



Energy+Illawarra: An interdisciplinary energy efficiency social marketing programme

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Murdoch University Sustainability Group,
Perth, Wednesday 22nd June 2016.



Structure



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1. About The Energy+Illawarra project

2. Theory

3. Research

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ENERGY +
ILLAWARRA



A COMMUNITY ENERGY EFFICIENCY PROGRAM

\$2.3m nationally competitive grant funded by Australian Dept. of Industry 2013-2016 as part of the Low Income Energy Efficiency Program LIEEP.

Multiple project partners – Regional Development Agency, University of Wollongong and Macquarie University, Aged Care Providers, Community Organisations.

University CIs: Paul Cooper, **Ross Gordon**, Gordon Waitt: Multidisciplinary project involving social marketing, human geography, and engineering researchers.

Aim to develop, deliver and evaluate a comprehensive social marketing programme to facilitate energy efficiency and comfort in home of low income older residents of the Illawarra.

The Energy+Illawarra programme made judicious use of **theory** - combining perspectives from social practice theory (SPT), socio-ecological theory, and value theory.

Research was a key feature at all stages of the project:

Baseline survey segmentation analysis using value theory identified four key segments (Frugal Eco Warriors, Value Opportunists, Independents, and Ambivalents) based on their perceptions towards energy efficiency.

Formative focus group research, and home ethnographies and video ethnography was used to gain understanding of people's energy use practices drawing on SPT.

Theory and research informed the **practice** of designing & delivering Energy+Illawarra. A strategic social marketing mix was developed, drawing upon a broad range of techniques, tools and strategies, taking a socio-ecological approach, acknowledging insights about energy use practices, and seeking to create value in using energy efficiently .



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1. Theory



Theoretical framework :

Three-pronged theoretical framework

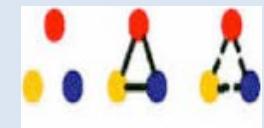
1. **Social ecological model** of social marketing: micro/meso/exo/macro.

Explicated in the evaluation survey items and programme activities:

-communications, materials, media & PR, advocacy, peer-2-peer/community development, training, policy change.



2. **Social practice theory**: *The site of the social in social marketing.* Exploring energy use practices placed in the body, mind, things, knowledge, language, structure, agents, and...spatially.



3. **Value theory**: theorising and measuring participant perceived economic, functional, emotional, social, ecological value of using energy efficiency. Measure changes over time. Exploring whether value theory can be used for segmentation; and if social marketing acts as a value creation process.



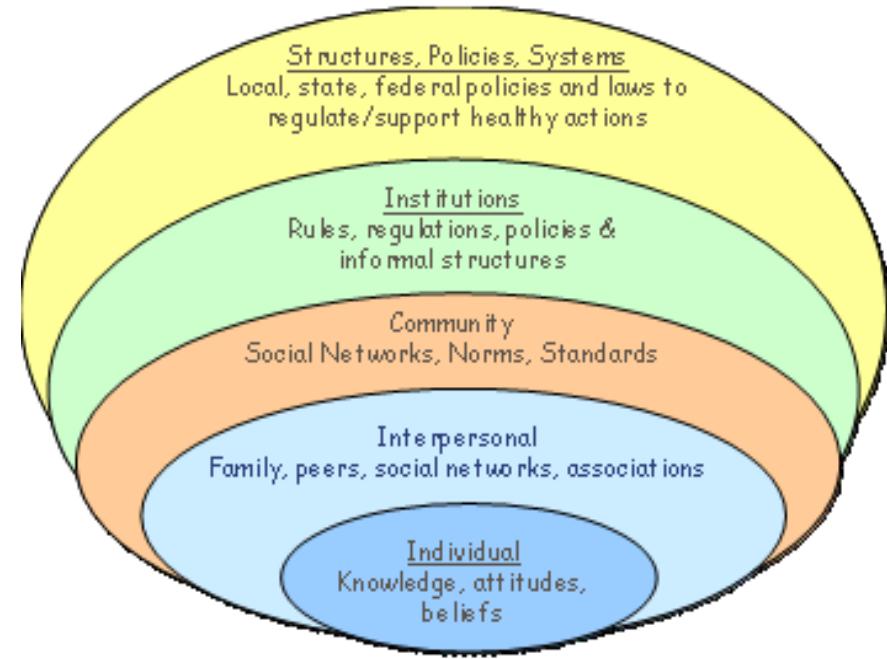
1. Theory

Socio Ecological Model



Energy+Illawarra utilises a social ecological model (Dahlberg et al. 2002) approach to social marketing, acknowledging that tackling complex social issues like energy efficiency requires insight, and action at the micro/meso/exo/macro level (Bronfenbrenner, 1977)

Accordingly the baseline and follow up surveys measure participant's knowledge, attitudes, and behaviours not only at the individual level, but concerning the community level (families, peers, workplaces, public services), and the macro/policy level (policy, government, social norms, the built environment).



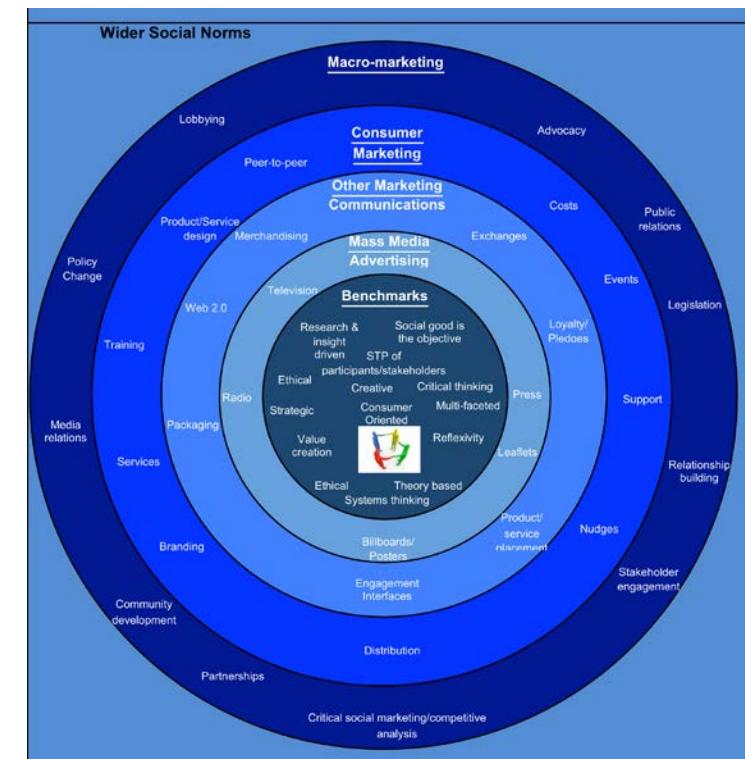
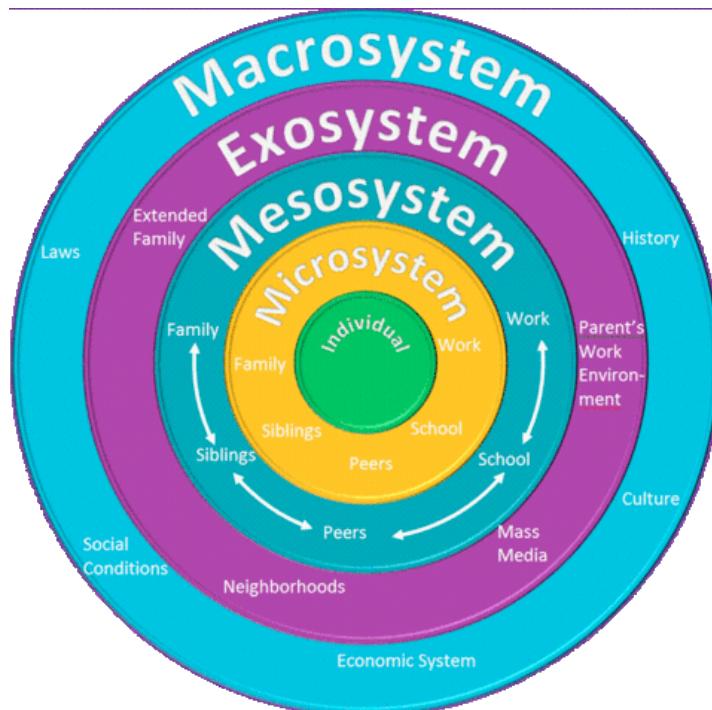
1. Theory

Socio Ecological Model



The Energy+Illawarra adopts a social ecological approach.

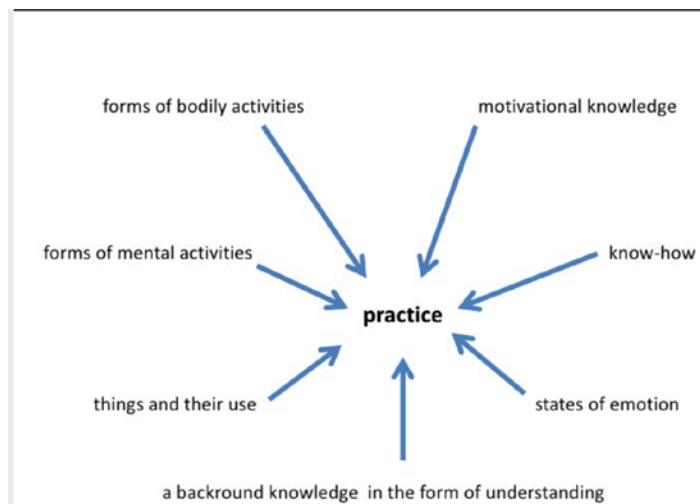
- seeking to influence the individual through activities including products, home instillations, promotion and communications
- the community through events, peer to peer conversation, and training
- the macro environment through media relations, advocacy, policy change, influencing social norms, and changes to the built environment.



1. Theory

Social Practice Theory

- We were interested in using social practice theory (SPT) to understand people's energy use practices.
- SPT refers to a broad paradigm of approaches to understanding social practices using a cultural theory lens (Schatzki, 2002; Reckwitz, 2002).
- Social practices refer to everyday or regular practices or habits, such as consumption of food (Warde, 2005), or using energy in the home (Gram-Hanssen, 2010), and the way that these are typically and habitually performed in society (Schatzki, 2002).
- Reckwitz (2002) states that practice comprises different elements: bodily and mental activities, use of materials/things, knowledge, language, structures, place, and individual and/or group agency, that are utilised to routinely perform the practice.



1. Theory

Social Practice Theory



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- SPT treats the abstract concept of practices as the key unit of analysis. The primary focus in SPT is on the practices themselves and not the performers.
- We focused on the various elements of practices of home energy use including language, discourse and narrative, bodies, materials, places, and everyday practicalities.
- Used the power of narratives as a way of acknowledging and influencing social practices of energy use in the social marketing programme.





Value in marketing:

Defined “**as the regard that something is held to deserve, the importance, worth, or usefulness of something**” (Oxford English Dictionary, 2013).

Moves beyond the concept of exchange (exchange of goods/services that serve individual or organisational goals) that is identified as simplistic and limiting (Zafirovski, 1999).

Permits consideration of multiple dimensions related to consumption of goods and services, or as recently proposed in social marketing – to performing behaviours (Zainuddin and Gordon, 2014; French and Gordon, 2015; Butler, Gordon, Waitt & Cooper, 2016).

Energy+Illawarra aimed to evaluate people’s perceived value of using energy efficiently, whether this influences behaviours, and if the social marketing programme could create/increase value.

1. Theory

Value Theory



Value essentially refers to the value in good, services, or behaviours that is perceived by consumers, citizens, organisations, and all relevant stakeholders (French and Gordon, 2015).

Different domains of value:

| | Economic approach | Experiential approach | Behavioural approach |
|-------------------------|--|--|--|
| Value definition | An outcome of an evaluation of costs against benefits (Zeithaml, 1988) | An interactive relativistic preference experience (Holbrook, 2006) | A holistic and multi-dimensional appraisal of value in performing behaviour(s) (Zainuddin and Gordon, 2014) |
| Value type | Value-in-exchange | Value-in-use | Value-in-behaviour |
| Orientation | Outcomes-oriented | Process-oriented | Behaviour-oriented |
| Context | Goods-based | Services-based | Behaviour-based |
| Benefits | Predominantly extrinsic to self | Predominantly intrinsic to self | Intrinsic and extrinsic to self and others |
| Marketing domain | Commercial marketing | Social marketing | Social marketing |

1. Theory

Value Theory



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Dimensions of value:

Functional value: utility, convenience, control provided by the consumption or behaviour; extrinsically motivated (perceived as a means to an end), benefit of the self (Sheth et al. 1991).



Economic value: intrinsically motivated, focused on price & cost-benefit analysis from consuming goods and services, or from performing behaviours (Payne & Holt, 1999).



Emotional value: intrinsically motivated (an end in itself), self-oriented - for the emotional experience and for no other end-goal (Holbrook, 2006). Related to different affective states that can be positive (e.g., confidence and pleasure) negative (e.g., anger and fear) (Sánchez-Fernández and Iniesta-Bonillo, 2007), or even neutral (ambivalence).



Social value: extrinsically motivated, directed at others, focuses on influencing other people as a means to achieving a desired goal, such as status or influence within groups (Holbrook, 2006).



Ecological value: intrinsically motivated, recognises the importance that citizen's place on the impacts of their consumption behaviours and experiences on the natural environment (Koller et al. 2011).



2. Research

2. Research Focus Groups

- Focus groups used as formative research to explore and gain insight on people's social practices regarding energy use in the home. Particular focus on myths, barriers and potential strategies that we could use in the subsequent social marketing programme.
- 11 focus groups, n=55 participants (35F, 20M).
- Purposive sampling approach using existing networks.
- Sample to meet the criteria – aged 60+, low income, residing in Illawarra region of NSW, Australia.
- Diversity in climactic conditions.
- Two groups of ILUs.
- Digitally recorded, analysed using QSR NVivo 10.
- Corpus of 439 pages of transcript (13hrs, 14mins, 49sec of audio).



2. Research Focus Groups

Three key themes emerged from our focus group analysis:

1. Existing energy efficient practices.
2. Tyrannies of thrift.
3. Myths & misunderstandings about energy efficiency

2. Research Focus Groups

Existing energy efficient practices

I think it's because of our age, we've always had to think, the way to save. We're conscious of saving money and not being extravagant, frivolous. Whereas, a lot of younger ones don't look at in that light. Flick a switch. Yeah.

I think in many ways Australia has become a wasteful country ... We were brought up in a different age, when you had to be careful with water and think like that. My grandmother used a brick to put in the bed to warm us up, now we've got electric blankets. When I was a child out in Cobar they used to save the *Sydney Morning Herald* because they were bigger, and put that between the sheet and the blankets. Now I use a blanket when I get cold before I would use a heater.

2. Research Focus Groups

Existing energy efficient practices

We found that low-income older people are already doing much of the work of energy efficiency (see Waitt et al. 2016).

Participants identified how their practices often focused on not wasting energy, and they appeared to be fairly conscious of their energy use and discourses of energy efficiency in the home.

As such, our social marketing programme aimed to not come across as preaching about practices that many low-income older people already employ, but to focus on reflecting upon existing capabilities and strategies that people use.

2. Research Focus Groups

Tyrannies of thrift

“In the winter when it’s cold I just go to bed early at 7 o’clock and try to keep warm under the blankets”

I think you know, people coming in, influences ... you may be a bit more inclined' to put the heater on. Not for our comfort, their comfort. I must admit when my grandchildren walk in the first thing they do is turn on the heater, and they're allowed to. If I know they're coming I turn it on before they get there. When they leave I turn it off and open the door.

“I know a friend who used to use the street lights at night through the window instead of turning lights on. He had a fall in the bathroom and ended up in hospital”.

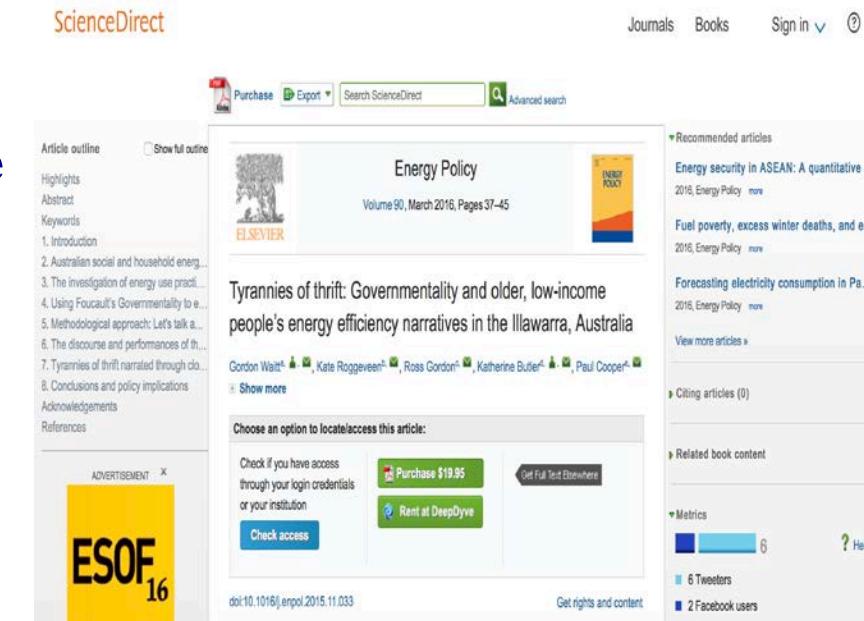
My Bryan, because he has been very ill and he also fell so I say to him ‘Bryan take your torch, don’t just walk out’. Because he got up and whether he got up very fast or bumped something but he hurt himself very badly because he fell in the toilet. So I say to put the torch on. It doesn’t matter. Or put the light on your phone. But that’s the safety reason. You must do that to feel comfortable.

2. Research Focus Groups

Tyrannies of thrift

These thrifty practices can lead to negative economic and ecological outcomes (increased energy waste and higher bills due to an inefficient old fridge), and threats to health and wellbeing as shown by the person ending up in hospital after a fall in the dark.

In the subsequent social marketing programme we aimed to address these tyrannies of thrift and try to support people to use energy efficiently in ways that maintain or facilitate their comfort, health and wellbeing.



The screenshot shows a ScienceDirect article page. The title is "Tyrannies of thrift: Governmentality and older, low-income people's energy efficiency narratives in the Illawarra, Australia". The authors listed are Gordon Waitt^a, Kate Roggeveen^b, Ross Gordon^c, Katherine Butler^d, Paul Cooper^e. The article is from Volume 90, March 2016, Pages 37–45. The journal is "Energy Policy". The page includes sections for Article outline, Highlights, Abstract, Keywords, 1. Introduction, 2. Australian social and household energy, 3. The investigation of energy use practice, 4. Using Foucault's Governmentality to explore..., 5. Methodological approach: Let's talk about..., 6. The discourse and performances of th..., 7. Tyrannies of thrift narrated through..., 8. Conclusions and policy implications, Acknowledgements, References, and a section for Choose an option to locate/access this article: Check if you have access through your login credentials or your institution, Purchase \$19.95, Rent at DeepDyve, Get Full Text Elsewhere, and Check access. There are also sections for Recommended articles, Citing articles (0), Related book content, Metrics (6), 6 Tweeters, and 2 Facebook users.

2. Research Focus Groups

Myths and misunderstandings about energy efficiency

“I often wonder about silly things like that, what opening and closing the fridge door does to my energy usage. I don't know the answer to how to most efficiently open the fridge to get the milk out to put in my coffee and then I put the milk back in. Should I close the door in between or should I leave the door open?”

“The higher the star rating the more energy efficient it is”.

“I've got reversible air conditioning, but I don't use that either because it's too expensive”.

2. Research Focus Groups

Myths and misunderstandings

Our research identified a number of myths, and lack of or misunderstandings about energy use and energy efficiency (see Gordon et al. 2016).

We did identify practices that were not efficient and where strategies to support change may help. For example, participants referred to not using reverse cycle air conditioners that they had in their homes “because it’s too expensive”.

This is despite evidence showing that reverse cycle air conditioning is actually an efficient way to heat the home.

Furthermore, other myths were mentioned like turning lights on and off causing a power surge and using more electricity - “people used to think if you turn a light on, it causes a small power surge and that you should leave it on rather than turning it on and off again”.

Therefore, the social marketing programme sought to address myths and lack of or misunderstanding about energy efficiency.

2. Research Focus Groups



Energy+Active Cooling



Energy Efficiency
is using energy wisely
and economically to
sustain everyday life,
live comfortably
and support well-being

2. Research Ethnography



- The ethnography aimed to give insight on the lived experiences of using energy efficiency in the home among 40 participants— before and after the social marketing intervention.
- This goes beyond self reported knowledge/attitudes/behaviours/ identified in the survey & focus group research – gives insight on their actual energy use practices. Also helps give qualitative understanding of what worked and what did not work in the social marketing intervention.
- Involved an initial visit to their homes during which a tour is conducted, an open-ended interview, asking them to draw the energy in their home (e.g. where is warm/cool/has lots of appliances).
- Follow up video home tour to visually record energy use practices – edited and analysed footage is then discussed and interpreted with participants.
- Final home visit and open ended interview after the social marketing programme is delivered to explore experiences and perceptions of the project.

2. Research Ethnography



Frugality and thrift

I was brought up not to be wasteful...My mother was born in 1897. She had five daughters born to her during the depression, so we were taught from childhood not to be wasteful about anything. So that's a good grounding, you see. And probably many people of our age have similar thoughts because of their upbringing

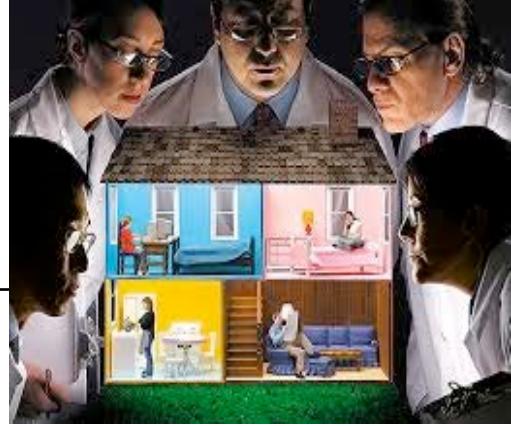
2. Research Ethnography

Billing anxiety

After hearing from a woman who was shocked by a \$1000 bill last winter, Renee said:

came home and I thought: "Oh my goodness"., But, mine was only 300 and something, and I was delighted, absolutely delighted...But I don't know, but I found that last winter because I spent a lot of time in the home, and because it was so cold, I just had to put it on whether the cost was or not, you know I just had to do it. And feeling guilty about it too, you know, and feeling terrified of getting the account. Absolutely terrified of getting the account, you know.

**Joe: because of the cost per unit of electricity,
I'm not allowed to use my house the way I
should as someone my age.**



Because like Macy said, there are people in this town who can't afford heating. We know that. I'm lucky, I'm still able enough to go and get wood. But how long can I - with a heart attack and heart condition like I've got - heart disease - how long can I keep going and getting wood?

2. Research Ethnography



Ageing, health and energy

I use much more than I did before, because... I like a voice in the house, because of my age and I'm deteriorating you know, with sickness. I like the radio going, and I like to watch, I watch much more daily. Once that television didn't go on until the evening. Well now because I'm at home a lot more, I watch DVDs.....Because my lifestyle has changed. And I must say that I feel very guilty about using a lot more electricity because I'm at home. But then I have to... like, during the winter for instance, I would never have put that gas on because I had a gas bill of \$700. And in the first instance when I used that years ago. So I avoided that, and I had the wood fire. And sometimes I had electric blanket to get into bed. But this winter, because of my home and because I've been ill, I just can't worry about the price of it...

2. Research Ethnography

Challenges with talking about energy

we tell them about the system and what's going on and how we're saving power and they can take what they want of it. ... We chat about it and let them go away and make up their own mind. We don't try and push a point of view or anything like that. We just tell them what we've found and let them do their own thing.

unless they're interested in listening, there's no point. Because everybody has their own set ideas. I wouldn't like to get in an argument with someone about it. I know about it, and I can suggest it to someone, but I certainly wouldn't make it a big point.



2. Research Ethnography



Changes in energy use practices

With the fridge thermometers I went out and bought two myself...I have the good, good thermal ones downstairs. ...It was good from Energy Illawarra to give me this idea to see it.

Miles (70s, retired, couple household in the community, Shoalhaven) reported that since joining the project he had begun to: Turn off appliances at the power point; Use the air conditioner less and make more use of fan with the door open, and; Turn off lights/TV when not in room.

2. Research

Longitudinal cohort survey



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Baseline survey 2014 (follow up post intervention in 2015 & 2016)

Measure and evaluate changes in knowledge, attitudes, value, thermal comfort, and behaviour in relation to using energy efficiently. Insights used to help inform & evaluate the social marketing programme.

Sample of 830 baseline **intervention** participants in Southern Councils Region of NSW (650 at follow up 1, 500 at follow up 2).

Sample of 614 **control** participants in Greater Sydney, Central Coast, Hunter (400 at follow up 1, 200 at follow up 2).

Survey participants interviewed in-home by trained RAs using iPads and questionnaire hosted on Qualtrics.

2. Research

Longitudinal cohort survey

Baseline survey

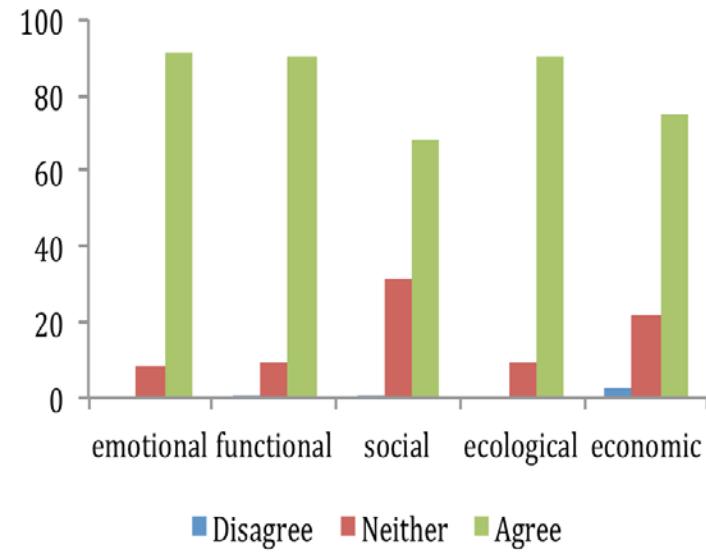
Conducted latent class analysis using MPlus to identify distinct classes of participants according to how they answered the value scale questions.

Permits segmentation of the study sample according to value perceptions of using energy efficiently. This insight was used to help guide the subsequent social marketing programme.

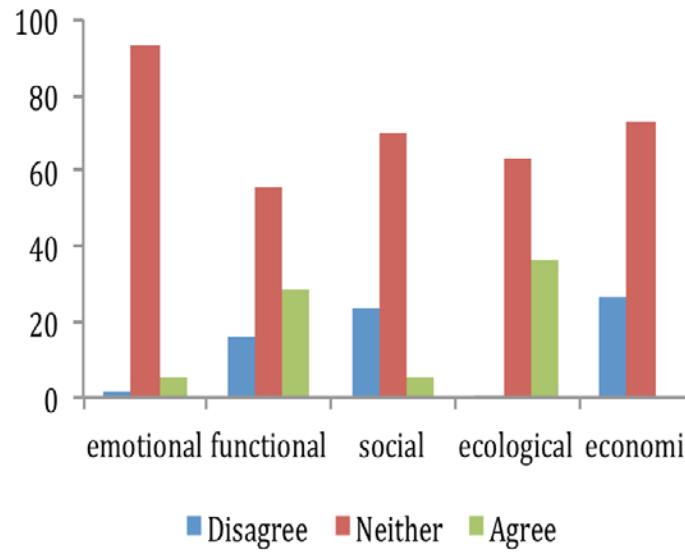
Baseline survey (n=1,444): latent class analysis on value perceptions identified 4 distinct segments:

1. **frugal eco warriors** (n=554; 45.4%) high functional, economic & ecological value; ambivalent emotional & social value.
2. **value opportunists** (n=216; 17.7%) high for all value dimensions.
3. **ambivalent** (n=280; 23%) ambivalent across all value dimensions.
4. **Independent and indecisive** (n=143; 9.9%) low emotional & social value, ambivalent for functional, economic and ecological dimensions.

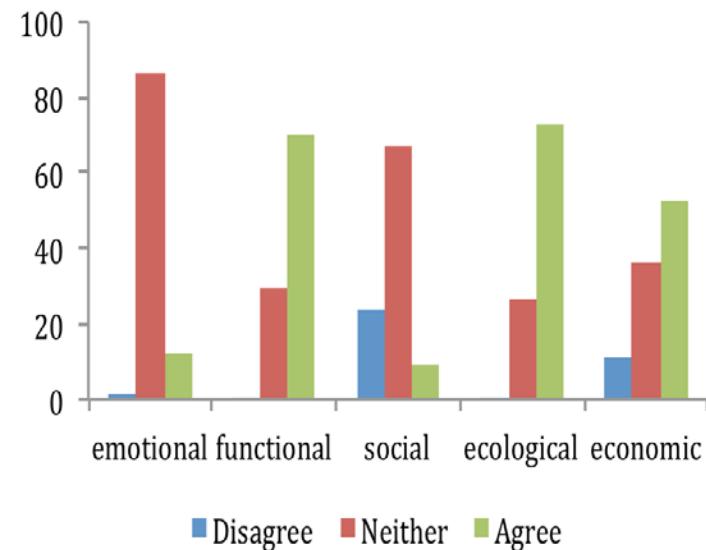
A. Value Opportunist (n = 216; 17.7%)



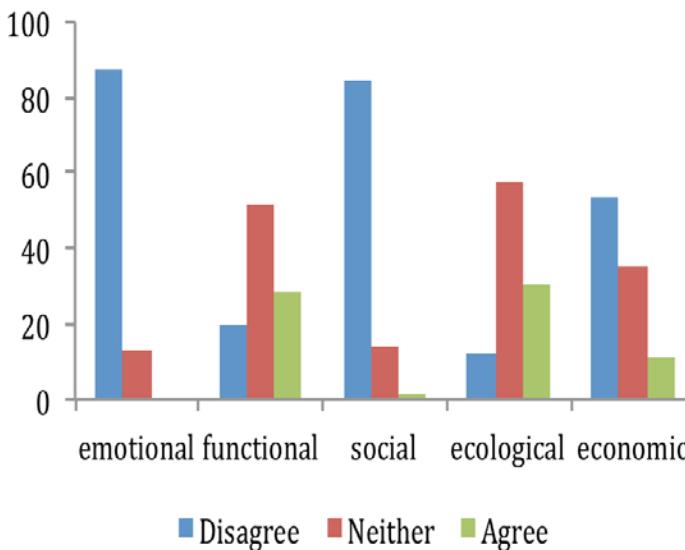
B. Ambivalent (n = 280; 23.0%)



C. Frugal eco-warriors (n = 554; 45.4%)

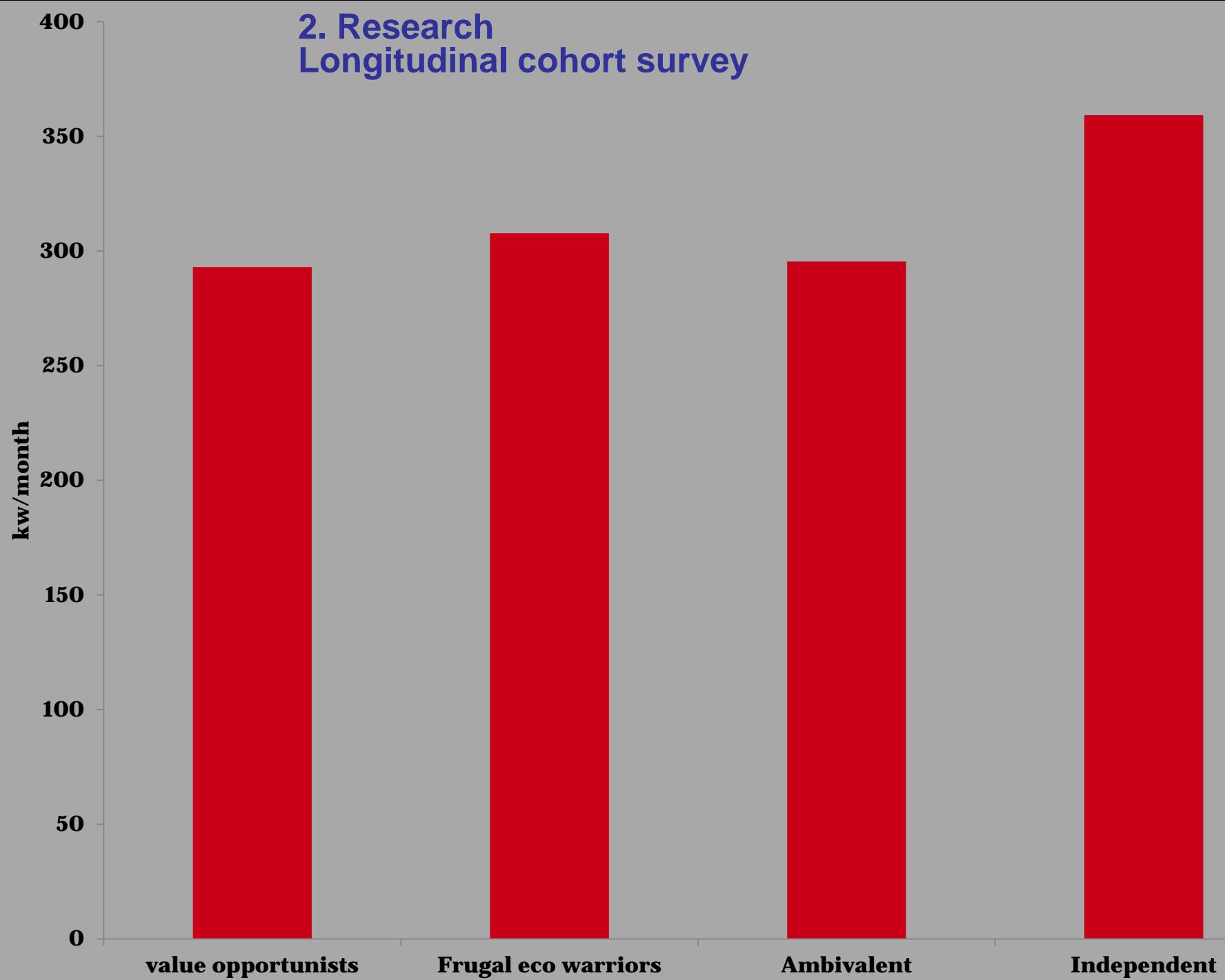


D. Independent (n = 169; 13.9%)



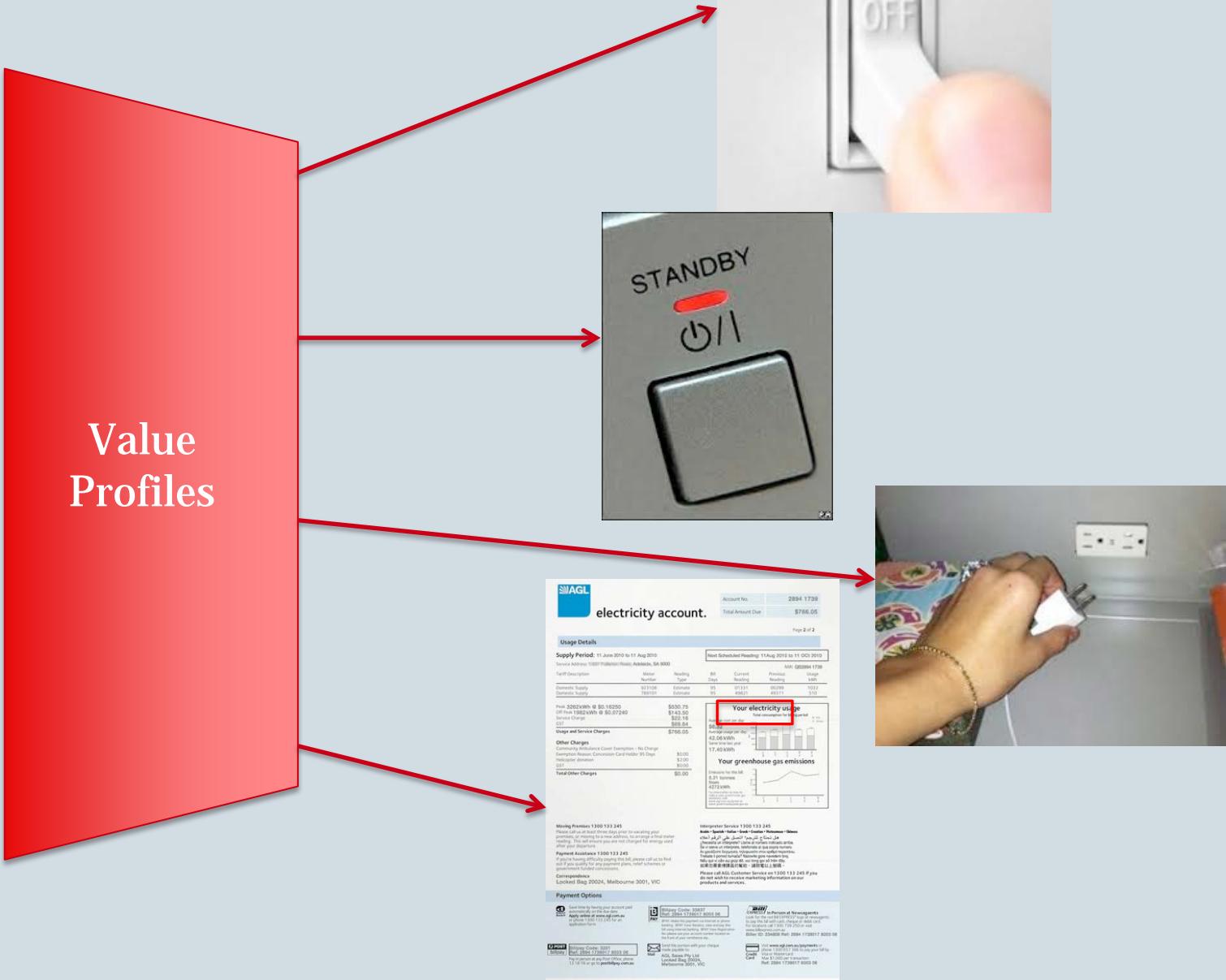
2. Research Longitudinal cohort survey

2. Research Longitudinal cohort survey



2. Research

Longitudinal cohort survey



2. Research

Longitudinal cohort survey

The Ambivalent ($B = -.20$, $p = .001$) and Independents profiles ($B = -.15$, $p = .031$) were significantly less likely to turn off lights in rooms that were unoccupied.

Value Opportunists were more likely ($B = .24$, $p = .016$) and Independents less likely ($B = -.41$, $p < .001$) to use standby functions.

Finally, Value Opportunists were significantly more likely to unplug mobile chargers when not in use compared with the Frugal Eco Warriors ($B = .28$, $p = .003$).

The Independents profile was significantly less likely to sometimes ($OR = .39$, $p = .027$), often ($OR = .44$, $P = .029$), and always ($OR = .37$, $p = .004$) minimize their heating/air conditioning use.

Independents were found to use significantly more energy per month in kWh compared with Frugal Eco Warriors ($B = 51.50$, $P = .018$).

Value profiles were used to segment and tailor the social marketing intervention.

2. Research

Longitudinal cohort survey



| Evaluation W1→W2 | Social marketing | | SM + retrofit | | Control | | P value |
|--|--------------------------|----------|--------------------------|----------|-----------------------------|----------|---------|
| | Mean (SD) | % Change | Mean (SD) | % Change | Mean (SD) | % Change | |
| Knowledge | 3.38 (.07) | 13.0% | 3.40 (.10) | 19.0% | 3.22 (.08) | 7.8% | .119 |
| Attitudes | 33.01 (.21) ^a | 131.9% | 33.42 (.28) ^b | 136.2% | 31.99 (.22) ^{a, b} | 128.4% | < .001 |
| Behaviours (self-reported energy behaviours) | | | | | | | |
| Fill up washing machine | 3.67 (.07) | 7.4% | 3.65 (.09) | 6.9% | 3.78 (.07) | 9.6% | .328 |
| Tumble dry clothes | 1.84 (.08) | 23.3% | 1.82 (.10) | 15.3% | 2.01 (.08) | 24.9% | .155 |
| Turn off lights | 4.34 (.05) ^a | 0.1% | 4.44 (.06) | 2.4% | 4.60 (.05) ^a | 7.2% | < .001 |
| Standby mode | 3.12 (.07) | 12.4% | 3.11 (.09) | 12.2% | 3.17 (.07) | 7.2% | .808 |
| Unplug phone charger | 3.71 (.08) ^a | 2.8% | 3.71 (.10) | 0.4% | 3.92 (.08) ^a | 7.9% | .033 |
| Buy efficient appliances | 4.29 (.05) | 5.1% | 4.22 (.06) | 2.9% | 4.24 (.05) | 2.4% | .374 |
| Low air conditioning/heating | 3.27 (.07) | 18.7% | 3.30 (.09) | 14.9% | 3.27 (.08) | 11.5% | .968 |
| Turn off air con in unused rooms | 3.70 (.06) | 0.6% | 3.76 (.07) | 5.6% | 3.78 (.06) | 4.6% | .400 |
| Value | | | | | | | |
| Emotional | 25.04 (.23) | 4.1% | 25.28 (.30) | 5.2% | 24.79 (.24) | 3.4% | .358 |
| Functional | 19.61 (.16) | 3.1% | 19.31 (.20) | 1.6% | 19.47 (.16) | 3.6% | .322 |
| Social | 13.43 (.15) ^a | 8.9% | 13.25 (.19) ^b | 6.6% | 12.76 (.16) ^{a, b} | 2.3% | .001 |
| Economic | 10.94 (.14) | 10.1% | 11.07 (.18) | 11.2% | 10.70 (.14) | 7.3% | .152 |
| Ecological | 12.85 (.09) ^a | 3.1% | 12.83 (.12) ^b | 2.5% | 12.55 (.09) ^{a, b} | -0.9% | .015 |
| Perceived thermal comfort | | | | | | | |
| Overall Home | 3.29 (.04) ^a | 2.5% | 3.24 (.05) ^b | 2.4% | 3.10 (.04) ^{a, b} | -3.1% | < .001 |
| Main living room | 3.22 (.04) ^a | 3.0% | 3.16 (.05) | 0.9% | 3.07 (.04) ^a | -1.4% | .005 |
| Bedroom | 3.48 (.05) ^a | 5.2% | 3.36 (.06) ^b | 1.1% | 3.17 (.05) ^{a, b} | -2.0% | < .001 |
| Satisfaction with thermal comfort | | | | | | | |
| Summer | 11.45 (.13) ^a | 3.9% | 10.99 (.17) ^a | 0.3% | 10.88 (.14) ^a | -2.0% | < .001 |
| Winter | 10.14 (.16) ^a | 0.2% | 9.78 (.20) ^b | -2.9% | 10.52 (.16) ^{a, b} | 4.3% | .008 |

3. Practice

The brand...developed from our research and with the community!

ENERGY + ILLAWARRA



A COMMUNITY ENERGY EFFICIENCY PROGRAM

Practice: Newsletters

Development & mail out of three seasonal/phased Energy+Illawarra newsletters about energy efficiency to: 830 project participants; &, distribution of a further 3,000 newsletters in the wider community to 27 different community & health centres & community organisations, & to partners, policy makers, & media contacts.



ENERGY + EVERYDAY LIVING

WWW.ENERGYPLUSILLAWARRA.COM.AU

**SAVE MONEY, SAVE EARTH, LIVE WELL
AND CREATE A BETTER WORLD FOR TOMORROW**

Practice: Newsletters

ENERGY + STAR RATINGS

WHAT IS IT?

The Energy Rating Label is a mandatory comparative energy label. It shows you the energy performance information on a range of appliances and allows you to compare similar appliance models through a star rating of between one and ten stars. It also shows the annual energy consumption in Kilowatt hours.

THE STARS

When comparing similar sized products the stars are a great way to quickly compare which model will be more energy efficient. The higher the star rating, the more efficient the appliance is.

However the stars do not tell you how much energy the appliance actually uses.

Because of this, when looking at two different sized products the stars are no longer an accurate indication of which model will be more efficient for your home.

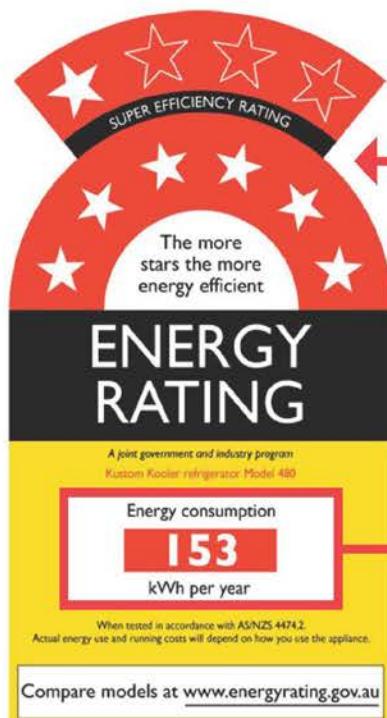
THE KILOWATT HOURS (kWh)

When considering the energy consumption of a household appliance, looking at the Kilowatt Hours (kWh) is key. The kWh rating of an appliance tells you how much energy the appliance will use per year. The lower the number, the lower the energy consumption.

With this number we can also calculate the running cost per year of the appliance. If your fridge has a rating of 461 kWh per year and your electricity currently costs \$0.32/kWh then running your fridge for 1 year would cost \$147.52. To get this number you simply multiply the kWh's per year (461) by

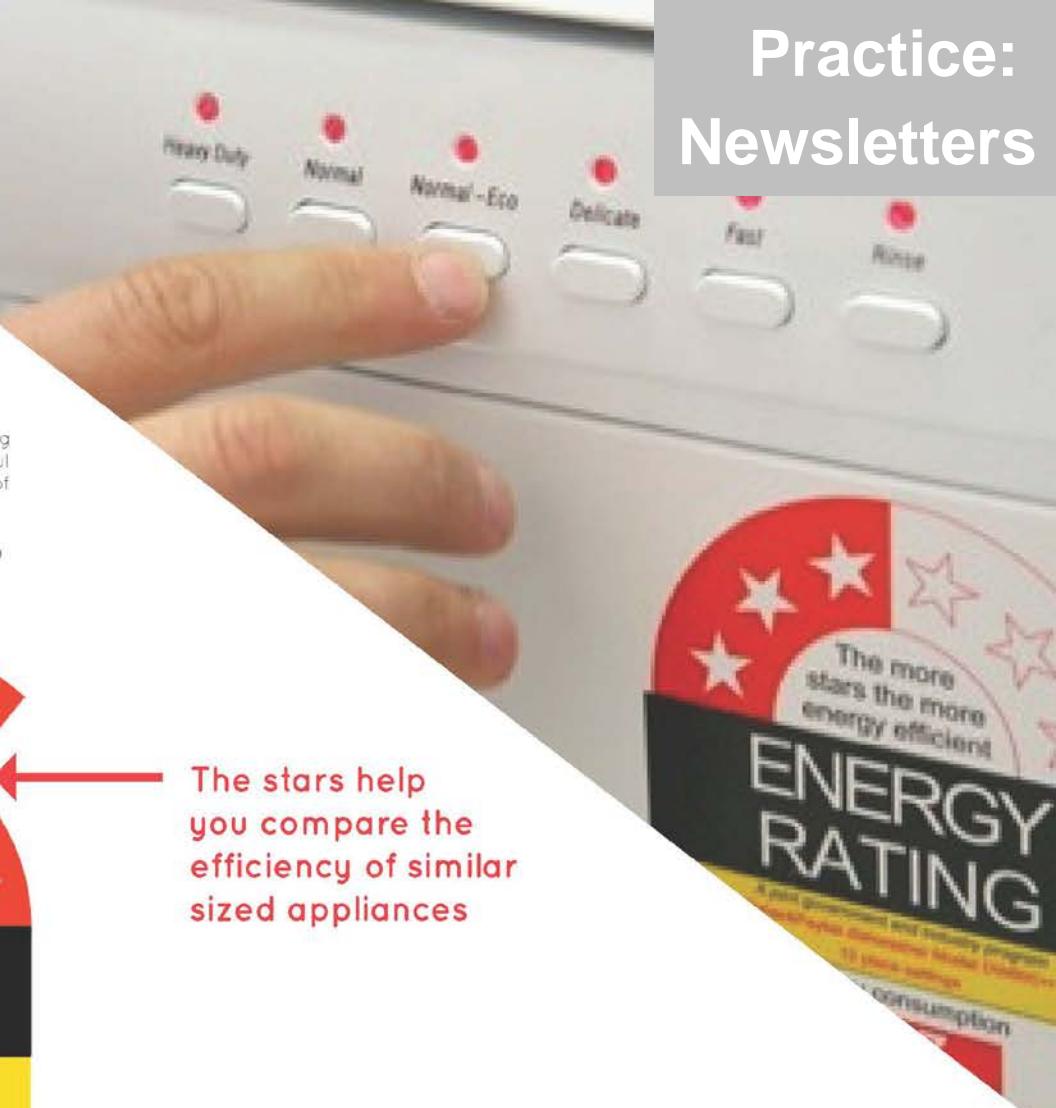
the cost of a kWh (in this example \$0.32). To help calculate the cost of using an appliance in your home see this useful calculator provided by the NSW Office of Environment & Heritage:

www.smarterchoicecalculator.com.au



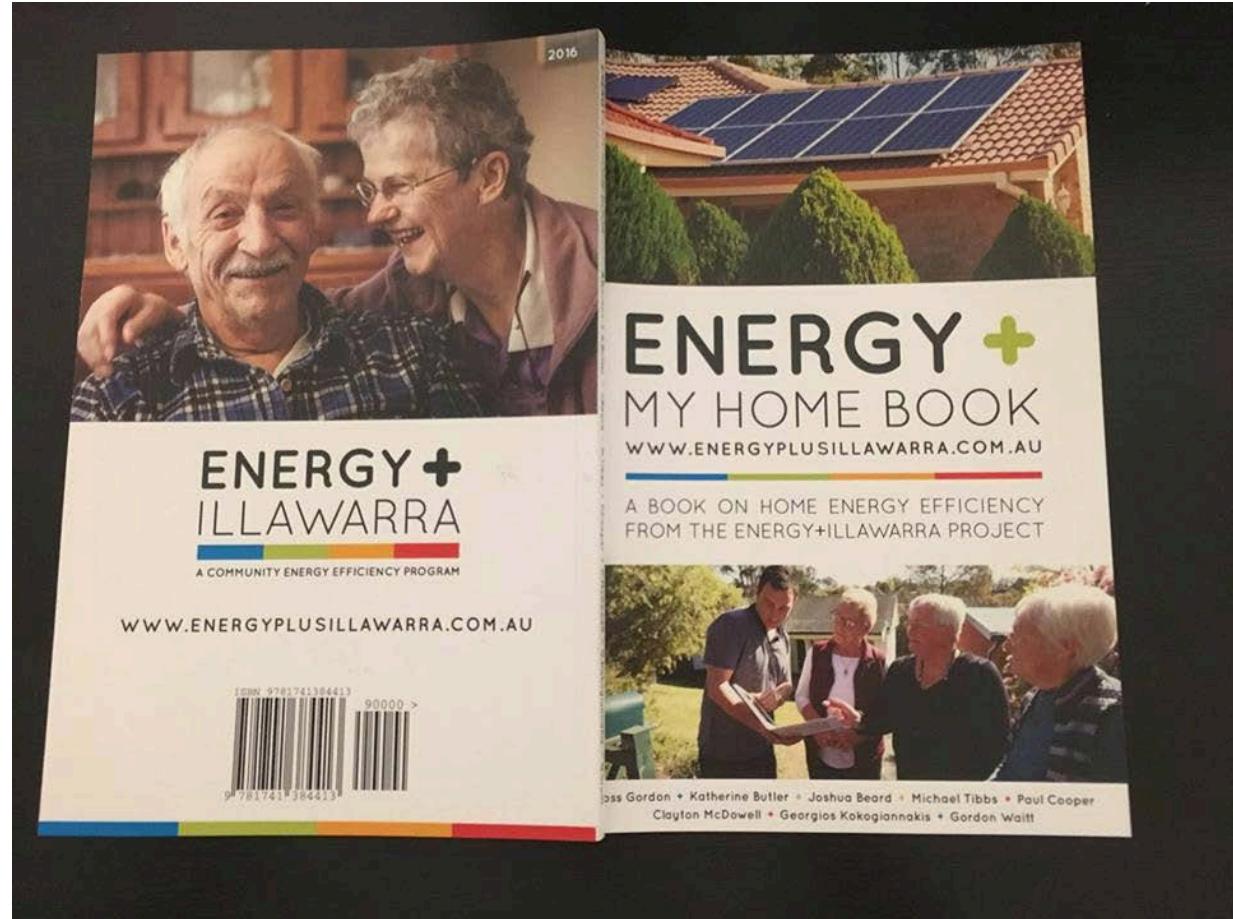
The stars help you compare the efficiency of similar sized appliances

This number tells you how much energy an appliance uses, measured in kWh's per year



Practice: Home Energy Books

1,000 Home Energy Use books that collated and extended on the information from the newsletters and narrative videos, provided information about the project research and outcomes, and contained links to additional information, resources and support were posted to project participants, and distributed to the broader community.



Practice: Small Products

1,000 branded fridge magnet thermometers, and 1,000 remote control power sockets were produced and distributed to participants and in the community.

These products were used as a disruptive technology to encourage efficient practices.



Practice: Website



WELCOME TO ENERGY+IL

<http://www.energyplusillawarra.com.au/>

To foster community conversations and sharing of knowledge, the project website www.energyplusillawarra.com.au was developed & contains information on the project, news items, newsletters, the narrative videos, details on media coverage, links to relevant services, and project research findings, including conference papers and journal articles.

Between launch on 1st June 2015 and 1st June 2016 the website attracted 2,268 distinct sessions, across 1,550 different users, with an average website visit duration of 2 minutes and 40 seconds. Visits to the website were split by 68.3% new visitors, and 31.7% returning visitors.

Practice: Social Media



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Social media was also utilised for the same purposes. A Facebook page was created & regular posts about energy efficiency & energy use in the home were made.

Paid Facebook advertising was also used to promote the page.

From its launch on 1st June 2015 to 1st June 2016, it attracted a total of 306 unique user likes, 339 reactions, comments and shares, and 410 post clicks form of engagement.

<https://www.fa>



Links to the project resources were also promoted using existing Twitter accounts of project team members and their networks.

Practice: Advertising



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The image consists of three parts. On the left, a photograph shows a person's hand holding a remote control pointing at an air conditioner unit mounted above a fireplace. In the center, a red rectangular poster with white text asks, "What is the most energy efficient way to heat my home?". Below it, text reads, "Find out this and many other energy saving tips at www.energyplusillawarra.com.au". The poster features the "ENERGY + ILLAWARRA" logo. At the bottom, there is small print about funding from the Australian Government. On the right, a newspaper clipping from the "ILLAWARRA MERCURY" dated Saturday March 21, 2009, shows a large advertisement for "ENERGY + ILLAWARRA" with the same headline and website information. A small image of a person adjusting a thermostat is also part of the ad.

Alert to the importance of print media for consumption of communications and messaging in the lives of older, low-income people, 500 posters about a series of different energy use practices and which advertised the narrative videos, facts, and calls to action to visit the project website were disseminated through the same community centres and networks listed above.

Paid advertisements were placed in local print media, with six large advertisements in the Illawarra Mercury, two in the South Coast Register, and one in the Milton-Ulladulla Times.

Practice: Narrative Videos



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To encourage reflection about energy use practices & behaviour transformation, 10 community oriented and people centred narrative videos about energy use and efficiency were produced.

Videos feature stories from real participants about energy use, utilising transcripts from the formative research. Videos also provide advice & facts about energy efficiency & feature explanatory visual animations.

Videos were uploaded to YouTube & the project website & were promoted by Facebook posts, & Twitter links.

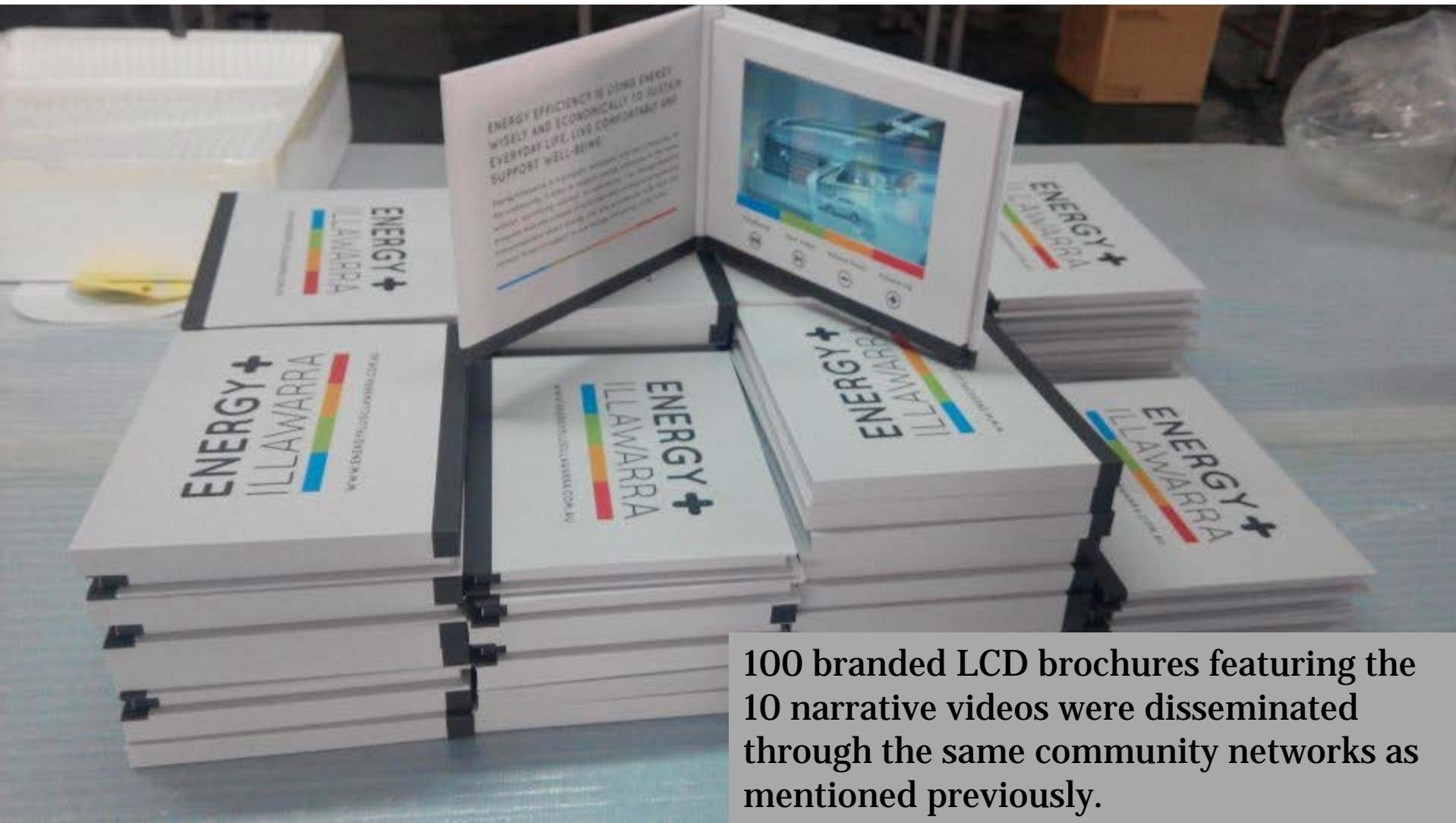


http://www.energyplusillawarra.com.au/?page_id=84

Practice: LCD Video Brochures



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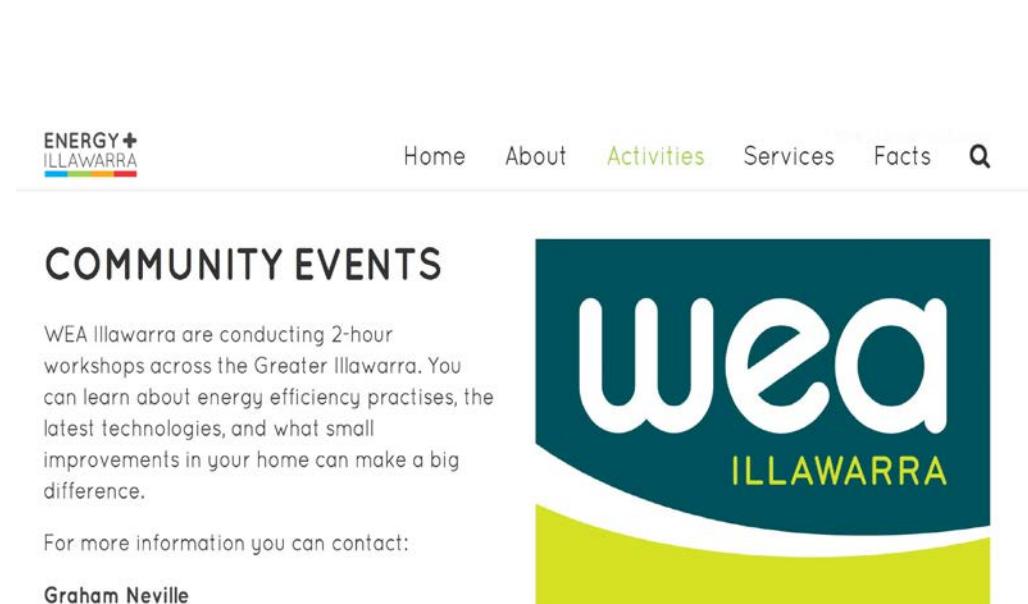
100 branded LCD brochures featuring the 10 narrative videos were disseminated through the same community networks as mentioned previously.

Practice: Community Training

To help build knowledge and capacity for conversations about energy efficiency in the broader community, project partner WEA Illawarra delivered 25 community events in the region to share insights, stories, and provide advice and support for people to use energy efficiently.

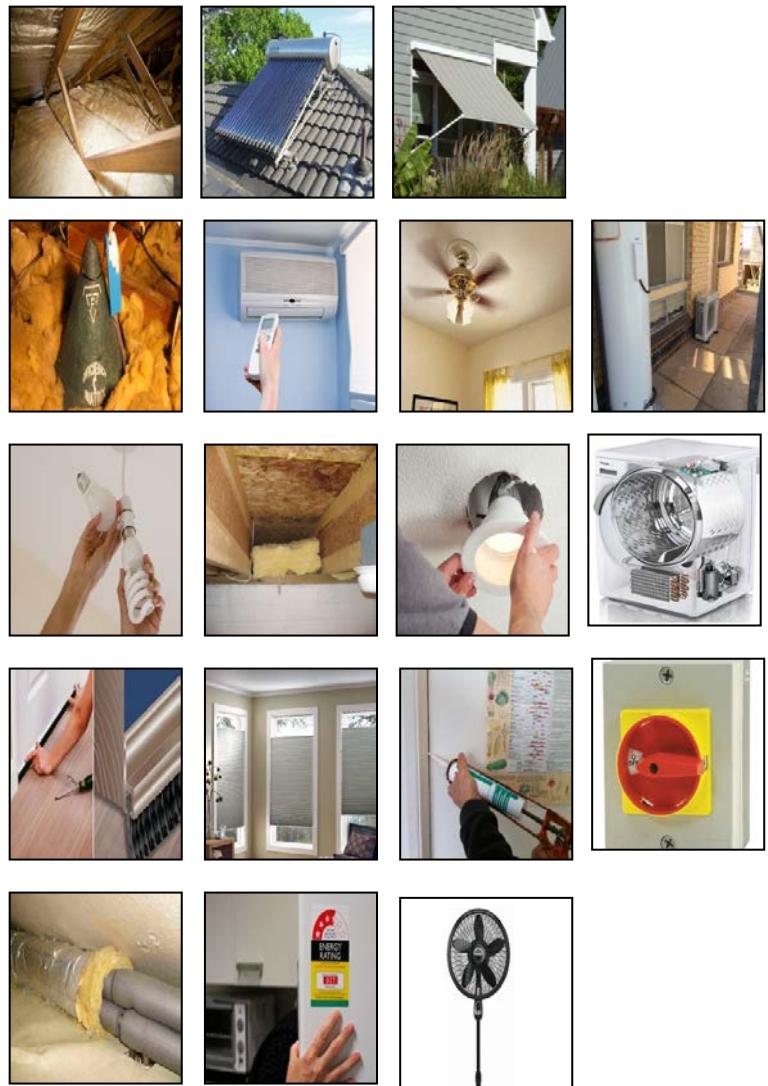
Staff from relevant community partners & social services received training.

The stories utilised in the narrative videos were used to encourage people to reflect on practices of energy use in their homes and initiate conversations and peer-to-peer support of energy efficiency.



The screenshot shows a website header with the 'ENERGY + ILLAWARRA' logo. Below the header, a navigation bar includes links for Home, About, Activities (which is highlighted in green), Services, Facts, and a search icon. The main content area features a section titled 'COMMUNITY EVENTS'. It contains text about WEA Illawarra conducting 2-hour workshops across the Greater Illawarra, focusing on energy efficiency practices, technologies, and home improvements. It also provides contact information for Graham Neville (0418603171, info@weaillawarra.com.au). To the right of the text is a large, stylized logo for 'wea ILLAWARRA' in white and yellow on a dark blue background.

Practice: Retrofits



Alive to the impact of the built environment and household dynamics on energy use, 200 randomly selected homes (from the intervention group) received tailored energy efficiency retrofits and installations, ranging from new lighting, pipe lagging, solar panels, air conditioners, window shading, heat pumps, hot water systems and refrigerator upgrades.

A consumer oriented and co-creative process was followed in which engineers conducted home audits and follow up consultations. These consultations built trust and rapport with participants and helped develop consensus with householders about what retrofits were appropriate and aligned with their personal needs and wants.

40 randomly selected participants (of the 200) received a support package of additional technical advice and guidance, and participation in the ethnographic study.

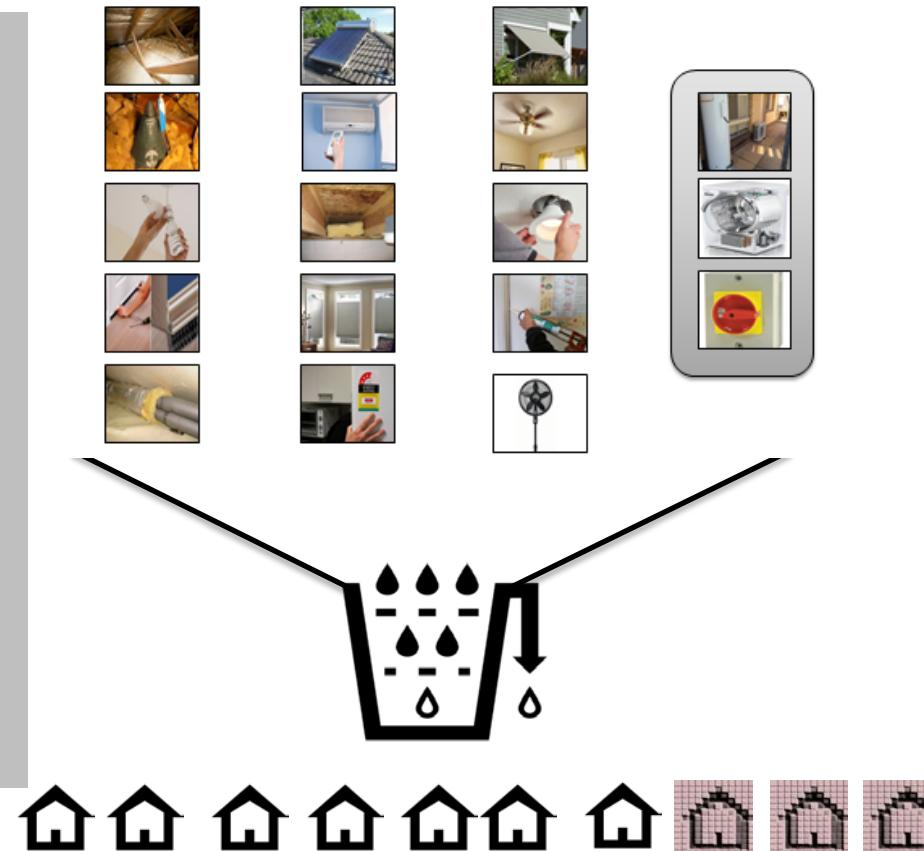
Practice: Retrofits



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**Retrofits packaged, segmented, & delivered following home energy audits,
householder consultation & according to suitability & participant wishes**

Helga: (about a recommendation to get a new hot water systems) – “Yeah. Don’t touch it. Look, the saying is, if it works, why change it? If it uses a bit more, all right, I have to pay for it. And I’m in an age where I want my comfort. I’m used to what is there, I know what it’s doing.”



Practice: Retrofits



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Well, I'm absolutely delighted with the lights, because I would not have ever been able to afford... although I use a lot of lamps, but I do use these here. I'm absolutely delighted with that, the lamp. And I'm so grateful, and I thanked Steven so much for doing that, because I would never have been able to afford that, you know. Because they cost me \$300 for free. That cost me there, \$300 I think roughly. Under my circumstances I could never, so I am absolutely delighted.

Helga: "And I got the upright freezer, so I don't have to bend down".

Rex: ... "the hot water system, theoretically we should give that fifteen years out of the new one which was quite good, because that was coming up, like, that was going to be an expense before we grew much older."

Interviewer: Okay, so that's kind of a bit of a relief? Marina: Yes, well as I said, once he mentioned that we could have one, we thought we had to take advantage of that given the age of the old one."

Practice: Media relations/advocacy



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<https://www.youtube.com/watch?v=mutx6nFGL5Q>

MERCURY

Roslyn happy to trial program for energy savings

By ATHON LATIFI
Feb. 25, 2015, 1 p.m.

(https://www.facebook.com/share/sharer.php?u=http://www.llawarmercury.com.au/story/3750985/comfort-and-real-energy-efficiency)

(http://twitter.com/share?url=http://www.llawarmercury.com.au/story/3750985/comfort-and-real-energy-efficiency&text=Comfort+and+real+energy+efficiency)

(mailto:?subject=Comfort+and+real+energy+efficiency&body=I%20found%20this%20article%20-%20Comfort+and+real+energy+efficiency,+and+thought+you+might+like%20it.)
<http://www.llawarmercury.com.au/story/3750985/comfort-and-real-energy-efficiency>

Roslyn Farley is a creature of habit but the Warrigal Figitte resident is open to change if it means she can save money on her energy bills.

That's why she jumped at the chance to be part of the Energy+Illawarra (E+) research project.

"Electricity is the biggest bill I pay and I thought that having solar system would be useful. When I joined the program I didn't expect much but was happy to be part of the research project," Mrs Farley said.

After a detailed building assessment, Mrs Farley's home received a solar hot water system and LED lighting upgrade. On Tuesday she had an in-home energy display installed.

RDA Illawarra project manager Deborah Petkovic said this in-home energy display will allow Mrs Farley to see her energy consumption in real time and influence energy efficient behaviour.

"That's really important," Mrs Petkovic said.

"One thing that is being observed quite clearly is that if people own the technology that's being introduced in their homes and they understand it then they are going to make changes to their behaviour. They are actually going to make a difference to their energy efficiency."

E+ is a three-year, \$2.3 million project funded by the Federal Department of Industry, Innovation, and Science and contributions from consortium members led by RDA Illawarra.

Mrs Petkovic said the aim is to trial a variety of ways to influence people's behaviour and to improve their energy efficiency at home but without affecting their thermal comfort.

"So, that is making sure they are keeping cool in summer and keeping warm in winter but not increasing their costs of energy usage," she said.



GOOD ENERGY OUTCOMES: Warrigal Figitte resident Roslyn Farley and RDA Illawarra project manager Deborah Petkovic. Picture: Robert Pest



To help influence the broader structural environment in which home energy practices occur, media and stakeholder advocacy was undertaken. A media advocacy strategy was used to generate coverage about Energy+Illawarra research insights, marketing messages, and milestones.

This generated 21 different news items on national and local television, radio, and printed media.

Practice:

Stakeholder advocacy & policy



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Adelaide Forum

SUSTAINABLE,
LIVING RESIDENTIAL
BUILDINGS
CONNECT:
SBRC FORUM

Be a part of the future
This half-day forum brings together industry leaders, practitioners and researchers from universities and government to explore opportunities for improving the energy performance of our existing residential buildings.

Sustainable Buildings Research Centre Forum
Friday 13 November 2015
9:30am till 1:00pm
SBRC, Building 237, Innovation Campus, University of Wollongong
Squires Way, North Wollongong 2500

For more information or to register please contact sbrc@uow.edu.au

SBRC SUSTAINABLE BUILDINGS RESEARCH CENTRE UNIVERSITY OF WOLLONGONG



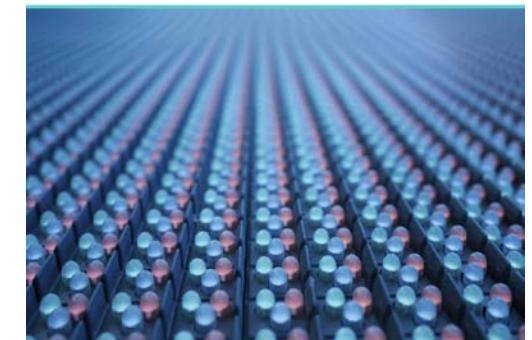
Extensive engagement & advocacy with policymakers from the Commonwealth Government, Southern Councils Region & other relevant stakeholders including energy retailers in meetings & forums was also undertaken to share findings & insights, & influence policy discourse.



Australian Government



COAG
Energy Council



NATIONAL ENERGY
PRODUCTIVITY PLAN 2015-2030
Boosting competitiveness, managing costs
and reducing emissions

Questions?



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Associate Ross Gordon

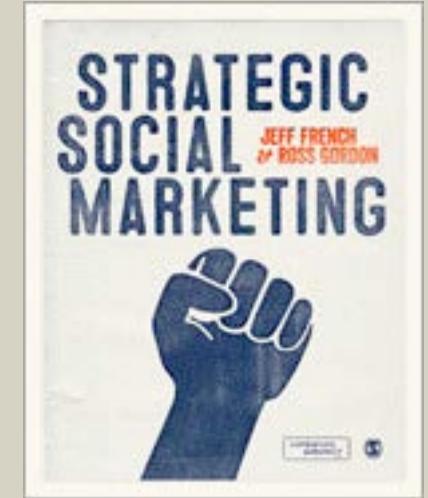
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[Australian Association of Social Marketing – President](#)



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