



Householders'  
Changing Views &  
Responses to Climate  
Change

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50+ academic researchers, from Research Professors to PhD candidates. Based in Australia and London.

Discoveries disseminated in reports and in-house briefings.

Research agenda overseen by Advisory Boards in New York, London, and Adelaide.

See - [www.MarketingScience.info](http://www.MarketingScience.info)



## Importance of knowledge

- Prior knowledge is an important factor in message comprehension (Murphy & Mason, 1996)
- Correct understanding of the causes of global warming is a key determinant of behavioural intentions to address it (Bord et al, 2000, Peattie 1995)
- Well rounded knowledge about effects, root causes, strategies for change, & alternatives to an environmental problem is most conducive to behavioural change (Jensen, 2002)
- The belief of being environmentally informed is not always supported by objective knowledge (Ellen, 1994)



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## Research Questions

What is the objective level of consumer knowledge

- Climate change
- Carbon footprints
- Green' energy
- Carbon emission behaviours

What is the relationship between self-assessed and objective knowledge



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## Research Objectives

What water & energy saving changes have the Australian public already made to their homes?

Which changes are they most likely to make in the future?

Implications for interventions aimed at encouraging and changing behaviour



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## Methodology

### *Consumer Knowledge*

810 telephone Interviews with Australian adults

Open-ended responses to retain data richness

### *Behaviours in home*

812 online surveys with homeowners & renters (>1 year)

11 telephone interviews to validate

Key  
Point

**The online results were validated**



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## Self-assessment of knowledge

How much do you think you know about global warming?

*How much do you think you know about global warming?*

	A lot	A reasonable amount	A little	Nothing
%	9	51	37	3

In most cases a positive relationship between self-assessed level of knowledge and performance on objective tests ... but not always



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## Emissions Behaviour

Nearly one-fifth of respondents either said they did not do anything personally that produces greenhouse gases (13%) or that they did not know if they did (6%)

Fewer than half of respondents who felt they knew 'nothing' about global warming acknowledged engaging in greenhouse gas emitting behaviours



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## Knowledge of Climate Change

Are the following statements true, false or you are not sure?

	Correct answer %	Incorrect answer %	Respondent unsure %
Most water is used by domestic households	59	30	11
Hole in ozone layer is a major cause of global warming	34	46	20
Recycling paper, cardboard and glass saves on materials but doesn't help with saving water, energy or fuel	30	47	23
Leaving TV on for 24 hours straight causes more emissions than a week of overfilling the kettle each time you make tea/coffee	17	40	43



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## Carbon Footprint

Few are aware of the size (or even a realistic range) of the average person's carbon footprint

What is the size of the average Australian's / your carbon footprint?

	'Don't Know' % of sample	Correct (5-13 tonnes) % of estimates	Overestimated % of estimates	Underestimated % of estimates
Average Australian's Carbon Footprint	93	22	59	19



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## Carbon Footprint

	'Don't Know' % of sample
Personal Carbon Footprint	98

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## Green Energy

Six in ten respondents could correctly identify from a pair of alternatives the energy source that produces the least greenhouse gases

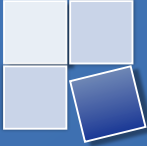
*Which of the following produces the most greenhouse gases?*

	Correct answer %	Incorrect answer %	Respondent unsure %
Nuclear power vs electricity*	64	15	21
Petrol cars vs diesel cars	58	22	20
Gas vs electricity	68	15	17


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# Emissions Reduction at Home



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## Changes already made

	%		%
Switch off lights	86	Compost food & garden waste	39
Clothes line or drying rack	76	Replace washing machine	36
Wash in cold water	73	Shower timer	34
Replace light bulbs with CFLs	67	Water saving toilet	34
Install low flow shower head	60	Install toilet flush saver	32
Appliances at switch	56	Install heavy drapes/pelmets	28

**Key Point** Common changes involve minimal effort & cost; or may be done inconsistently

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## Green Activity Segments

The average respondent has undertaken 7.8 of the 20 listed activities

Larger numbers of changes made is associated with:

- Older respondents
- Those who have been living at their property longer
- Home ownership
- Greater expressed interest in the environment
- Activity in seeking water & energy bill savings




## Future Likely Behaviour (unprompted)

Water-Saving Changes	%	Energy-Saving Changes	%
Install a rainwater tank	59	Install/Extend solar panels	38
Recycle greywater	31	Replace light bulbs with CFLs	32
Install low flow showerhead	17	Install solar hot water system	16
Changes to garden/gardening	12	Switch off lights/appliances	13
Install efficient taps	10	Ceiling/wall/floor insulation	11



**Most respondents suggested only one water saving change and one energy saving change**




## Future Likely Behaviour (prompted)

	%
Install a rainwater tank	43
Install a greywater recycling system	41
Install solar panels	38
Change electric hot water system to gas or solar powered	31
Turn off appliances at switch	28
Replace fridge with a more energy efficient system	26

**Key Point** No real preference emerged for water saving changes over energy saving changes or vice versa

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## Future Likely Behaviour

The range of salient water & energy saving home improvements appears limited

The public will need assistance in making decisions to compensate for lack of knowledge

It was not the least expensive or simplest improvements that were considered most likely

This in part reflects the changes already made...

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## Education Increases likelihoods

65% of the population are estimated to implement some type of water and/or energy saving change in their home in the next 12 months

Telephone sample substantially lower at 46%

likely due to lack of priming

Additional finding rather than validation

Key  
Point

**Mental availability is the key – people respond positively to being ‘educated’**



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## Conclusions

The Australian public perceives itself to be well informed about global warming issues ...but this belief is not supported by objective knowledge tests

There is scope for education. Mainstream concepts may be recognised, but are not necessarily understood.



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# Conclusions

Government, media and educators must work with a relatively modest level of assumed knowledge in their communication and educational efforts

Simple and easy to remember messages and 'calls to action' are required



# Questions?

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