / not sure how to do more</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Above average in feeling like they are already doing as much as they can</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>More likely</b> to feel they are doing enough / not sure how to do more</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Above average in feeling like they are already doing as much as they can</li> </ul>

Exploring differences of our  
micro Time Surfer segments...



	Time Surfers (4 & 7)	Time Surfers (5 & 6)	Time Surfers (2 & 8)	Time Surfers (1 & 3)	Time Surfer (9)
% of Customers	<b>17%</b>	<b>17%</b>	<b>15%</b>	<b>11%</b>	<b>5%</b>
# of Customers	112,869 accounts	110,222 accounts	99,979 accounts	70,820 accounts	31,132 accounts
Consumption Pattern					
Who we are	<ul style="list-style-type: none"> <li>High no. school age families</li> <li>Higher metro</li> <li>Higher renters</li> <li>More students, gamers, CALD</li> </ul>	<ul style="list-style-type: none"> <li>More younger children and teens in household</li> <li>Higher for units</li> <li>Higher incomes</li> </ul>	<ul style="list-style-type: none"> <li>More younger children (&lt;11)</li> <li>More workers</li> </ul>	<ul style="list-style-type: none"> <li>Younger families</li> <li>More renters</li> <li>More workers, also high for home duties / unemployed</li> </ul>	<ul style="list-style-type: none"> <li>Higher no. of single or couple with no children</li> <li>Lower number of workers</li> </ul>
Our unique energy sources and appliances	<ul style="list-style-type: none"> <li><input type="checkbox"/> High level of Mains Gas usage</li> <li><input type="checkbox"/> Lowest Solar &amp; Home battery</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> High level of Mains Gas usage</li> <li><input type="checkbox"/> Low level of Solar</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Highest level of Mains Gas usage</li> <li><input type="checkbox"/> Lowest bottled gas, generator, home battery usage</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Highest for Solar (out of Time Surfers)</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> High level of Mains Gas usage</li> <li><input type="checkbox"/> Low level of Solar &amp; Home Battery</li> <li><input type="checkbox"/> More likely to have pools</li> </ul>
Our unique energy behaviours	<ul style="list-style-type: none"> <li><input type="checkbox"/> Less likely to undertake many energy conscious behaviours, including reducing use during peak periods</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Less likely to undertake many energy conscious behaviours, including lower for turning off appliances, and reducing use during peak periods</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> More likely to undertake energy saving behaviours, including cutting down usage during peak times in winter</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Less likely to undertake most energy conscious behaviours, including reducing usage in peak times</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Average likelihood to undertake energy conscious behaviours</li> </ul>
Future Intentions	<ul style="list-style-type: none"> <li><input type="checkbox"/> Lower potential uptake of EVs</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Highest potential uptake of Solar</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Above average interest in adopting pre-set energy, time of use tariffs, 3<sup>rd</sup> Party Mgmt of Energy</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Highest potential uptake of EVs / Part EVs</li> <li><input type="checkbox"/> Highest interest in Flexible Exports</li> <li><input type="checkbox"/> Highest interest in 3<sup>rd</sup> Party Mgmt of Energy</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Higher potential uptake of solar</li> <li><input type="checkbox"/> Below average interest in most propositions</li> </ul>
Unique attitudes and literacy levels	<ul style="list-style-type: none"> <li><input type="checkbox"/> Most likely to think they could be doing more to save energy</li> <li><input type="checkbox"/> Most likely to feel not much attention is paid to usage</li> <li><input type="checkbox"/> Lower energy literacy</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Above average for feeling they could be doing more to save energy</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Above average care for the aesthetics of the home rather than energy saving</li> <li><input type="checkbox"/> Below average energy literacy</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Above average for not paying attention to their usage, and that energy, environment a low priority, and finding it easy to reduce usage</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Least likely to care about being independent from the grid</li> <li><input type="checkbox"/> Highest level of care about aesthetics rather than saving energy</li> <li><input type="checkbox"/> Lowest energy literacy levels</li> </ul>
Unique Motivators and Barriers to Reduce Use	<ul style="list-style-type: none"> <li><input type="checkbox"/> Most likely to be motivated by cost and have cost as a barrier</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> More likely to feel motivated by cost</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> More likely to feel motivated by energy incentives</li> <li><input type="checkbox"/> Higher for not knowing enough about energy saving as a barrier</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> More likely to feel that their reduction will have only a small impact as a barrier</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> More likely to feel that their reduction will have only a small impact as a barrier</li> </ul>

# About the segment packs





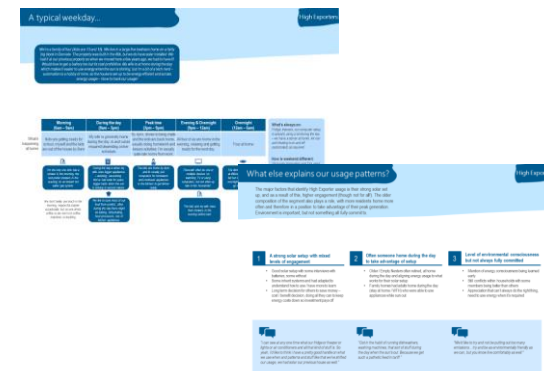
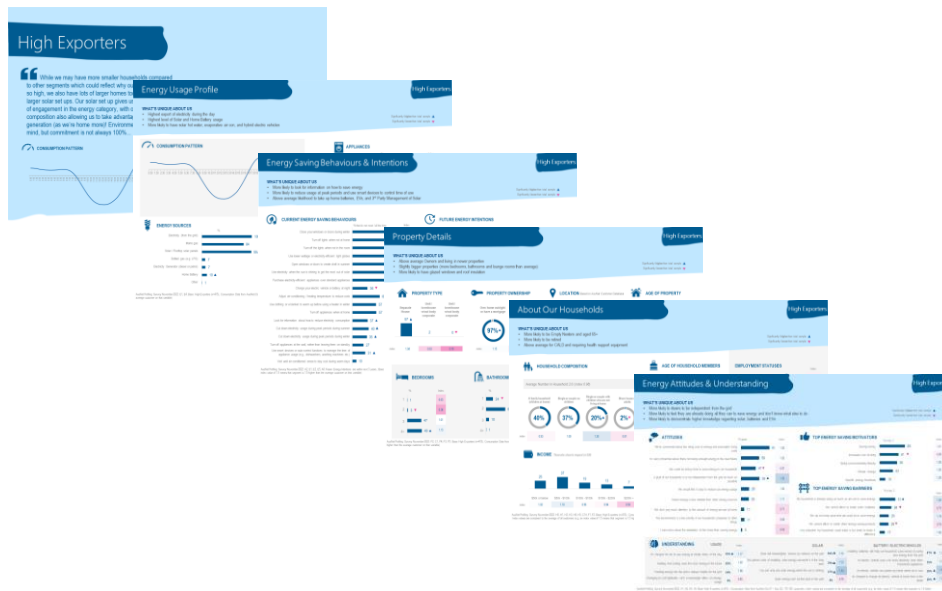
# Details of the supplementary document: Profiles & Persona Packs

**Profiling Data:** All segments have detailed profiling pages about their households; including:

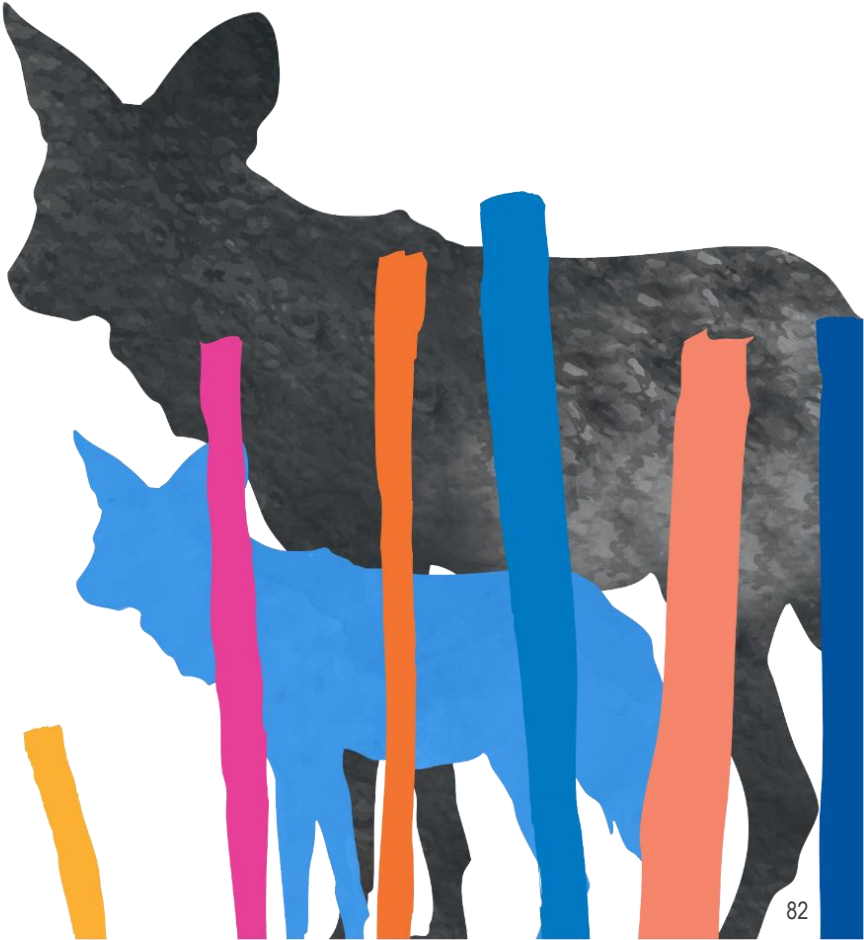
- Energy Usage Profile
- Energy Saving Behaviours & Intentions
- Property Details
- About Our Households
- Energy Attitudes & Understanding

**Qualitative Persona Enrichment:** Insights from interviews from prioritised segments (with time of day persona details and potential explanation of energy use patterns for:

- High Exporters
- Medium Exporters
- Time Surfers 4+7
- Time Surfers 2+8
- Time Surfers 9

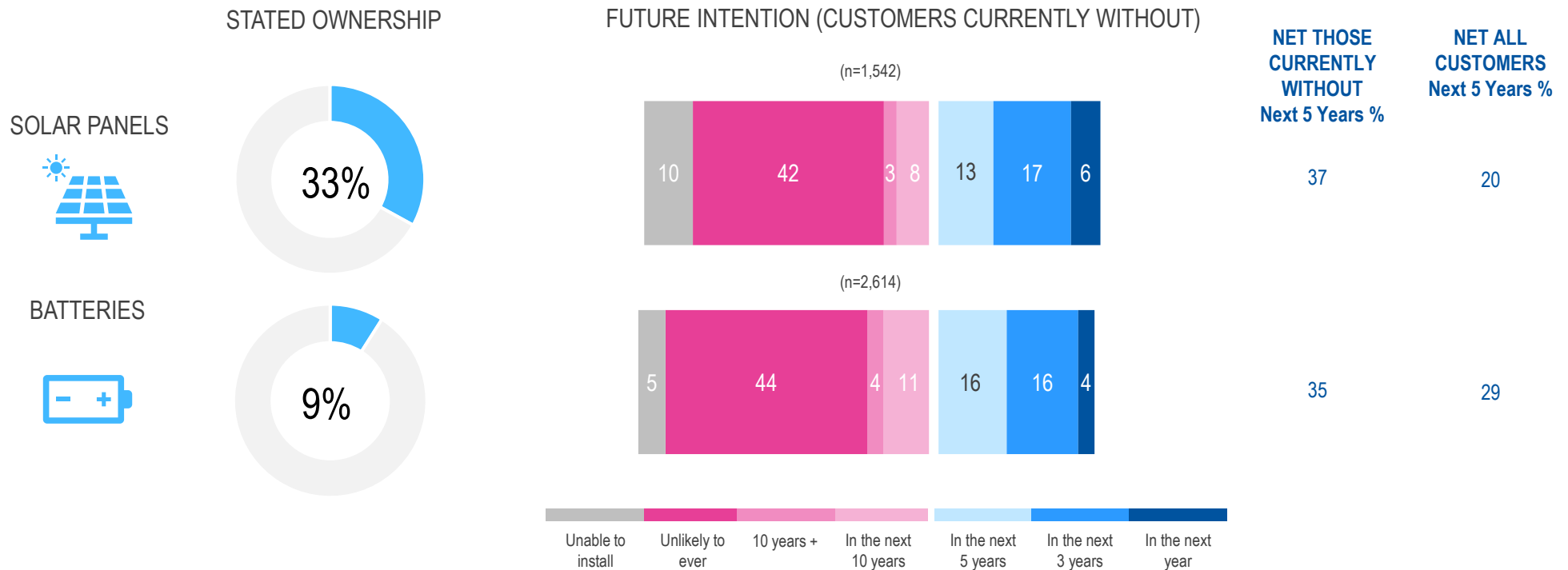


# Solar deep dive



Currently one in three have solar panels and two in five are planning to install in the next five years.

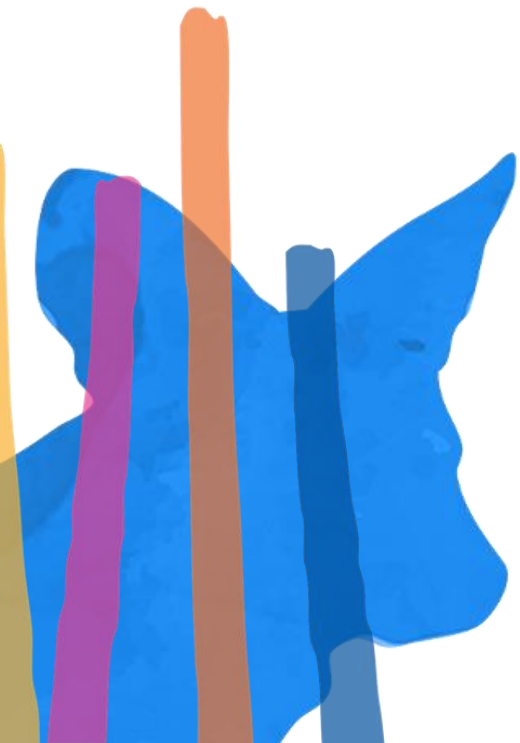
Batteries see much smaller current ownership (one in ten), but greater claimed uptake (three in ten of customers).



E1. Which of the following energy sources does this property have, apart from mains electricity?

E2. When are you likely to install the following items at this property? Base: Those who have lived in their property more than 6 months (n=3,172)

Cost is a key motivator and barrier related to the decision around getting solar at home.



While contributing positively to the environment is a motivator, long term cost savings are driving decisions.



### Motivators to getting solar

#### Long term cost savings

- Solar will pay for itself in the long term; the upfront cost is worth it in the end

#### Renewable source of energy

- Better for the environment / less pollution
- Less reliance of unsustainable energy sources

#### Independence from the grid

- Freedom from being bound to electricity cost fluctuations etc
- Protection from blackouts and other grid disruptions

#### Previous positive experience

- Important to get installed in new properties, having solar part of lifestyle.

Upfront costs and the cost / benefit trade off appears to be suitable for certain lifestages and households.



*“Easing pressure on the on the grid, and preventing blackouts is compelling. One of the reasons why I bought all the solar panels, then the battery, because it does help in that regard. So being a good citizen, and save yourself money as well... I looked at that before I started buying all this stuff. And I thought well, even if I only broke even on doing my bit to take the strain off the off the grid.”*

- High Exporter



*“Probably about five or six years ago, I ended up deciding to get solar panels because I was actually very concerned about the increased rise in electricity costs. And so when the sun is shining, I have to admit I'm feeling very happy because I'm thinking my solar panels are absorbing a lot of the cost through clean energy.”*

- Medium Exporter



*“We both retired a while ago, and we decided to get solar while we were still working as we knew it would keep our costs down through retirement.”*

- High Exporter

## Cost was also the key barrier for Time Surfers we spoke to.



*“It would be nice to be able to run everything off a solar and a battery system, but it just simply doesn't make economic sense in this property.”*

- Time Surfers 9



*“When I looked at it, which was quite a few years ago, I didn't think it was worth it. The fact that since I've done it, the cost of electricity has gone up by a lot noticeably recently and the cost of installation of solar has come down. I've got friends who talk quite highly of it but I'm never sure whether that's because it works or because they don't want to admit it.”*

- Time Surfers 9



*“We've got a flat roof at the moment. We're doing renovations on the house and it keeps getting delayed. When they're done we'll deal with solar panels. It's frustrating, because I really want to get the solar panels. But then the cost of building and trying to do things at the moment is just crazy up here. And it's probably also eight months away, even by the time we start planning to do it.”*

- Time Surfers 4+7

Many were open to and supportive of solar but the upfront investment was too large a barrier; or the cost / benefit not motivating enough.

There were some we heard from who were more negative with the technology or need for alternative energy sources.

### Barriers to getting solar

#### Costs / way it is costed

- The disparity with amount paid for electricity (e.g., 30c), versus how much solar gives (10c) – unfair
- Up front costs

#### Time horizon for savings can be too long

- For some (especially those who're older, not planning to be in the same property long), the upfront cost won't pay itself off fast enough

#### Home being renovated / not yet suitable

- Multiple interviewees cited interest but following building / upgrades to roof.

#### Improvement of technology in the long run

- Solar might get better with time – might not be the right time to get it if it will improve

#### Scepticism about need

- No issue with current energy sources, no climate change.

Time Surfers overall are very likely to consider solar in the future, however would be more likely to if some factors were optimised...

## Concerns about Solar

### Trust in solar

- Solar companies can sometimes seem a bit 'dodgy' – hard to know whether you can trust them – more standardisation among these companies is desired
- Haven't got a good understanding about how solar works – more information that can be trusted should be easily available
- Some worry about how reliable it is as a source of energy – heard stories from friends and in the media – more information such as this should be made available

### Better incentives

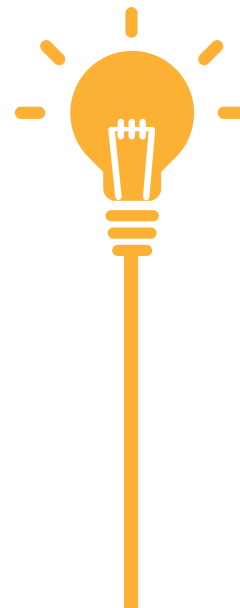
- Better incentives available to get solar – e.g., government subsidies and incentives
- More money for exporting to the grid – make it more worth it. Some feel like it used to be better in terms of how much they get back, but no longer is as profitable for households

### Long term impacts

- Concerns too about the way that solar panels are produced – is it sustainable and is the lifetime of a panel outweighing the production emissions – more information about this process

### Specifics about their property

- For those who were renting or living on properties with limitations (e.g., lots of shade coverage), there was a feeling that solar wasn't viable in the future unless they changed their circumstances significantly



*"Hard to know if you can trust some of the solar companies – they just seem a bit dodgy!"*

- Time Surfer 2+8



*"I've heard people saying that renewable energy sources are unreliable and not timely and stuff that kind of feeds into a narrative that renewable energy options aren't workable and efficient."*

- Time Surfers 9



*"It's horrible that how you actually produce solar cells, their cost of production, et cetera, et cetera, using the current technologies, and some of the emerging it's not anywhere near as good as people like to make it sound."*

- Time Surfer 4+7

Exporters feel solar provides guilt-free power, with the freedom to do more with the energy that *they* generate.

Solar customers are more aware of their usage – they are conscious all the time about what is being used and when, with a far greater understanding of the implications this has on their bill, as well as reliance on the grid. Psychologically – things change drastically!

## What does having solar mean

### Feeling like they are doing their part

- Reducing their carbon footprint
- Part of the solution to climate change, everyone has a role to play, and they are doing theirs

### Independence / self reliance

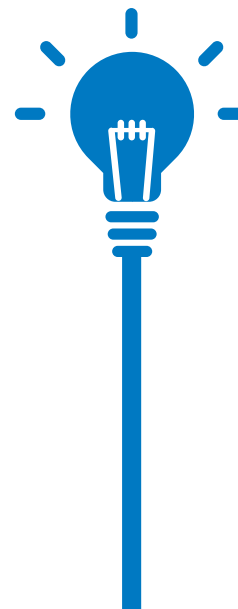
- Not at the mercy of electricity or gas, price changes or grid disruptions
- Consistency in their own energy sources into the future
- Peace of mind that their costs will be lower moving forward

### Freedom to use things without having to spend more

- Can turn on devices such as dryers when they know they are covering its usage with solar
- They can use what they want when solar generation is high
- Even if they acknowledge their usage is higher overall – their net usage is much lower

### Higher awareness of energy usage in the household

- Seeing as they check things like applications that track generation / usage etc – gives households a higher awareness of what is on and what can be turned off



*"It's great... financially it's fantastic. The payback period is very low at the moment, gives us good peace of mind knowing that our big chunk of energy bills is kind of paid for by the system itself."*

- Medium Exporter

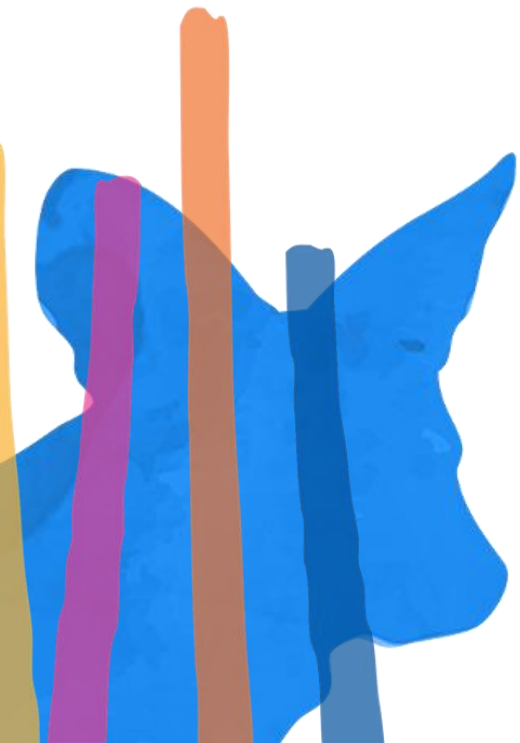


*"Have control over my own usage – safer from price fluctuations when it comes to energy."*

- High Exporter



Most Exporters had good understanding of solar, but there are a few areas of confusion.



Exporters were well aware of some of the key elements of solar – exporting back to the grid and peak generation.

1

### Exporting back to the grid

- Process for this is well understood, excess solar generation that isn't being used is exported to the grid
- Many are constantly checking their generation at all times of the day via apps etc
- *Not all were aware of the limits that might be imposed on this – those who were aware of limits, were confused around whether it was a maximum daily limit, or whether it was capped to a certain amount at a particular time*

2

### Peak generation

- All Exporters are aware of when their solar is generating the most – during sunny days generally between 8am-5pm (depending on the season and weather)
- Where relevant, some had understanding of property / block nuances due to orientation and tree coverage
- *There was less certainty about the specific proportion of total energy usage their solar takes up of their overall usage*



Time Surfers understand the concept of grid expansion when it's explained to them.

They feel these upgrades *should* be made – it's best for the future! Having said this, they have some differing thoughts on *who* should pay...

3

### Grid expansion as a result of solar

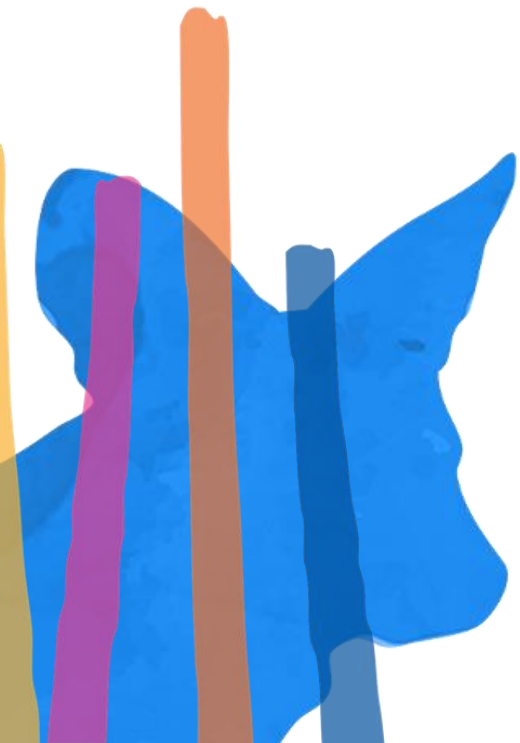
- Most of those we spoke to are aware that a large influx of solar could have negative impacts on the grid
- Not all understand the limits that must be imposed – or whether they are on fixed, flexible, or what the limits are



### When asked who should pay for grid upgrades – Time Surfers opt for two different approaches:

- The government and electricity companies should fund it (understanding that this means they will *all* pay) – this is the fairest approach!
- Some with better understanding felt that due to the fact electricity companies' purchase household generated solar electricity for far less than they sell it back to customers, these profits should be used to upgrade the system – no one should pay more for it!

Feelings towards batteries are also mixed...



...With Exporters who have batteries feeling mostly positive about their operation.

The biggest reason comes down to being able to take advantage of their solar usage even more than before – they are off the grid for longer, and independent for longer when it comes to their energy usage.

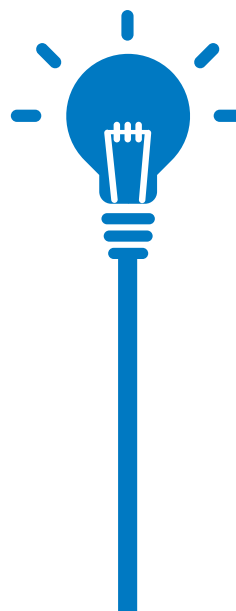
## What does it mean to have batteries

### Making the most out of solar

- Allows the household to use more of its solar energy that is generated in the system
- Less power needs to be sent back to the grid and less needs to be purchased again in the evening for a higher price than it was sold

### Even more independence / self reliance

- Helps to further reduce any reliance on the grid – households feel more self reliant and independent in their usage – a big driver of purchasing in the first place
- Even less so at the mercy of changing energy costs
- Off the grid for more of the day – not totally, but the periods where grid power is used is even lower with batteries installed
- Less impacted by any potential power outages



*"I can now rely on solar until around 9-10pm depending on how sunny it was during the day. Makes the most of the solar that is installed."*

*- Medium Exporter*


But those without, overall more sceptical of the benefits that batteries can give them.



### Positives about batteries

#### Can help store power generated by solar during the day

- The obvious benefit for Medium Exporters - means that their energy bills will come down
- Reduces their reliance on the grid, more independence in their energy
- Can avoid the need to sell excess energy in the day only to have to buy it back at night for a higher price



"The most compelling argument is the financial aspect, but also to be more self sufficient. Cost is very high for them, this will be a barrier for most – more incentives would be good but the operation is great"  
– High Exporter

However, it is the more savvy Exporters who feel the most sceptical – as they already have solar, they are more knowledgeable about the costs/benefits, having likely already researched. Less knowledgeable Time Surfers feel more positive.

*This suggests that while the concept of batteries is well received – when the specifics are understood around the current offerings, a more negative view comes about.*




### Negatives about batteries

#### The value for money

- The current outlay to benefit is not aligned yet, those who are in the know about the specifics of it have 'run the numbers'
- Those with less awareness of when it will be paid off also feel it is currently too expensive / they haven't researched more into the benefits long term regarding finances

#### Technology is getting better

- Perception that batteries will become *much more affordable* and be *much better* in the future – now is not the time
- The presumed longer lifespans of future batteries may make them more attractive



"I've run the numbers... for solar it's overwhelmingly positive but for batteries it's disappointingly neutral. Solar PV system, the payback here is less than four years, which is fantastic. Battery with the current tariff structure, payback is 15 to 20 years."  
– Medium Exporter

# Proposition deep dive



## The propositions shown to customers...

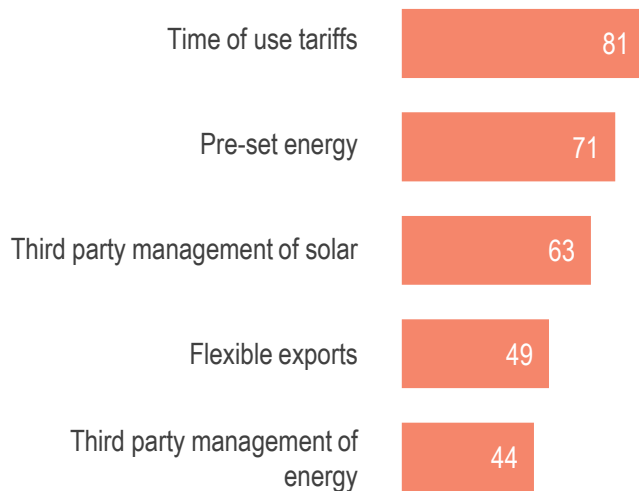
<b>PRE-SET ENERGY</b>	A reduction in electricity bills if the household can limit their energy usage of specific appliances at certain times. For example, electric vehicle charging only at night; or run pool pump during off-peak hours. The household would opt in each individual appliance and if they are able to meet the requirements of the offer, they receive a reduction from their bill.
<b>TIME OF USE TARIFFS</b>	Using electricity outside peak time (before 3pm and after 9pm) would be significantly cheaper compared to using electricity during peak time (3pm to 9pm). This means it is cheaper for households to shift energy consumption to outside peak time if possible.
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<b>THIRD PARTY MANAGEMENT OF ENERGY</b>	This is a program where households allow a third party remotely and intelligently manage your electricity usage that can optimise / adjust when appliances use electricity. The main devices that can be connected are your heating and cooling system, hot water system, lighting and appliances. Households allow utility providers to optimise their usage while enabling the providers to manage peak demand on the grid. For instance, bedrooms can be programmed to be heated/cooled at night and early in the morning and lighting to be in operations only when needed. In return households would benefit through reduced costs or financial incentives for participating in the program.
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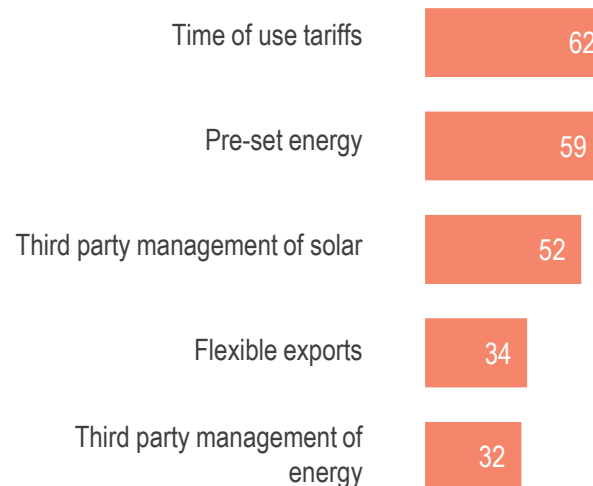
While most propositions are easy to understand, time of use tariffs made the most sense, with third party management of energy being the least easy to interpret.

Time of use tariffs, pre-set energy, and third party management are propositions that over half may consider in the future.

#### EASY TO UNDERSTAND (% NET agree)



#### WOULD CONSIDER ADOPTING IN THE FUTURE (% NET agree)

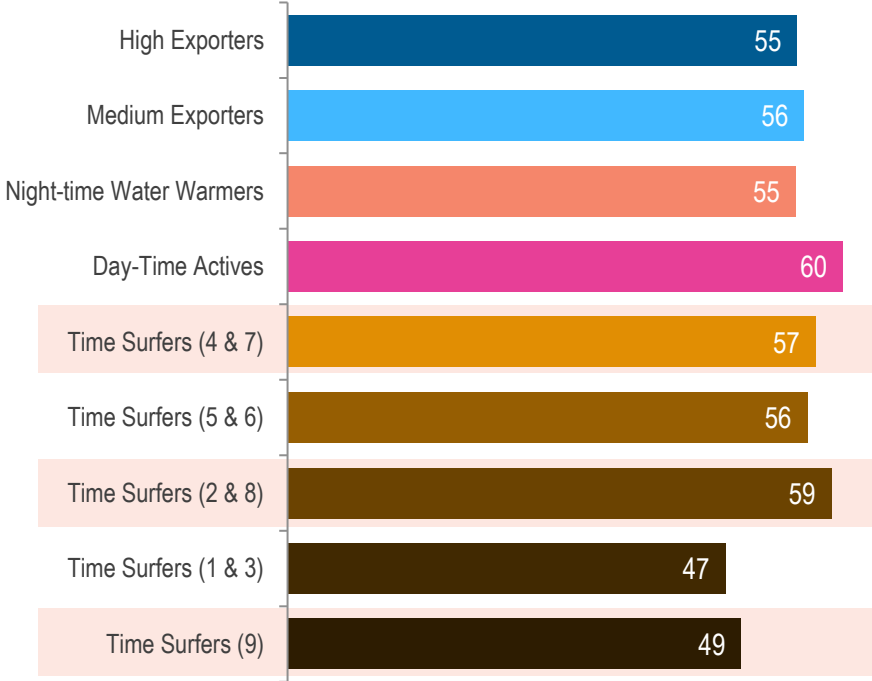


What are the views on  
Time of Use Tariffs?



When it comes to Time of Use Tariffs, around half of Time Surfers felt they would implement usage now.

**Interest in Time of Use Tariffs – NOW**



SOURCE: AusNet Bringing Segments to Life Quantitative Survey; A8.

Time of use tariffs mostly garner a positive reaction – households feel the approach is beneficial to reducing the usage during peak times.

However, when thinking about it more – in some cases there is a sense that it might unfairly impact particular households: those who are disadvantaged who might not have the flexibility to be at home to do things outside of peak times, and families especially who's usage is more structured and needing to be that way.



### Motivators for Time of Use Tariffs

#### Can help to save money

- Can allow households to intentionally shift usage and save money, compared to a flat rate system
- Gives households a better understanding of energy usage and better consciousness of their usage in general – both financial and environmental benefits

#### Means that the infrastructure upgrading costs might be lower

- If energy-use behaviors can be changed, there is less need for grid upgrades to accommodate what would otherwise have been greater peak loads
- This means less cost to the consumer



### Barriers for Time of Use Tariffs

#### Unequal impact

- Those who are less able to adapt to different times of day usage would be impacted the most
- Those who are more disadvantaged are less likely to be able to shift their usage

#### Confusing / convoluted


- Too many different plans with too many different options

#### More effective initiatives to make this happen are available

- Intelligent timers on things such as washing machines and dishwashers / have to be made easier


#### Scepticism / distrust of the approach

- Wondering whether it will work – is it a money grab?
- Will it only work on particular households?



*"Yeah, look, I tend to agree, I think that, you know, if you want to try and limit people's usage, like it's worth anything, you know, if you want to pay the premium"*

– Time Surfer 4+7



*"Immediately, that is going to hit the poor people hardest. They are less able to adapt to time of day, their jobs are more locked in, they're less able to make lifestyle choices that shift them to the cheaper times. Therefore you are immediately going to punish poor people more socially, that is criminal to me."*

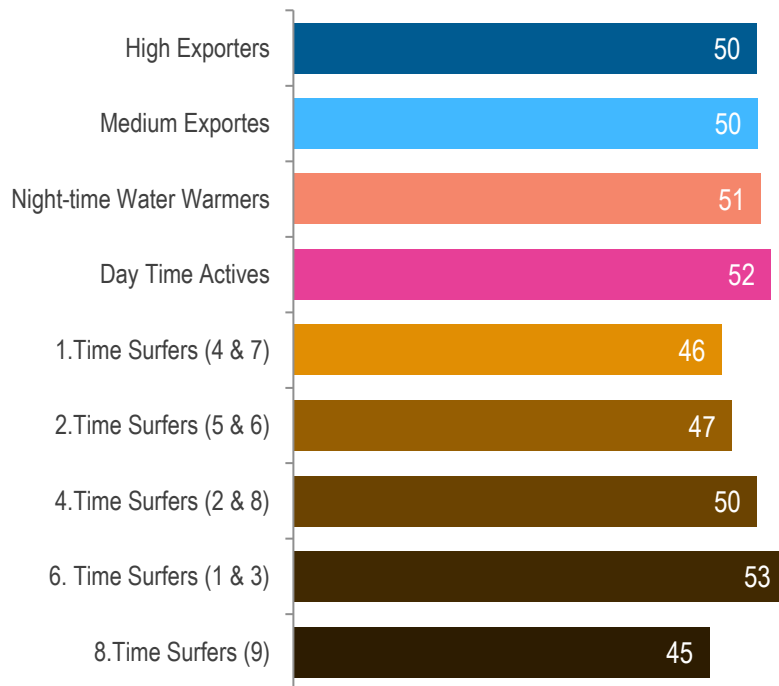
– Time Surfer 4+7

How about Victorians'  
view on the pre-set energy  
concept?



Consistent across segments for the most part, around half would be interested in implementing pre-set energy.

### Interest in Pre-set Energy - NOW



When it comes to pre-set energy, the concept is seen positively, but there are some challenges that arise if they were to convert.

In practice, it might be difficult for some appliances to actually have pre-set energy applied to usage – the positives being that if not in the home, energy can be used to best advantage. The positives for Exporters mainly come down to taking better advantage of solar generation, and for Time Surfers, getting cheaper off-peak energy. Challenges come down to the amount of effort that may be needed to try and schedule things with a busy and chaotic life to be able to take advantage of the approach.

### What would pre-set energy mean to households?

#### Some devices that they'd be happy to have automated

- Heating / cooling
- Lights
- Dishwasher
- Washing machine
- Dryer
- EV

#### Positives about pre-set energy

- For those with solar who wish to use things while generating, it is far more efficient to be able to schedule things – ability to take further advantage of solar feed in tariffs being higher
- Similarly, for those on Time of Use Tariffs who are out of the house, can allow usage outside of peak – saving money when being able to be at home to do this manually isn't an option

#### Challenges around pre-set energy

- Pre-set energy potentially adds complication to their lives
- Lives are busy and not always consistent – setting and forgetting might not always work given that people don't always get home at the same time etc
- Sometimes it's easier to just use things as and when they're needed

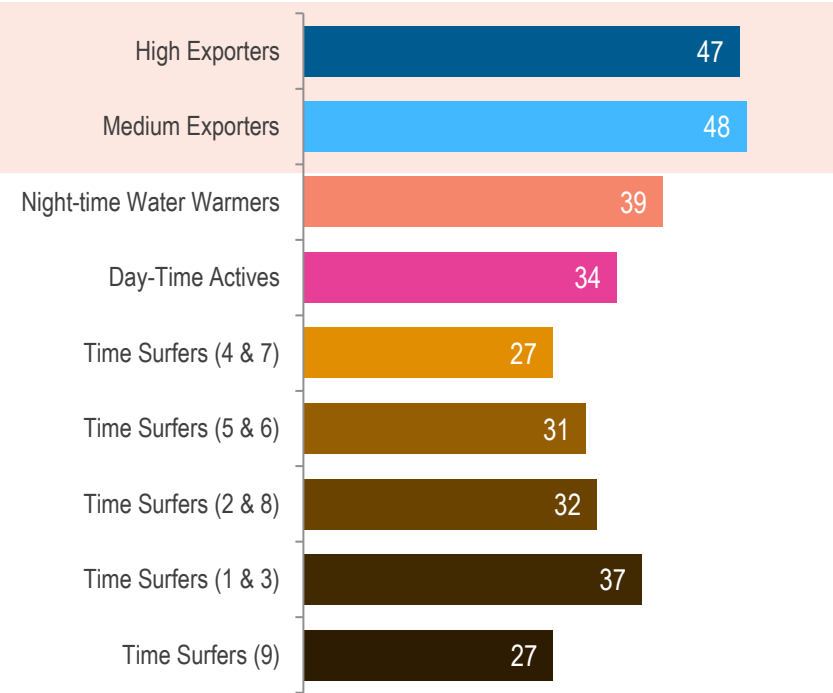
What is the response to  
third party management  
of solar?





As we know, Exporters have the highest likelihood to be on board with the idea of Third Party Management of Solar.

**Interest in Third Party Management of Solar - NOW**



SOURCE: AusNet Bringing Segments to Life Quantitative Survey; A8.

# Third Party Management of Solar is seen in a very positive light – Exporters are on board!



## Positives about Third Party Management

- Helps to overcome the barrier of average households struggling to justify the cost of a battery.
- Also makes it a partnership between the network and the community.
- Helps to 'even out' the usage over a day – meaning that there aren't as many big loads in usage and that generated power can be used later in the day
- Allows for aggregation in all the assets that consumers have, with them being as much AusNet's, as they are the communities.



*"You're getting to the point where you can't just treat households as consumers at that point, you got to recognise that they are becoming partners in the energy system." "Yes, I do consume. But I also generate."*

– Medium Exporter

There's a sense that this will mitigate the issues at peak load, not least the potential issues arising from influx of solar, but also the issues the grid may have at peak times as populations increase.

While most are positive, there are some concerns around cost and complication of the system which could impact households.



## Negatives about Third Party Management

- Cost – while it's a great idea, everything costs money and this might not be a priority to pay for
- Concerns over the complication of the network with this level of management – would it make it less reliable / is there a potential it could break more easily



*"I'd love to be able to control all this - but the biggest barrier is the cost."*

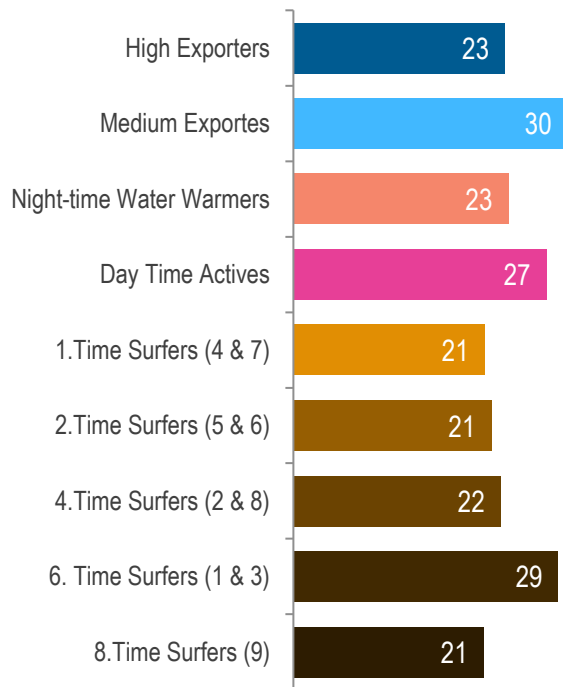
- High Exporter

What are the views on  
Flexible Exports?



There is a lower level of interest when it comes to flexible exports across all segments.

### Interest in Flexible Exports - NOW



Overall, while some had heard of the concept, understanding is relatively low among Exporters...

Many benefits are identified in terms of the concept and its aims, but there is work to be done in overcoming some knowledge barriers in order for the masses to get fully on board with it!




### Positives about Flexible Exports

- Would rather see energy go back to the grid as opposed to being wasted – this could be a good thing
- Makes the whole energy system more connected and smarter – a more dynamic flow
- Will help to flatten the curve and peak usage time strains – reduces the challenges at peak time




### Watch outs for Flexible Exports

- Querying about whether the priority would always be to fill up batteries first, *before exporting*
- Cost of investments for this – is it realistic? How much would it cost?
- Overreliance on computer and algorithms, will something go wrong?

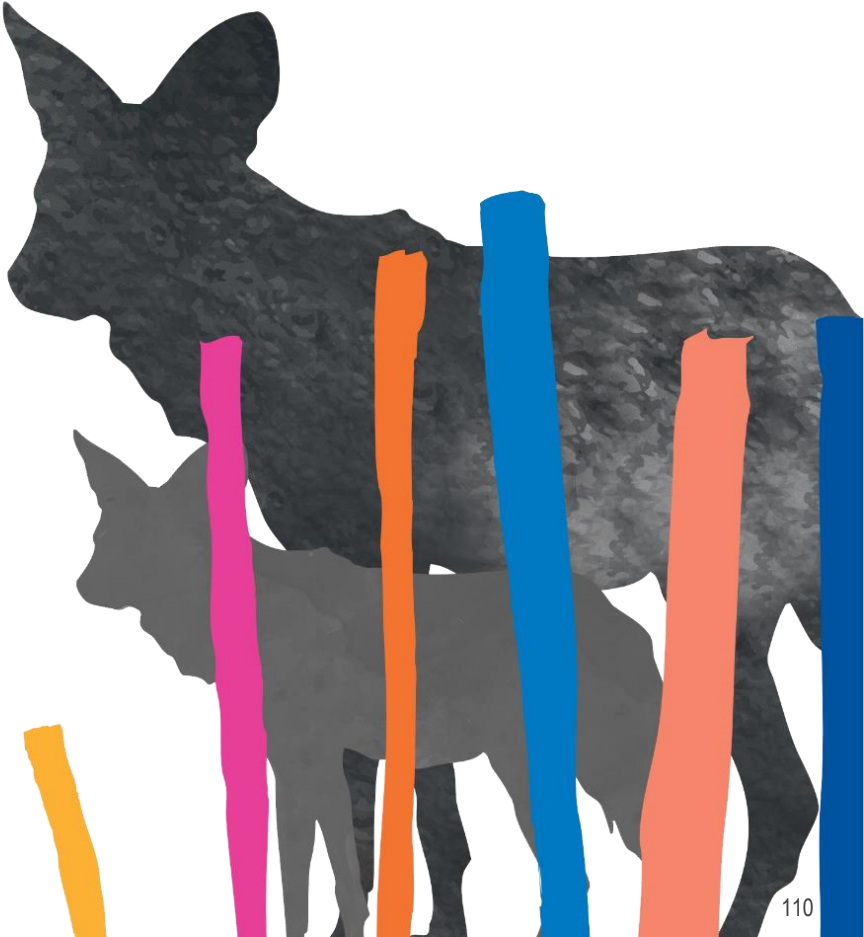


"I'd rather see it go back into the grid, than get wasted."  
– High Exporter



"Would you say that the first and foremost, you'd always want to be filling up your battery first? If it's if it's not full. Yeah. And then you'd be happy at that point, once it's hit a point where it's not going to get any more full. To start. Only then would you be happy to have this exporting?"  
– High Exporter

# Appendix



# About AusNet total customers



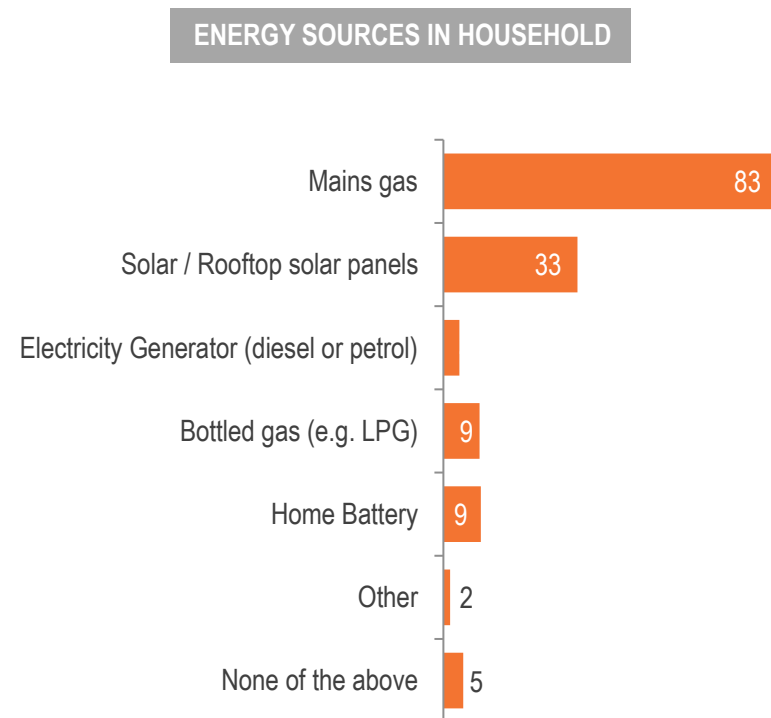
# Energy sources & usage





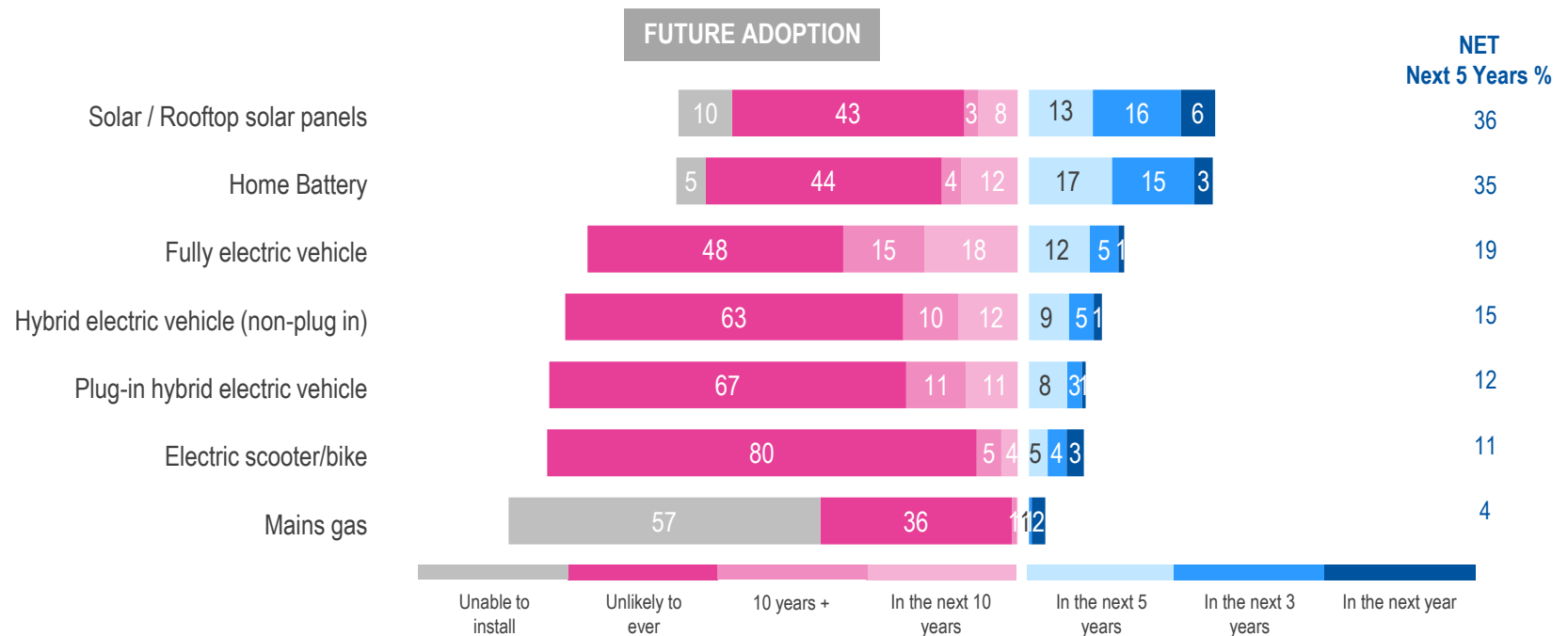
Besides electricity off the grid, a large majority have mains gas (82%), with a third having some form of solar.

Under one in ten have generators, bottled gas, or home batteries.



When it comes to future adoption of new technology, potential take up is relatively low overall.

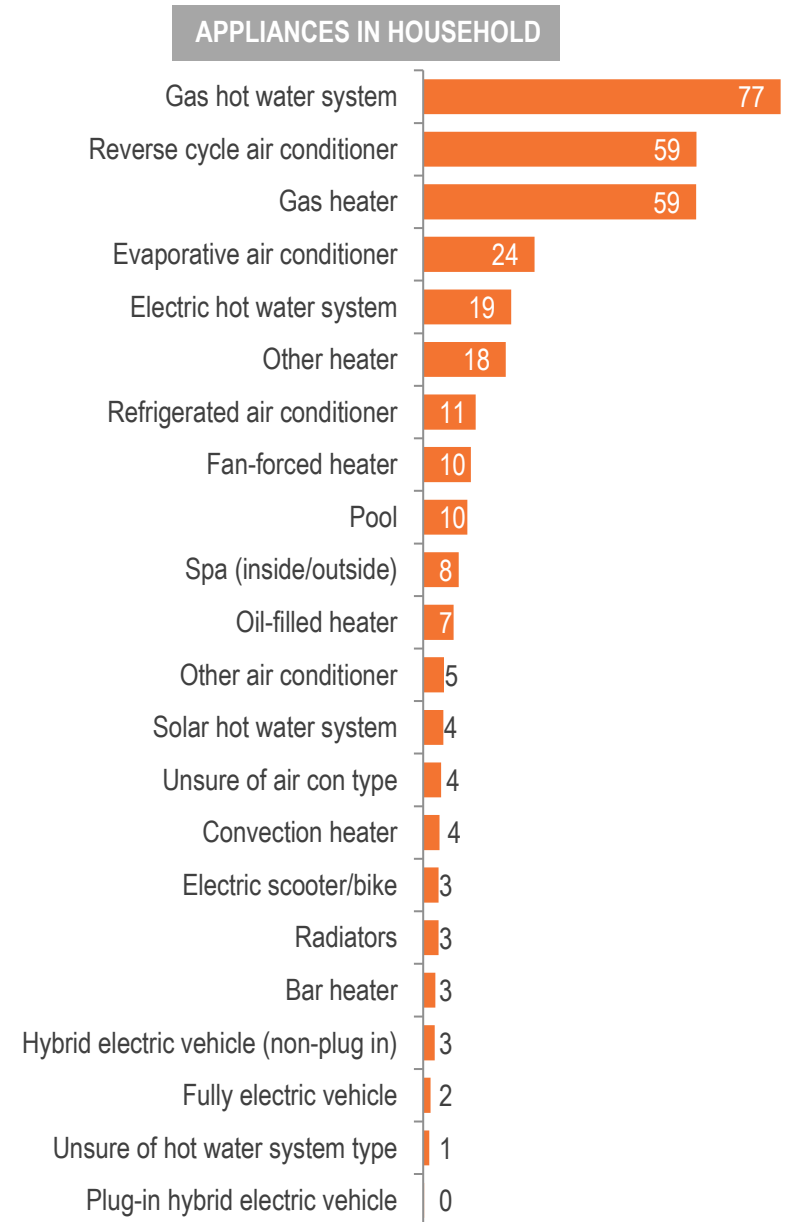
The likelihood of solar and home battery installation in the next 5 years for those who currently do not have it installed, sits at just over a third.



E2. When are you likely to install the following items at this property?

E5. When is someone in your household likely to purchase the following? Base: Those who have live in their property more than 6 months (n=3,172)

Gas hot water system, reverse cycle aircon, and gas are the most common household appliances among AusNet customers.



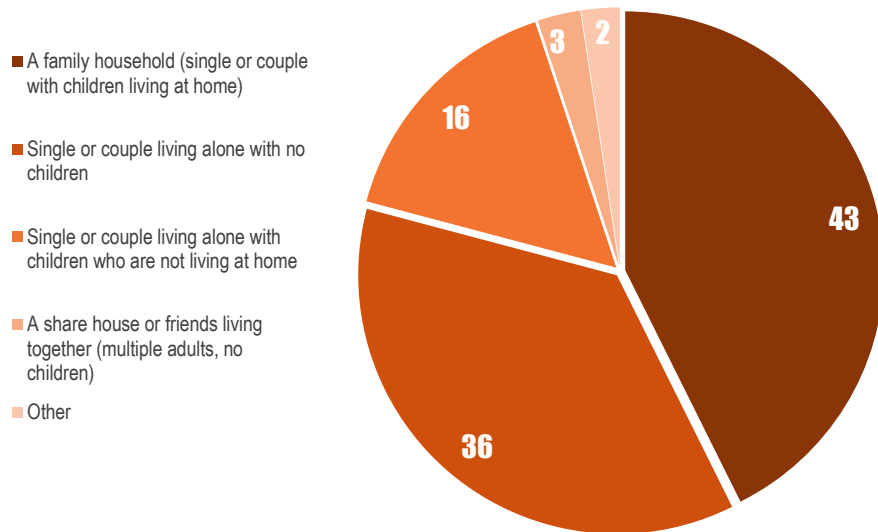
# About the household



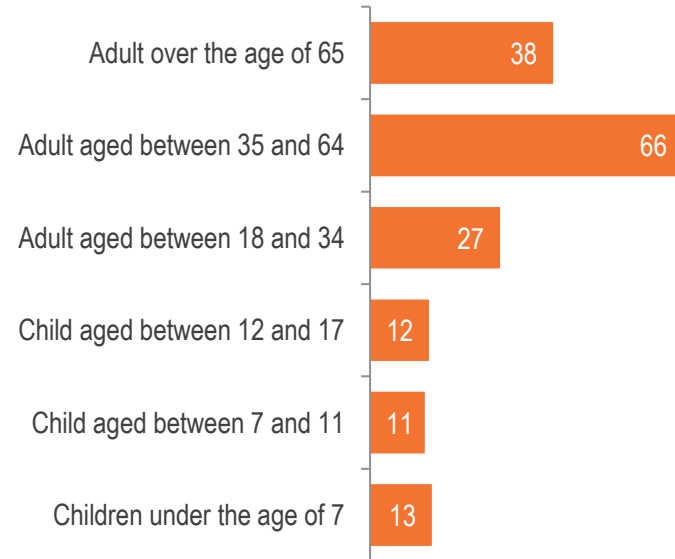
Over two in five properties are family households, over a third are SINKS/DINKs, and just 15% are Empty Nesters.

Over two thirds of households have residents aged between 35 and 64, with just over a third within the 65 + bracket.

**HOUSEHOLD COMPOSITION**



**HOUSEHOLD AGES**



H0. Which of these best describes your household?

H1. Of the list below, including yourself, please indicate how many of each live in your household... Base: Those who have lived in their property more than 6 months (n=3,172)

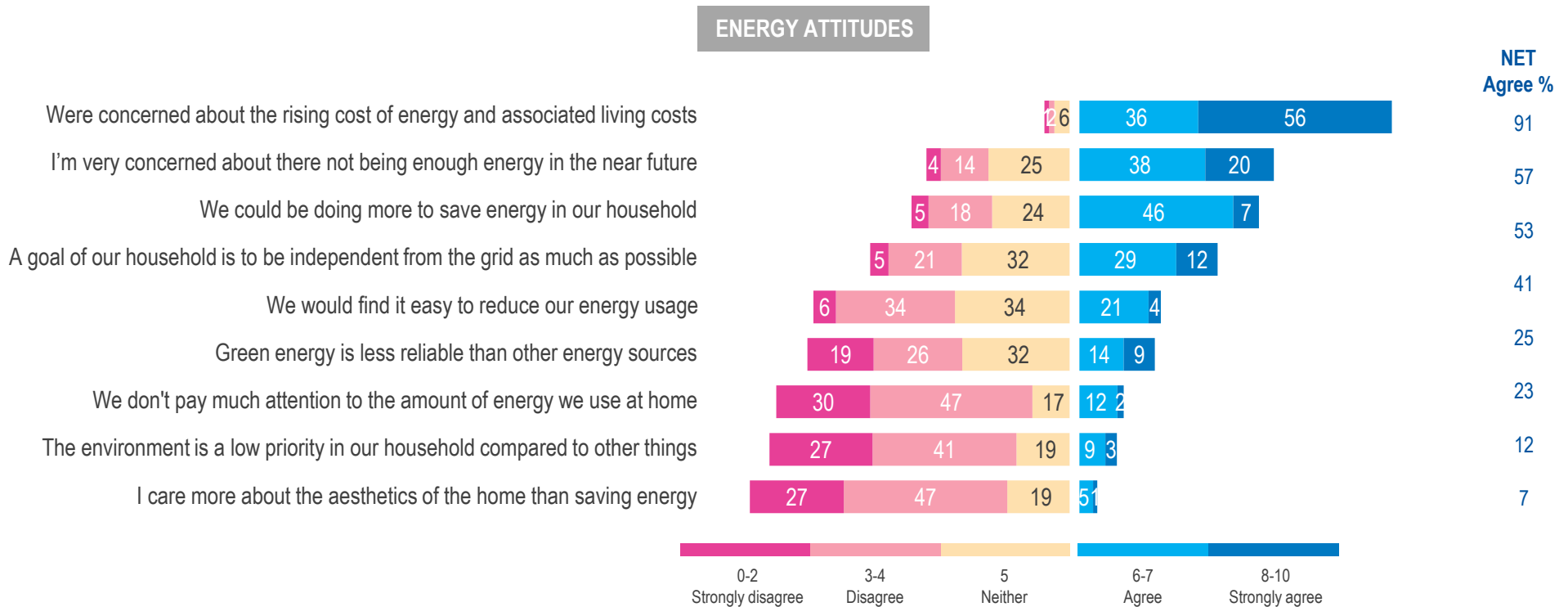
# Energy attitudes & knowledge



# Rising cost of energy and living are a concerns felt by nearly all!

With just over half being worried about not having enough energy in the future, and feeling that they could be doing more to conserve.

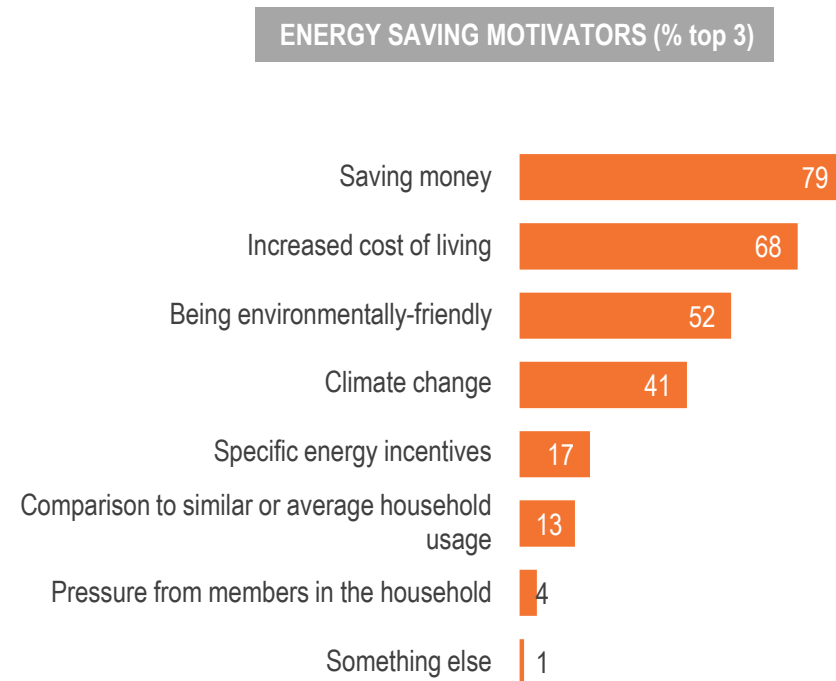
*While these key attitudes are to be expected in the current environment – they represent major motivators to conserving energy.*



A1. How strongly do you agree or disagree with each of these statements? Base: Those who have lived in their property more than 6 months (n=3,172)

Saving money is the strongest motivator when it comes to being more energy efficient, followed by increased cost of living.

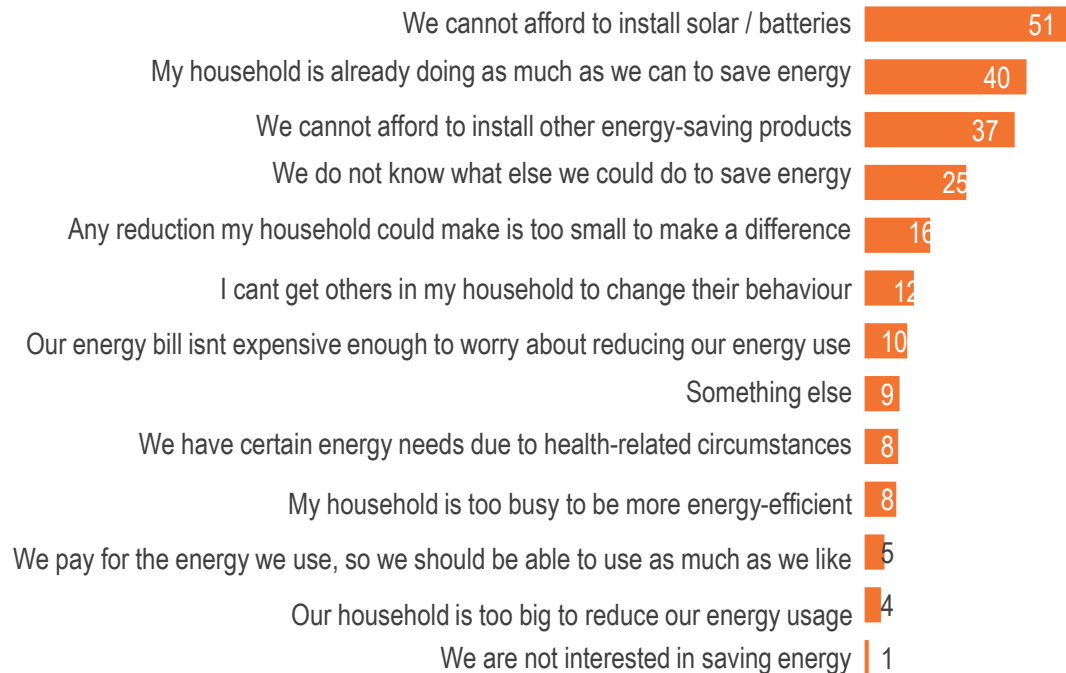
It's clear that these are major issues in the minds of customers.



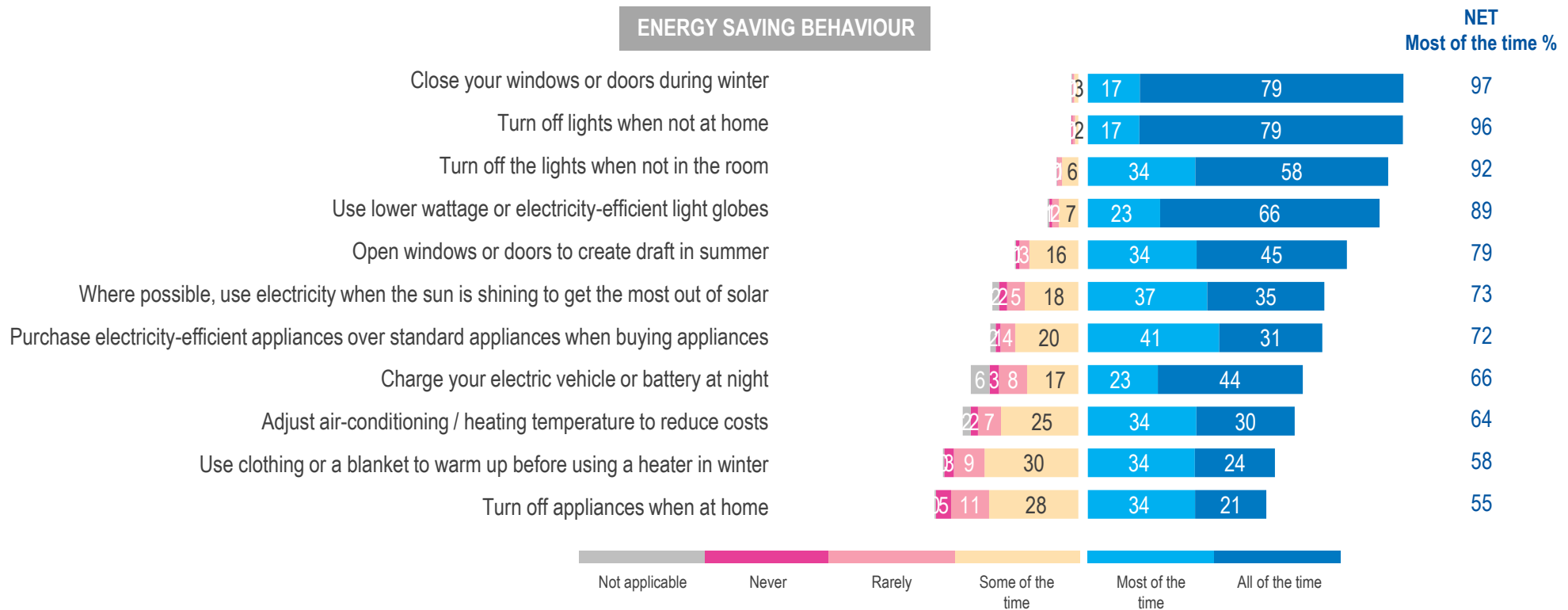


Not being able to afford to install solar and batteries is the key barrier – again with cost a key factor.

#### ENERGY SAVING BARRIERS (% top 3)

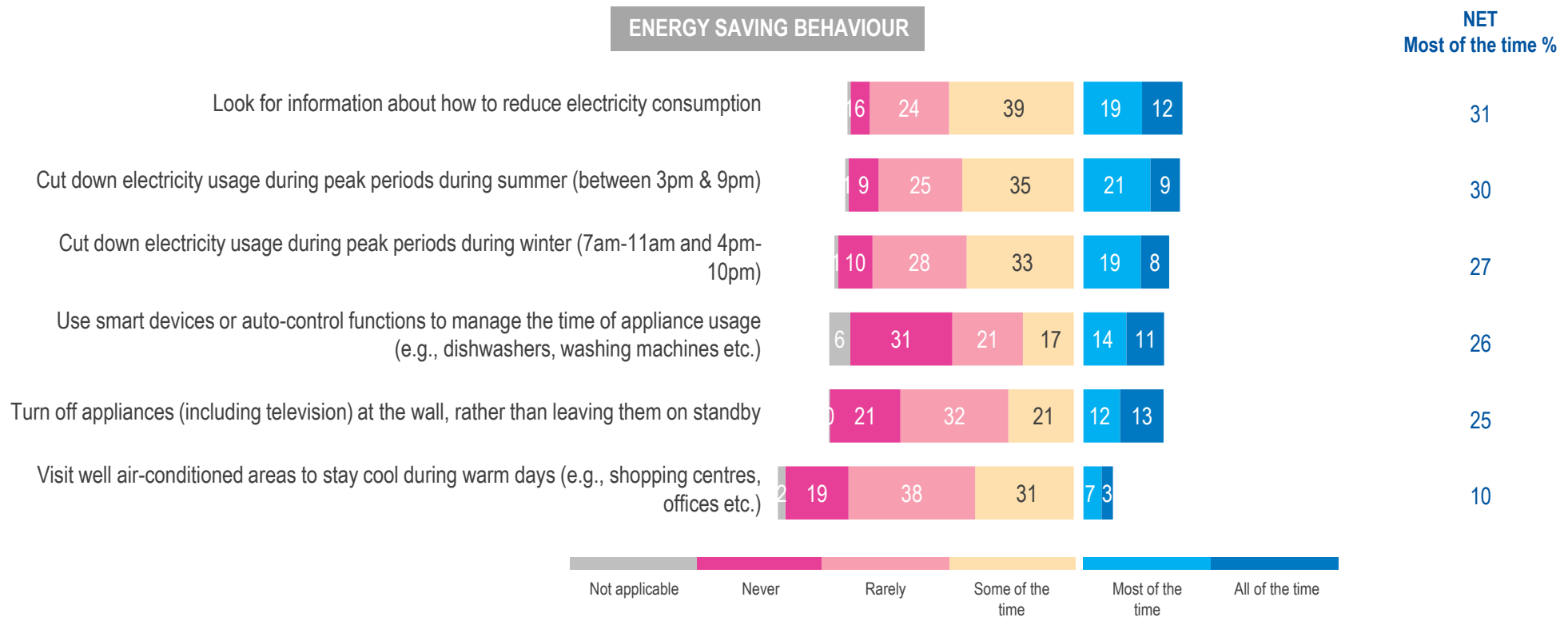


When it comes to simple daily habits to help conserve energy such as closing windows, turning off lights, the vast majority undertake these actions.



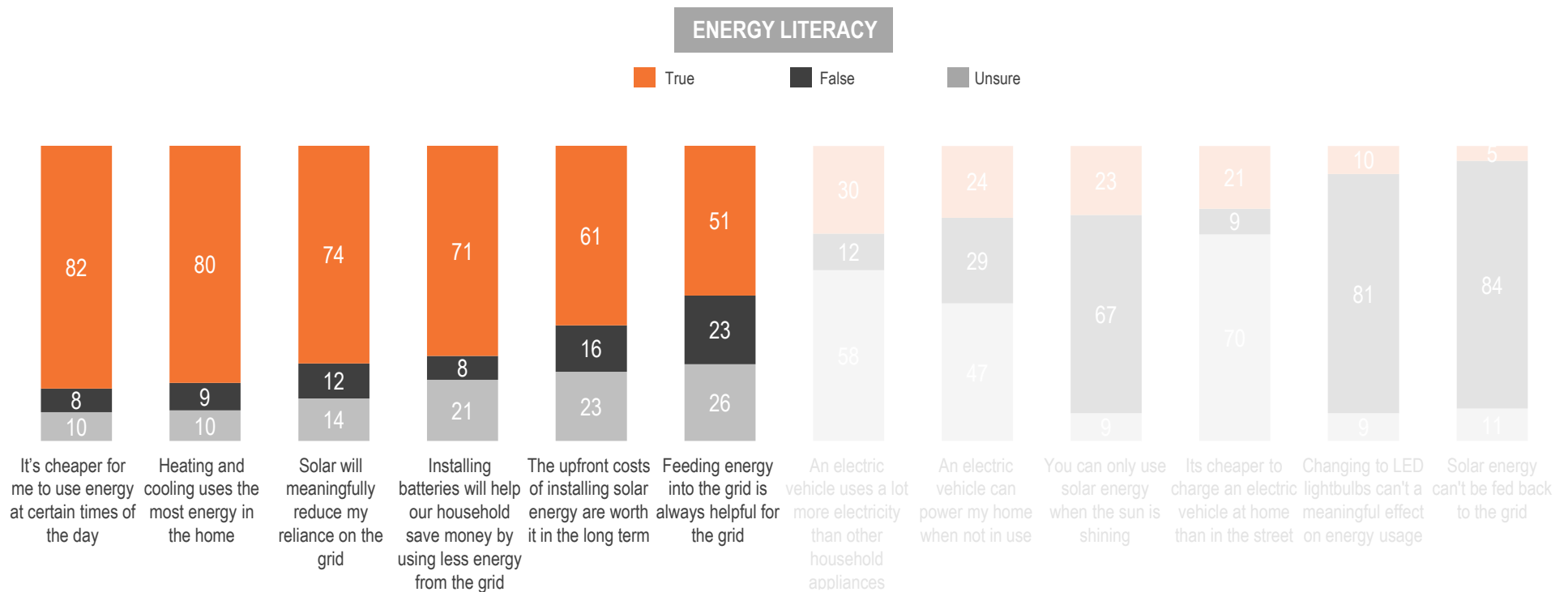
However, less than half take it a step further in terms of searching for information / tips, and cutting down usage at peak times.

Customers overall don't appear to be motivated to take the time to put in additional effort to be environmentally conscious...



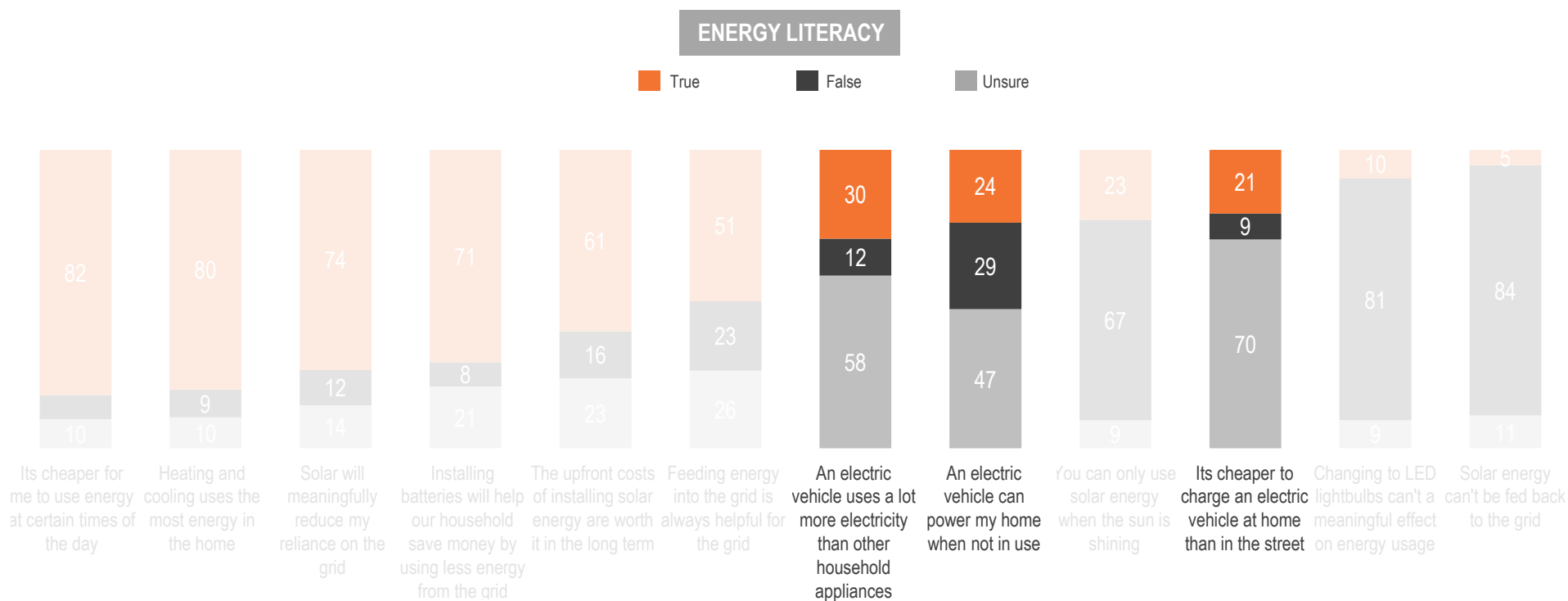
There are some areas that customers strongly believe to be true when it comes to energy usage.

Energy being cheaper at certain times of the day, heating and cooling using the most energy, solar and batteries meaningfully reducing reliance on the grid, are areas that customers think to be true.



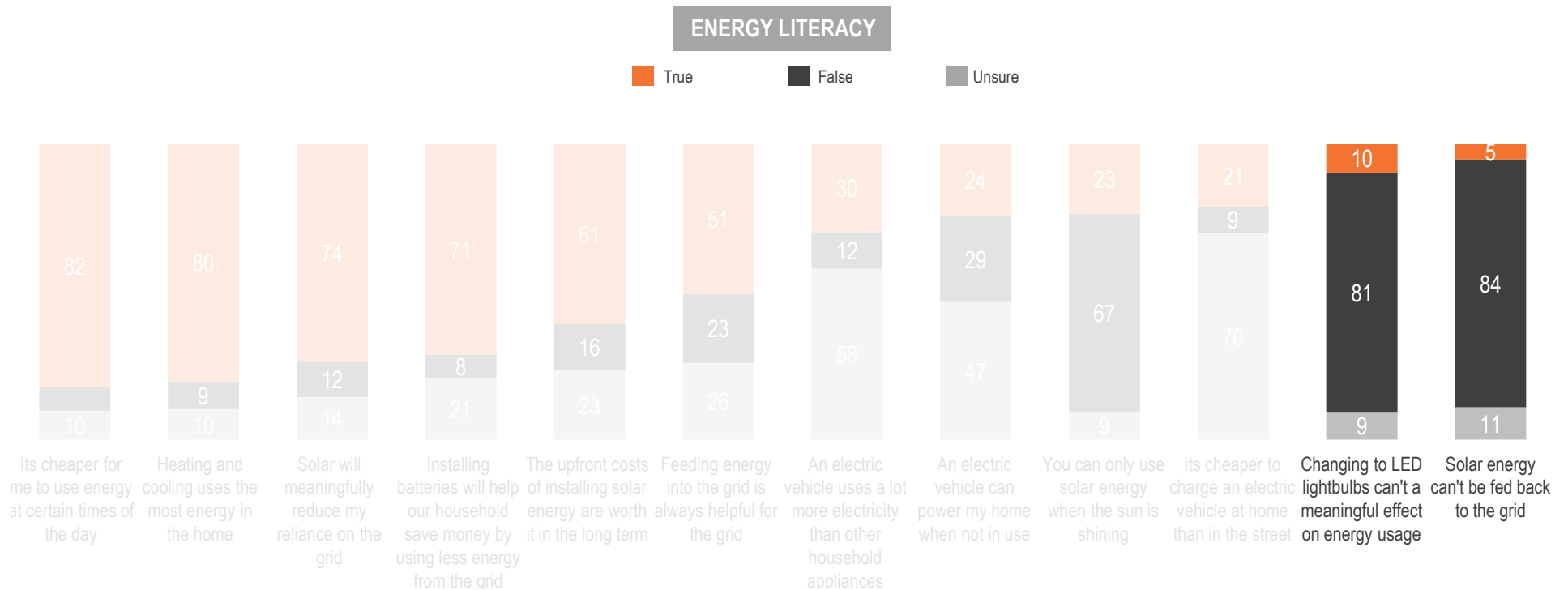
There is a high number of customers who simply are unsure about specifics on EVs...

Around half or more are unsure if EVs can power their home, if they use a lot more electricity compared to other appliances, or if cheaper to charge them on the street or at home.



...and a large majority feel that solar can't be fed back into the grid...

And that changing to LED lightbulbs can't have a meaningful effect on energy usage.



# Response to energy propositions



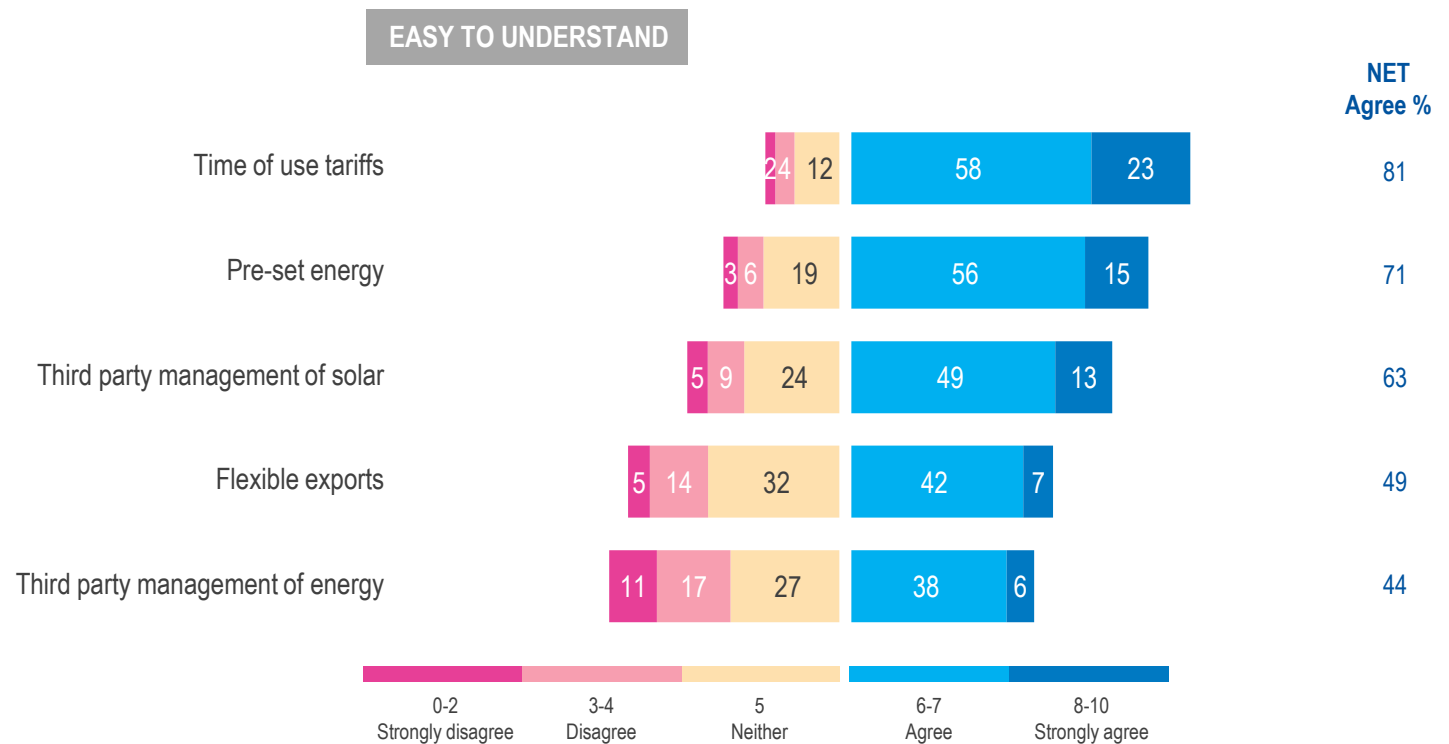
# The propositions shown to customers...

<b>PRE-SET ENERGY</b>	A reduction in electricity bills if the household can limit their energy usage of specific appliances at certain times. For example, electric vehicle charging only at night; or run pool pump during off-peak hours. The household would opt in each individual appliance and if they are able to meet the requirements of the offer, they receive a reduction from their bill.
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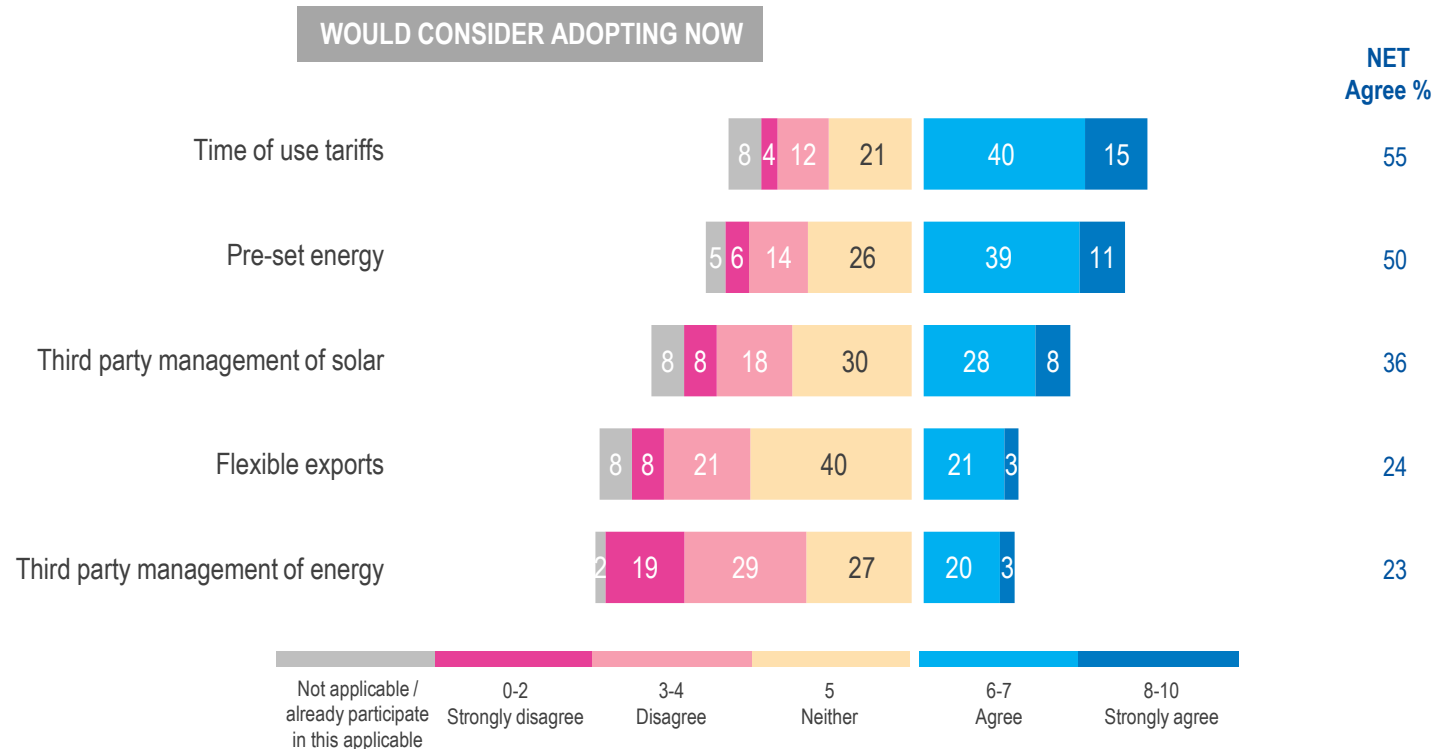
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..time of use tariffs made the most sense, with third party management of energy being the least easy to interpret.

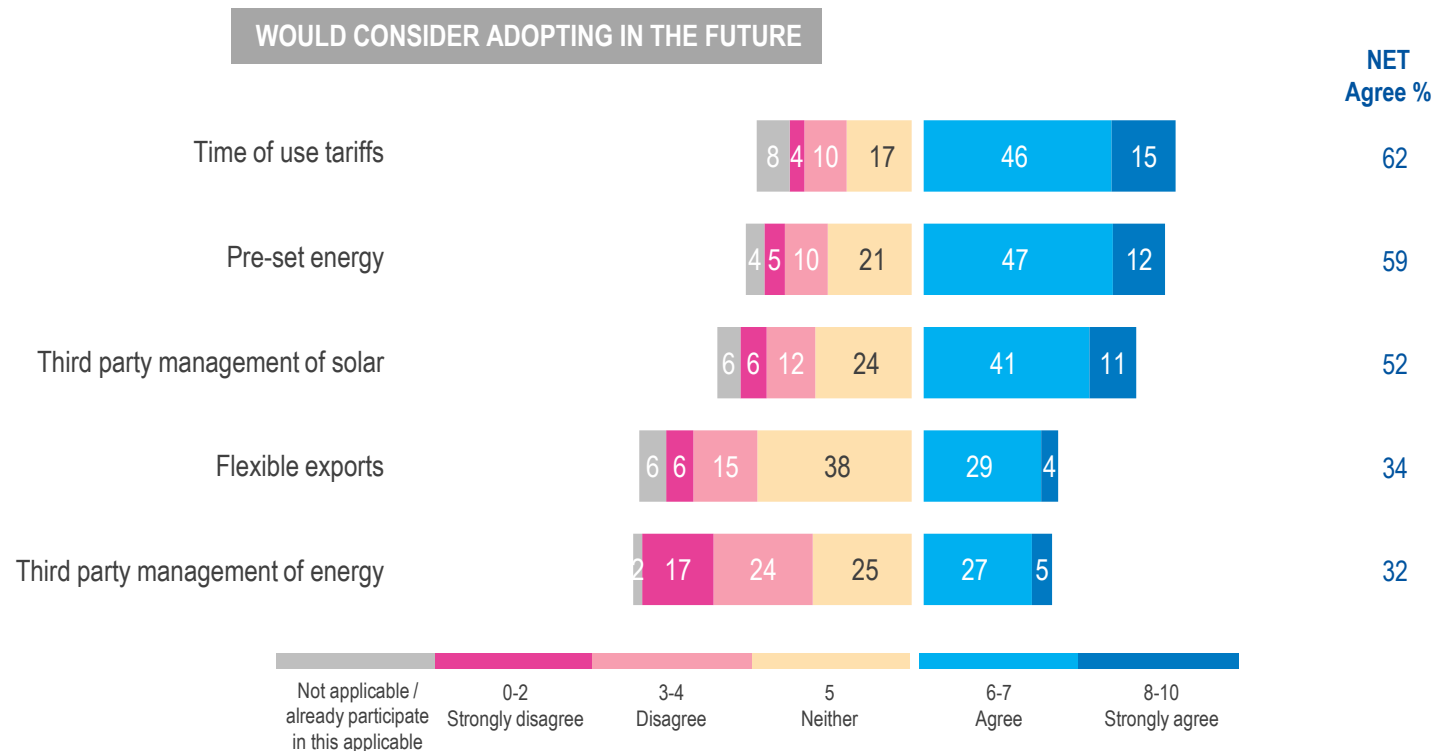


Only half or just over feel that they would adopt time of use tariffs or pre-set energy now.

Well under half feel they would adopt the other propositions now.

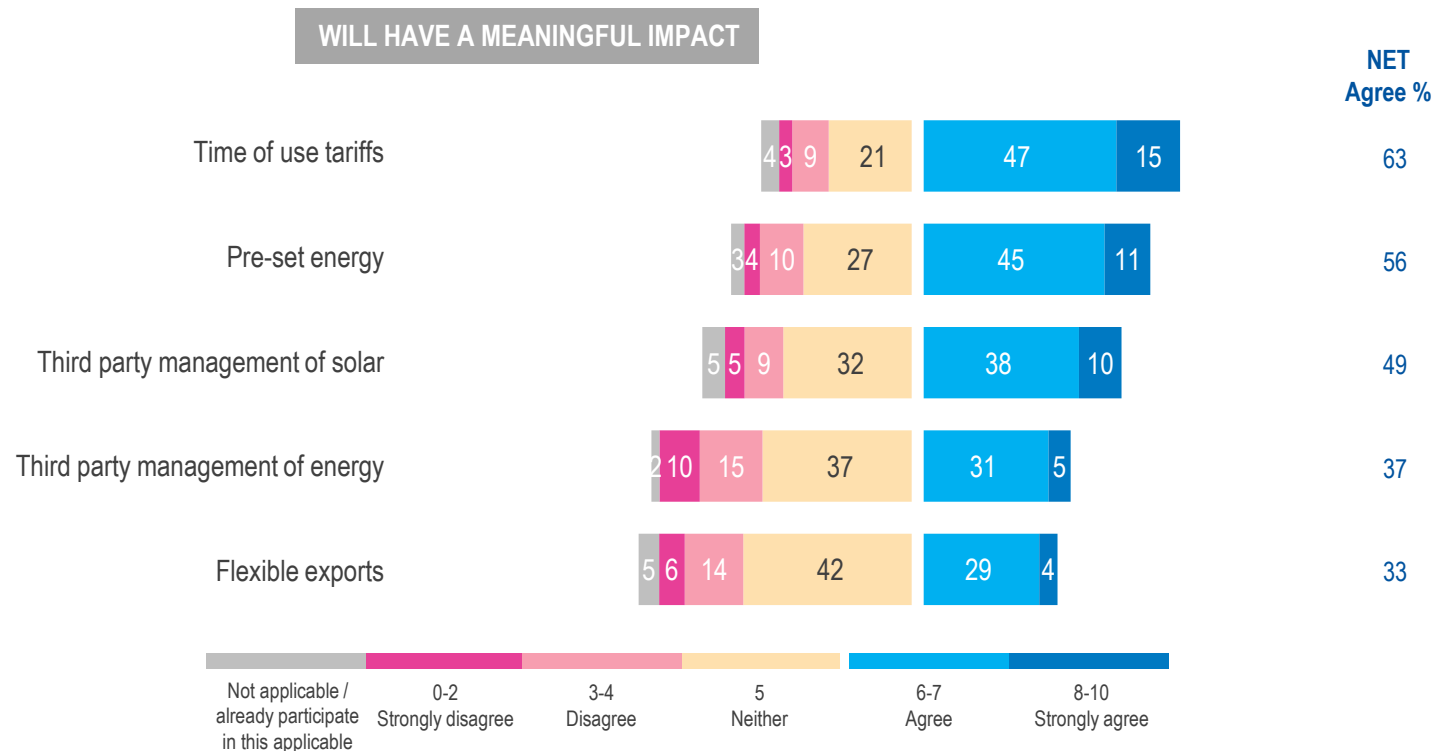


Time of use tariffs, pre-set energy, and third party management are propositions that over half may consider in the future.



A8. To what extent do you agree or disagree for each of the following, in relation to this idea? Base: Those who have lived in their property more than 6 months (n=3,172)

And only time of use tariffs and pre-set energy are seen to have a meaningful impact on consumption and costs for over half.



# Hunt Smarter.

