

CASE STUDY



ENERGY + ILLAWARRA



A COMMUNITY ENERGY EFFICIENCY PROGRAM

About Energy+Illawarra

The Energy+Illawarra project is a community oriented, interdisciplinary, strategic social marketing intervention programme with the aim of supporting energy efficiency in the home among low-income older people in the Wollongong, Shellharbour, Shoalhaven, and Wingecaribee regions of NSW.

Research

The Energy+Illawarra project is based on extensive research, insight generation and engagement with low-income older citizens. The following phases of research feature in the project:

Survey Piloting Testing: The evaluation survey used in the project involved extensive development and testing. This involved a comprehensive review of relevant literature and survey scales, scale development following established rigorous protocols, and extensive cognitive pilot testing with participants. The pilot testing involved observed cognitive interviews and focus groups and appropriate modifications to the survey instrument.

Wave 1 Baseline Cohort Survey: Survey with a random sample of 830 intervention participants residing in the community; and 630 control participants residing elsewhere in NSW to measure their knowledge, attitudes and behaviours in relation to energy efficiency and thermal comfort.

Wave 2: Immediate Follow Up Cohort Survey: Survey with the same cohorts of intervention and control participants immediately post intervention to measure effects of the programme on knowledge, attitudes and behaviours in relation to energy efficiency and thermal comfort.

Wave 3: 1 Year Follow Up Cohort Survey: Survey with the same cohorts of intervention and control participants one year post intervention to measure effects of the programme on knowledge, attitudes and behaviours in relation to energy efficiency and thermal comfort.

Formative Qualitative Research: A series of 11 focus groups with 59 low income older participants from the community were carried out to explore existing knowledge, attitudes, behaviours, practices and narratives relating to energy efficiency. This research was used to help develop insight and understanding of the participant group and to inform the subsequent social marketing programme.

Social Marketing Programme Pre-testing: Followed the development of social marketing programme materials to promote energy efficiency, including: newsletters, branding, videos, a website, key messaging, extensive pre-testing was carried out with the participant group. This involved focus group testing, and use of cognitive neuroscience techniques to assess fidelity of the materials. Appropriate modification of materials was then carried out prior to and during programme roll out.

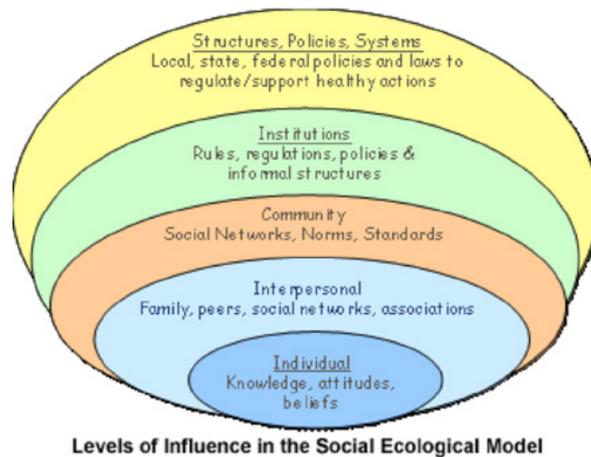
Participant Ethnographic Research: A randomly selected sample of 40 participants were involved in ethnographic research to gain insight and understanding of the everyday lived experience of using energy and energy efficiency in the home. The ethnographic research involved home tours, video diaries, and open-ended interviews.

Engineering Home Energy Use Monitoring: A random selection of 200 intervention participants received energy efficiency engineering installations in their homes. As part of this process, the engineering team conducted intensive technical monitoring measuring energy use and temperature in each household for a period of time before, during and after the Home Energy Efficiency Engineering Installations.

Theory

The Energy+Illawarra project draws upon three main theoretical frameworks: the social ecological model, social practice theory, and value theory.

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 (see Figure 1) (Bronfenbrenner, 2005).

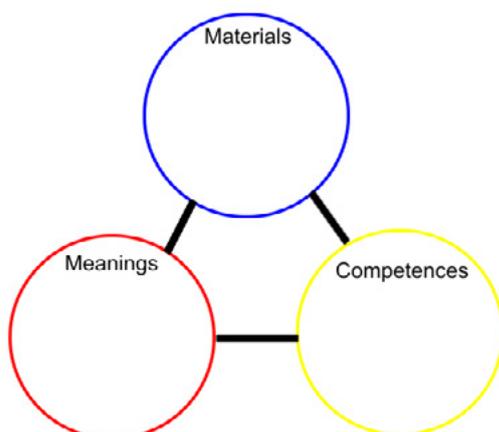


Levels of Influence in the Social Ecological Model

Figure 1: The Social Practice Framework

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). Furthermore, the social marketing programme uses a social ecological approach – seeking to influence the individual through activities including products, home installations, promotion and communications; the community through events, peer to peer conversation, and training; and the macro environment through media relations, advocacy, policy change, influencing social norms, and changes to the built environment.

The project also draws upon [social practice theory](#) (SPT) – a social theory that helps understand people’s energy use as part of everyday life. SPT is a framework for understanding the social world and the performance of everyday practices as citizens go about their everyday lives. Social practices refer to everyday practices, such as consumption of food (Warde, 2005), or using energy in the home (Shove, 2012), and the way that these are typically and habitually performed in society (Schatzki, 2002). Such activities are comprised of different elements such as bodily and mental activities, use of materials/things, knowledge, language, structures, space and place, and individual or group agency, that are utilised to routinely perform the practice (Reckwitz, 2002). Figure 2 presents a framework of social practices developed by Shove et al. (2012).



Materials: including things, technologies, tangible physical entities, and the stuff of which objects are made

Competences: which encompass skill, know-how and technique; and

Meanings: symbolic meanings, ideas and aspirations (Shove et al., 2012, p.14)

Figure 2: The Social Practice Framework

SPT offers a theoretical lens for understanding not just behaviour or a set of behaviours, but the various components that underpin performance of a practice – such as using energy in the home and being energy efficient. As such, SPT can help locate and understand discrete social behaviours such as using a fridge, or switching the heating on or off within a broader rubric of the practices people perform in everyday life. The value of SPT for social marketing and behaviour change has recently been identified (Spotswood, 2015, French and Gordon, 2015). Gaining insight on how people use various elements and resources to perform everyday practices such as using energy can offer valuable new insights and understanding as well as help inform policy and interventions. SPT also offers a powerful approach for use in formative research that can inform the development of social marketing behaviour change programmes.

The Energy+Illawarra project also draws on [value theory](#), a conceptual framework from the marketing and consumer research literature. Value can be defined as the regards that something is held to deserve, the importance, worth, or usefulness of something. Value theory proposes that consumers such as the participants in the Energy+Illawarra project perceive value in buying and using goods and services (Sánchez-Fernández and Iniesta-Bonillo, 2007), or in performing behaviours – such as using energy efficiently (French and Gordon, 2015). Value theory posits that consumers may perceive economic, functional, emotional social, and ecological value in buying or using goods and services, or performing behaviours. Furthermore, value theory research suggests that the greater value people perceive the stronger the influence on their behaviour (as illustrated in Figure 3).

Therefore, the Energy+Illawarra is measuring participants perceived economic, functional, emotional, social, ecological value of using energy efficiency in the baseline and follow up surveys. The social marketing programme is also aiming to increase participants perceived value in using energy efficiently, and demonstrate that social marketing can be used to help create value. In addition, the results of the response to the value theory questions at baseline have been used to **segment** (group) participants according the different value they perceived towards using energy efficiently. Subsequent social marketing materials, communications and messages were then tailored and positioned to these different segments according to their value perceptions.

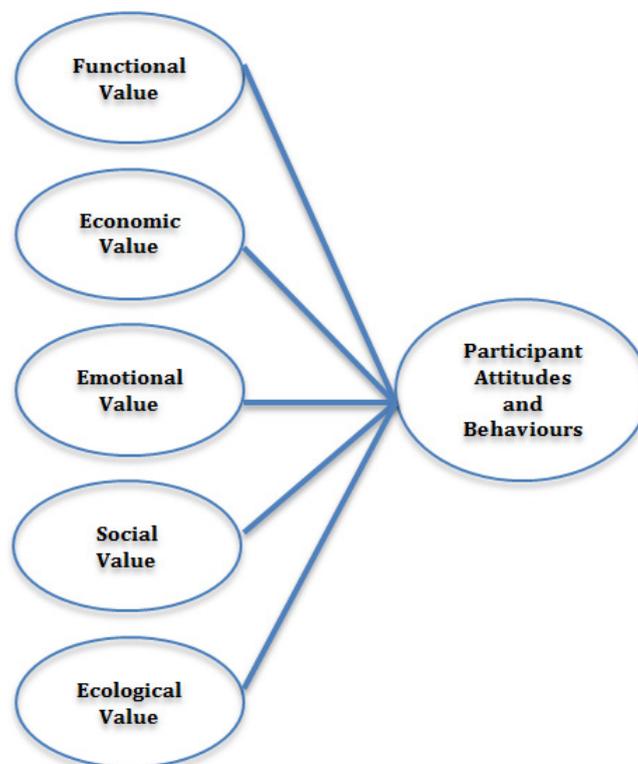


Figure 3: Value theory and consumer attitudes & behaviour

Social Marketing Intervention Programme

The social marketing programme involves three phases that aim to provide advice, support and strategies for using energy efficiently and supporting comfort and wellbeing. Each of these three phases discusses a number of energy use practices.

Phase 1. Everyday Energy

Focusing on the following every day energy use practices

- Energy+Star Ratings focusing on understanding star ratings and energy consumption of household appliances
- Energy+MyFridge focusing on using fridge-freezers in the home
- Energy+Lighting focusing on use of lighting in the home
- Energy+The Laundry focusing on washing and drying clothes

Phase 2. Winter Warming

Focusing on the following energy use practices related to winter

- Energy+Heating focusing on use of energy to heat the home in winter
- Energy+Hot Water focusing on energy use relating to hot water
- Energy+Cooking focusing on energy use practices related to cooking

Phase 3. Keeping Cool

Focusing on the following energy use practices related to keeping cool in the warmer months

- Energy+Solar Power focusing on solar power energy
- Energy+Cooling focusing on energy use and keeping cool in summer
- Energy+Dishwashing focusing on energy use and washing the dishes
- Energy+Standby focusing on energy use and standby on appliances

The different components of the social marketing intervention programme are as follows:

Newsletters

Three newsletters containing facts, tips and advice on energy use practices have been posted to the 830 intervention participants. These relate to the three phases of the social marketing programme.

Newsletter 1: Everyday Energy

Focusing on the following every day energy use practices

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Newsletter 2: Winter Warming

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- Energy+Heating focusing on use of energy to heat the home in winter
- Energy+Hot Water focusing on energy use relating to hot water
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Newsletter 3: Keeping Cool

Focusing on the following energy use practices related to keeping cool in the warmer months

- Energy+Solar Power focusing on solar power energy
- Energy+Cooling focusing on energy use and keeping cool in summer
- Energy+Dishwashing focusing on energy use and washing the dishes
- Energy+Standby focusing on energy use and standby on appliances



Videos

Videos containing narratives – stories based on participant’s comments in the focus group research aligned with energy efficiency facts and advice have been created for all of the practices that appear in the newsletters. The videos feature film and audio footage of real project participants telling these stories, followed by animations providing the technical advice and guidance on energy efficiency. The videos are available on the [project website](#), and are also featured on the LCD brochures that are distributed in the community.



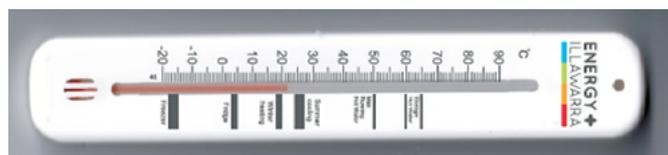
LCD Brochures

Branded LCD Brochures containing the videos about energy efficiency practices have been created, and these have been extensively distributed in the community in places in which low-income older people use. These include community centres, various service locations, and other relevant spaces and places.



Small Energy Efficiency Products

Branded Fridge magnets showing recommended temperature settings for refrigerators and freezers were sent out to the 830 intervention participants at the same time as the Newsletter 1 Everyday Energy newsletter. Remote control sockets that enable people to switch off appliances were issued to the 830 intervention participants at the same time as Newsletter 2 on Winter Warming.



Project Website

The project website www.energyplusillawarra.com.au contains information on the project, news items, copies of the newsletters, videos, information on the community events, details on media coverage on the project, links to services such as recycling and energy rebates, facts on energy use practices, and details on the project research findings.

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Home About Activities Services Facts

WELCOME TO ENERGY+ILLAWARRA

ENERGY+ILLAWARRA is a program developed with the community, for the community. It aims to support energy efficiency in the home, without sacrificing comfort or well-being. The Energy+Illawarra program features a range of activities that will help bust myths and misconceptions about energy use, and provide you with facts and various forms of support to use energy efficiently in the home.

- SAVE MONEY
- SAVE THE ENVIRONMENT
- LIVE WELL
- FEEL GOOD
- SET A GOOD EXAMPLE

Energy+Illawarra
298 likes

You like this

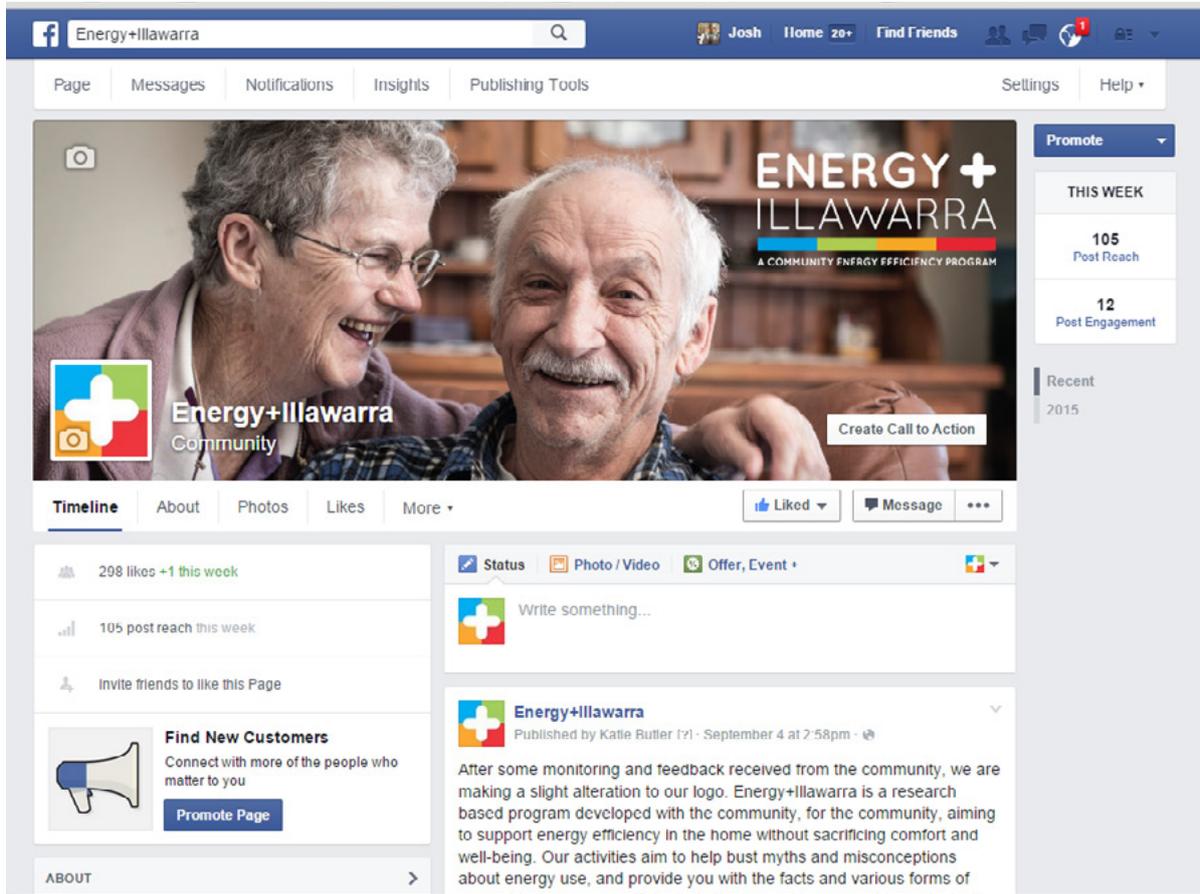
Energy+Illawarra
September 1 at 2:58pm

After some monitoring and feedback received from the community, we are making a slight alteration to our logo. Energy+Illawarra is a research based program developed with the community, for the community, aiming to support energy efficiency in the home without sacrificing comfort and well-being. Our activities aim to help bust myths and misconceptions about energy use, and provide you with the facts and various forms of support to use energy efficiently in the home. You can get in contact with us directly about the various aspects of the project, or visit our website at <http://www.energyplusillawarra.com.au/>

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Social Media

To support the social marketing programme activities an Energy+Illawarra Facebook page has been set up: <https://www.facebook.com/energyplusillawarra?fref=ts>. The page contains links to the project website and other resources, and also contains regular content postings relating to energy efficiency and energy use in the home. Paid Facebook advertising has been used to promote the page in the community.



Links to the project resources have also been promoted using Twitter. Existing Twitter accounts of project team members and their networks including CHI @ UOW, and @AASM_Aus that have strong numbers of followers have been used to promote the project and related materials to ensure a sizeable audience for tweets.

Community Events

WEA Illawarra is delivering a series of 25 community events in the region to share insights, stories, and provide advice and support for people to use energy efficiently. These events are being held in local community venues and details of these are being posted on the project website.

COMMUNITY EVENTS

WEA Illawarra are conducting 2-hour workshops across the Greater Illawarra. You can learn about energy efficiency practises, the latest technologies, and what small improvements in your home can make a big difference.

For more information you can contact:

Graham Neville
0418603171
info@weaillawarra.com.au



Narrative Conversations

The project team used the transcripts from the formative research qualitative focus groups to develop a series of narratives – stories from participants about their energy use practices. These narratives are designed to encourage people to reflect on the myths, ideas, and practices of using energy in the home and being energy efficient. They are also intended to encourage people to start a conversation about energy efficiency and reflect on their own practices. The narratives have featured in the videos appearing on the LCD Brochures and project website. Furthermore, transcripts of these stories are being distributed in the community with calls to action to visit the project website, and to have conversations with other people about energy efficiency.

“I often wonder about silly things like that, what opening and closing the fridge door does to my energy usage.”

Media Relations and Media Advocacy

A media relations and media advocacy strategy forms an important component of the Energy+Illawarra programme. An initial media release was launched in July 2015 based on the findings of the baseline and formative research which identified that low income older people are thrifty in their energy use but often at risk to their health, comfort and wellbeing. This generated 21 different news items across AM/FM radio, TV, newspapers and online news media. A series of interviews on ABC Sydney/Illawarra/South Australia/Newcastle appeared, as well as a television news story on WIN News. Details of the project [media coverage](#) are provided on the project website.



Stakeholder Advocacy

The Energy+Illawarra project recognises that using energy efficiently is not just down to individual behaviour, and requires a supportive environment. Stakeholder advocacy and support forms an important part of the programme. Following stakeholder consultation, the retailer Energy Australia have agreed to support the project and adapt project materials such as newsletters and videos for distribution to a broader audience of consumers. In addition, local councils have been engaged on their policies and practices relating to energy efficiency. This has resulted in distribution and sharing of materials, links to the project website being promoted, and input into policy and practices of local councils concerning energy efficiency.



Policy

As identified above, engagement with local councils has resulted in input into policy and practices concerning energy efficiency. Furthermore, project insights, findings and learning has been shared with Australian Government policy makers and has helped inform debates on energy policy.

Home Energy Efficiency Engineering Installations

200 participants in the intervention sample were randomly selected to receive home energy efficiency installations. These installations include insulation, new lighting, draught exclusions, pipe lagging, solar panels, reverse cycle air conditioning, window shading, awnings, fans, heat pumps, hot water systems, and energy efficient fridge-freezers. The Engineering Project Team have worked in close partnership with RDAI, Viridis and a number of contractors to audit the homes of these 200 participants to identify the most suitable installations. A consultation with householders has then been conducted to select the most appropriate installation from a technical and consumer/participant oriented perspective. This co-decision on the installation programme is innovative and almost unique in energy efficiency installation programmes. This approach ensure buy in from participants, and a sense of involvement and acknowledgement of their own needs and wants. The installations were then made to people's homes by trained contractors with a consumer/participant oriented and personable approach. Relevant training and support regarding technical installations has also been provided to participants.



Energy Efficiency Support Packages

The sample of 40 participants who participated in the intensive monitoring and ethnographies also received a support package of additional technical advice and guidance regarding energy efficiency in the home from the team of engineers and human geographers.

Project Findings

To be announced in due course, and dependent upon publication in relevant outlets prior to publication here.

The Project Team

The project involves a novel collaboration between the local regional development agency; University researchers from three discipline areas: social marketing, engineering and human geography; aged care and independent living unit providers; community education providers; community service providers; building contractors, and local councils. Key members of the project team are listed below:

RDAl	SBRC: Engineers	Social Marketers	AUSCERR Human Geographers
<p>Deborah Petkovic Project Manager RDAI Illawarra</p> <p>Natalie Burroughs CEO, RDAI Illawarra</p>	<p>Professor Paul Cooper Engineering Project Team Leader, SBRC, University of Wollongong</p> <p>Michael Tibbs Engineering Project Research Associate, SBRC, University of Wollongong</p> <p>Clayton McDowell Engineering Project Research Assistant/ PhD student, SBRC, University of Wollongong</p> <p>Dr Georgios Kokogiannakis Engineering Project, SBRC, University of Wollongong</p> <p>Stephen Choi Home Energy Efficiency Engineering Installations, Viridis</p>	<p>Dr Ross Gordon Social Marketing Project Team Leader, Macquarie University</p> <p>Katherine Butler Social Marketing Project Manager, CHI, University of Wollongong</p> <p>Joshua Beard Social Marketing Project Graphic Designer, Macquarie University/ACU.</p> <p>Nick Davlourous Social Marketing Project Videos, Flying Pig Productions</p>	<p>Professor Gordon Waitt Human Geography Ethnography Project Team Leader, AUSCERR, University of Wollongong</p> <p>Kate Roggeveen Human Geography Ethnography Research Associate, AUSCERR, University of Wollongong</p> <p>Theresa Harada Human Geography Ethnography Research Assistant, AUSCERR, University of Wollongong</p>
<p>Community Partners</p> <p>Kerrie Smith Community Events, WEA Illawarra</p> <p>Graham Neville Community Events, WEA Illawarra</p> <p>David Rogers Property and Sustainability Manager, Warrigal</p> <p>Laura Pritchard Warrigal</p> <p>Steven Ellitt Assets & Contracts Manager, Royal Freemasons Benevolent Institution</p> <p>Andrew Hahn IRT Group</p> <p>Nicky Sloan CEO, Illawarra Forum</p> <p>Simone Stuart NSW HACC Development Officer, Illawarra Forum</p>			