



Final Report

Glennelg SAVES Consortium

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Executive Summary

The groups most vulnerable in Australia to rising energy costs include the elderly, the chronically ill and the socio-economically disadvantaged. The Australian Government's Low Income Energy Efficiency Program (LIEEP), funded through the Department of Industry, Innovation and Science, aimed to assist these disadvantaged groups. The Glenelg SAVES project, funded under Round Two of LIEEP, aimed to address information failure as a barrier preventing low-income residents from improving their energy efficiency. The Glenelg SAVES consortium: Western District Health Service - Southern Grampians Glenelg Primary Care Partnership (SGGPCP), the Glenelg Shire Council (Glenelg Shire) and Federation University Australia (FedUni), managed this project.

This partnership between SGGPCP as the lead agency, Glenelg Shire, FedUni and energy efficiency experts was set up as an advisory group to lead the project. This collaborative approach involved staff from each organisation sharing knowledge, skills, lessons from previous projects and other resources.

The Glenelg SAVES project targeted low-income households who receive Home and Community Care (HACC) services in the Glenelg Shire in South-West Victoria, including elderly residents and people with a disability. The project focused on increasing the capacity and knowledge of the Glenelg HACC staff through an innovative participatory approach, which sought to engage staff in the project by providing home energy efficiency training. This training was tailored to the existing skills and knowledge of HACC staff and enabled them to undertake home energy assessments in both their own homes and that of the region's HACC service recipients. In particular, the objectives of the Glenelg SAVES project were to:

1. Increase the household energy efficiency skills, specifically in home auditing and advice, and improve household energy efficiency for Glenelg Shire HACC staff.
2. Improve energy efficiency in the homes of HACC clients in the Glenelg Shire.
3. Deliver a high quality trial project that provides data and analysis to inform policy and future energy efficiency programs and support for low income households.

This project trialed a participatory development method designed to engage HACC staff and clients in becoming more energy efficient. This approach aimed to increase the knowledge, interest and motivation of HACC staff, who undertook home energy assessments and provided energy efficiency advice to HACC clients through their existing relationship. A range of data including survey, energy use and climate data has been collected and analysed to evaluate the effectiveness of Glenelg SAVES and inform future policy and program approaches.

Methodology

Project Approach

The first stage of the project involved recruiting Glenelg Shire HACC staff to take part in the project. All Glenelg Shire HACC staff (support, maintenance, assessment and management) were invited to take part in an initial information session to outline the project, including processes, support structures and benefits. The project also employed an existing HACC staff member, for 0.2EFT, to be the primary point of contact for the HACC staff, and act as the Glenelg SAVES champion.

HACC staff participants received training in home energy assessments from the Moreland Energy Foundation (MEFL). This training was designed to enable participants to identify and prioritise recommendations, and help arrange their implementation. Once trained, the staff collected baseline data using a paper-based survey and conducted home energy assessments for HACC client participants. The energy efficiency implementation was then carried out, and post-implementation data collected. The project had a budget of up to \$200 per household to support energy efficiency purchases.

As part of the project's community engagement activities, family and others having a relationship with HACC Clients were also encouraged to become more energy efficient. This phase included six community workshops with Planned Activity Groups (PAG) and the local Men's Shed Association.

The longitudinal design employed, used measurements at baseline and at intervals throughout the project. The three major data sources for this study included: energy data, participant surveys and climate data. Qualitative data was also collected through discussions with HACC workers, consortium members and contractors involved in the project.

Evaluation

The methodology applied to the Glenelg SAVES evaluation allows for evidence-based policy making by studying questions such as:

- What influence did the Glenelg SAVES project have on energy use behaviour of HACC staff and clients?
- What influence did the Glenelg SAVES project have on HACC staffs' knowledge and ability to provide advice on household energy efficiency opportunities?
- Which types of participants benefited most from the Glenelg SAVES project?
- What types of low-income consumers are attracted to energy efficiency programs and technologies?

- What factors influence adoption of energy efficiency technologies and curtailment behaviour?
- How does project participation influence the drivers of energy use behaviour?

The evaluation design developed by FedUni researchers is a well-grounded theory-based approach that ensures policy relevance: it not only answers what works but also why (or why not). The framework maps out the sequence from inputs to impact and allows for the identification of barriers that may influence the project's outcomes. Importantly the framework evaluates the Glenelg SAVES trial not simply in terms of observed changes in energy use (and other related measures) but rather in terms of what happened because of the project compared with estimates of what would have happened without the trial (i.e. counterfactuals).

FedUni maintained records of all project activities, all participants (HACC staff and clients) recruited into the project, and all energy efficiency recommendations adopted. The content of the database included:

- Household energy consumption data (from meter and/or billing data)
- Household and demographic data relating to LIEEP Data items
- Weather data (from Bureau of Meteorology data files)
- Household attitudinal and other data

Glenelg SAVES was conducted from 2013/14 to 2015/16 and included 22 HACC Staff and 306 HACC Client participants.

Findings

In summary:

- The project was successful in increasing beliefs around the energy efficiency levels of participant households and their perceived control over energy consumption.
- Glenelg SAVES was successful in increasing: perceived household energy efficiency levels and control over energy use and heating curtailment behaviour among HACC Client participants.
- The project was successful in achieving its aim of increasing the energy knowledge of HACC Staff.
- Most workers and clients had carried out some of the recommendations arising from their energy efficiency assessments.
- Satisfaction with participation in the project for both workers and clients was high.
- The project was not successful in reducing household electricity use. Although electricity use did decline from the project's pre- to post-assessment phase, this was consistent with

historical trends. The actual levels of energy use were 5% higher than forecasts from statistical modelling. These results were consistent for both HACC Staff and Clients.

- The analysis found that energy efficiency knowledge had a significant influence on attitudes towards reducing energy and participant's perceived ability to achieve this goal.
- HACC staff identified economic factors as the major reason for joining the project, whereas for HACC clients the influence of HACC staff and financial support for energy efficiency purchases were greater.
- A high level of energy curtailment for HACC clients was identified, suggesting little potential to increase such behaviour, although opportunities for increased energy efficiency may exist.
- Most common actions, for staff and clients, generally related to appliances and heating.

Recommendations

1. Extend the HACC Program to incorporate energy efficiency training for all staff and targeted advice and support for clients.
2. Promote energy efficiency as a wellbeing issue that falls within the provision of public health services.
3. Alleviate imperfect information market failure by using social networks to support disadvantaged groups in accessing energy efficiency information, advice and support.
4. Establish standard guidelines for undertaking energy efficiency program evaluations in an Australian context.
5. Investigate opportunities for encouraging financial support for energy efficiency investment by low-income households.

List of acronyms and abbreviations:

ADC	Average Daily Consumption
BOM	Bureau of Meteorology
CADE	Computer-assisted data entry
FedUni	Federation University Australia
Glenelg Shire	Glenelg Shire Council
HACC	Home and Community Care
HVAC	Heating, ventilation, and air conditioning
kWh	Kilowatts per hour
LIEEP	Low Income Energy Efficiency Program
MEFL	Moreland Energy Foundation
NAC	Normalised Annual Consumption
NADC	Normalised Average Daily Consumption
OMR	Optical mark recognition
PAG	Planned Activity Groups
PV	Solar photovoltaic
SGGPCP	Southern Grampians Glenelg Primary Care Partnership
TPB	Theory of Planned Behaviour
VEET	Victorian Energy Efficiency Target

Table of Contents

Executive Summary	i
1. Introduction	1
1.1 Glenelg SAVES Background	1
1.2 Glenelg SAVES: the project.....	2
1.3 Program Approach	6
2. Methodology	17
2.1 Evaluation Design.....	17
2.2 Data Collection	20
2.3 Data Entry and Analysis.....	25
2.4 Database design and management	27
3. Results	29
3.1 Participant Characteristics	29
3.2 Reasons for joining Glenelg SAVES	36
3.3 Energy Assessment Recommendations	37
3.4 Project Impact.....	39
3.5 Participant satisfaction and perceived quality	51
3.6 Process Evaluation.....	53
3.7 Co-benefits.....	69
3.8 Cost effectiveness	70
4. Budget	74
5. Conclusion and Recommendations	76
Appendices	81

List of Figures

Figure 1: Map of Glenelg Shire Council, Local Government Area	6
Figure 2: Project Timeline	8
Figure 3: Glenelg SAVES short-film (screenshots).....	16
Figure 4: Conceptual Framework.....	19
Figure 5: Overall NADC: actual vs. trend (kWh).....	39
Figure 6: HAC Staff NADC: actual vs. trend (kWh).....	40
Figure 7: HAC Clients NADC: actual vs. trend (kWh).....	40
Figure 8: Post-assessment NADC by town: actual vs. trend (kWh)	41
Figure 9: Post-assessment NADC by own HACC worker: actual vs. trend (kWh)	41
Figure 10: Post-assessment NADC by house size: actual vs. trend (kWh)	42
Figure 11: Post-assessment NADC by age of house: actual vs. trend (kWh)	42
Figure 12: Post-assessment NADC by project purchase type: actual vs. trend (kWh).....	43
Figure 13: Changes in key project outcomes.....	70
Figure 13: Revenue and expenditure report	74
Figure 14: Funding sources	75

List of Tables

Table 1: Project Governance.....	5
Table 2: Date of home energy efficiency assessment by group	24
Table 3: Number of records (cases) uploaded to LIEEP database	28
Table 4: Participants by town and group	29
Table 5: Participants by tenure and group.....	30
Table 6: Level of education by group	30
Table 7: Dwelling characteristics by group.....	31
Table 8: Dwelling insulation by group.....	32
Table 9: Recent modifications by group.....	33
Table 10: Hot water system by group.....	33
Table 11: Household lighting profile (average # per household).....	34
Table 12: General energy curtailment behaviour	34
Table 13: Heating energy curtailment behaviour.....	35
Table 14: Cooling energy curtailment behaviour	35
Table 15: Reasons for joining Glenelg SAVES.....	36
Table 16: Electricity use changes by group.....	43
Table 17: Gas use changes by group	44
Table 18: Level of recommendation adoption by group	46
Table 19: Recommendations adopted by group.....	46
Table 20: Changes in non-energy benefits (all participants)	49

Table 21: Changes in non-energy benefits (HACC Staff)	50
Table 22: Changes in non-energy benefits (HACC Clients)	50
Table 23: Satisfaction by group.....	51
Table 24: Satisfaction by region.....	51
Table 25: Service quality by region	52
Table 26: Product quality by group.....	52
Table 27: Cost-effectiveness analysis (cost per % increase)	72
Table 28: Per participant cost-effectiveness analysis (cost per % increase)	72

1. Introduction

This report presents the findings of Glenelg SAVES. Undertaken from July 2013 – 30 June 2016, the evaluation included in this report represents an important element of understanding the influence of the Glenelg SAVES project on improving the energy efficiency of low-income households. Although this research is confined to the influence of one project, its findings provide a broader understanding of the role of such programs in overcoming the barriers to the uptake of energy efficiency measures in low-income households.

This report is organised into five broad sections. The first section details the background, objectives and activities of the Glenelg SAVES project. The second section details the methods used by evaluate the project's effectiveness. The following section details and discusses the evaluation findings and is organised around the key topic areas covered in the study. The fourth section details the project's budget. The final section concludes the report with a brief discussion of the evaluation findings and recommendations for future support of low-income households.

1.1 Glenelg SAVES Background

The groups most vulnerable in Australia to rising energy costs include the elderly, the chronically ill and the socio-economically disadvantaged. The Australian Government's Low Income Energy Efficient Program (LIEEP), funded through the Department of Industry, Innovation and Science, had the following two objectives to assist disadvantaged groups:

1. To trial and evaluate a number of different approaches in various locations to assist low-income households to become more energy efficient.
2. To capture and analyse data and information for future energy efficiency policy and program approaches.

The intended benefits of the LIEEP were to:

- Assist low-income households to implement sustainable energy efficiency practices to help manage the impacts of increasing energy prices and improve the health, social welfare and livelihood of low-income households.
- Build the knowledge and capacity of consortium members to encourage long-term energy efficiency among their customers or clients.
- Build capacity of Australia's energy efficiency technology and equipment companies by maximising the opportunities for Australian industries to participate in the projects.

The Glenelg SAVES project, funded under Round Two of the LIEEP, aimed to address information failure as a barrier preventing low-income residents from improving their energy efficiency. This project and evaluation was managed by the Glenelg SAVES consortium: Western District Health Services - Southern Grampians Glenelg Primary Care Partnership (SGGPCP), the Glenelg Shire Council (Glenelg Shire) and Federation University Australia (FedUni).

This project trialed a participatory development method designed to engage HACC staff and clients in becoming more energy efficient. This approach involved an innovative participatory training approach to increase the knowledge, interest and motivation of Home and Community Care (HACC) staff, who undertook home energy assessments and provided advice via their existing trusted relationship with HACC clients. A range of data including survey, energy use and climate data has been collected and analysed to evaluate the effectiveness of Glenelg SAVES and inform future policy and program approaches.

1.2 Glenelg SAVES: the project

The first stage of the project involved recruiting Glenelg Shire HACC staff to participate in the project. All Glenelg Shire HACC staff (support, maintenance, assessment and management) were invited to take part in an initial information session to outline the project, including processes, support structures and benefits. The project also employed an existing HACC staff member, for 0.2EFT, to be the primary point of contact for the HACC staff, and act as the Glenelg SAVES champion.

HACC staff participants received training in home energy assessments from the Moreland Energy Foundation (refer Appendix A for training materials). This training was designed to enable participants to identify and prioritise recommendations (refer Appendix B for prioritisation form), and assist with the arrangement for energy efficiency implementation to be carried out in the home. The participatory training approach enabled HACC staff to undertake assessments in their own homes. This approach provided HACC staff with the opportunity to apply the energy efficiency knowledge and skills gained from their training in a context that was personally relevant to them. Once trained the staff collected baseline data using a paper-based survey and conducted home energy assessments for HACC client participants. The energy efficiency implementation was then carried out, and post-implementation data collected. The project had a budget of up to \$200 per household to assist with energy efficiency purchases.

As part of the project's community engagement activities, family and others having a significant relationship with HACC Clients were also encouraged to become more energy efficient. This phase

included community workshops with Planned Activity Groups (PAG) and local “Men’s Sheds”. Six Community Forums were conducted as part of the parallel community awareness program targeted at stakeholders who work with or who have a relationship with HACC clients.

Maureen Crisp: HACC worker

Maureen Crisp is already putting her new found skills to work, to improve energy efficiency in her home. Maureen was motivated to be involved in Glenelg SAVES as it “helps my clients save money, not only during the project, but into the future too”.

Through the Glenelg SAVES (Seniors Achieving Valuable Energy Savings) project, Maureen has been trained in Home Energy Efficiency Assessment. The training provided Maureen with the information she needed to make the best choice when purchasing her new appliance, and also how to use the machine the most efficiently once it was installed:

- Look at water and energy use and how to read the star rating stickers
- Consider a front loader; they often use less water
- Wash in cold water whenever possible
- Use less detergent

Maureen’s involvement in the Glenelg SAVES project has heightened her awareness of energy efficiency, and increased her knowledge. “Having the information provided to me in a no-nonsense format, was invaluable,” Maureen said, “and then to be able to put it into practice straight away was the real winner for me. I can’t wait to be able to assist some of my clients to improve their energy efficiency too”.



Saving Energy – It’s all about “Nanna Technology”

Jason Cox, from the Moreland Energy Foundation recently reminded members of the Dartmoor Planned Activity Group (PAG) that “Nanna Technology” is one key to saving on your household energy bills. “ Losing precious heat during winter or cool air in summer as a result of drafts and gaps in our homes is a major cause of energy inefficiency” said Mr Cox at a series of energy efficiency workshops facilitated by the Glenelg SAVES project. “Door snakes, cool towels near fans and a knee rug are some of the simple ways to save energy - much as our Nanna used to tell us” he said.



The workshop in Dartmoor provided opportunity not only for the Planned Activity Group members to pick-up some great energy efficiency tips, but also the PAG staff and other staff at the Dartmoor Bush Nursing Centre. Conducted during the course of a regular PAG session, a number of people had to pop in and out of the workshop. “The ability for sharing learnings between participants, when someone had missed a tip, was amazing” said Maureen Crisp, Glenelg SAVES Project Officer.

Rachael Pridham, PAG Coordinator noted that “all of the PAG members were really interested in what Jason had to say – it was great to have an expert come and visit us in Dartmoor”. “There has already been further discussion about people making some changes in their homes, including getting an energy saving switch for their TVs that they control, rather than the auto-off ones, and that they will speak to their families about changing to LED lighting”.

The longitudinal design employed, used measurements at baseline and at intervals throughout the project. The three major data sources for this study included: energy data, participant surveys and climate data. Qualitative data was also collected through discussions with HACC workers, consortium members and local contractors involved in the project.

Project Objectives

1. Increase the household energy efficiency skills, specifically in home auditing and advice, and improve household energy efficiency for 30 Glenelg Shire HACC staff.
2. Improve energy efficiency in the homes of 300 HACC clients in the Glenelg Shire.
3. Deliver a high quality trial project that provides data and analysis to inform policy and future energy efficiency programs and support for low income households.

Project Governance

The following details the project’s consortium members and their roles and responsibilities.

Table 1: Project Governance

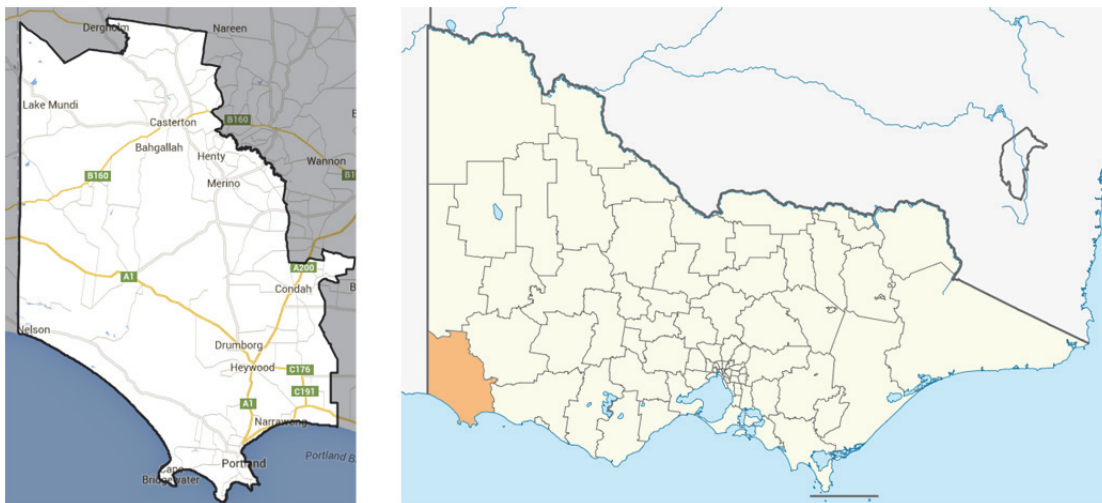
Consortium Member	Role, Accountabilities and Responsibilities
Western District Health Service – Southern Grampians and Glenelg Primary Care Partnership (SGGPCP)	Lead Agency, with overall accountability to existing Executive Committee of the SGGPCP <ul style="list-style-type: none"> • Project direction and management • Facilitate project advisory group • Project Reporting, including data • Information dissemination • Project Manager employment • Manage contractors (for energy efficiency implementation)
Glenelg Shire: Home and Community Care (HACC) Program	Project conducted through Glenelg Shire HACC program <ul style="list-style-type: none"> • Manage and supervise HACC support staff • Manage and supervise HACC Maintenance staff • Advisory Group member • Utilise expert knowledge to facilitate project with HACC staff and HACC clients
Federation University Australia	Expert advice and direction with regards to the project, and in particular data collection, analysis and evaluation <ul style="list-style-type: none"> • Manage and deliver data collection and analysis • Data Management and synthesis • Project evaluation • Assistance with Project Reports • Advisory Group member

Note: Originally, Energised Homes were part of the Glenelg SAVES consortium with the role and responsibility of providing expert energy efficiency advice and energy efficiency training. Due to extraneous circumstances, the organisation had to withdraw from the consortium in early 2014. The role and tasks associated with Energised Homes' involvement were outsourced to the Moreland Energy Foundation (MEFL).

1.3 Program Approach

Glenelg SAVES targeted low-income households who receive HACC services in the Glenelg Shire in South West Victoria (refer Figure 1), including elderly residents and people with a disability. The project employed an innovative participatory training approach to increase workforce capacity of the Glenelg Shire HACC staff. This participatory training approach, allowed the HACC staff to undertake training to increase energy efficiency awareness and to develop skills in home energy assessment. As well as experiencing a home energy assessment and adapting their home environment and behaviour, the project was designed to increase the HACC staff's engagement prior to recruiting HACC clients. The "real life" experience of conducting a home energy assessment and adaptation to improve their own home energy efficiency further developed their knowledge and understanding thus enabling staff to translate the benefits to their client group.

Figure 1: Map of Glenelg Shire Council, Local Government Area



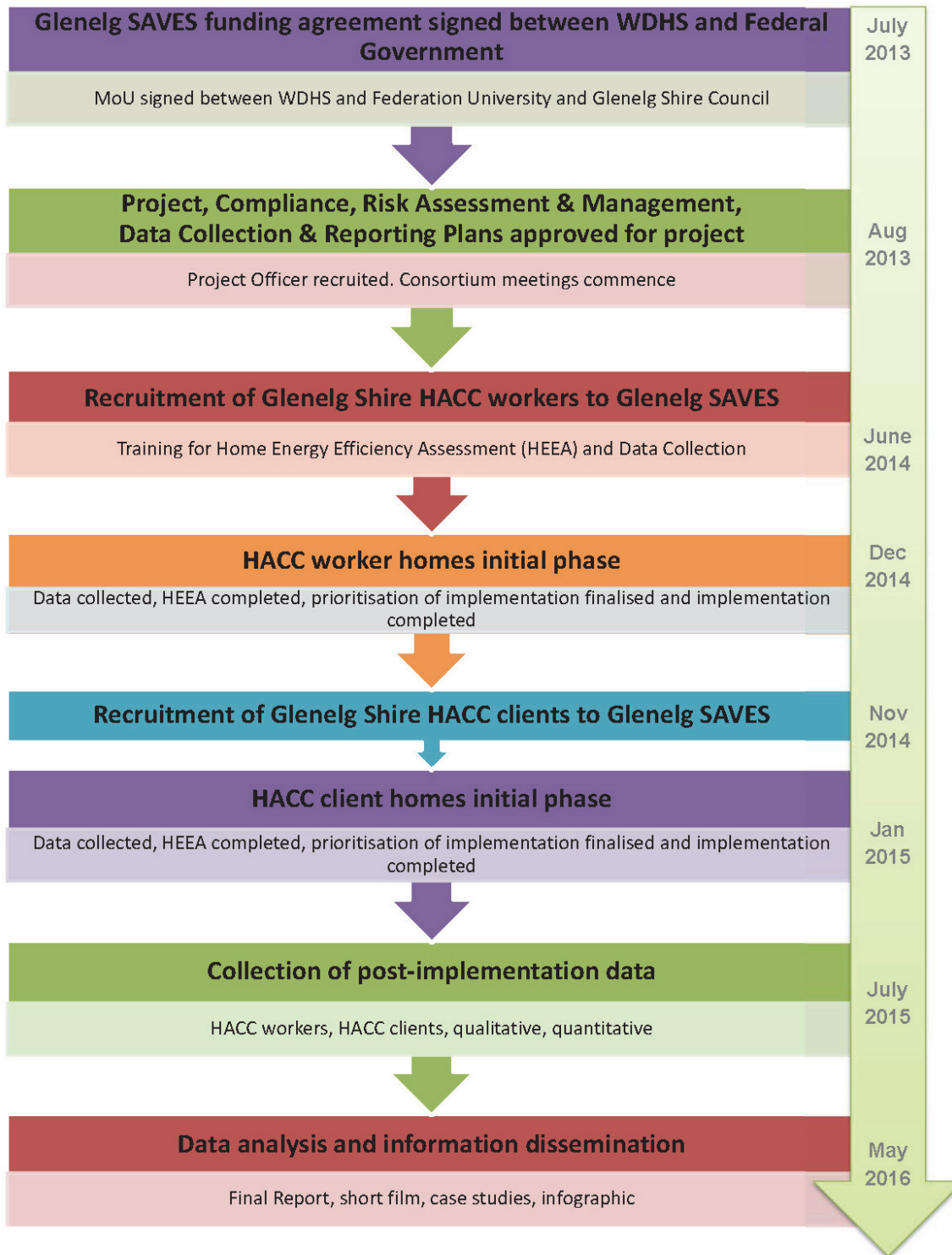
HACC staff work in the homes of their clients and are in a unique position to work closely with them to increase their energy efficiency. In addition, the relationship HACC staff have with HACC service recipients provides an opportunity to engage with this vulnerable sub-set of the community. HACC workers have established a rapport and trust with their clients to support their clients to live independently and autonomously in the community. Anecdotal feedback from HACC staff indicates that many of their clients' energy use behaviours could be detrimental to their health and wellbeing. This includes not using heating during winter or air-conditioning during summer for fear of rising

energy bills. After conducting a home energy assessment with their clients, staff were then able to link their clients with opportunities to improve energy efficiency through local service providers. Previously, HACC clients have been reluctant to take up some community projects (such as the Victorian Energy Efficiency Target (VEET) schemes), mainly due to lack of understanding of benefits and distrust of those implementing such programs.

The collaboration between SGGPCP as the lead agency, Glenelg Shire HACC, FedUni and energy efficiency experts was formed to establish an advisory group to lead the project. This advisory group allowed for a collaborative approach that involved the sharing of knowledge, skills, lessons from previous projects and other resources.

During the initial planning of Glenelg SAVES, a program logic framework was used to outline the theory and major assumptions underlying the project (refer Appendix C for project planning documentation). The major phases of the project are detailed in Figure 2 (overleaf).

Figure 2: Project Timeline



The following provides details of how the project's objectives and strategies were linked with intended outputs and outcomes because of this process.

Objective One

Increase the household energy efficiency skills, specifically in home auditing and advice, and improve household energy efficiency for 30 Glenelg Shire HACC staff by June 2015.

Strategies:

- Recruit a Glenelg Shire HACC staff member for 0.2EFT Project Officer position, allowing for internal leadership and communication.
- Conduct an information awareness session on the project, outline the home energy efficiency and auditing training for all Glenelg Shire HACC staff and recruit 35 staff to undertake training.
- Deliver a course in Home Sustainability Auditing.
- Enable recruited HACC staff to collect prescribed baseline data, conduct audits in their own homes to priorities actions for improving energy efficiency.
- Support HACC staff to action energy efficiency priorities by assisting HACC staff to implement home adaptation and behaviour change strategies in their own homes and collect post-improvement data.

Intended Outputs:

- HACC staff member recruited as a project officer
- Information session conducted with HACC staff
- 35 HACC staff homes have baseline and post energy efficiency improvement data collected
- 35 HACC staff have implemented home adaptation and behaviour change to increase energy efficiency

Intended Outcomes:

- Trained HACC staff have increased capacity to enable recruitment of HACC clients for the project.
- Increased skills and knowledge, through participation in the "real life" experience, of trained HACC staff to engage HACC clients and others in the importance of improving home energy efficiency.
- Increased household energy efficiency in homes of 35 HACC staff
- Recruitment of HACC clients for this project enables further discussions for all HACC clients around household energy efficiency.

Objective Two

Improve energy efficiency in the homes of 300 HACC clients in the Glenelg Shire by December 2015.

Strategies:

- Trained HACC staff to each recruit 10 HACC clients for the project, conduct home audits, and collect baseline and post-implementation data.
- Implement audit recommended home adaptations for the HACC client homes by linking with HACC maintenance, government and community projects and outside contractors.
- Supporting HACC Clients to undertake behavioural change to improve energy efficiency
- Deliver a targeted community energy efficiency awareness education program.

Intended Outputs:

- 350 HACC Clients recruited for the project.
- Home audits and pre data collection completed in the homes of 350 HACC clients.
- 300 HACC clients have been supported to implement home adaptation and behaviour change to increase energy efficiency and post data collected.
- Five energy efficiency workshops conducted with target groups across the Glenelg Shire.
- Media releases placed across the Glenelg Shire print and electronic media to increase awareness of energy efficiency and the project (refer Appendix D for project media releases).

Intended Outcomes:

- Data collection informs future household energy efficiency projects.
- Increased energy efficiency in the homes of 300 HACC clients

Objective Three

To deliver a high quality trial project that provides data and analysis to inform policy and future energy efficiency projects for low income households, by 31 March 2016.

Strategies:

- Develop robust project management and governance to ensure trial project validity and credibility.
- FedUni will work with HACC staff to collect data as specified in LIEEP funding agreement (Annexure C Schedule 4).

- Report and analysis of data.

Intended Outputs:

- High functioning and rigorous advisory group reporting to SGGPCP Executive.
- Data sets completed for 30 HACC staff and 300 HACC clients.

Intended Outcomes:

- Valid data sets and analysis to inform future household energy efficiency programs.

Based on the above program logic framework, the following details specific activities administered as part of Glenelg SAVES.

Engagement and training of HACC staff

The first stage of the project involved recruiting Glenelg Shire HACC staff to participate in the project. Previously the Glenelg Shire HACC participated in the Sustainability Victoria funded Pass the Parcel Project¹ managed by SGGPCP. This project involved working with a small number of staff who volunteered to participate in the project; 12 staff participated, working with 55 clients. This was a valuable opportunity to ascertain training needs and interest of HACC staff. SGGPCP, together with support from Deakin University/Department of Health/ Department of Human Services Strategic Alliance facilitated further training for HACC staff through Kildonan Uniting Care. As a result, Glenelg Shire HACC were well placed to participate in the trial with a good framework to build on and management support, but more importantly a recognition on the importance of energy efficiency, and the impact of rising energy prices on the welfare of their low-income client group and their ability to intervene.

All Glenelg Shire HACC staff (support, maintenance, assessment and management) were invited to participate in an initial information session to outline the project, including processes, support structures and outcomes. Attendance at the information session was subsidised by the Glenelg Shire to ensure access for all staff. The information session highlighted processes for staff training, benefits of participation in training including “real life” experience, impact on personal household energy efficiency, processes to impact clients’ energy efficiency and value of the training for community participation. The project also engaged an existing HACC staff member, for 0.2EFT, to be the primary point of contact for the HACC staff and act as the project champion.

¹ Further information on the Pass the Parcel project is available at: <http://sggpcp.com/wp-content/uploads/2014/05/2013FINALREPORT.pdf>

The participating HACC staff received 12 hours of formal training in home energy efficiency and energy assessment. Once trained, HACC staff collected baseline data (as required in Annexure C LIEEP data items) in-home and conducted home energy assessments for their own residence. Furthermore, they learnt to identify and prioritise recommendations, and assist with the arrangement for energy efficiency implementation to be carried out in the home. FedUni assisted with data collection (see Appendix E for Data Collection and Reporting Plan). The energy efficiency implementation was then carried out, and post-implementation data collected. The project had a budget of up to \$200 per household to assist with energy efficiency purchases.

Clipping 1: Seniors saving power

Seniors saving power

Thirty-five Community Support Workers (CSWs) will receive formal home energy assessment training as part of a new project at Glenelg Shire Council.

Glenelg SAVES (Seniors Achieving Valuable Energy Saving) equips CSWs with the skills needed to assess the energy consumption of both their own and their clients' homes, then implement strategies to reduce power usage.

The program was launched in late February and is being coordinated through the Council's Home & Community Care (HACC) department.

Glenelg Shire Council Mayor Councillor John Northcott said it was exciting for Glenelg Shire to be at the forefront of initiating positive changes to assist our environment.

"Even if we all make the small differences in our homes, it adds up to a huge difference in energy savings overall.

"The real benefits aren't what we will feel immediately but they are what will affect the livelihoods of our children and future generations."

The project received funding from the Australian Government Department of Industry as part of the Low Income Energy Efficiency Program.



From Left: Executive Officer of the Southern Grampians Glenelg Primary Care Partnership Janette Lowe, Glenelg Shire Council 'Glenelg SAVES' Project Officer Maureen Crisp, Glenelg Shire Council Group Manager Community and Culture Adele Kenneally, Glenelg Shire Council Councillor Gilbert Wilson (front) Glenelg Shire Council HACC client Debbie Schultz

Glenelg Shire Council, Federation University and the Southern Grampians Glenelg Primary Care Partnership have collaborated and provided the remainder of the funding. Data will be collected pre and post energy efficiency improvements with continued research until the project's completion in March 2016.

Source: *Local Government Focus* (April 2014)

Formal home energy assessment training

THIRTY-FIVE Community Support Workers (CSWs) will receive formal home energy assessment training to pass on to their clients, as part of a new project at Glenelg Shire Council.

The initiative, Glenelg SAVES – Seniors

Achieving Valuable Energy Saving – was launched in late February and is being co-ordinated through the council's Home & Community Care (HACC) department.

Together with data collection, CSWs will be funded to assess their own homes for energy

efficiency as well as make some improvements to the energy efficiency of their homes.

CSWs will then involve their clients in the project, collecting pre and post data, conducting an energy efficiency assessment of the homes and also working with the client to arrange for the installation/adjustment to improve the energy efficiency of the home.

Glenelg Shire Council Mayor Cr John Northcott said it was exciting for the shire to be at the forefront of initiating positive changes to assist our environment.

“Even if we all make the small differences in our homes, it adds up to a huge difference in energy savings overall,” he said.

Data will be collected pre and post energy efficiency improvements and the consortium members will all work on the project throughout its duration, until its completion in March 2016.

Source: *Hamilton Spectator* (25 March 2014)

Recruitment of HACC Clients

Through their own experience in the project, participating HACC staff were well placed to explain the benefits of the project to their clients. HACC staff collected baseline data with their clients and undertook a household energy efficiency assessment of the clients' home. This then informed the identification and prioritisation of energy efficiency implementations in the home. The Project Manager and Project Officer, along with the HACC Staff worked together to arrange for the energy efficiency improvements to be made at the HACC client homes. A majority of this work involved engaging local contractors/suppliers. Two hundred dollars for each participant was allocated to implement priority changes, which was used for the purchase and installation of equipment such as draught proofing & weather sealing, ceiling fans and installation of window shading as required. Throughout this process, HACC staff continued monitoring and supporting energy efficiency actions

and home adaptation with their clients through their ongoing relationships. Post-implementation data collection occurred after the energy efficiency improvements had been made.

Clipping 3: Program teaches energy-saving measures

Program teaches energy-saving measures

MORE than 300 Home and Community Care (HACC) clients are now savvy household energy savers, after taking part in a pilot program by Glenelg Shire Council.

The Glenelg SAVES (Seniors Achieving Valuable Energy Savings) project is an initiative of Council's HACC team to educate carers and their clients about energy-saving in the home.

Funding from the

Department of Industry enabled 35 Community Support Workers (CSW) to learn about the latest energy saving measures, how to assess clients' homes and how to arrange for the installation of items like LED lights and new blinds and awnings (for improved insulation), as well as door and window weather proofing.

During September, HACC staff will contact

all participants to survey how the energy-saving measures have affected each household. Those who take part in the survey will go into a draw to win a \$50 grocery voucher.

The project coordinator would like to prepare some case studies to include in the project's final reporting. If you are able to assist, please contact your HACC worker or



Maureen Crisp on 5522 2204. The Glenelg SAVES project, which will continue until March 2016, is also

supported by Federation University and the Southern Grampians Glenelg Primary Care Partnership.

Source: *GS Community News* (Spring 2015)

Staffing and Resourcing Requirements

The project was managed through SGGPCP where a Project Director (0.1EFT) was employed to oversee the strategic direction of the project and provide project management advice and assistance to other project staff. The SGGPCP also employed a Project Manager (0.5EFT), who was responsible for the co-ordination of the advisory group, reporting requirements and operational requirements of the project. The Glenelg Shire employed a Project Officer (0.2EFT) who was located within their HACC program to facilitate a close relationship with HACC staff and management, and acted as an advocate of the project and main contact for HACC staff.

HACC staff (including support, management and maintenance) were invited to an information session to outline the project process and impacts and to recruit HACC staff to undergo the training program. The Glenelg Shire resourced staff to attend information sessions and training and provided a venue to enable access for all staff. Furthermore, each staff member was allocated three hours per household to conduct the home energy efficiency assessment and collect data; this included their own and client homes.

Collection and analysis of project-related data

A significant component of the project was the collection and analysis of data, which was completed by FedUni. The University worked with HACC staff to collect data. FedUni then managed the analysis and synthesis of data and assisted with reporting and research requirements.

A longitudinal design was employed, with measurements at baseline and at intervals throughout the remainder of the project. The three major data sources were used for this study included: energy data, participant surveys and climate data. This project element included the collection of data required for Annexure C LIEEP data items. Qualitative data was also collected through discussions with HACC workers, consortium members and local contractors involved in the project.

Dissemination of Results

Information dissemination is critical to partnerships, and when working with vulnerable groups of people in the community, it is essential to disseminate information in a meaningful and practical manner. Information content and delivery is one of the key barriers identified for Low Income Households with regards to household energy efficiency. The Glenelg SAVES project consortium was very aware that although the Glenelg SAVES project was reported on extensively to the Department of Industry, Innovation and Science, and more broadly through the LIEEP CSIRO reporting, these reports were not going to be accessible to our project participants, and other stakeholders. We were also preparing abstracts and papers for journals and conferences, however once again, we were missing a key group of people. A short film of approximately six minutes, featuring actual participants from the project (refer Figure 3, overleaf), telling their story and experience, was going to provide meaningful information on the project. From previous experience, producing a short film, has a far greater reach, to an unlimited audience, than formal reports. Furthermore, a short “project report on a page” will be produced for participants and other stakeholders in appropriate formats.

Figure 3: Glenelg SAVES short-film (screenshots)



2. Methodology

The following section summarises the research design and methodology used to achieve the study's objectives. In particular, this section explains the type of evaluation design, data collection and analysis procedures, and study participants.

2.1 Evaluation Design

For the project's evaluation, FedUni developed theoretical and conceptual frameworks to guide the design and administration of survey instruments; collated and uploaded data into CSIRO's national LIEPP database; and undertook primary and secondary data analysis to understand the project's effectiveness. This approach provided a systematic procedure for collecting and analysing trial information. The evaluation was designed to assess changes in energy use and other important attributes (e.g. knowledge, attitudes and participant satisfaction) related to the Glenelg SAVES project. The methodology applied to the Glenelg SAVES evaluation allows for evidence-based policy making by studying questions such as:

- What influence did the Glenelg SAVES project have on energy use behaviour of HACC staff and clients?
- What influence did the Glenelg SAVES project have on HACC staffs' knowledge and ability to provide advice on household energy efficiency opportunities?
- Which types of participants benefited most from the Glenelg SAVES project?
- What types of low-income consumers are attracted to energy efficiency programs and technologies?
- What factors influence adoption of energy efficiency technologies and curtailment behaviour?
- How does program participation influence the drivers of energy use behaviour?

Theoretical Framework

Existing studies on household energy behaviour are typically based on interdisciplinary concepts from economics, psychology and sociology. The 1970s energy crisis in the United States prompted increased interest in understanding how households could reduce energy consumption in response to increased energy costs (Stern, 2002). This led to a body of research designed to understand the main factors influencing energy consumption behaviour. The primary purpose of such studies has been to stimulate behaviours that are more energy efficient and/or will reduce energy-consuming behaviours. Despite the prevalence of research addressing such issues, understanding energy

behaviour still presents many complexities. Such issues include difficulties in identifying and measuring the factors that influence energy-consumption and the nature of each influence on behaviour. Stern (1992) suggested potential factors include psychological, social structures, economic, technological and other variables. Similarly, Abrahamse et al. (2005) propose that energy consumption is a complex interaction between macro-level factors (e.g. technological, economic, demographic and institutional factors) and an individual's perceptions, preferences and abilities.

Barr et al. (2001) sought to provide a broader understanding of environmental behaviour, through a framework that suggests consumption is mainly influenced by social and environmental values, situational variables and psychological factors. The link between values and conservation behaviour builds on previous studies, which have found that social values are associated with environmental practices (Cameron et al., 1998; Corraliza & Berrenguer, 2000; and Stern et al., 1995). A wide range of social science studies have also examined the influence of environmental values on behaviour. In general, such studies have failed to provide conclusive evidence that support the effect of values on behaviour (e.g. Steel, 1996; Scott and Willits, 1994; Vining & Ebreo, 1992). A possible reason for the failure to identify such a relationship could be attributed to the moderating and mediating effects of situational variables (e.g. physical infrastructure, geographical location, socio-economic structure and knowledge) or psychological variables (e.g. attitudes, social norms), which have received considerable attention in the past forty years (Ajzen & Fishbein, 1978; Stern et al., 1992).

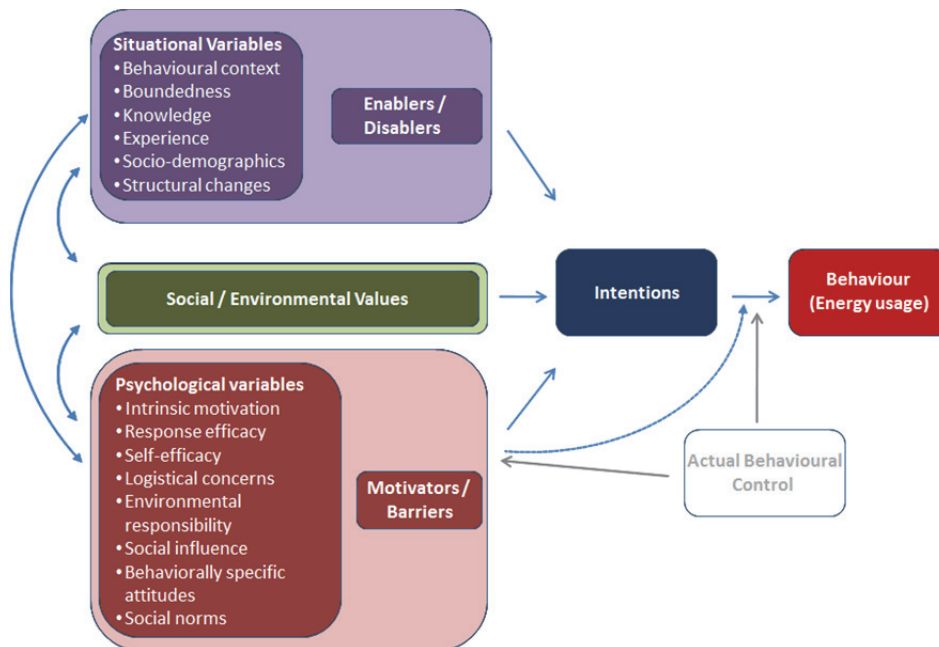
Despite the prevalence of literature into the determinants of energy consumption, such factors are rarely taken into consideration when evaluating the effectiveness of energy programs. Indeed, Abrahamse et al (2005) found that only 25% of studies reviewed controlled for behavioural determinants. Such omissions inhibit the ability of these evaluations to investigate if the differences observed in post-program energy consumption are caused by the intervention itself or by something else (i.e. counterfactual explanations). The Glenelg SAVES evaluation considered such confounding effects by comparing the influence of project interventions in the context of other determinants of energy use. Such determinants outside the project's interventions have been taken into consideration in the development of this evaluation's conceptual framework.

Conceptual Framework

A review of the literature highlighted the need to understand the characteristics of households as well as the context in which they live in order to understand energy behaviour and how it might be changed. The study's conceptual framework (Figure 4, overleaf) proposes that energy behaviour (and behavioural intentions) is a function of situational variables, social/environmental values and

psychological factors that motivate or act as barriers for households to use energy in a particular way. This conceptual framework was used as a basis to guide the evaluation and construction of associated survey instruments. This framework builds on other research undertaken by FedUni into identifying and understanding the determinants of conservation behaviour.

Figure 4: Conceptual Framework



Adapted from Barr & Gilg (2007), Ajzen & Fishbein (1980, 2005) and Lynch et al. (2013).

The evaluation design developed by FedUni researchers is a well-grounded theory-based approach that ensures policy relevance: it not only answers what works but also why (or why not). The framework maps out the sequence from inputs to impact and allows for the identification of barriers that may influence the project's outcomes. Importantly the framework evaluates the Glenelg SAVES trial not simply in terms of observed changes in energy use but rather in terms of what happened to energy use because of the project compared with estimates of what would have happened in the absence of the trial (i.e. counterfactuals).

Ethics Approval

Approval for the Glenelg SAVES project was obtained from Federation University Human Research Ethics Committee on 12 June 2014, and approval for the qualitative evaluation of the project was obtained on 21 September 2015 (refer Appendix F for ethics application). Although, ideally data for a study such as the Glenelg SAVES project would be collected by an independent third party, previous work and anecdotal reports from the Glenelg Shire reveal that using a HACC worker who has an

established relationship with the client was the best way to gather data and was the foundation for this project.

In accordance with the National Statement of Ethical Conduct in Human Research, the following protocols were put in place to ensure that participation was purely voluntary and not influenced by the existing relationships between the Glenelg Shire, the HACC workers and the HACC clients during the consent process:

- HACC clients were encouraged to discuss their participation with someone who is able to support them in making their decision
- Where potential participants were especially vulnerable or powerless, HACC clients were encourage to appoint a participant advocate
- HACC staff and consortium members were briefed to take particular care throughout the research to minimise the impact of any dependency
- As part of the consent process, persons who declined to participate in or decided to withdraw from the study were ensured that they would not suffer any negative consequences, such as unfair discrimination, reduction in the level of care or any other disadvantage
- HACC staff were also informed that if they declined to participate in or decided to withdraw from the study they would not suffer any negative consequences, such as unfair discrimination, dismissal from employment or any other disadvantage

All participants were provided with a plain language information statement (refer Appendix F: Ethics application) outlining the Glenelg SAVES project, the research procedures – what participation would involve, the risks of participation, the available support and data protection. Written consent was obtained from the participants (or their advocate if appropriate) prior to their involvement in the research. Copies of the consent forms are provided in Appendix F: Ethics application.

2.2 Data Collection

The voluntary nature of participation in energy efficiency programs often means that a true experimental design with randomly assigned treatment (i.e. intervention group) and non-treatment (i.e. control group) groups is not possible. A number of factors relating to the context of Glenelg SAVES prohibited the use of a randomised control trial design. Such factors included:

- Limited number of HACC staff and clients for a control group
- Randomising a control group from such a vulnerable group within the community could potentially be perceived as exclusion and have a detrimental impact on wellbeing

- If another shire was able to participate and act as the control group there would have been a significant cost to the project to gather data for comparison and provide incentives for participation
- Discrimination and damage to relationships both between organisations and staff/client relationship

Due to these circumstances, an interrupted time-series design² was employed, with measurements at baseline (and before baseline for some measures) and at intervals throughout the rest of the project. Three major data sources collected and monitored for evaluating project outcomes were:

- Energy use
- Participant information
- Climate data

Energy use:

The data requirements for the evaluation required energy use data from participating households. This analysis used meter data provided by Powercor (the region's electricity distributor). Information about pre-project energy use was collected retrospectively, for up to three years. This pre-project energy use (adjusted for climate variations) was used as a baseline to assess changes attributable to Glenelg SAVES participation. Powercor were unable to provide tariff details for participating households and therefore, it was not possible to convert electricity use into monetary values.

Participant information:

To collect information about the determinants of household energy consumption, baseline surveys were administered to all participating households as part of the energy assessment process (refer Appendix G: Baseline survey). HACC staff also administered a face-to-face follow-up survey (refer Appendix H: Follow-up survey) with participants to measure changes in household characteristics, adoption of recommendations, project satisfaction, free-ridership, spill-over and other suitable items. These surveys included relevant LIEEP Data Items³ (refer Appendix E) and other determinants of household energy use (e.g. attitudes and barriers relating to energy efficiency). The study's key constructs relating to attitudes and opinions were operationalised by using existing scales from the literature. For example, attitudes and opinions about reducing energy use were identified using Ajzen & Fishbein (1991) Theory of Planned Behaviour. Other key constructs such as satisfaction and

² Interrupted time series is a type of longitudinal analysis that can be applied when an intervention occurs at a specific point and the series is broken up by pre- and post- intervention periods (Glass & Wilson, 2008)

³ Relevant LIEEP data items were identified with support from the Commonwealth Scientific and Industrial Research Organisation (CSIRO)

knowledge also used validated scales. Such validated measures of attitudes/beliefs were used to complement LIEEP Data items such as 'barriers being addressed by trial', 'household comfort status' and 'empowerment status'.

Although, ideally data would have been collected by an independent third party, previous work and anecdotal reports from the Glenelg Shire reveal that using HACC workers that have an established relationship with the client was the best way to gather data and the foundation for this project. The HACC workers undertook extensive training (in accordance with Australian Market & Social Research Society's guidelines) to enable them to administer the survey in accordance with best practice research requirements. This training was delivered in the form of a DVD and HACC staff were given the opportunity to contact project staff before recruiting and collecting data from clients (refer Appendix I for DVD note booklet). Due to the flexibility required in the survey booklet (e.g. skipping back and forth between pages relating to different areas of the house) and the low computer literacy of participants, a paper-based survey booklet was used to collect data for the project.

Ideally long-term follow-up would be undertaken to assess the durability of changes to energy use; however, data collection and analysis needed to be undertaken at time frames that ensure successful report submission at this deadline. There are also concerns that extending the period of follow-up data collection would have resulted in a reduction of trial participant numbers due to morbidity and other natural attrition experienced in longitudinal studies (drop-outs, moving residence).

Measures of energy efficiency barriers focused on the extent that HACC staff and clients believe they are able to enact energy efficient behaviour. Such measures included the influence of the following economic and behavioural energy efficiency barriers:

- Credibility and trust in information sources
- Knowledge of cost-effective energy efficiency measures (i.e. imperfect information)
- Bounded rationality (i.e. clarity and accessibility of energy efficiency information, information and time constraints that lead to non-optimal energy-related decisions)
- Attitudes towards energy efficiency benefits
- Access to capital
- Perceived risk of energy efficiency investments
- Principle-agent relationships / split incentives
- Cultural influences (e.g. social pressure, normative behaviour)

Data collected from the follow-up survey was used to obtain post-audit energy use, changes to site characteristics, identify energy efficiency recommendations adopted and ascertain subjective

assessments of project effectiveness. To assess the influence of the project on alleviating energy efficiency barriers, measures were made during the baseline and follow-up surveys and discussed during the trial's qualitative research phase (refer below). Measurement of changes to the prevalence of these barriers, along with their influence on energy efficiency behaviour, is designed to provide a detailed understanding of how the project has influenced participant behaviour and outstanding issues.

The project's data collection activities were designed to minimise participant burden. Therefore, a balance was agreed upon between LIEEP data requirements and the length of surveys. With this objective, 30-40 minute surveys were developed with a focus on priority data requirements. Extra data relating to housing characteristics (e.g. appliances, insulation and materials) were also sourced as part of the Energy Assessment process. These surveys included a basic set of socio-demographic questions, short rating scales and simple plain language. The design and implementation of surveys followed Dillman's Total Design Method to ensure a rigorous approach to data collection.

Glenelg SAVES approached 1,000 households in the Glenelg Shire through training, education and home audit and adaptation. Over 300 households (as per low income selection criteria), including elderly residents, people with a disability, all living in a rural locality directly benefited from in home energy assessments and were provided with links to assistance for improving their energy efficiency.

A total of 22 HACC Staff and 306 HACC Clients undertook a home energy assessment and completed the project's baseline survey. As indicated by Table 2 (overleaf), HACC Staff undertook an energy assessment on their own homes from May-October 2014. The rollout of energy assessments for HACC Clients took place from August 2014-April 2015. In terms of the follow-up survey, 21 HACC Staff (96%) and 189 HACC Clients (62%) returned completed booklets.

Table 2: Date of home energy efficiency assessment by group

Town	Group			
	HACC Staff		HACC Clients	
	Count	%	Count	%
2014				
May	3	13.6	0	0.0
June	13	59.1	0	0.0
August	1	4.5	25	8.2
September	4	18.2	54	17.6
October	1	4.5	52	17.0
November	0	0.0	46	15.0
December	0	0.0	37	12.1
2015				
January	0	0.0	82	26.8
February	0	0.0	6	2.0
March	0	0.0	1	0.3
April	0	0.0	3	1.0
Total	22	100	306	100

The recruitment of staff to the Glenelg SAVES project was challenging at times, however as a set target had been agreed to, we were clear in the number of staff that had to be recruited. Staff numbers reduced between project planning and recruitment stages resulting in a higher percentage of staff participation required to meet the project objectives. The HACC staff had challenges in determining how they would fit the Glenelg SAVES project into their schedule, despite there being allowance for paid work on the project. The concept of the HACC role in Household Energy Efficiency was new to most of the staff and as a result, it took some time for staff to take full ownership of this new knowledge.

During the post-project interviews a number of staff noted that the idea of learning new concepts was foreign to them and therefore they were nervous to speak to clients about energy efficiency in the home.

In general, work practice HACC staff have a consistent allocation of clients. Due to the reduction in staff participating in Glenelg SAVES, HACC staff were responsible for clients other than their own and as a result, a new relationship had to be developed prior to participating in the project. Although this was not a long process, it was unexpected and led to some delays.

Climate data:

Variations in weather conditions have a major influence on energy use. To control for this influence, local climate data has been sourced from the Bureau of Meteorology (BOM). The most relevant meteorological measures are heating and cooling degree-days. Energy use data was adjusted, using a Normalised Annual Consumption (NAC) index, to control for temperature variations and therefore, allow for robust comparisons between pre- and post- project energy use.

Qualitative data:

Qualitative data was also collected through discussions (focus groups and in-depth interviews) with HACC workers, consortium members and sub-contractors in October 2015. All focus groups and interviews were digitally recorded with the permission of the participants. These discussions included:

- Four focus groups for HACC workers, two in Portland (group one – four workers, group two three workers) and one each in Heywood (two workers) and Casterton (four workers). In total 13 HACC workers participated. Each focus group ran for over an hour, with an average focus group length of 1 hour 8 minutes.
- Individual in-depth interviews with the training provider from Moreland Energy and the consortium members, two from the SGGPCP and two from the Glenelg Shire. The interview with the training provider was conducted by telephone and lasted 39 minutes. The consortium member interviews lasted on average an hour, ranging from 27 minutes to 1 hour 18 minutes, and all were face-to-face interviews.
- Six interviews with sub-contractors who were involved in the project, three from Portland, two from Heywood and one from Casterton. These short interviews lasted between 18 minutes and 31 minutes, with an average interview time of 26 minutes.

Data collected from these discussions was thematically coded and analysed by experienced FedUni researchers. This aspect of the research focuses on identifying recommendations for improving the design and administration of future energy efficiency programs targeted at low-income households.

2.3 Data Entry and Analysis

Data entry for the household surveys was undertaken through FedUni's computer-assisted data entry (CADE) system, which uses optical mark recognition (OMR) technology to simplify data entry, by minimising the need for manual entry by data entry operators. Before commencing any analysis, data was subject to a systematic and rigorous process to ensure the information to be analysed is 'clean'. All data sets were subject to stringent examination to ensure the negative impacts of survey

errors (sampling, coverage, non-response, measurement, specification and processing errors), missing data, outliers and violations to assumptions of statistical tests were mitigated. Such quality control procedures ensure that findings reported throughout the evaluation have a rigorous foundation.

The data analysis was directed toward identifying, quantifying and comparing the outcomes attributable to the project with regard to levels and patterns of energy use. These analyses included longitudinal statistical analyses of changes in energy use measures (such as average daily consumption) with appropriate consideration given to the potential influence of differing and changing participant characteristics and other confounding factors.

The following details the procedures undertaken to prepare the data for multivariate analysis required to evaluate the effectiveness of the Glenelg SAVES interventions:

Data Cleaning

Data cleaning and recoding is a necessary and often underestimated (sometimes overlooked) task in providing quality research. In its raw form, data collected is often described as “dirty” in that some data is missing, some contains extreme values (outliers) and some imputation and transformation is often necessary. Before proceeding with any analysis, data was ‘cleaned’ and decisions made as to which cases need to be excluded. For example, the following actions represent some of the steps taken to clean this data set:

- Data excluded from the analysis included:
 - households recording less than 40 weeks occupancy;
 - households showing extreme use (i.e. Average Daily Consumption (ADC) use was less than 1.0kWh or more than 100 kWh);
- Data Clarification: Clarification sought from participant for ambiguous responses;
- Data Standardisation: Raw data often needs to be standardised so meaningful comparisons can be made. Sometimes data also needs to be transformed (i.e. normalised) to enable more robust analysis.

The electricity use data collected for the evaluation required considerable cleaning, manipulation and transformation to enable required analyses to be undertaken. This development of specialist procedures and techniques to assure the data was useful and functional for analysis was a challenging and lengthy process. This experience is not unusual for secondary data as by definition, it is collected for another purpose. In the case of electricity meter data, this is mainly to meet

electricity market needs. In the formats delivered, such data did not fit comfortably with LIEEP database schema requirements, nor the analysis requirements related to the evaluation.

Missing Data

Missing value analysis was applied to explore the prevalence and nature of missing data. For analysis purposes, missing data was imputed using appropriate methods.

Screening for Normality

The distribution characteristics of the data was examined for deviations from normality. As expected, the study's key response variable, ADC, was not normally distributed, with a high positive skew. A log transformation of this variable was used to ensure the variable's skewness value falls within the recommended guidelines for assumptions of relevant statistical tests.

Modelling

Statistical models were primarily based on an interrupted time-series design. This procedure used a weather-adjusted Normalised Annual Consumption (NAC) index based on heating and cooling degree-days to control for the confounding effects of climate variation. The analysis also developed estimates of spill-over and free ridership in accordance with the U.S. Environmental Protection Agency's Model Energy Efficiency Program Impact Evaluation Guide. This approach is well accepted by the Energy Efficiency Program Evaluation community and specific techniques have been designed to develop statistically sound energy saving estimates attributable to project interventions. Following data cleaning and screening procedures, electricity data from 177 participants was used for this analysis.

2.4 Database design and management

FedUni maintained records of all project activities, all participants (HACC staff and clients) recruited into the project, and all energy efficiency recommendations adopted. The content of the database included:

- Household energy consumption data (from meter or billing data)
- Household and demographic data relating to LIEEP Data items
- Weather data (from Bureau of Meteorology data files)
- Household attitudinal and other data

FedUni have been responsible for all matters pertaining to data collection and monitoring, including data structures and data formats. All data available was provided to CSIRO by 1 December 2016 to meet their timeline requirements for reporting on the overall LIEPP.

The Glenelg SAVES Database resides on a dedicated FedUni server hosted by IBM. The server uses Free and Open-Source software including the “GNU/Linux” operating system and “MySQL” database management system. As part of the project team, a Data Manager was responsible for the management of the database. This role includes gathering data from Powercor and the Bureau of Meteorology, pre-processing of data, uploading of data to meet the Department’s requirements and generating inquiries for data analysis.

Glenelg SAVES generated large quantities of data. Table 3 details the records uploaded to the LIEEP database as of March 2016.

Table 3: Number of records (cases) uploaded to LIEEP database

TABLE	LIEP TABLE DESCRIPTION	NUM OF RECORDS
GRANT_RECIPIENT	This record will uniquely identify a LIEEP grant recipient.	1
GRANT_RECIPIENT_STAFF	The grant recip. staff. Track interact. btw staff and participants	25
PROGRAM	A LIEEP program or trial conducted by a grant recipient.	1
PROGRAM_BARRIER	Barrier addressed by a particular program.	2
TARIFF	This captures the link between a meter and a tariff.	22
WORKSHOP	Record describing a community workshop or group training ses	3
WORKSHOP_ATTENDANCE	Lists the participants that attended a given workshop	55
METER	This captures the detail of a utility meter.	363
NEM12	This captures 30 minute interval readings from utility electricity meter	29,306,638
INFORMATION	Details of an info pack or sess provided to a participant	664
DWELLING	Details about the dwelling a LIEEP participant lives in.	332
PARTICIPANTS	Uniquely identified participant in a LIEEP program	332
INSULATION	Identifies the insulation in part of a house, it's type, etc	394
LIGHTING	Details the lighting in the dwelling.	332
PV_DETAILS	Contains details of any PV systems installed at a dwelling.	29
RECENT_MODS	Home mods prior to LIEEP that may impact energy consumption	506
AAS_EE_SURVEY	Attitudes To Energy Efficiency Survey	332
ENERGY_AUDIT	Record detailing an energy audit.	332
FUNDING_AGREEMENT_SURVEY	List of questions provided by the Dpt in the Funding Agreement	332
CASE_MANAGEMENT_INTERACTION	Ongoing series of interactions with a participant	332
APPLIANCE	Record capturing details of household appliances.	2,738

3. Results

The Glenelg SAVES project was conducted from 2013/14 to 2015/16 and included 22 HACC Staff and 306 HACC Clients. This section reports on the participant characteristics, project impact and satisfaction, and details findings pertaining to the various project components.

3.1 Participant Characteristics

Profiles of the Glenelg SAVES participants for whom complete data was available were compiled from information derived from the first survey.

Site Profiles

Table 4 shows the distribution of households across the Glenelg Shire Council's three major towns: Portland, Casterton and Heywood. The two largest population areas of Portland and Heywood were well represented in both the HACC Staff and Clients groups.

Table 4: Participants by town and group

Town	Group			
	HACC Staff		HACC Clients	
	Count	%	Count	%
Portland	15	68.2	195	63.7
Casterton	2	9.1	47	15.4
Heywood	5	22.7	64	20.9
Total	22	100	306	100

Table 5 (overleaf) demonstrates that the Glenelg SAVES project predominantly recruited home-owners or household with a mortgage commitment. HACC Clients were significantly more likely to own their residence outright (77% vs. 32%) and less likely to have a mortgage than HACC Staff (6% vs. 55%). The relatively low proportion of renters in both groups suggests that the principal-agent problem related to different goals and levels of information of landlords and tenants was not a major barrier for most participants in this study.

Table 5: Participants by tenure and group

Tenure	Group			
	HACC Staff		HACC Clients	
	Count	%	Count	%
Owned*	7	31.8	235	76.8
Rented	3	13.6	50	16.3
Mortgaged	12	54.5	18	5.9
Other	0	0.0	3	1.0
Total	22	100	306	100

*Significant at the 95% level

Participants within the HACC Staff group generally had a higher level of education than HACC Clients. Table 6 shows that the most common education level for HACC Staff was a TAFE diploma, while HACC Clients were most likely to have a highest qualification of high school – year 10. This is likely to be influenced by the vocational requirements for working in the HACC program and HACC Clients being generally older.

Table 6: Level of education by group

Highest qualification	Group			
	HACC Staff		HACC Clients	
	Count	%	Count	%
Primary school*	0	0.0	101	33.0
High school - Year 10	6	28.6	123	40.2
High school - Year 12	3	14.3	28	9.2
TAFE*	10	47.6	32	10.5
Tertiary	2	9.5	22	7.2
Total	22	100	306	100

*Significant at the 95% level

HACC Staff indicated that they had lived at their current address for an average of 10.5 years, while HACC Client average length of residence was 22.5 years. This discrepancy suggests a greater level of mobility amongst HACC Staff, which is not surprising considering they are generally younger and still part of the workforce. Both groups reported that they occupied the residence for an average of roughly 51 weeks per year. HACC Staff had statistically significant more people, on average, living in their households (2.4) than did HACC Clients households (1.5).

Table 7 summarises the major dwelling characteristics for both HACC Staff and HACC Clients households. In general, participants from both groups were most likely to live in houses (rather than units) and relatively small and older housing stock. The major difference in dwelling characteristics between HACC Staff and Client participants was that staff were more likely to live in large (26.9 squares or more) housing. The two most common dwelling material types for both groups were brick veneer and weatherboard. The proportion of participants that had installed a solar photovoltaic (PV) system was equivalent across both groups (HACC Staff = 18%; HACC Clients = 14%).

Table 7: Dwelling characteristics by group

Characteristics	Category	HACC Staff	HACC Clients
Type of House (%)	House	100.0	85.9
	Unit	0	14.1
Age of House (%)	0 to 19 years	18.2	14.7
	20 to 39 years	40.9	28.1
	40 to 59 years	13.6	27.1
	60 years or more	27.3	30.1
Size of House (%)	Small	36.4	52.0
	Medium	50.0	43.1
	Large	13.6	4.9
Room count (average #)	Bedrooms	3.0	2.8
	Living Rooms	1.6	1.7
	Bathrooms	1.4	1.2
Material Type (%)	Brick Veneer	36.4	44.4
	Weatherboard	22.7	15.0
	Mixture	13.6	11.4
	Timber	0.0	10.5
	Fibro	18.2	8.5
	Concrete block	4.5	4.6
	Double brick	0.0	3.3
	Concrete	4.5	2.3
Roof Colour (%)	Light	54.5	35.3
	Intermediate*	9.1	32.7
	Dark	36.4	32.0
Solar PV (%)	Yes	18.2	14.1
	No	81.8	85.9

*Significant at the 95% level

Table 8 summarises the insulation profiles of the HACC Staff and HACC Clients group’s residences. Whilst some form of insulation was common for the vast majority of households, insulation treatments such as double-glazing, floor insulation and tinted windows were only found in a relatively small number of households. HACC Clients were significantly more likely than HACC Staff to have ceiling insulation (79% vs. 59%).

Table 8: Dwelling insulation by group

Insulation	Group			
	HACC Staff		HACC Clients	
	Count	%	Count	%
Curtains	20	90.9	271	89.4
Ceiling insulation*	13	59.1	238	78.5
Internal window awnings/shades	8	36.4	158	52.1
Draught stoppers	8	36.4	140	46.2
Wall insulation	9	40.9	111	36.6
External Blinds	5	22.7	102	33.7
Double-glazed windows	2	9.1	15	5.0
Floor insulation	1	4.5	16	5.3
Tinted Windows	0	0.0	13	4.3
Total	22	100	303	100

*Significant at the 95% level

Participants were asked to nominate any energy-related modifications they had made to their residence in the 12 months before joining the project. As indicated by Table 9 (overleaf), the most common change made by both groups were replacing major whitegood(s), heating, ventilation, and air conditioning (HVAC) systems, electric hot water systems and installing ceiling fans. HACC staff were significantly more likely to have replaced major whitegood(s) (52% vs. 17%), which is likely to be indicative of greater access to capital.

Table 9: Recent modifications by group

Modification	Group			
	HACC Staff		HACC Clients	
	Count	%	Count	%
Replaced major whitegood(s)*	11	52.4	51	16.9
Replaced heater/cooler/air conditioner	2	9.5	43	14.2
Replaced electric hot water system	2	9.5	21	7.0
Installed ceiling fans	2	9.5	16	5.3
Installed solar electricity	1	4.8	10	3.3
Installed insulation	1	4.8	5	1.7
Installed solar hot water system	0	0.0	3	1.0
Installed louvre windows	0	0.0	3	1.0
Installed double glazed windows	0	0.0	2	0.7
None of the above	10	47.6	193	63.9
Total	22	100	303	100

*Significant at the 95% level

Table 10 shows that there was roughly an equal proportion of participants in both groups that had either an electric or gas hot water system. Only a relatively small number of participants in both groups had installed a solar hot water system.

Table 10: Hot water system by group

Hot water system	Group			
	HACC Staff		HACC Clients	
	Count	%	Count	%
Electric	8	36.4	149	48.7
Gas	12	54.5	144	47.1
Solar	2	9.1	14	4.6
Other	0	0.0	1	0.3
Total	20	100	304	100

Table 11 reflects the average number of different types of lighting within the HACC Staff and HACC Client group households. The most common forms of lighting for both groups were compact fluorescent lamps (CFLs) and halogen lights. There were no significant differences in the average number for each lighting type between the HACC Staff and HACC Client participants.

Table 11: Household lighting profile (average # per household)

Lighting	HACC Staff	HACC Clients
Standard (incandescent) light globes	2.5	3.0
Halogen lights	3.3	2.3
LED lights	2.1	1.3
CFLs	8.3	8.7
Fluorescent tube lights	1.3	2.0

Energy behaviour

Participants indicated how often they undertook energy *curtailment behaviour*⁴ in general and specifically for heating and cooling purposes. As shown in Table 12 curtailment behaviour was generally high for both groups, especially regarding: switching off lights in unoccupied rooms and minimising energy use for cooling and heating. HACC Clients, on average, indicated that they were more likely to undertake energy curtailment behaviour than HACC Staff. This difference was most apparent for behaviour relating to the minimisation of appliance and hot water use.

Table 12: General energy curtailment behaviour

Curtailment	HACC Staff	HACC Clients
Switch off lights in unoccupied rooms	4.4	4.6
Minimise appliance use in your home to save energy*	3.5	4.0
Minimise hot water use in your home*	3.2	4.0
Minimise energy use for cooling in your home	3.8	3.9
Minimise energy use for heating in your home	3.6	3.8
Curtailment (general)^{A*}	3.7	4.1

Scale: 1=Never – 5=Always

*Significant at the 95% level

^A Composite variable derived from responses to scale items

Participants were also asked to indicate the prevalence of their energy curtailment behaviour for keeping their residence warm in winter. Again, curtailment behaviour was generally high for both groups (refer Table 13, overleaf). Respondents generally indicated that they were more likely to undertake routine low energy alternatives (e.g. close windows, open/draw blinds) than resort to turning their heating up.

⁴ Habitual decisions and actions related to energy use

Table 13: Heating energy curtailment behaviour

Curtilment	HACC Staff	HACC Clients
Close windows	4.8	4.7
Open blinds or curtains during the day to let in light and heat	4.4	4.7
Draw blinds or curtains when the sun goes down	4.3	4.5
Close doors to keep heat in rooms you are using	4.4	4.4
Turn heating up	3.0	2.9
Curtilment (heating)^A	4.5	4.7

Scale: 1=Never – 5=Always

^A Composite variable derived from responses to scale items

Glenelg SAVES participants also indicated the frequency in which they undertook energy curtailment behaviour for keeping their dwelling cool in summer. Cooling curtailment behaviour was also generally high for both groups (refer Table 14), with the most common cooling response being *closing windows during hot days to keep cool air inside*.

Table 14: Cooling energy curtailment behaviour

Curtilment	HACC Staff	HACC Clients
Close windows during hot days to keep cool air inside	4.7	4.7
Open windows during the evening to allow cross ventilation	4.4	4.3
Open blinds or curtains when the sun goes down	4.0	3.9
Curtilment (cooling)^A	4.2	4.1

Scale: 1=Never – 5=Always

^A Composite variable derived from responses to scale items

The high level of energy curtailment behaviour reported by both groups suggests that participants were already undertaking habitual and routine measures to reduce their energy use before joining the Glenelg SAVES project. This finding suggests that there is relatively little potential to target an increase in the prevalence of such behaviour; although, there may be opportunities to increase the influence of such behaviour on energy efficiency.

3.2 Reasons for joining Glenelg SAVES

As indicated by Table 15, economic factors (save energy /reduce energy bill) were the major reason for joining the project for HACC staff. Although these factors were also important reasons for HACC Clients to take part in the project, the influence of HACC staff and Glenelg SAVES' financial support for energy efficiency purchases were generally greater. These findings support two key elements of the project: 1) the use of trusted advisors (i.e. HACC Staff) to encourage participation and 2) financial support to alleviate barriers associated with access to capital barriers for energy efficiency investments by low-income households.

The influence of other support networks (friends/relatives, other HACC clients) and environmental concerns (sustainability, climate change) were not reported as major reasons for joining the project. These findings suggest that communication strategies based around highlighting the financial benefits of participation through existing carers/trusted advisors is likely to be an effective strategy for recruiting participants to similar programs.

Table 15: Reasons for joining Glenelg SAVES

Reason	Group			
	HACC Staff		HACC Clients	
	Count	%	Count	%
HACC Staff member advised me to join the program*	7	33.3	163	87.6
Reduce energy bill/save money	18	85.7	146	78.5
Financial support for an energy efficiency purchase*	9	42.9	142	76.3
Save energy	17	81.0	126	67.7
Evaluate the efficiency of my home	11	52.4	98	52.7
Learn more about energy characteristics of my home*	14	66.7	78	41.9
Sustainability concerns	9	42.9	70	37.6
Climate change concerns	7	33.3	39	21.0
Friends/relatives advised me to join the program	1	4.8	12	6.5
Other HACC clients advised me to join the program	N/A	-	11	5.9
Other	3	14.3	13	7.0
Total	22	100	303	100

*Significant at the 95% level

Angie Howson – linking to Winda-Mara

Recent training in Home Energy Efficiency Assessment has provided Glenelg Shire Council Community Support Worker Angie Howson with the confidence to spread the energy efficiency message far and wide.



Through her training with the Community Support Workers at the Glenelg Shire, Angie has been able to ensure that the knowledge she has gained around energy efficiency can be shared with the Winda-Mara Aboriginal Corporation Home and Community Care (HACC) clients too. “By receiving the formal training, I have been able to ensure that the information I am passing onto clients is correct, and up to date”, Angie said.

Angie has already made some adjustments to the way she uses energy in her own home, resulting in immediate savings. “I have popped a digital shower timer in the bathroom” she said. “I am also looking forward to receiving some assistance with either cooling my home or managing stand-by power to further improve the energy efficiency of my home”.

“My clients, both at Glenelg Shire and Winda-Mara have been interested in what I have to say with regards to energy efficiency and saving money.” “They have in the past received lots of information from lots of different places, and this can be confusing – it will be great to be able to help them to save money too”.

3.3 Energy Assessment Recommendations

As part of the project’s home energy assessments, HACC Staff identified actions that could be undertaken by either themselves or their clients to increase their energy efficiency. Based on the training provided by MEFL, these recommendations were categorised into the following areas:

- hot water;
- heating;
- cooling;
- clothes drying;
- lighting; and
- appliances

The most common actions for both groups generally related to appliances and heating. HACC Staff were most likely to identify the following actions for their own homes: setting fridge/freezer to the correct temperature (91%); checking fridge/freezer seals (86%); keeping fridge/freezer doors closed when possible (86%); turn off appliances that are not in use (86%); set washing machine to cold wash (82%) and filling gaps and cracks for heating purposes (82%). Recommendations made for HACC Clients were generally similar, with keep fridge/freezer doors closed when possible (92%); set fridge/freezer to the correct temperature (90%); checking fridge seals (89%); prioritising self-heating by wearing jumpers (89%); and closing curtains at night to keep heat inside the house (87%) being the most common actions identified during the energy efficiency assessments.

Dianne Gill – HACC Client

Glenelg Shire Home and Community Care client Mrs Gill is thrilled with her new curtains that she received as part of the Glenelg SAVES project – helping Glenelg Shire HACC clients reduce their energy use and be more comfortable in their homes.

“The curtains are helping to keep the heat out of my kitchen and keeping my home cooler in general” Mrs Gill said, adding “the recent burst of hot weather was a great test, and the difference the curtains made was amazing”.

As a participant in the Glenelg SAVES project, being delivered by Glenelg Shire Home and Community Care Workers across the shire, Mrs Gill was able to receive assistance to purchase the custom-made curtains, supplied through local Glenelg Shire business.



3.4 Project Impact

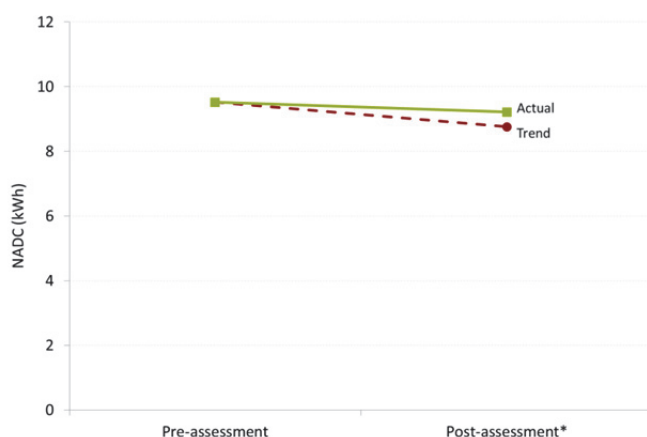
The following section details the influence of the Glenelg SAVES project on participant behaviour and attitudes related to their energy efficiency.

Energy Use

To estimate the influence of the project on energy use, an interrupted time series (ITS) analysis was undertaken. This involved using the electricity data provided by the region's distribution, Powercor, at multiple time points before and after each participant received a home energy efficiency assessment. The purpose of this analysis was to detect whether or not project participation had a significantly greater effect than any underlying secular trend.

Overall, the Glenelg SAVES project was not successful in reducing household electricity use. Figure 5 shows the actual normalised average daily consumption⁵ (NADC) compared with forecasted trends based on historical energy use before and receiving a home energy efficiency assessment. Although energy use did decline from the pre- to post-assessment phase, this was consistent with historical trends. The actual levels of energy use were 5% higher than what was forecasted through statistical modelling.

Figure 5: Overall NADC: actual vs. trend (kWh)

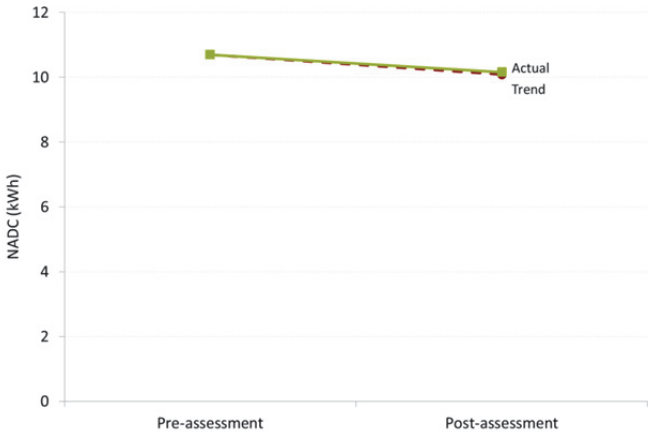


*Significant at the 95% level

⁵ Electricity use data was normalised based on heating and cooling degree days recorded at the Portland weather station. This process was done to control for weather changes that could influence the assessment of the project's influence on energy use.

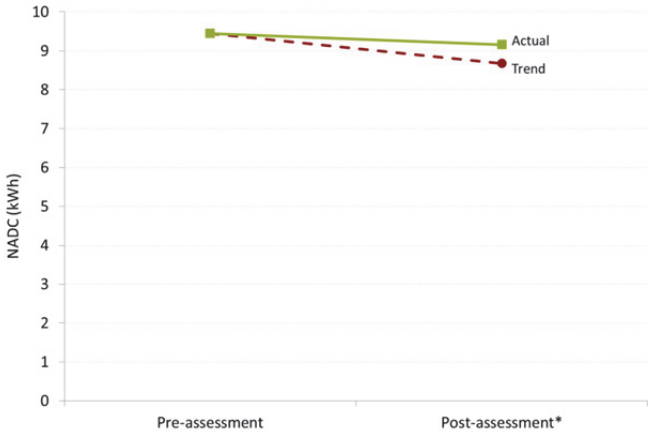
HACC Staff participants' actual energy use was consistent with statistical forecasts (refer Figure 6). Although this group's energy use did decrease by 5% from the pre-assessment period, this decline was consistent with statistical forecasts (6% decrease).

Figure 6: HAC Staff NADC: actual vs. trend (kWh)



HACC Clients that participated in the project reduced their energy use by 3% following their home energy efficiency assessment. Nevertheless, this was 5% above the 8% decrease what was forecasted to have occurred without Glenelg SAVES participation (refer Figure 7).

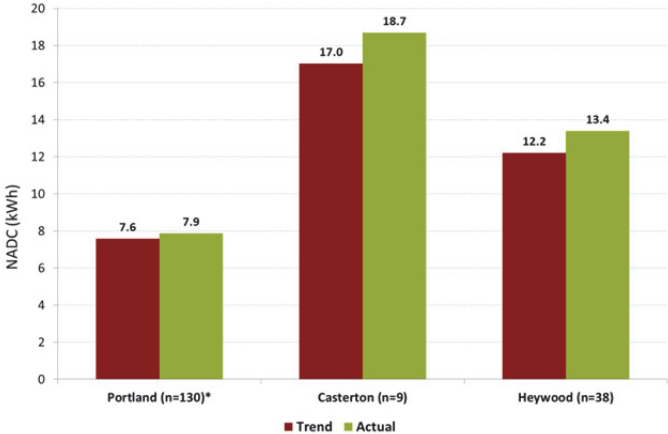
Figure 7: HAC Clients NADC: actual vs. trend (kWh)



*Significant at the 95% level

Figure 8 demonstrates the post-assessment energy use of participating households across the Glenelg Shire’s three largest towns. All areas experienced a consistent level of energy use with statistical forecasts. In general, participants from Casterton and Heywood were higher electricity users than those from Portland, which is most likely related to reticulated gas access.

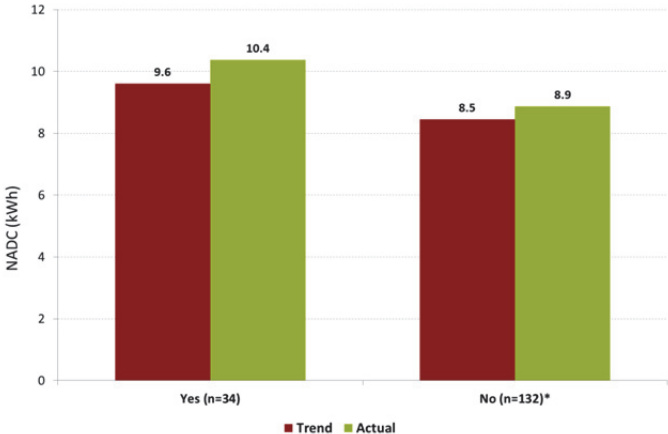
Figure 8: Post-assessment NADC by town: actual vs. trend (kWh)



*Significant at the 95% level

Figure 9 shows a comparison of post-assessment NADC for HACC Client that did and did not undertake a home energy efficiency assessment with their regular HACC carer. This analysis found that actual electricity use was generally higher whether or not participants’ regular carer carried out their energy assessment.

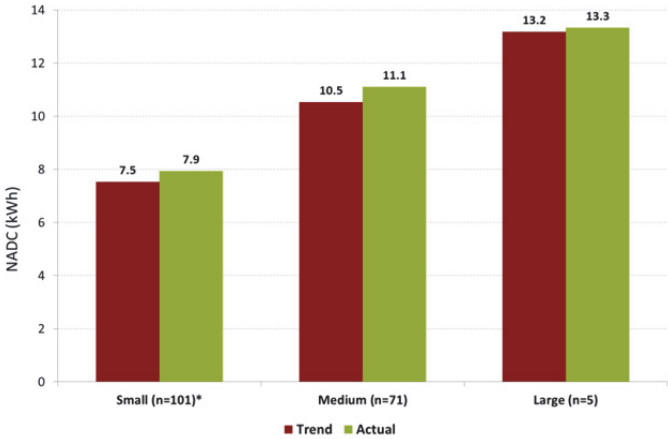
Figure 9: Post-assessment NADC by own HACC worker: actual vs. trend (kWh)



*Significant at the 95% level

As expected, electricity use was related to house size. Participant energy use for small, medium and large dwellings was relatively consistent with forecasts.

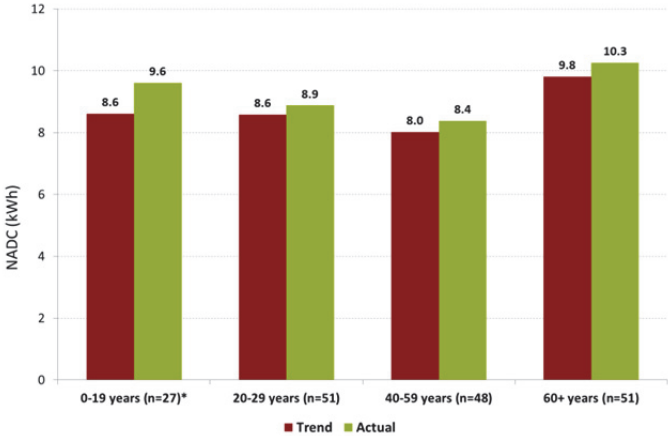
Figure 10: Post-assessment NADC by house size: actual vs. trend (kWh)



*Significant at the 95% level

A common rationale for government energy subsidies targeted at low income households is that such groups are more likely to live in inefficient housing stock with poor insulation. To assess the impact of Glenelg SAVES on participants in inefficient housing, age of house was used as a proxy. This analysis found that the project did not have an influence on the energy use of participants living in older houses. Participants living in newer dwellings (aged 20 years or less) actual electricity use was higher than statistical forecasts.

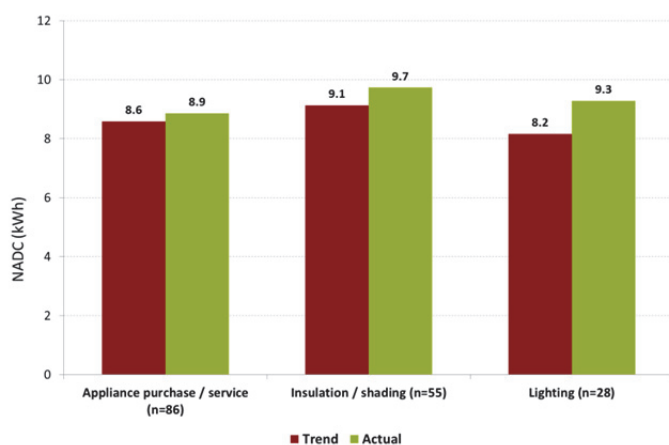
Figure 11: Post-assessment NADC by age of house: actual vs. trend (kWh)



*Significant at the 95% level

Figure 12 demonstrates that the type of energy efficiency purchase made by participants through the project generally did not significantly influence their electricity use.

Figure 12: Post-assessment NADC by project purchase type: actual vs. trend (kWh)



During the follow-up study, participants were asked to estimate changes to their household's electricity and gas use since joining the project. Although self-reporting of such measures is susceptible to recall bias, they do provide a proxy indication of participant's beliefs about the influence of the project.

As indicated by Table 16, the majority of HACC Staff (59%) and HACC Clients (52%) indicated that project participation had not had an influence on their electricity use. Based on these self-reports, the project appears to have had a greater influence on HACC Staff's electricity use than that of HACC Clients. Over two-fifths of HACC Staff (41%) indicated that their electricity use was either slightly or much lower than it was before taking part in the project. In contrast, only a relatively small proportion of HACC Clients (12%) believed that their electricity use had decreased since joining Glenelg SAVES.

Table 16: Electricity use changes by group

Level of Change	HACC Staff %	HACC Clients %
Much higher (more than 10% increase)	0.0	13.6
Slightly higher (1-10% increase)	0.0	22.2
About the same	58.8	52.5
Slightly lower (1-10% decrease)*	35.3	9.9
Much lower (more than 10% decrease)	5.9	1.9
Total	100	100

*Significant at the 95% level

Nearly half of respondents to the follow-up survey (48%) indicated that their household had a gas connection. The majority of these participants (HACC Staff=67%; HACC Clients=65%) indicated that their level of gas use had not changed since joining the project. Based on statistical testing, no difference in the general level of change was identified between the two groups, except HACC Staff had a greater inclination than HACC clients to report that their gas use was slightly lower (1-10% decrease) than before taking part in the project.

Table 17: Gas use changes by group

Level of Change	HACC Staff %	HACC Clients %
Much higher (more than 10% increase)	6.7	10.2
Slightly higher (1-10% increase)	6.7	18.1
About the same	66.7	65.4
Slightly lower (1-10% decrease)	20.0	5.5
Much lower (more than 10% decrease)	0.0	0.8
Total	100	100

*Significant at the 95% level

Drivers of Energy Use

A path analysis was used to test the fit between the study’s conceptual framework (refer Figure 4, page 19) and the data collected for the study. The combination of variables provided a plausible explanation of behavioural intentions but only explained a small proportion of variance in changes to electricity use. The higher predictability of these variables on intentions than actual behaviours is consistent with previous studies applying similar models of behaviour (Armitage & Connor, 2001).

The analysis found that energy efficiency knowledge had a significant influence on attitudes towards reducing energy and participant’s perceived ability to achieve this goal. The two major influencers on intentions to reduce energy were attitudes (environmental and financial) and social norms. The latter finding suggests that Glenelg SAVES participants were responsive to what others think that they should do in terms of energy use.

Consistent with previous research, it appears that reducing energy use was generally more difficult for Glenelg SAVES participants than what was perceived (cf. Lynch & Martin, 2013). Such a discrepancy may be due to difficulties in considering extraneous factors likely to influence such behaviour. These factors could include aspects such as weather variation, appliance replacements, changes to household structure and technology advances.

Adoption of assessment recommendations

Household energy conservation efforts can be divided into two categories: curtailment and efficiency behaviour. *Curtailment behaviour* includes everyday actions that help to conserve energy (e.g. turning off lights, lowering thermostat settings). *Efficiency behaviour* relates to one-off installations of devices that enable ongoing energy conservation (e.g. buying efficient appliances, installing insulation). The energy-saving potential of efficiency behaviour has been found to be greater than that of curtailment behaviour (e.g. Gardner & Stern, 2002). For instance, households may save more energy by installing more efficient appliances than by minimising the use of inefficient devices. A contradiction may arise, however, if people use efficient appliances more often than they otherwise would have because they are cheaper to run (i.e. the rebound effect or Jevons Paradox). Such situations highlight the need to consider the relationship between adoption of energy technologies and knowledge of how to use them efficiently, when evaluating the influence of conservation efforts on household energy consumption.

As part of the project's home energy efficiency assessments, HACC Staff identified a range of actions for their own households and that of their clients, which were designed to result in energy savings. Due to the financial capital constraints generally faced by low-income groups, these recommendations generally related to curtailment behaviour, as opposed to efficiency behaviour, predominantly to address appliance and heating energy use issues (refer page 37). To assess the effectiveness, in terms of adopting these recommendations, participants were asked to identify actions they had undertaken as part of the follow-up survey.

A comparison of adoption levels indicated that HACC Staff (50%) were significantly more likely to carry out all or most of the actions arising from their energy assessment than HACC Clients (26%). The majority of HACC Clients (66%) indicated that they had carried out some but not all the recommendations identified during their home energy assessments. Only a small proportion of participants in both groups indicated that they had not implemented any recommendations or could not recall the advice that was provided. The major reasons nominated for not carrying out any HEA recommendations were: required too much effort/hassle/too difficult (HACC Staff=20%; HACC Clients=30%); financial considerations (HACC Staff=40%; HACC Clients=26%) and potential reductions in comfort levels (HACC Staff=60%; HACC Clients=15%).

Table 18: Level of recommendation adoption by group

Level of adoption	Group			
	HACC Staff		HACC Clients	
	Count	%	Count	%
Carry out all or most of the actions*	10	50.0	48	25.7
Carry out some but not all actions	9	45.0	124	66.3
Carry out none of the actions	1	5.0	9	4.8
Do not recall identifying actions	0	0.0	6	3.2
Total	20	100	187	100

*Significant at the 95% level

As indicated by Table 19, the three recommendations most commonly adopted by HACC Staff were: wash full loads (washing machine/dish washer); turn off appliances not in use (70% of those adopting recommendations); and use a clothes horse if it is raining (65%). For HACC Clients, the recommendations with the highest adoption levels were: set fridge/freezer to correct temperature (72%); wash full loads (washing machine/dishes) (68%) and set machine to cold wash (63%). Recommendations that required a capital investment – e.g. replace halogen lights with LEDs, fit external awnings on windows and install a tap aerator - had a relatively low level of adoption amongst both groups, especially amongst HACC clients.

Table 19: Recommendations adopted by group

HACC Staff	HACC Clients
Wash full loads (washing machine/dishes) (75%)	Set fridge/freezer to correct temperature (72%)
Turn off appliances that are not in use (70%)	Wash full loads (washing machine/dishes) (68%)
Use a clothes horse if it is raining (65%)	Set machine to cold wash (63%)
Fill gaps and cracks (for heating/cooling) (60%)	Turn off appliances that are not in use (60%)
Dry clothes on the line (60%)	Set thermostat to most efficient temp (41%)
Don't put hot food in the fridge (60%)	Set thermostat to most efficient temp (41%)
Keep doors closed when possible (60%)	Use a clothes horse if it is raining (37%)
Close curtain at night to keep heat in (55%)	Heat yourself first (e.g. put on a jumper) (35%)
Open curtain in the day to let heat in (55%)	Close curtain at night to keep heat in (35%)

The major reasons for not carrying out recommendations nominated by HACC Staff were changes would reduce household comfort level (60%); planning to do so in the future (40%); and financial considerations (40%). For the HACC Client participants the most common reasons nominated were: requiring too much effort/too difficult (29%); not believing the changes would reduce their energy use (26%); and financial considerations (26%).

Free Ridership

Free-ridership refers to participants who would have implemented the program measure in the absence of the program (National Action Plan for Energy Efficiency, 2007). In this case, a free rider may be seen as a household that would have installed an energy efficiency measure whether or not the program existed (for example, a household that intended to install a blind anyway despite the project's purchase support).

One-third of HACC Staff (33.3%) and over one-fifth of HACC Clients (21%) could be classified as free riders, as they indicated that they would have made exactly the same energy efficiency purchases in the absence of the project. For 14% of HACC Staff and 16% of HACC Clients, the Glenelg SAVES project's purchase support allowed participants to make energy efficiency purchase(s) sooner than otherwise might have been the case.

Spill-over

Participant spill-over refers to additional energy efficiency actions taken by program participants due to a program's influence, but actions that go beyond those directly required by the program. *Non-participant spill-over* refers to savings from efficiency projects implemented by those who did not directly participate in a program, but which occurred due to the program's influence anyway (National Action Plan for Energy Efficiency, 2007).

To estimate participant spill-over, participants were asked to indicate whether or not they made any extra purchases outside the Glenelg SAVES project to increase the energy efficiency of their home. Nearly two-fifths of HACC Staff (38%) and more than a quarter of HACC Clients (26%) indicated that they had made extra energy efficiency purchase(s) outside the Glenelg SAVES project. Only a small proportion of participants in both groups (HACC Staff = 13%; HACC Clients = 5%), however, indicated that they were either unlikely or very unlikely to have made these purchases without receiving the project's energy assessment. This finding suggests that participant spill-over was low for both groups of Glenelg SAVES participants.

Leeann Evans: HACC worker

Recent training in Home Energy Efficiency Assessment provided Glenelg Shire Home and Community Care (HACC) worker Leann Evans with information about the high costs of running halogen down-lights in her home, and more importantly some options to make changes.

Leeann, a keen sewer, used halogen down-lights over her sewing bench. “I won’t be using halogen down-lights anymore,” said Leeann. “They are being changed over to LEDs, which will be far cheaper to run, even though they are a little more expensive to purchase initially”.



The energy efficiency training has been provided to Glenelg Shire HACC workers as part of the Glenelg SAVES project, and is already proving to be a hit with participants.

“I became involved in the project not only because I am a team leader in Heywood, but also I saw the benefits it provided; my new skills and knowledge will help me spread the word to my HACC clients” Leeann said. “Hopefully, in the future, I will be able to install solar panels on my home too – now I have the information about what is going to suit my needs”.

To estimate non-participant spill-over, participants were asked to indicate if they had discussed or shared ideas on how to save energy with other people outside the project. Nearly two-thirds of HACC Staff (65%) and half of HACC Clients (50%) indicated they had discussed or shared energy efficiency ideas with others. This finding indicates that the project was successful in generating community discussion about energy efficiency and was more successful in producing non-participant than participant spill-over.

Non-energy benefits

To assess the non-energy benefits associated with project participation, respondents were asked a range of questions relating to the following areas:

- Energy Related Knowledge
- Household comfort status
- Behaviour change status
- Empowerment status
- Level of energy efficiency interest

- Finance control status
- Attitudes to energy efficiency
- Bounded Rationality
- Energy curtailment levels (general, heating, cooling)

These items were included in both the initial and follow-up surveys to allow for comparisons before and after participants undertook a home energy efficiency assessment. Although factors outside the project may have influenced these measures, their focus on energy-related attitudes, knowledge and behaviour do provide a high degree of confidence that changes can be mostly attributed to project participation.

As indicated by Table 20, overall, most non-energy benefit items remained unchanged from the initial survey to the follow-up survey. The two exceptions are behaviour change and empowerment status. This finding suggests that the project was most successful in increasing beliefs around the energy efficiency levels of participant households and their level of control over their energy consumption.

Table 20: Changes in non-energy benefits (all participants)

Non-energy benefits	Initial survey	Follow-up survey	Change
Household comfort status	4.2	4.2	0%
Behaviour change status	3.5	3.8	7%*
Empowerment status	3.8	4.1	9%*
Level of energy efficiency interest	4.3	4.3	0%
Finance control status	4.6	4.5	-1%
Attitudes to energy efficiency	3.6	3.6	0%
Bounded Rationality	2.6	2.7	2%
Curtailment (general)	4.0	4.1	2%
Curtailment (heating)	4.6	4.7	2%
Curtailment (cooling)	4.0	3.9	-2%
Energy Related Knowledge	3.0	2.9	-2%

*Significant at the 95% level

For HACC Staff, the two non-energy benefits that increased significantly between the initial and follow-up surveys were: general energy curtailment behaviour and energy related knowledge. This finding suggests that the project was most successful in achieving its aim of increasing the energy knowledge of HACC Staff.

Table 21: Changes in non-energy benefits (HACC Staff)

Non-energy benefits	Initial survey	Follow-up survey	Change
Household comfort status	4.2	4.3	2%
Behaviour change status	3.1	3.5	11%
Empowerment status	3.4	3.7	9%
Level of energy efficiency interest	4.2	4.0	-6%
Finance control status	4.1	4.5	7%
Attitudes to energy efficiency	3.8	3.8	1%
Bounded Rationality	2.6	2.5	-3%
Curtailment (general)	3.7	4.0	8%*
Curtailment (heating)	4.5	4.3	-4%
Curtailment (cooling)	4.3	4.4	2%
Energy Related Knowledge	2.9	3.3	12%*

*Significant at the 95% level

For HACC Clients, the three non-energy benefits that increased significantly between the initial and follow-up surveys were: behaviour change status and empowerment status. This finding suggests that the project was most successful in increasing perceived household energy efficiency levels and control over energy use amongst HACC Client participants. Surprisingly, HACC Clients indicated that their energy-related knowledge had decreased since joining the project. This finding warrants further investigation to see if it is a random occurrence or an unintended consequence (e.g. less dependency on their own knowledge, lower confidence in their own knowledge).

Table 22: Changes in non-energy benefits (HACC Clients)

Non-energy benefits	Initial survey	Follow-up survey	Change
Household comfort status	4.2	4.2	-1%
Behaviour change status	3.5	3.8	7%*
Empowerment status	3.8	4.2	9%*
Level of energy efficiency interest	4.3	4.3	1%
Finance control status	4.6	4.6	-2%
Attitudes to energy efficiency	3.6	3.6	-1%
Bounded Rationality	2.6	2.7	2%
Curtailment (general)	4.1	4.1	1%
Curtailment (heating)	4.7	4.8	2%*
Curtailment (cooling)	4.0	3.9	-3%
Energy Related Knowledge	3.0	2.9	-4%*

*Significant at the 95% level

3.5 Participant satisfaction and perceived quality

The follow-up survey, administered in the last quarter of 2015, explored the perceived satisfaction value and quality of the Glenelg SAVES and any energy-related goods and services received as part of the project. Participants were also provided with an opportunity to suggest areas of improvement. The response rate to this survey was relatively high (64% of the initial research participants).

In general, satisfaction with taking part in the project was high across both HACC Staff and Clients. Conversion of item responses, found that overall satisfaction levels were 84% for HACC Staff and 80% for Clients that completed the project's follow-up survey.

Table 23: Satisfaction by group

Satisfaction Items	HACC Staff	HACC Clients
My decision to take part in the Glenelg SAVES project was a wise one	4.2	4.0
I am delighted with my experience of taking part in the Glenelg SAVES project	4.0	3.9
Overall, I am satisfied with what I received from the Glenelg SAVES project	4.2	3.9
I believe I did the right thing by taking part in the Glenelg SAVES project	4.3	4.1
Satisfaction^A	4.2 (84%)	4.0 (80%)

Scale: 1=Strongly disagree – 5=Strongly agree

^A Composite variable derived from responses to scale items

Satisfaction levels were consistent between participants from the Glenelg Shire's three major regions: Portland, Casterton and Heywood. This finding suggests a consistent project experience across the region.

Table 24: Satisfaction by region

Satisfaction Items	Portland	Casterton	Heywood
My decision to take part in the Glenelg SAVES project was a wise one	4.0	4.1	4.1
I am delighted with my experience of taking part in the Glenelg SAVES project	3.9	3.9	4.0
Overall, I am satisfied with what I received from the Glenelg SAVES project	4.0	4.1	3.9
I believe I did the right thing by taking part in the Glenelg SAVES project	4.1	4.1	4.2
Satisfaction^A	4.0 (80%)	4.1 (81%)	4.0 (81%)

Scale: 1=Strongly disagree – 5=Strongly agree

^A Composite variable derived from responses to scale items

HACC Client participants were also asked to indicate the quality of the home energy efficiency assessment that they received as part of the project. Reported service quality ratings were very high across the Glenelg Shire area's three major regions and overall. This finding suggests a consistency in service quality across the region.

Table 25: Service quality by region

Satisfaction Items	Portland	Casterton	Heywood	Total
Communication with the assessor before the energy assessment was excellent	4.3	4.5	4.2	4.3
The energy assessment was easy to schedule	4.2	4.5	4.2	4.2
The energy assessment was comprehensive	4.2	4.3	4.4	4.3
The energy assessor was knowledgeable about ways to reduce energy	4.2	4.5	4.3	4.2
The recommendations made by the assessor were easy to understand	4.2	4.5	4.2	4.2
The recommendations made by the assessor were useful	4.2	4.5	4.2	4.2
The energy assessor had your best interests at heart	4.3	4.6	4.3	4.3
Information about financial support for an energy efficiency purchase was easy to understand	4.2	4.6	4.1	4.2
Energy Assessment Service Quality^A	4.2 (85%)	4.5 (90%)	4.2 (85%)	4.3 (85%)

Scale: 1=Strongly disagree – 5=Strongly agree

^A Composite variable derived from responses to scale items

All HACC Staff (100%) and the vast majority of HACC Clients (88%) that completed the follow-up survey also received an energy-related good or service through the project. These participants were asked to indicate the quality of the products received. As indicated by Table 26, reported product quality ratings were generally high for both HACC Staff and HACC Clients. This high level of perceived quality suggests that the goods and services provided by the project to participants are generally believed to be of great benefit.

Table 26: Product quality by group

Satisfaction Items	HACC Staff	HACC Clients
Are very well made	3.8	4.1
Work as they should	4.1	4.2
Will last a long time	3.9	4.1
Were reasonably priced	3.7	3.9
Were easy to get installed	4.1	4.2
Have improved the comfort of my home	3.8	4.1
Will save me money in the long run	4.0	4.0
Product quality^A	3.9 (78%)	4.1 (82%)

Scale: 1=Strongly disagree – 5=Strongly agree

^A Composite variable derived from responses to scale items

3.6 Process Evaluation

This section provides findings from focus groups conducted with the HACC workers, individual semi-structured face-to-face interviews conducted with individual consortium members, sub-contractors and a telephone interview conducted with the training provider during October 2015. Discussion guides (refer Appendix J) were used for each of these interviews to facilitate communication and as a reference for interviewers/moderators. The aim of this qualitative research was to evaluate the operation of the consortium and of the project.

Objectives of the consortium

The formation of consortium is a common governance structure for complex projects that involve multiple stakeholders. The consortium model provides a strong governance structure and is a mechanism to:

- Bring to the table stakeholders and provide a long term basis for joint collaboration;
- Tap into the expertise of persons or groups within the home care and energy efficiency fields;
- Make decisions to ensure that the project fulfils its major objectives;

Glenelg SAVES' objectives were to increase the household energy efficiency skills, specifically in home auditing and advice for Glenelg Shire HACC staff. The project also aimed to improve energy efficiency in the homes of Glenelg Shire HACC staff and clients and deliver a high quality trial project providing data and analysis to inform policy and energy efficiency programs in the future and support for low-income households.

Focus Groups and Interviews

Four focus groups were run for the HACC workers, two in Portland and one each in Heywood and Casterton. In total, 13 HACC workers participated in a focus group, details as follows: Heywood – 2 workers, Casterton – 4 workers, Portland 1st Group – 4 workers and Portland 2nd Group – 3 workers. Each focus group ran for over an hour with an average focus group length of 1 hour 8 minutes.

Individual in-depth interviews were conducted with the training provider from MEFL and the consortium members; two from WDHS – SGGPCP and two from Glenelg Shire. The consortium member interviews lasted on average an hour, ranging from 27 minutes to 1 hour 18 minutes, and all were face-to-face interviews. The interview with the training provider was conducted by telephone and lasted 39 minutes. In addition, six interviews have been completed with sub-contractors who were involved in the project, three from Portland, two from Heywood and one from Casterton. These shorter interviews lasted between 18 minutes and 31 minutes, with an average interview time of 26 minutes⁶.

HACC Workers

Three of the four focus groups were made up of HACC workers who had participated fully in the project. Whereas, the fourth group was comprised of four HACC workers who had not completed any home energy assessments with clients, however, one of these four workers had undertaken some training and completed their own home energy assessment. (This person had been unable to undertake client assessments for personal reasons). The number of client assessments undertaken by each worker varied considerably, ranging from one to 93. However, the majority of the workers reported they had undertaken between five and 22 client assessments. The length of employment as a HACC worker ranged from one to 28 years, with the majority being employed for over 10 years.

Motivations:

The initial motivation for participation identified by all the HACC workers was the opportunity to help their clients. However, two workers also acknowledged that they viewed it as a good opportunity to address their own energy efficiency. One worker indicated that she was initially concerned about undertaking assessments with clients she did not know. The reasons provided by the four HACC workers for not participating in the project included insufficient time and family issues.

Concerns were raised in one focus group that at the beginning they were not fully aware of what participating involved. There was general agreement in this group that they had not realised how much would be involved, as one participant stated "... there was a lot more involved than we thought." However, it appeared that these HACC workers had not participated in all the training, one missed the initial session and one had started after the training had been completed. In contrast the view from the two other participant focus groups was that they had been trained well and they were happy with the level of information provided. Issues around the information provided to HACC staff and clients was a recurring topic in all of the focus groups.

⁶ All focus groups and interviews were digitally recorded with the permission of the participants.

Provision of Information:

The non-participating HACC workers discussed the problems they encountered because they were unaware whether or not their own clients were participating in the project. They identified that their lack of knowledge about the project was also problematic when their clients wanted to discuss their participation, as one worker explained, “we didn’t know what it was all about”. It was evident from this group that for those HACC workers who had not participated there was confusion surrounding which clients had participated and how clients had been selected.

The discussion in the three participant focus groups focused around the information provided to the clients, and the confusion and mistrust of the HACC clients. In particular, the need for the following suggestions was identified:

- More clarity and information regarding the process to avoid misunderstandings. The confusion around the \$200 contribution and clients expecting to be reimbursed for purchases was identified as one area that needed to be addressed
- information to be provided in written form to allow workers to read, digest and keep, especially as clients were suspicious of providing information for fear of how that information would be used
- information to be supplied to the HACC worker on the product/service to be supplied to their clients as some clients could not remember what they had requested
- a frequently asked questions (FAQ) sheet, to answer questions such as why sub-contractors were used.

Products:

In addition to the above, a recurring discussion topic in the three participant focus groups centred round the possibility of providing a list of products, their energy usage and prices. It appears that the flexibility of the project regarding products and services had unanticipated consequences for both workers and clients as the view of the workers was that a list would have been beneficial.

Client Recruitment:

The discussion on the recruitment of clients revealed that some workers were unwilling or uncomfortable with ringing and making initial contact with other workers’ clients. It appears that the project officer in these instances made the initial call to the clients and the HACC workers made contact with the client once they had agreed to participate to arrange a time to meet with the client. The workers identified a number of problems encountered from recruiting via telephone, including:

- many clients don't like answering the phone, because they are wary of scams, charities calling and sales calls
- the difficulties in getting this client group to understand about the project over the telephone rather than face to face.

One HACC worker commented how it was much easier with clients she knew, even if they were not her own clients, and that recruitment of those she did not know took much longer. In addition, this worker reported that clients had indicated to her they were happier with someone they already knew doing their assessment.

Client Motivations:

There was a general view from the HACC workers that most of the clients participated because of the \$200 financial incentive, or as the workers indicated the fact they were "getting something for nothing". The workers identified that some of their clients wanted to save money. The workers also acknowledge that even though many agreed initially because of the \$200 they also wanted to reduce their energy usage and save money. The workers also identified that the more nervous clients were those less willing to participate and acknowledge most of their clients are security conscious. The term 'energy assessment' was identified as problematic for some clients, because the clients were concerned their home care could be impacted due to confusing with HACC assessment by the shire. With the second survey it was reported that some clients were concerned if they said they were unhappy with the products received, it would mean that their homecare might be stopped.

Training:

The workers who participated in general said the energy efficiency training had reinforced and reminded them about energy efficient behaviours and that the training had made them think about their energy usage. One worker reported she had replaced several old appliances and adapted her behaviour resulting in a \$400 reduction in her bill.

Loreen Mizzi – HACC Worker

Being a Home and Community Care (HACC) Worker at Glenelg Shire has led to reduced electricity accounts for Loreen Mizzi. Through the Glenelg SAVES project Mrs Mizzi has been trained in Home Energy Efficiency Assessments and has been able to assist Glenelg Shire HACC clients with energy efficiency too. “It made it a lot easier to teach



some about energy efficiency after I had experienced the program myself” Mrs Mizzi said.

The Glenelg Shire HACC staff have a trusted relationship with their clients, and it is this trusted relationship that is a key to the Glenelg SAVES project. “Our clients trust us, and therefore they are more inclined to listen to us and take the information on board” Mrs Mizzi stated, “I will be able to continue to teach new clients about energy efficiency into the future, and also continue to save on my own electricity bills”.

Reflections:

When the HACC workers reflected on the most common changes clients could make they highlighted the following:

- washing clothes with cold water
- putting the plug in the sink to wash dishes
- switching off lights and power points
- closing curtains and blinds
- replacing halogen downlights with LEDs.

A common theme that emerged across the focus groups was that HACC workers viewed many of their clients were already undertaking energy efficient behaviour, or in some cases liked to think they were.

Survey:

There was a consensus amongst the HACC workers that as part of the training it would have been useful to dedicate more time on how to conduct the survey. A number of the workers suggested that an opportunity to practice administering the survey, i.e. include a role playing exercise in the training, would have been beneficial. In particular, the workers identified that advice on how to approach the more problematic questions such as income would have been valuable.

Issues regarding the length of the two surveys were at the fore for the workers during the focus group discussions and this matter was raised several times in each group. The workers described the surveys as repetitive, too detailed, too long and complicated, and having ambiguous questions. In addition, the requirement for clients to provide their energy bills was identified as problematic. The workers reported clients often could not find them, or did not keep them or someone else had them, as they did not pay them themselves.

Summary:

The HACC workers participated in the project primarily to assist their clients, whilst acknowledging the personal benefits of participation. A number of issues were identified regarding the information provided to participating HACC workers, other HACC workers and the HACC clients. In particular, a need for all HACC staff to be fully informed about the project and their clients' involvement to allow them to fully support their clients, the need for clear and concise information to be provided in written form to the workers and clients and the provision on a FAQ sheet to answer many of the common questions from clients were identified. Telephone recruitment was identified as problematic for HACC clients, indicating recruitment in person is more appropriate for HACC clients and other similar groups. The HACC workers identified the benefits for their clients from their role in the project, including avoiding the use of strangers, which was identified as an issue for their clients, as many were nervous and security conscious. The energy efficiency training the HACC workers received had reinforced and reminded them about energy efficient behaviour and prepared them to inform and remind their clients. Thus, enabling them to support and enhance the energy efficiency efforts being undertaken by their clients.

Sub-Contractors

Six interviews were undertaken with a range of sub-contractors who were involved in the project, three from Portland, two from Heywood and one from Casterton. These short interviews lasted between 18 minutes and 31 minutes, with an average interview time of 26 minutes. All interviews were audio recorded with the permission of the participants.

Of those interviewed three were electrical contractors mainly supplying and installing ceiling fans and replacement lighting, two of the contractors provided and installed a range of goods, including internal and external blinds, draught stoppers, door seals and insulation, and one had supplied and delivered electrical goods, such as fridges, washing machines, fans and microwaves.

Mavis Jennings – HACC Client

Receiving Home and Community Care Services from the Glenelg Shire has led to bigger and better things for Mrs Jennings. As a participant in the Glenelg SAVES project, being delivered by Glenelg Shire Home and Community Care Workers across the shire, Mrs Jennings was able to receive an energy efficient microwave oven.



“I do a lot of cooking and learnt that by using a microwave where possible, I could save energy.” Mrs Jennings said. The Glenelg Shire workers were trained to complete home energy efficiency assessments in the homes of all participants, who were then able to access assistance to improve the energy efficiency of their homes.

Motivations:

Of the interviewees, two indicated their main reason for involvement was commercial; however, for the remaining sub-contractors contributing to their community was identified as important factor in their willingness to be involved in the project. Moreover, one supplier indicated that without knowing the clients he might not have been willing to be involved in the project. For most of the sub-contractors, already knowing many of the clients and being trusted by them was also identified as assisting with the installation/supply process. Importantly for the clients knowing the sub-contractor may also be a factor in determining participation, as evidenced by clients requesting work be undertaken by a sub-contractor known to them rather than a stranger.

Margaret Sawyer – HACC Client

A new back door and a repaired window have greatly improved the comfort for Mrs Sawyer in her home. Home energy efficiency assessment training was provided to Mrs Sawyer's Glenelg Shire Community Support Worker, who was able to assess Mrs Sawyer's home. Then together with Mrs Sawyer, they were able to make recommendations on how to improve the energy efficiency and comfort of Mrs Sawyer's home.



"I am able to open the window in the evenings now for the late breeze" Mrs Sawyer said, and the new back door is just fantastic. "The handyman who attended my home was wonderful – he did such a great job, and went the extra mile to ensure that everything was OK".

Installation and supply:

All of the sub-contractors indicated that the process for arranging and installing energy efficient purchases was effective. In particular, they all identified the benefit of having a single contact person for organising products, installations and to deal with queries and issues was effective from their perspective. However, the \$200 maximum contribution from the project towards purchases was identified as problematic for both the sub-contractors and the clients. Issues identified included:

- The high cost of LED globes - customers expected more globes replaced for \$200.
- The costs of installation and travel time were not well understood by clients, resulting in higher costs than anticipated or less product, e.g. light globes.
- The final cost of supply and installation of certain electrical products, such as ceiling fans, were unable to be determined prior to installation, resulting in an unanticipated client contribution after installation. In most instances clients were willing and able to pay; however, this was not always the case.
- Payment of any excess cost over the \$200 direct to the supplier prior to delivery of products worked well in most instances; however, at times this became problematic due to non-payment by the client for whatever reasons.

In addition, the sub-contractors identified as problematic the aged client group and their confusion around the project, the products and the processes. Particular examples included:

- Clients believing they had requested a different product(s) to that arranged to be installed or delivered.
- Client concern over costs, even when product costs were covered by the \$200.
- Clients having to be reminded that the installation or product was as a result of the energy assessment and project.

The issue of contacting clients and their availability for installation and delivery of products was also identified as problematic and time consuming for the sub-contractors.

Energy efficiency and safety:

Four of the sub-contractors indicated that for some of the clients there was a lot more that could be done to make their homes energy efficient and that the work being undertaken was only a small part of what could be done. In addition, one of the electrical contractors indicated that they had identified, as part of their usual process, extra electrical work that was required in clients' homes for safety reasons.

Reflection:

On reflection of their participation in the project only one of the interviewees indicated that their involvement in the project had increased their general knowledge around energy efficiency, although even in this instance it was only regarding the types of energy efficiency products available that he had been unaware of previously. Whereas, half of the interviewees indicated that participation in the project had increased their knowledge about the needs of the local vulnerable people.

When reflecting on the project, the overall view from the sub-contractors was that the project had been successful in their small communities, however, concerns were raised about the possibility of scaling up and translating such a project to a metropolitan area. These concerns may be because of the sub-contractors viewing their involvement as partly a community service, exemplified by the following:

- Planning work to minimise costs of travel time to clients and in certain cases for more remote clients not charging for travel time.
- In a small number of cases supplying at cost or providing a small extra service at no charge.
- Motivation for participation, as mentioned previously, to assist the vulnerable in the community.

Project participation:

The issue of communication and having one contact person for the sub-contractors were reiterated as important for the efficiency and success of a project of this type. In particular, sub-contractors operating on a purely commercial basis are unlikely to participate given the small scale of individual jobs unless the costs of participation are kept to a minimum. For example, one supplier indicated that the small order numbers and ad hoc ordering procedure were problematic due to their minimum order numbers for certain appliances.

Summary:

The interviews with the sub-contractors revealed the opportunity provided by the project to contribute to their communities was a strong motivation for participation. Knowing and having the trust of the clients was identified as assisting with the installation/supply process from the sub-contractor and clients perspectives. The project processes for the installation and supply of goods were viewed as effective. In particular having a single project contact was identified as important and beneficial. The \$200 maximum contribution was identified as problematic for both the sub-contractors and the clients, especially when combined with the aged client group and their confusion surrounding the project. The sub-contractors installing products indicated that for some clients there was a lot more that could be done to make their homes more energy efficient. This group of participants, although viewing the project had been successful, raised the question of whether such a project would be successful in larger communities with sub-contractors who had a strong commercial focus.

Energy Efficiency Training Provider

MEFL undertook the community energy efficiency workshops and provided the energy efficiency and assessment training for the HACC workers. The trainer had been involved with the project from the start, he identified this, and the collaborative approach of the project team as important factors in the success of the training and the working relationship. In particular, the collaborative approach to the project design and the flexibility of training delivery and energy efficiency interventions were identified as important success factors for the delivery of the energy efficiency training.

The input from the project team on the training requirements and the feedback on the proposed training content were acknowledged as valuable for arranging the training. In addition, the trainer emphasised the importance of the project design in ensuring that the project objectives were both practical and achievable. In particular, he emphasised that by not 'overstretching' on numbers, types or retrofits and financial commitment the resultant goals were practical and achievable.

Community workshops:

The trainer reported that all of the community workshops were well attended with around 20 people in each workshop. Workshops identified included: Men's Sheds and a retirement village. Due to the large numbers of elderly people in each of the workshops, the workshop materials were tailored to suit the audience. Rather than the usual approach of providing information about energy efficiency room by room in the house, a quicker more direct approach was taken with the aim of holding the audience's attention. The approach taken was to inform people of the seven things that will have the greatest impact on energy efficiency in the average home and then explain their implementation. The feedback from the workshop participants provided to the workshop facilitator was positive and the level of engagement was evident to the trainer. The success of this approach used in the Glenelg SAVES project workshops has resulted in the training provider replicating with other groups where there is a need to get the energy efficiency information over quickly and concisely, for example in migrant communities.

HACC worker training:

The training was designed in two stages with built in feedback from participants to allow the trainer to adapt the training to meet their needs, by adapting the training as feedback was received, he believed that the training criteria had been met. The first of the two training sessions was a technical session, providing knowledge and this was followed with a practical session on what can be done in the home. Importantly, the training was designed to get the HACC workers to consider practical energy efficiency in their own homes to prepare them for assessing their clients' homes. In summary, the trainer stated it was "all about passing on some knowledge to people so they could make really simple changes in the home that would improve both their financial position and their health".

Project Flexibility:

The flexibility the project afforded in addressing energy efficiency in homes was identified as an important factor. In particular, the trainer recognised the importance of the flexibility of covering a range of products and interventions to ensure applicability to the participant's homes. This flexibility also allowed the trainer to tailor the energy efficiency training content for the HACC staff and their clients. The aim was to give the HACC workers the knowledge to know that every house they go into is going to be different and hence solutions will differ. Customisations of the training identified included:

- Removing as much jargon and technical content as possible
- Relating back to the real world

- Identifying low-technology strategies to fit the budget and the people, e.g. door snakes, draught stoppers, blinds etc.
- A strong focus on thermal comfort – heating and cooling – for the elderly clients

Engagement of HACC workers:

The HACC workers high level of engagement with the training was evident to the trainer from their behaviour, including:

- how much they talked and wanted more information
- the amount of questions asked during the sessions
- the feedback from the first session in the second session
- the follow up questions after the training.

The trainer believed that one of the reasons for the level of engagement was that the training focused on their homes, it made them work through the rooms in their home and think about their own energy efficiency. The trainer identified that this approach could have been enhanced if it had been conducted in a real home rather than a training room, allowing the training to be in-situ and for incorporation of some practical work. Furthermore, the trainer believed their engagement was also a result of them seeing the training as a way to help their clients. From undertaking the training with the HACC workers, it became evident to the trainer that they saw it not just as more training, but a real opportunity to help their clients.

Summary:

High levels of engagement were reported for both the energy efficiency training sessions for the HACC workers and the community workshops. The community workshops were well attended and the trainer tailored them to the largely elderly audience. A short and direct approach was used to inform the audience of the seven things that would have the most impact on energy efficiency in the average home and how to implement them. The success of this approach has led to replication with other groups where the energy efficiency information needs to be delivered quickly and concisely. The HACC worker training was delivered in two stages. It allowed for participant feedback and was tailored for the HACC workers to provide them with knowledge to identify simple changes in their home and their client homes to reduce energy usage. The success of the training and the level of engagement appears to be due to the training being focused on the HACC workers own homes, that is the training was relevant to the workers, and the HACC workers were able to identify opportunities for ways to help their clients with their energy usage.

Consortium

Four semi-structured interviews were undertaken with consortium members, two representatives from SGGPCP and two from Glenelg Shire. These interviews lasted between 27 minutes and one hour 18 minutes, with an average interview time of an hour. All the interviews were audio recorded with the permission of the participants. Although the two representatives from SGGPCP had been involved with the project from the very beginning, the representatives from the Glenelg Shire had joined the project at a later date. The manager of the Glenelg Shire HACC program had formally commenced in the role early in 2015 after a number of staffing changes in the Shire, and the project officer was appointed after a slight delay following project's commencement.

Expectations:

From interviews, the consortium members' expectations regarding the project roll out were viewed to have been met; however, it was acknowledged that given personnel changes at the council, expectations regarding the ownership of the project by Glenelg Shire had been reduced, from SGGPCP's perspective. As one consortium member explained

... so there were significant staff changes [in the Glenelg Shire] from the time we planned this project through to receiving funding, through to actually getting started ... so at times it was more of PCP are doing this project, rather than it being Glenelg Shire's project ...

Changes in expectations by SGGPCP over time were in part attributed to the staffing changes within the Shire, but also due to greater understanding of the workings of the Shire's HACC program as the project progressed.

Consortium Model:

Participants were asked about the effectiveness of the consortium for governing the project. One consortium member viewed that:

I think we still would have had lots of challenges [without the staffing changes], but I think it would have maybe given us more ability to discusssome of the challenges and work together collaboratively to overcome them and gain some more momentum and ownership ... the (link with FedUni) worked well. Some of the initial planning worked really well like drawing up the project, but... I think that idea of forming a consortium is really good. So even just the idea of having a consortium is a good one.

This member also reflected on potential improvements, identifying:

It would have been nice to have Powercor on board ...

Other members reflected:

With hindsight ... if I start with the consortium the three Glenelg Shire, PCP, and FedUni working on that project plan together was a fantastic thing, because everybody had already started to think about how's this going to work and what would my resources be, I think that's been really really good. What I would change in the delivery of the program [project] and I don't know how ... would be somehow that we all own this.

I think it has been OK. There has been a lot of communication ... Yes I think it has been run really well. But I think what we touched on before on paper it looks good but really it is human nature and things change ... it's complex!

Suggested improvements in this area included better resourcing of relationship building and communications, particularly in view of organisational changes.

Project Administration:

Consortium members were asked whether they received complaints from project participants. Interaction with project participants ranged from none to repeated contact, with complaints predominantly dealt with at the operational level. A common complaint from HACC workers and clients was around the survey and in particular the length and complexity of the survey. Other complaints were less common, examples included:

- high installation costs
- removal of old light bulbs
- cost of replacement LED globes
- confusion by clients over the products or services to be supplied.

Hindsight:

Consortium members were asked what they would have done differently if they had their time again.

I would have a working group that included the end users the HACC workers and maybe the clients in the design of how we actually implemented [the project] in the Shire. I would make sure that the consortium members all had discussed and workshopped what each of their roles were and that we revisit that if ever we are struggling with the different roles ... and obviously I'd like not to have a huge data collection component.

Another consortium member expressed the opinion that more information about the project at the start would have helped those participating, especially when they were asked questions by the clients, whilst acknowledging it may not have increased recruitment of HACC workers.

Major challenges that were identified included the length of the survey and information on available products and services.

I think I mentioned it before about making it easier for them with a list [of products] and also making the booklet shorter

Project Evaluation:

Generally, consortium members saw value in the project with members suggesting that research findings would be useful for implementation of future projects, and for member organisations. The benefits to the HACC clients were identified by the consortium members.

The main one was for our clients that they got something into their home that helps save on energy, I don't know if it saves as energy prices are going up but they are not putting more energy out there, not using a lot more energy so it's going to save in the long run.

I would just see our frail clients getting some energy efficiency ... hoping to save some of their money on their bills as most of ... we have got a very high population of over 65's and I could see that they could benefit from it definitely.

In addition, other benefits to consortium members identified included:

... furthering our understanding of how the federal government works. We had a previous project, which we tried to keep control of the project, and this time we've sort of taken a different approach. Once you receive federal government funding you have to let the project go, it is not yours anymore and we've done that this time so we have further understood that's how the federal government works ... forming a relationship with FedUni as a research partner through this project timeframe we've also formed [relationships with other universities] as well so that's just a good benefit to us to have a greater understanding that a research partner is important – it is not something to be scared of and it adds strength to your project. ... working with the HACC workers it's been a benefit for us to get a greater understanding of that system and how they work, so we've got some great learnings to move forward if we wanted to do another HACC program.

I think partnering with FedUni is one because ... it has really helped us be more robust about evaluation, but it has also helped us build our confidence a bit and we know we can share and talk with someone who has access to literature reviews and stuff we maybe ... don't have the capacity to do. ... the other thing for us is that it is a really practical way to work with our partner agencies to build their capacity.

Reflections:

Consortium members were asked what they viewed was the most important message from the Glenelg SAVES project. The general view from all was that the vulnerable group of HACC clients need to be supported to improve energy efficiency in their homes and that the HACC workers are ideally placed to assist them. As one consortium member reflected:

... working with HACC workers is the right thing to do, I think it would have quite big impact on energy efficiency for low-income families, particularly those that are older and more vulnerable. I think it is certainly the right thing to be doing and that we need to invest more in building the capacity of the HACC workers ...

However, this was qualified with the consortium member adding “that Glenelg SAVES may have been somewhat restrained and limiting what it could do to the amount of data collection.”

Other consortium members supported this, one reflected “So I think they have gone about it the right way by getting the clients to accept it using HACC” and another stated:

I think it worked ... it worked as far as I am concerned the people who were interested got information, they got equipment put in their home. Workers are aware of what is out there and they took on board for their own home as well.

When asked whether providing energy efficiency advice could become part of the regular HACC service there was general agreement it should be. One member reflected:

that you can't unlearn something, so those HACC workers that did the training, have been involved in it, had that information ... and they are going to always or the majority of the times they will always be helping their clients and they'll always be having those conversations around that because it's always hot or cold.

Others strongly supported this view, explaining:

Absolutely, the relationships are there, there are some structures there that would also support [energy efficiency] to be more integrated into their everyday program.

Of course, any knowledge that the workers have and can pass onto their clients should be part of the curriculum - yes.

I think that is a good idea, we were working in another project which was different sort of enabling instruments to help people in the home, you know like gadgets to open things ... so we've been promoting that ... I think that we could also bring this in as well because we talk about the heat, what to do on a hot day and we talk about fires.

One member reflected on the outcomes from the project and had a strong view that there were “several learnings [from the project] that we ... should be able to take to other agencies.”

Summary:

Projects like Glenelg SAVES represent a significant development in research and collaboration between organisations. While some consortium members had a clear research agenda, others had their own agenda and project expectations – more community oriented. With differing expectations it is therefore not unusual that the expectations for some consortium members were met but not for others.

The reliance on consortiums and partnerships for funding energy efficiency projects is likely to continue and it is clearly important to get the right mix of consortium partners. For such initiatives to be successful requires

- The early establishment of a shared vision, a clear understanding of objectives, anticipated contribution by and value proposition for each member. It also requires a clear project scope.
- A clear understanding of consortium members and their impact on governance.
- Spelling out skill needs at the outset of project negotiations, continually gauging these needs against different consortium members, and better resourcing of relationship building and communications, particularly in view of project challenges which emerge.

3.7 Co-benefits

Whilst the potential co-benefits of low-income energy efficiency programs are acknowledged, traditionally these types of programs have been evaluated purely on the basis of energy savings for participants. Potential co-benefits can accrue to various stakeholders or society as a whole.

Frequently identified examples include local job creation, improved human health, higher property values, and fewer energy subsidies. Co-benefits are frequently categorised according to the beneficiary and the nature of the benefit.

The potential co-benefits from the Glenelg SAVES project included:

- Increased energy literacy – energy efficiency skills and knowledge, of the HACC workers and the clients with spill-over to the wider community
- Indirect economic benefits to society from local job creation and spending
- Social welfare benefits to participants, such as improved human health and wellbeing, improved home and fire safety and increased comfort

Improvements in energy literacy amongst project participants may lead to a more informed community and more efficient use of energy resources. In the case of Glenelg SAVES almost two-thirds of HACC Staff and half the HACC Clients who participated reported they had discussed or shared ideas on how to save energy with other people outside the project. This indicates the project was relatively successful at generating initial community discussion about energy efficiency and indicates the potential for further dissemination of energy saving ideas and energy savings throughout the community.

The project used local contractors and suppliers, wherever possible, for the supply and installation of the energy efficient purchases.

The potential social welfare benefits to participants from the project include:

- Increased comfort at home in both summer and winter
- Improved home and fire safety, for example replacement of halogen bulbs with LEDs, and required electrical safety improvements being identified and addressed by contractors whilst installing appliances as part of the project
- Improved wellbeing, for example increased confidence to manage fuel costs and consumption
- Health benefits

Investment in research to identify the co-benefits of energy efficiency programs and to develop the tools required for their evaluation is needed. The development of program evaluation frameworks, that address the co-benefits of low-income household energy efficient investments, will capture more of the benefits of future energy efficiency programs enabling better informed policy analysis.

3.8 Cost effectiveness

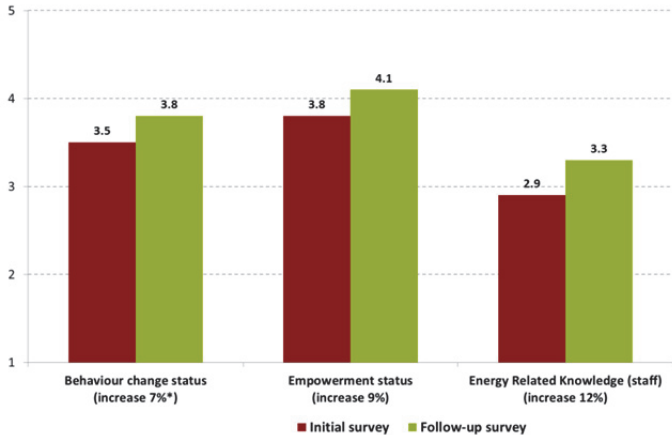
In accordance with LIEEP requirements, a cost-effectiveness analysis was undertaken to relate project expenses to evaluation findings. This also serves a secondary purpose to allow for a common assessment of the effectiveness of similar LIEEPs.

Based on the evaluation findings, this cost-effectiveness analysis was undertaken on the three main project outcomes, which significantly increased following participation in Glenelg SAVES:

- Energy efficiency knowledge of HACC staff (increase of 11.6%);
- Overall perceptions of household energy efficiency levels (behaviour change status) (increase of 7.3%); and
- Overall beliefs about control over energy use (empowerment status) (increase of 8.8%).

Each of these constructs were measured using 5-point likert scales. As indicated by Figure 13, these three outcomes increased significantly from the initial survey, completed at the start of the program, and the follow-up survey, which was undertaken after the project’s implementation.

Figure 13: Changes in key project outcomes



*Significant at the 95% level

The cost-effectiveness analysis was undertaken at the following four levels:

1. Direct trial approach (cost of delivering the trial approach to participants)
2. Trial component (direct trial approach + costs associated with recruiting and maintaining participants)
3. Total business (direct trial approach + trial component + costs of project administration)
4. Total trial (direct trial approach + trial component + costs of project administration + cost of participating in a government funded trial)

The following details the costs incorporated for each level:

Direct Trial Approach:

- Energy Efficiency Audit Implementation costs (the actual retro-fitting, appliance upgrades, etc.),
- Conducting the Home Energy Efficiency Assessment/Audit training through a consultant
- Conducting Community Workshop with a consultant
- Participant time for the Home Energy Efficiency Assessment training
- Participant time to carry out the home assessment/data collection

Trial Component:

- $\frac{3}{4}$ of the costs of Staff Costs – WDHS
- $\frac{3}{4}$ of the costs of Staff Costs – Consortium
- Participant time in the introductory workshop
- Launch, thank-yous and communication for the introduction

Total Business:

- $\frac{1}{4}$ of the costs of Staff Costs – WDHS
- $\frac{1}{4}$ of the costs of Staff Costs – Consortium
- HACCC staff administration
- Room hire for workshops
- Project dissemination

Total Trial:

- Data collection and analysis
- Governance costs – advisory group, and expert advice for advisory group
- Project auditing
- Film

The following table (Table 27) presents the cost effectiveness of the major project benefits at each of the four levels of analysis. The figures represent the cost of increasing each of the project outcomes by 1% (e.g. \$11,299 to increase staff's energy efficiency knowledge by 1%). The direct trial approach was the most cost-effective; however, this assumes that the same level of benefits would have been derived without the inclusion of the project's other components:

Table 27: Cost-effectiveness analysis (cost per % increase)

	Cost	Effectiveness (unit)	Knowledge (Staff)	Behaviour change	Empowerment change
Increase			11.6%	7.3%	8.8%
1. Direct trial approach	\$131,000	\$ per % pt	\$11,293	\$17,945	\$14,886
2. Trial component	\$320,625	\$ per % pt	\$27,640	\$43,921	\$36,435
3. Total Business	\$378,375	\$ per % pt	\$32,619	\$51,832	\$42,997
4. Total Trial	\$689,745	\$ per % pt	\$59,461	\$94,486	\$78,380

To allow for comparisons across programs, a further cost-effectiveness analysis was undertaken on a per participant basis. Table 28 details the cost effectiveness of each project benefit for the four levels of analysis. The cost per participant calculations assume that all fixed and variable costs were distributed equally across participants and costs for servicing staff and clients were equivalent.

Table 28: Per participant cost-effectiveness analysis (cost per % increase)

	Cost per participant	Effectiveness (unit)	Knowledge (Staff)	Behaviour change	Empowerment change
Increase			11.6%	7.3%	8.8%
1. Direct trial approach	\$399.39	\$ per % pt	\$34	\$55	\$45
2. Trial component	\$977.52	\$ per % pt	\$84	\$134	\$111
3. Total Business	\$1,153.58	\$ per % pt	\$99	\$158	\$131
4. Total Trial	\$2,102.88	\$ per % pt	\$181	\$288	\$239

Cost-benefit analysis

Due to electricity use being similar to or higher than historical trends, it was not possible to estimate financial benefits relating to energy use changes attributable to the project. The major benefits derived from the program were inherently subjective; however, they directly relate to the project's main objectives of increasing energy efficiency skills of HACC staff and improving the energy efficiency of participating clients. Placing a monetary value on such non-financial benefits has been identified as one of the most challenging aspects of undertaking a cost-benefit analysis for energy efficiency programs (Clinch & Healy, 2000). To overcome these difficulties, a method such as

contingent valuation⁷, would have been necessary to estimate participants' willingness to pay for such benefits (e.g. increased knowledge, energy efficiency). The process required for estimating such financial values would have been imposed a great burden on participants and was beyond the scope of this study.

The project is also likely to have provided several co-benefits for participants and the Glenelg Shire region. As low-income energy efficiency programs focus on financially constrained community members they are also more likely to provide non-energy benefits than general residential projects (Berelson, 2014). Such co-benefits include: lower vulnerability to rising energy costs; improved health and comfort, lower mortality risks; reduced subsidies from governments and energy providers; increased economic activity (e.g. jobs creation), improved energy literacy of participants; and knowledge sharing with non-participants (Anderson, Finney & White, 2010; Heffner & Campbell, 2011; Ryan, 2011). Although the Glenelg SAVES evaluation did assess some of these co-benefits (e.g. knowledge, participant and non-participant spill-over, housing comfort), due to the many factors that influence health and well-being it was not possible to quantify the direct impact of the project on these outcomes. Such estimates would need to be derived using an experimental or quasi-experimental research design, which was not possible for this trial, due to equity issues and budgetary constraints. Even with such an approach, measuring co-benefits has been identified as a major challenge for the program evaluation community (Heffner & Campbell, 2011).

⁷ Contingent valuation studies use surveys to estimate the monetary value of goods or services in the absence of prices (Carson, 2012). Traditionally, this method has been applied to value public goods.

4. Budget

The following provides a summary of the Glenelg SAVES budget. Total funding for the project was \$689,745, which included \$537,595 from LIEPP Funding and \$152,150 from consortium members' in-kind contributions.

The only budget variation required was a result of Energised Homes leaving the project's consortium in early 2014. Although Energised Homes had to cease being a Glenelg SAVES consortium member, a strong relationship was built with Moreland Energy Foundation Limited (MEFL). This organisation was appointed as a sub-contractor to provide the project's energy efficiency assessment training. MEFL were identified as a suitable replacement due to their familiarity with the LIEEP and the Glenelg SAVES project. This experience and expertise ensured that Energised Homes' in-kind contribution was covered through services provided by MEFL. This energy efficiency assessment training was provided below budget and allowed sufficient funding for MEFL to assist also in the delivery of the Community Awareness program.

Details of the Glenelg SAVES project's revenue and expenditure (Figure 14) and funding sources (Figure 15, overleaf) are provided in the following. An independent financial audit will be conducted by external auditors to ensure appropriate expenditure and financial accountability.

Figure 14: Revenue and expenditure report

Southern Grampians Glenelg Shire Primary Care Partnership

PCP Glenelg Saves Project

Revenue and Expenditure

For the project ending 29 February 2016

	2014		2015		2016
Revenue		Revenue		Revenue	
Department of Industry	\$ 237,325.00	Department of Industry & Science	\$ 159,000.00	Department of Industry, Innovation and Science	\$ 101,270.00
Department of Resources, Energy & Tourism	\$ 40,000.00	Transfer from Income in Advance 2013/14	\$ 104,912.00	Transfer from Income in Advance 2014/15	\$ 75,150.27
Other Income	\$ 1,449.72	Other Income - reverse overstated income 2013/14	\$ 1,449.72	Interest from 2014/15	\$ 2,610.11
Total Revenue	\$278,774.72	Total Revenue	\$262,462.28	Total Revenue	\$179,030.38
Expenditure		Expenditure			
Salaries & Wages	\$ 74,916.52	Salaries & Wages	\$ 52,104.80	Salaries & Wages	\$ 48,017.91
Superannuation	\$ 2,137.00	Superannuation	\$ 3,003.82	Superannuation	\$ 2,584.72
Workcare	\$ 249.90	Workcare	\$ 393.39	Workcare	\$ 739.36
Other oncosts	\$ 405.89	Other oncosts	\$ -	Other oncosts	\$ -
Food Supplies	\$ 1,075.78	Food Supplies	\$ 423.49	Food Supplies	\$ 3,159.95
Printing & Stationery	\$ 3,964.00	Printing & Stationery	\$ 3,257.35	Printing & Stationery	\$ 11,180.00
Staff Health & Welfare	\$ 1,092.39	Repairs & Maintenance	\$ 2,897.67	Repairs & Maintenance	\$ 5,895.50
Staff Training & Development	\$ 6,117.27			Conference Rego and Accommodation	\$ 8,560.27
		Audit expense	\$ 300.00	Audit expense	\$ 1,000.00
Other expenditure	\$ 368.14	Other expenditure	\$ 39,613.60	Other expenditure	\$ 45,259.95
Glenelg Shire Council	\$ 27,159.10	Glenelg Shire Council	\$ 28,949.69	Glenelg Shire Council	\$ 10,379.07
Federation University	\$ 56,378.19	Federation University	\$ 56,378.20	Federation University	\$ 42,283.65
Transfer to Income in Advance	\$ 104,911.95	Transfer to Income in Advance	\$ 75,150.27		
Total Expenditure	\$278,774.72	Total Expenditure	\$262,462.28	Total Expenditure	\$179,030.38
Surplus/(Deficit)	\$0.00	Surplus/(Deficit)	\$0.00	Surplus/(Deficit)	\$0.00

Figure 15: Funding sources

Organisation	Cash or in-kind	2012-13 (exGST)	2013-14 (exGST)	2014-15 (exGST)	2015-16 (exGST)	SUB-TOTALS (exGST)
LIEEP funding	Cash	\$20,000	\$140,000	\$191,325	\$186,270	\$537,595
Lead Organisation (SGGPCP)	In-kind		\$12,300	\$12,300	\$12,300	\$36,900
Glenelg Shire	In-kind		\$9,800	\$1,100	\$2,000	\$12,900
University of Ballarat	In-kind		\$19,850	\$28,300	\$48,300	\$96,450
Energised Homes	In-kind		\$300	\$3,800	\$1,800	\$5,900

5. Conclusion and Recommendations

The Australian Government's Low Income Energy Efficient Program (LIEEP) trailed a number of different approaches in various locations to assist low-income households to become more energy efficient. The program sought to assist low-income households to implement sustainable energy efficiency practices and build the knowledge and capacity of consortium members and Australian energy efficiency technology suppliers.

This report presents the findings from an evaluation of the Glenelg SAVES LIEEP project. This trial aimed to address information failure as a barrier preventing low-income residents from improving their energy efficiency. The focus of the project was to increase capacity and knowledge of HACC staff by providing them with energy efficiency training. HACC staff used this training with the aim of making their own houses more energy efficient. HACC staff also provided participating clients with a free home energy assessment and suggested recommendations for clients to reduce their energy bills and increase the energy efficiency of their homes. This project and evaluation was managed by the Glenelg SAVES consortium: SGGPCP, the Glenelg Shire and FedUni.

The results from the impact and process evaluation, indicate:

- 306 HACC Clients and 22 HACC Staff took part in the project
- The two largest population areas of Portland and Heywood were well represented in both the HACC Staff and Clients groups
- HACC Clients were significantly more likely to own their residence outright (77% vs. 32%) and less likely to have a mortgage than HACC Staff (6% vs. 55%)
- In general, participants from both groups were most likely to live in houses (rather than units) and relatively small and older housing stock
- Whilst some form of insulation was common for the vast majority of households, insulation treatments such as double-glazing and floor insulation were only found in a relatively small number of households.
- Curtailment behaviour was generally high for both groups, especially regarding: switching off lights in unoccupied rooms and minimising energy use for cooling and heating.
- Economic factors (save energy /reduce energy bill) were the major reason for joining the project for HACC staff. Although these factors were also important reasons for HACC Clients to take part in the project, the influence of social factors and Glenelg SAVE's financial support for energy efficiency purchases were generally greater. These findings support two key elements of the project: 1) the use of trusted advisors (i.e. HACC Staff) to encourage

participation and 2) financial support to alleviate barriers associated with access to capital for energy efficiency investments by low-income households.

- The most common actions identified from the home energy assessments for both groups generally related to appliances and heating.
- The majority of HACC Staff and HACC Clients indicated that project participation had not had an influence on their electricity or gas usage levels. This finding was supported by an analysis of participant energy data, which found that the Glenelg SAVES project did not generally affect household electricity use.
- A comparison of adoption level indicated that HACC Staff (50%) were significantly more likely to carry out all or most of the actions arising from their energy assessment than HACC Clients (26%). Only a small proportion of participants in both groups indicated that they had not implemented any recommendations or could not recall the advice that was provided.
- One-third of HACC Staff (33.3%) and over one-fifth of HACC Clients (21%) could be classified as free riders, as they indicated that they would have made exactly the same energy efficiency purchases in the absence of the project.
- Participant spill-over was low for both groups of Glenelg SAVES participants.
- The project was successful in generating community discussion about energy efficiency (i.e. non-participant spill-over).
- The project was most successful in increasing beliefs around the energy efficiency levels of participant households and their level of control over their energy consumption.
- The project was successful in increasing beliefs around the energy efficiency levels of participant households and their level of control over their energy consumption
- Glenelg SAVES was successful in increasing: perceived household energy efficiency levels and control over energy use and heating curtailment behaviour amongst HACC Client participants
- The project was successful in achieving its aim of increasing the energy knowledge of HACC Staff.

The following recommendations have ensued from the evaluation of the Glenelg SAVES project:

1. Extend the HACC Program to incorporate energy efficiency training for all staff and targeted advice and support for clients.

Often vulnerable groups are considered *hard to reach* through traditional service delivery models, due to the location of services, negative experiences, cynicism and a lack of knowledge about service availability (Crozier & Davies, 2007; Cortis, Katz, & Patulny, 2009). The Glenelg SAVES project demonstrated a successful model for engaging low-income households in becoming more energy efficient. Building on this success, it is recommended

that energy efficiency assessments and advice be embed into the daily responsibilities and operations for the HACC service. This would be a relatively low-cost integration and could include energy efficiency assessment items being included in existing HACC assessments. In the context of the Glenelg Shire, this would also allow the energy efficiency knowledge and skills gained by HACC Clients through the project to be utilised (both formally and informally) in the future provision of HACC Services.

2. Promote energy efficiency as a wellbeing issue that falls within the provision of public health services

Rising energy prices and climate change risks pose unprecedented challenges for the public health system. The success of Glenelg SAVES in integrating energy efficiency within an existing health service (HACC) demonstrates the potential to incorporate such elements in other areas of health promotion and policy. Such an approach is consistent with calls to re-orient health policy beyond its traditional focus of providing clinical and curative services (Ottawa Charter, 1986).

3. Alleviate imperfect information market failure by using social networks to support disadvantaged groups in accessing energy efficiency information, advice and support

Lack of information about specific ways to improve energy efficiency has been identified as an important reason why many people fail to identify energy saving strategies, and do not undertake cost-effective energy efficient upgrades or improvements to buildings or appliances. A key element to addressing this issue is improving the energy literacy of the population. The Glenelg SAVES project was successful in generating *non-participant* spill-over in that project participants share energy efficiency advice with people outside the project and found that energy-related knowledge was an important driver of attitudes and beliefs about increasing energy efficiency. This demonstrates that such projects designed to increase energy efficiency knowledge produce positive externalities as project benefits are shared with third-parties. These societal benefits provide a rationale for Government support of such programs designed to help foster better informed energy consumers.

4. Establish standard guidelines for undertaking energy efficiency program evaluations in an Australian context

A difficulty in comparing the effectiveness of the LIEEP is that each grant recipient conducted its own unique mix of trials, and that different methodologies were used to evaluate outcomes. This raised concerns about data comparability to facilitate analysis and generate findings and knowledge that would be applicable in such diverse contexts. Although the

LIEEP data scheme did provide some consistency in terms of data collection, the establishment of standard guidelines and protocols for program evaluation would likely alleviate some issues in comparing and sharing results from each project. Such guidelines could provide the following benefits:

- Common terminology and methodology for determining program impact in a variety of settings including residential, commercial, institutional and industrial buildings, and industrial processes;
- Procedures which, a) can be applied to similar projects, b) are internationally accepted as best practice and c) are impartial and reliable;
- Standard Procedures for measuring and/or verifying baseline and long-term energy savings.

5. Investigate opportunities for encouraging financial support for energy efficiency investment by low-income households

For low-income households, the capital costs of building retrofits and appliance upgrades are significant barriers to investment in energy efficiency measures. Financial considerations were still identified in this study as a major reason for not carrying out energy assessment recommendations even though their focus was on low-cost actions or behavioural changes. While various Commonwealth, State and Local Government loan schemes have been put in place to assist business and owners of commercial buildings to invest in energy efficiency, there are few such schemes for residential homeowners.

When the Commonwealth Government's Green Loans Scheme concluded several years ago, a small number of banks, credit unions and community support agencies continued to offer a range of personal finance options to encourage environmentally friendly residential building retrofits and appliance upgrades. These finance products are essentially personal loans, but the interest rates applied to green loans are generally 0.5-1% lower those applied to the lender's personal loans. These green loans may be secured or unsecured, and the funds must be used for the purchase of goods and services to reduce each household's environmental footprint. Acceptable purchases include:

- the replacement of incandescent and halogen lighting with LED lighting;
- the installation of blinds, awnings and other household shading;
- the replacement of older, less-efficient appliances/white goods with more energy efficient units (5 Star +);
- the replacement of electric & gas hot water heaters with solar hot water systems;
- the installation of solar PV systems;

- the purchase of 5 Star rated cars;
- the installation of rainwater and/or greywater tanks and systems;

Good Shepherd Microfinance currently offers two finance options to low income households to finance the purchase of white goods, education, car repairs, furniture, medical expenses and computers. The No Interest Loan Scheme (NILS) provides interest-free and fee-free short-term loans for \$300 - \$1,200. The StepUP program, which offers loans of \$800-\$3,000, is also free of fees, but interest is charged at a rate of 5.99% fixed. These loans are not specifically to fund energy efficiency upgrades, but could be used to assist eligible low-income households to improve the energy efficiency of their homes.

Although the private and third sector are providing some financial mechanisms to support energy efficiency investments, little is known about the feasibility of and demand for such services. This is a complex phenomenon as access to capital constraints are exacerbated by high discount rates for energy-related purchases (e.g. trade-offs between purchase and operating costs), which also hinder investment in energy-efficiency technologies.

Appendices

List of Appendices:

Appendix A: Home Energy Assessment Training Materials

Appendix B: Prioritisation Form

Appendix C: Project Planning Documentation

Appendix D: Project Media Releases

Appendix E: Data Collection and Reporting Plan

Appendix F: Ethics Application

Appendix G: Baseline Survey

Appendix H: Follow-up Survey

Appendix I: Introduction to Social Research & Interviewing (DVD Note Booklet)

Appendix J: Discussion Guides

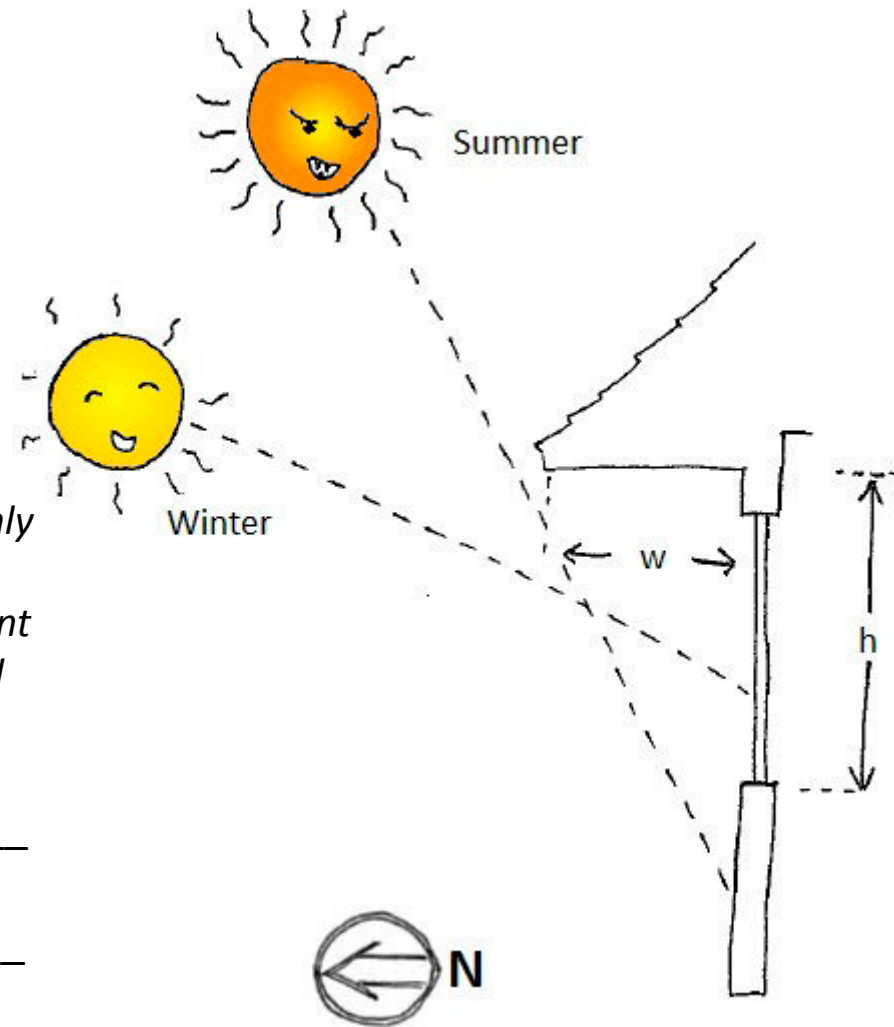
Appendix A: Home Energy Assessment Training Materials

Home Assessment Training

Please note that this information is to be only used as a guide only, and is based on an "average home". At all times, the assessment must be conducted within the policies and procedures of the Glenelg Shire.

Name: _____

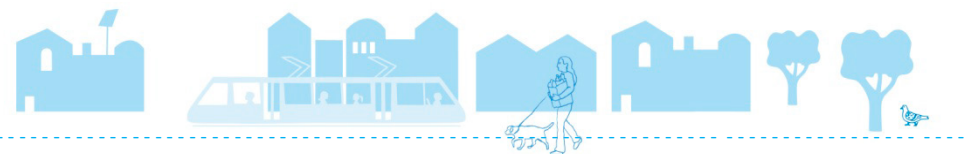
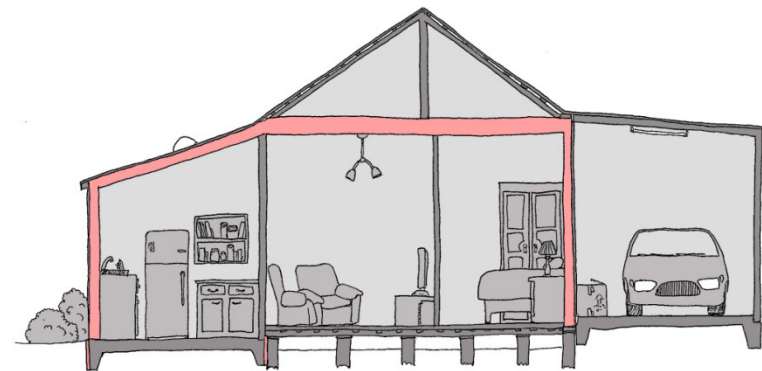
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House

Glenelg SAVES

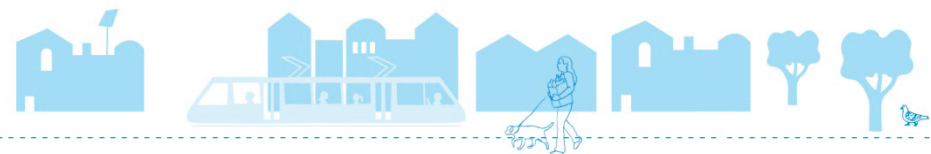
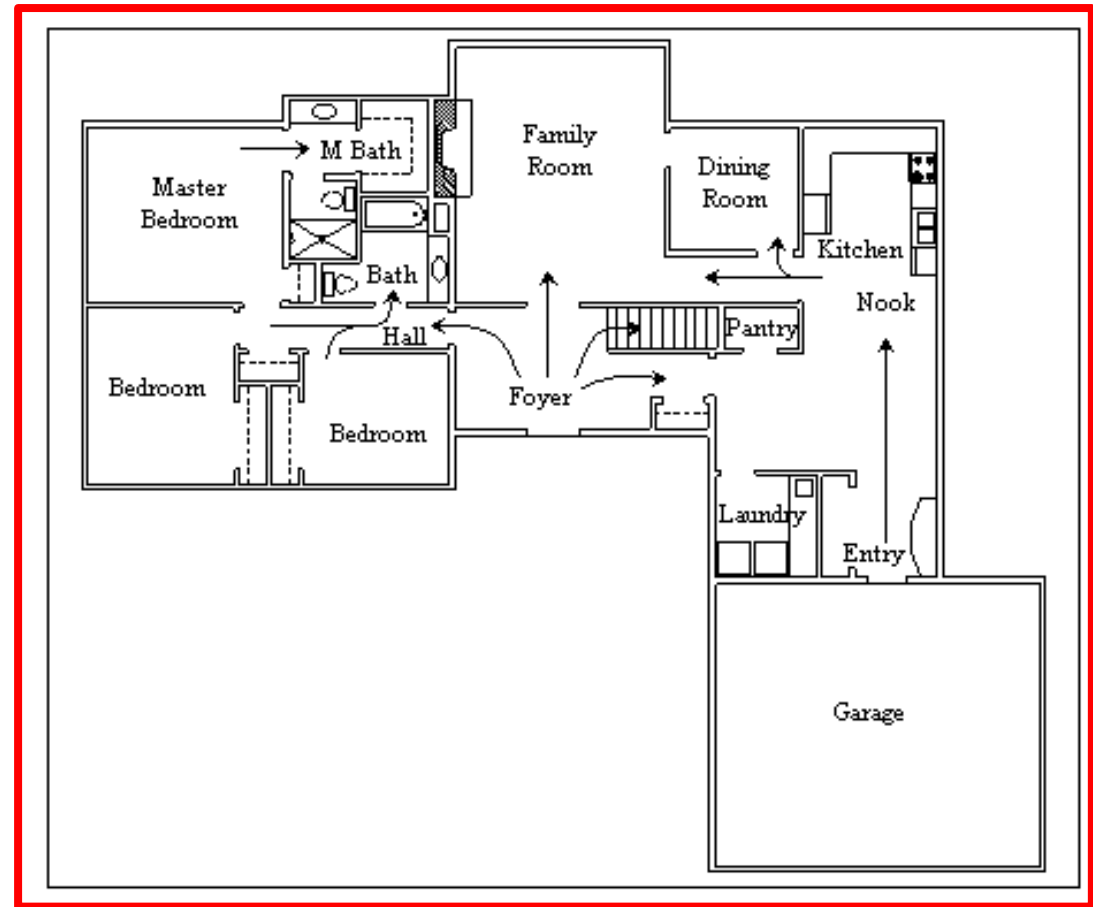
- It's their house. Make sure the homeowner is involved in the process and understands the benefits.
- Insulate (at least the roof space) if it is not already insulated, if it is, see if it needs to be topped up.
- Check for gaps and openings that need to be sealed.
- Check if the north and west windows are shaded, if not can they be easily shaded?
- Check orientation of main rooms (where do the windows face), it will help to understand which rooms may be hotter or cooler.



Always

Glenelg SAVES

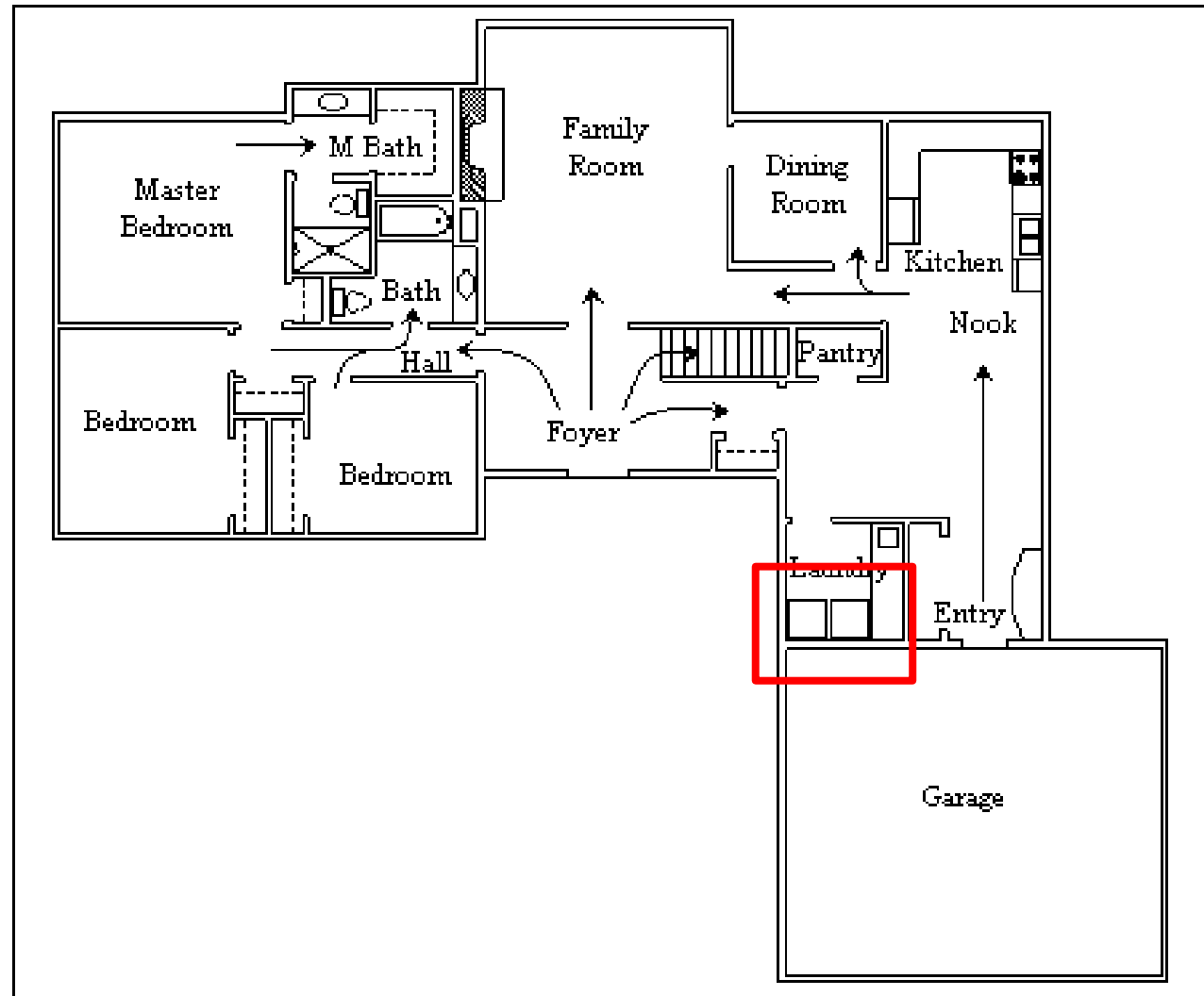
- Turn off lights and appliances when not in use.
- Dress for the climate, put on a jumper before the heater and shorts before the air conditioner.
- North and west facing windows can be used to heat the home in winter by leaving the curtains open. In summer they need to be closed or external shading used.
- Use fans before air conditioners.
- Avoid portable heaters.
- Keep doors closed and use draft seals on external and main doors.
- Use cross ventilation where possible.



Laundry

Glenelg SAVES

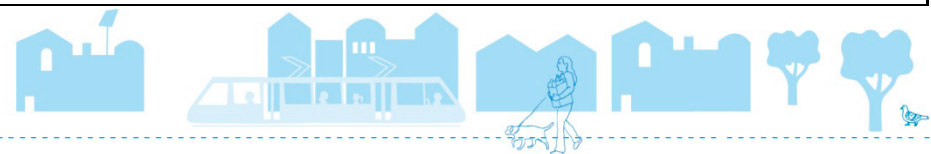
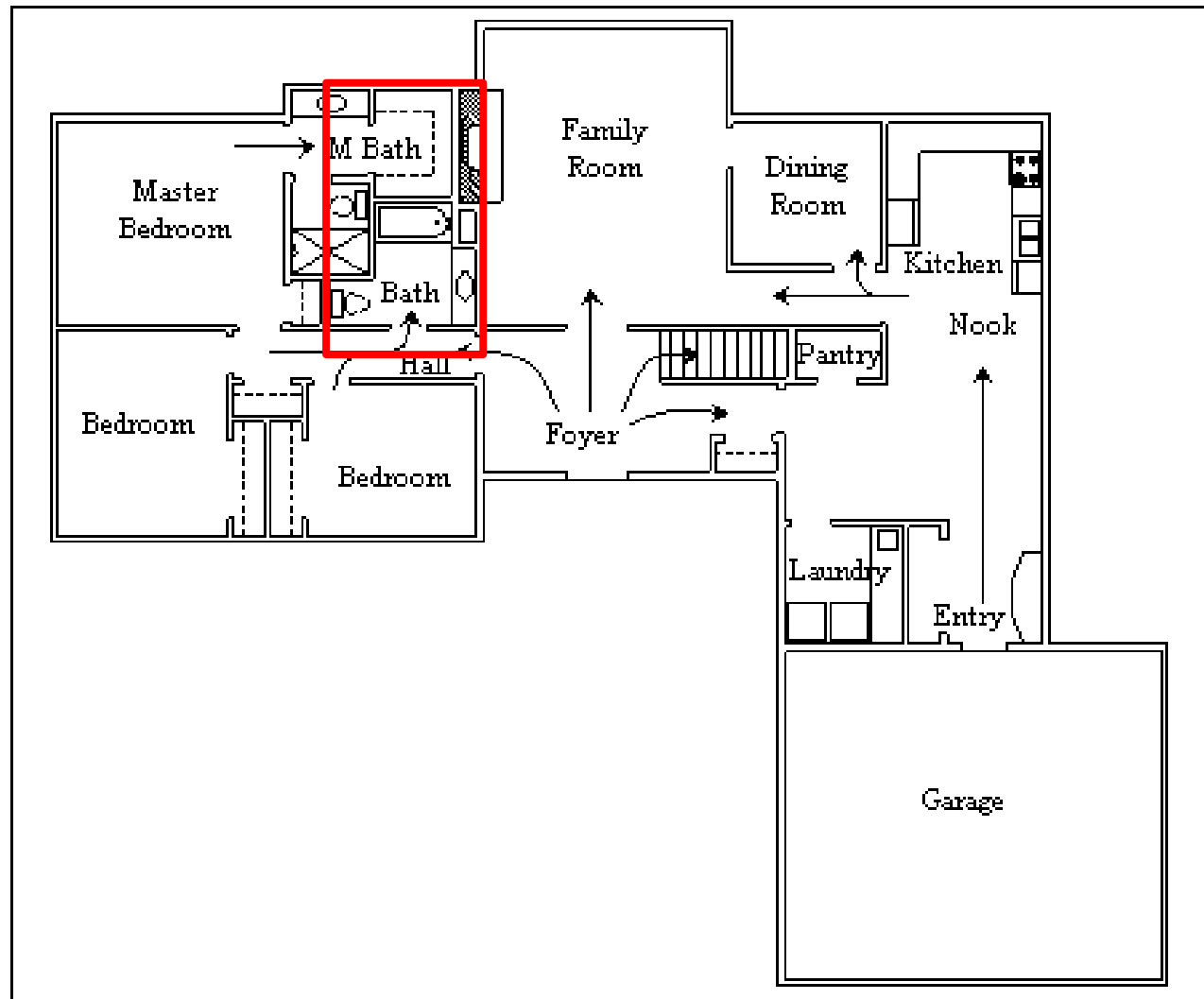
- Wash in cold water, it is better and cheaper.
- Turn flick mixer taps to the cold side.
- Only wash full loads.
- Only use a clothes dryer if there is no other choice.
- Use a clothes airer for rainy days.



Bathroom

Glenelg SAVES

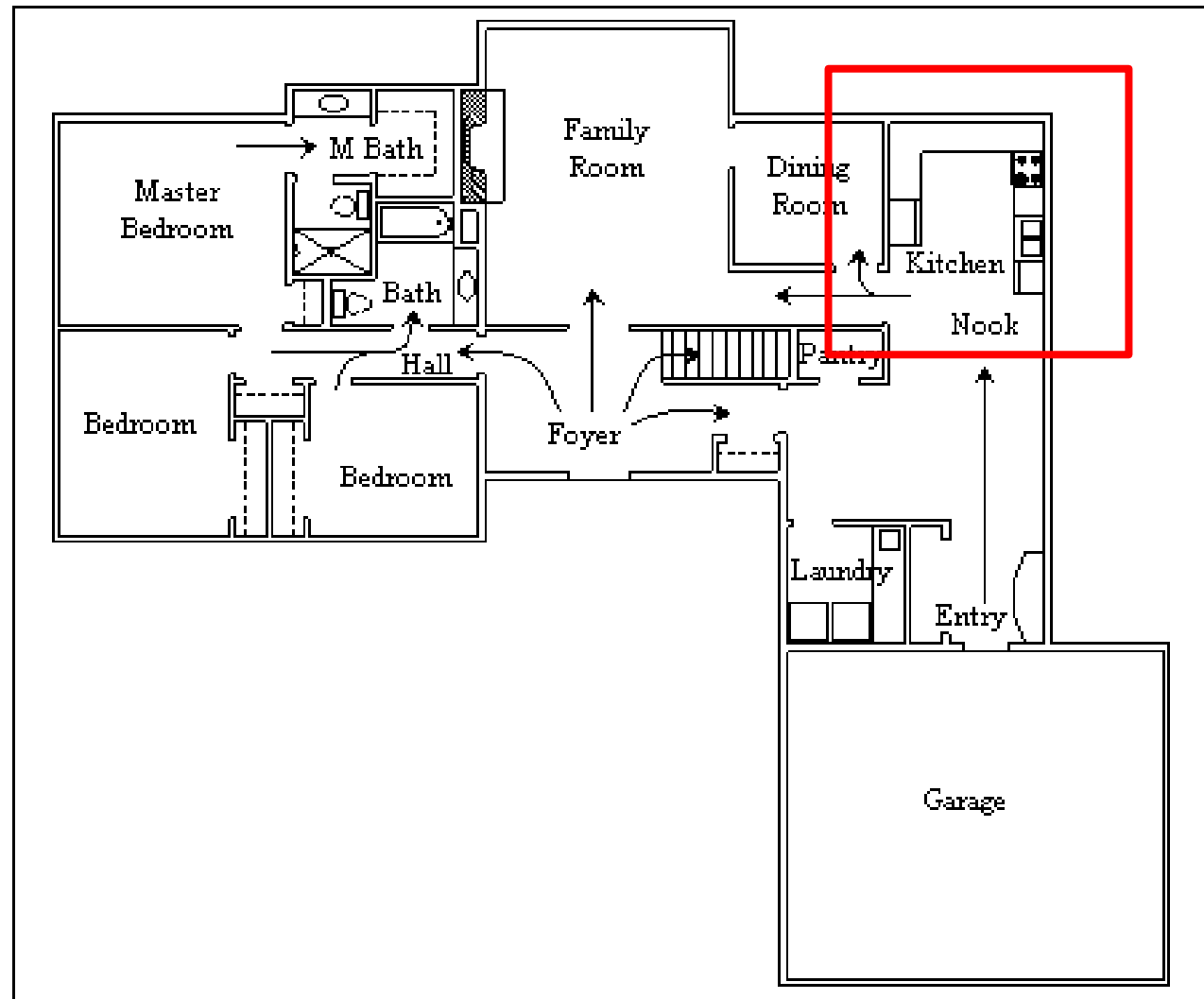
- Install a low flow shower head.
- Install tap aerators in the basins.
- Turn Flick Mixer taps to the cold side.
- Shower for four minutes or less.
- Use the half flush on the toilet.
- Don't use the heater light in the bathroom.



Kitchen

Glenelg SAVES

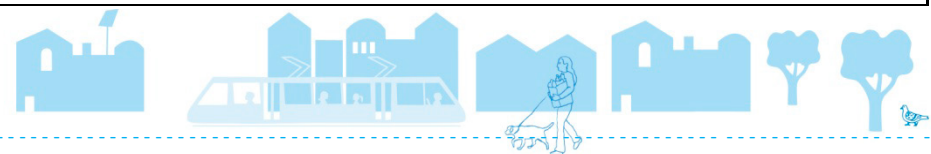
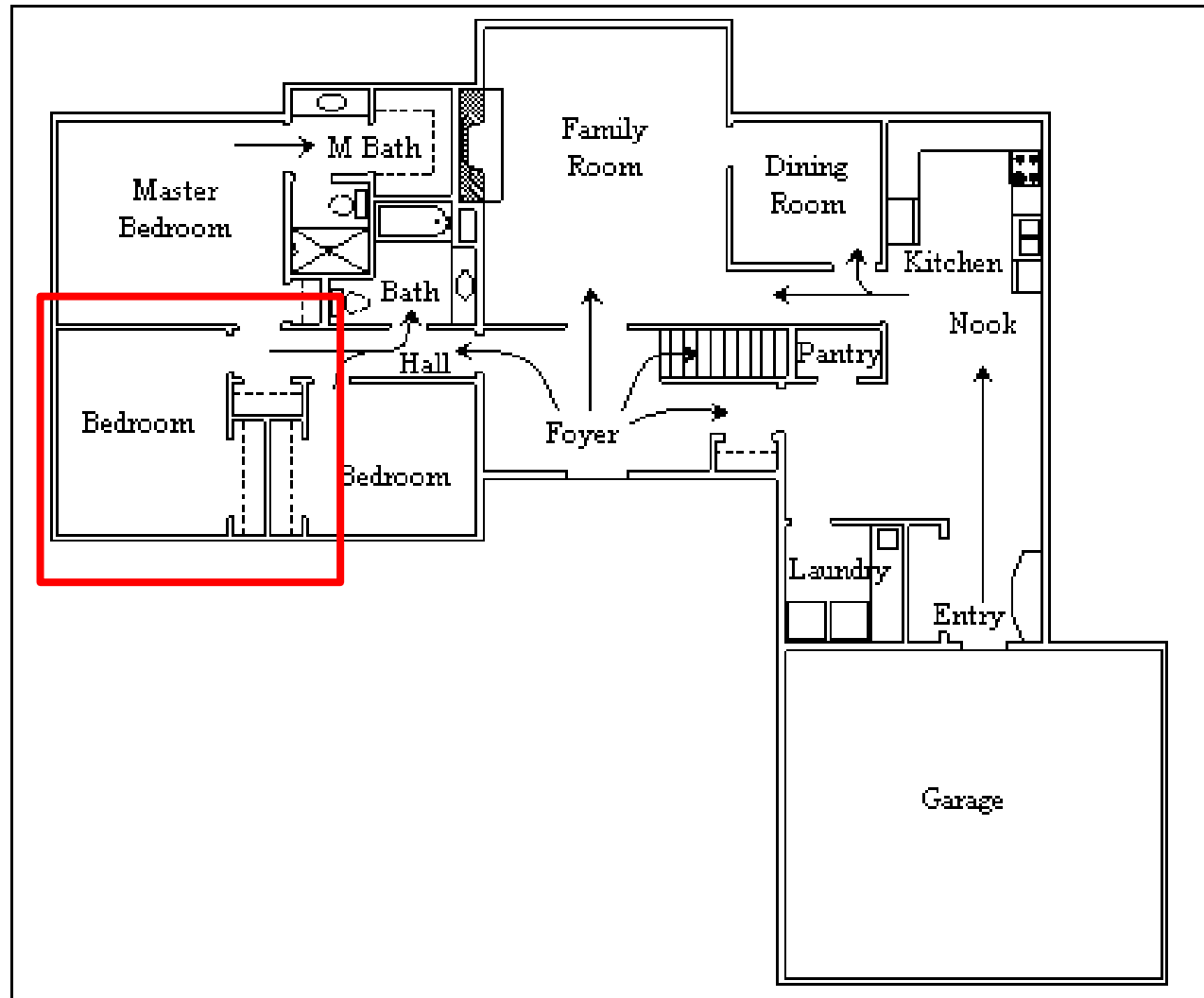
- Use full loads in the dishwasher.
- Check the fridge is well sealed and set to correct temperatures (5 degrees fridge – minus 15 for the freezer).
- Is the fridge too big for the homeowners needs?
- Are there unused or little used fridges that could be switched off?
- Install a tap aerator on the kitchen tap.



Bedroom

Glenelg SAVES

- Use a wheat bag instead of an electric blanket.
- Don't use heating or cooling in the bedrooms.
- Switch off all appliances in the bedrooms at the powerpoint.
- Use ceiling/portable fans on hot days.



Appendix B: Prioritisation Form

Prioritisation of Energy Efficiency Assessment recommendations

At the completion of the Home Energy Efficiency Assessment booklet, you will have identified a number of energy measures that were recommended as part of the Glenelg SAVES program (Section F – page 32 onward). Some of these recommendations are behaviour related, and therefore “free” – for example washing in cold water. Some of these recommendations involve installation/purchasing of items to improve the energy efficiency of the home. As part of the Glenelg SAVES project, there is provision to provide some low-cost energy efficiency improvements to households who complete the survey booklet.

Once you have completed Section F of the booklet, please review the recommendations, and through consultation with the participant, prioritise the top three recommendations below:

Name of householder:.....

1.

2.

3.

We will use these “top three” recommendations, as we work through the purchasing and arrangements for the implementation of the energy efficiency changes for each house.

Please return this form with the completed Survey Booklet.

Once you have returned the completed Survey Booklet, we will copy Section F and return a copy to you, so that you can continue to refer to it, for ideas and tips on how to improve the energy use within the assessed home.



Appendix C: Project Planning Documentation

PROJECT PLAN

Project introduction and objectives

Introduction

Glenelg SAVES will trial an innovative energy efficiency approach leveraging on the significant relationship between HACC staff and their clients. The focus of the project is to increase capacity and knowledge of the Glenelg Home and Community Care (HACC) staff through an innovative participatory approach to energy efficiency training. This will involve HACC staff taking part in training to increase energy efficiency awareness, knowledge and skills in home auditing as well as experiencing a home audit and adapting their home environment and behaviour. HACC staff work in the homes of their clients and are in a unique position to work closely with their clients to increase their energy efficiency.

Glenelg SAVES will provide opportunity for Glenelg Shire HACC staff to learn about and then participate in a home energy efficiency and auditing training course. Following the locally delivered training, HACC staff will practice their newly acquired energy efficiency skills in their own home: collecting baseline data, home auditing, making adjustments to their homes to improve energy efficiency and then collecting post energy efficiency improvement data. This “real life” experience will allow HACC staff to understand the benefits of improving energy efficiency within the home. Each trained HACC staff member will then use their energy efficiency auditing skills to assess and support improvement of the energy efficiency of at least ten of their clients’ homes. This will include: collecting baseline data, home auditing, arranging for adjustments to the homes of the clients to improve energy efficiency and then collecting post energy efficiency improvement data. The project will also facilitate a parallel energy efficiency awareness program with community groups and those who have a significant relationship with HACC Clients. The community awareness program will target as families and support groups, seniors group, meals on wheels and allied health to further support HACC clients.

The most vulnerable groups in Australia to rising energy costs are likely to include the elderly, the chronically ill and the socio-economically disadvantaged.¹ HACC programs work with their clients in their own homes so are well placed to assist clients to reduce vulnerability leveraging on this relationship.

Objectives

Objective one:

Increase the household energy efficiency skills, specifically in home auditing and advice, and improve household energy efficiency for 30 Glenelg Shire HACC staff by June 2015.

Objective Two

Improve energy efficiency in the homes of 300 HACC clients in the Glenelg Shire by December 2015.

Objective Three

To deliver a high quality trial project that provides data and analysis to inform policy and future energy efficiency projects for low income households, by 31 March 2016.



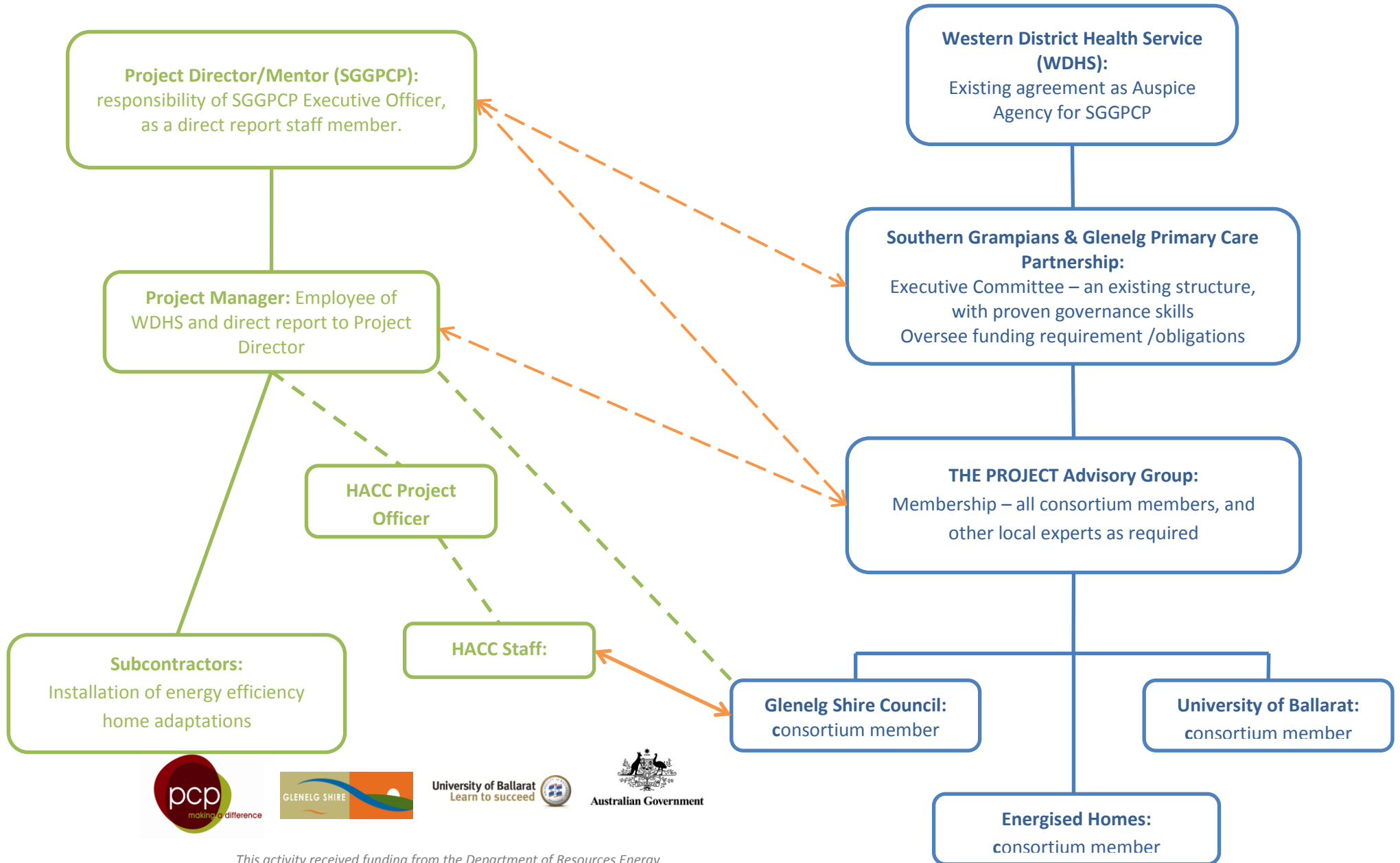
Governance arrangements

Consortium Member	Role accountabilities and responsibilities
Western District Health Service – Southern Grampians and Glenelg Primary Care Partnership (SGGPCP)	Lead Agency, with overall accountability to existing Executive Committee of the SGGPCP. Project direction and management. Facilitate project advisory group. Project Reporting, including data. Information dissemination. Project Manager employment. Manage contractors (for energy efficiency implementation).
Glenelg Shire: Home and Community Care (HACC) Program	Project conducted through Glenelg Shire HACC program. Manage and supervise HACC support staff Manage and supervise HACC Maintenance staff Advisory Group member. Utilise expert knowledge to facilitate project with HACC staff and HACC clients.
University Of Ballarat	Expert advice and direction with regards to the project, and in particular data collection, analysis and evaluation. Manage and deliver data collection and analysis Data Management and synthesis. Project evaluation. Assistance with Project Reports Advisory Group member.
Energised Homes	Expert advice. Advisory Group member. Facilitation and delivery of community education workshops.



PROJECT DELIVERY

GOVERNANCE



Activities

Please see the attached Gantt Chart for the activities of the Glenelg SAVES project (Project Plan Attachment A).

Project approach, outputs and outcomes

The Approach

Glenelg SAVES will approach 1,000 households in the Glenelg Shire in South West Victoria through training, education and home audit and adaptation. Three hundred and thirty households (as per low income selection criteria), including elderly residents, people with a disability, all living in a rural locality will directly benefit from in home audits and links to home adaptation to improve energy efficiency. The remainder of the target audience will benefit through training and increased awareness.

The project will employ an innovative participatory training approach to increase workforce capacity of Glenelg Shire HACC staff. The participatory training approach, allowing the HACC staff to undertake training to increase energy efficiency awareness and skills in home auditing as well as experiencing a home audit and adapting their home environment and behaviour, will increase the staff's engagement in the process, prior to then recruiting HACC clients. The participatory process will enable HACC staff to have a "real life" experience of home auditing and adaptation to improve energy efficiency further developing their knowledge, and understanding and enabling staff to translate the benefits to their client group.. HACC staff work in the homes of their clients and are in a unique position to work closely with their clients to increase their energy efficiency. The comprehensive training program will enable staff to transfer knowledge of the process and the impacts of home and behavioural adaptation to their HACC client group. In order to ensure a supportive environment and consistent messaging, the project will conduct a community awareness campaign targeted at stakeholders and significant others who play a role in the life of the HACC client.

HACC staff work in home with their clients and this relationship enables the opportunity to engage with this vulnerable sub-set. HACC workers are in a unique position whereby they have established a rapport and trust with their clients and are in a position to support their clients to live independently and autonomously in the community. Anecdotal feedback from HACC staff indicates that many of their clients are not being energy efficient which is affecting their health and wellbeing. This includes not using heating during winter and air-conditioning during summer for fear of rising energy bills. Having experienced home audits and implementation of strategies to improve energy efficiency in their own homes, HACC staff will be confident to impart this knowledge to their clients and support action. After conducting a home audit with their clients, staff will be able to link their clients with opportunities to improve energy efficiency through provision of resources through HACC maintenance staff, community projects or local contractors. In the past HACC clients have been reluctant to take up some community projects (such as VEET) due to lack of understanding of the benefits.

This collaboration between SGGPCP as the lead agency, Glenelg Shire HACC and education, research and energy efficiency experts will combine to establish an advisory group to lead the project. This advisory group will allow for a collaborative approach, sharing knowledge, lessons from previous projects, and resources. Further to the formal Advisory Group, there will be opportunities for the project to share its progress and findings with a wider group of interested parties that are not members of the project



consortium. This will provide further benefits to the project, input from experts and development of relationships that will benefit the region in the longer term.

Objective One

Increase the household energy efficiency skills, specifically in home auditing and advice, and improve household energy efficiency for 30 Glenelg Shire HACC staff by June 2015.

Strategies:

- i. Recruit a Glenelg Shire HACC staff member for 0.2EFT Project Officer position, allowing for internal leadership and communication.
- ii. Conduct an information awareness session on the project and outline the home energy efficiency and auditing training for all Glenelg Shire HACC staff and recruit 35 staff to undertake training.
- iii. Deliver a course in Home Sustainability Auditing.
- iv. Enable recruited HACC staff to collect prescribed baseline data, conduct audits in their own homes to priorities actions for improving energy efficiency.
- v. Support HACC staff to action energy efficiency priorities by assisting HACC staff to implement home adaptation and behavior change strategies in their own homes and collect post-improvement data.

Outputs:

- HACC staff member recruited as a project officer
- Information session conducted with HACC staff
- 35 HACC staff homes have baseline and post energy efficiency improvement data collected
- 35 HACC staff have implemented home adaptation and behavior change to increase energy efficiency

Outcomes:

- Trained HACC staff have increased capacity to enable recruitment of HACC clients for the project.
- Increased skills and knowledge, through participation in the “real life” experience, of trained HACC staff to engage HACC clients and others in the importance of improving home energy efficiency.
- Increased household energy efficiency in homes of 35 HACC staff
- Recruitment of HACC clients for this project enables further discussions for all HACC clients around household energy efficiency.

Objective Two

Improve energy efficiency in the homes of 300 HACC clients in the Glenelg Shire by December 2015.

Strategies:

- i. Trained HACC staff to each recruit 10 HACC clients for the project and conduct home audits and collect baseline and post-implementation data.
- ii. Implement audit recommended home adaptations for the HACC client homes by linking with HACC maintenance, government and community projects and outside contractors.



- iii. Supporting HACC Clients to undertake behavioral change to improve energy efficiency
- iv. Deliver a targeted community energy efficiency awareness education program.

Outputs:

- 350 HACC Clients recruited for the project.
- Home audits and pre data collection completed in the homes of 350 HACC clients.
- 300 HACC clients have been supported to implement home adaptation and behavior change to increase energy efficiency and post data collected.
- Five energy efficiency workshops conducted with target groups across the Glenelg Shire.
- Media releases placed across the Glenelg Shire print and electronic media to increase awareness of energy efficiency and the project.

Outcomes:

- Data collection informs future household energy efficiency projects.
- Increased energy efficiency in the homes of 300 HACC clients

Objective Three

To deliver a high quality trial project that provides data and analysis to inform policy and future energy efficiency projects for low income households, by 31 March 2016.

Strategies:

- i. Develop robust project management and governance to ensure trial project validity and credibility.
- ii. The University of Ballarat will work with HACC staff to collect data as specified in LIEEP funding agreement (Annexure C Schedule 4).
- iii. Report and analysis of data.

Outputs:

- High functioning and rigorous advisory group reporting to SGGPCP Executive.
- Data sets completed for 30 HACC staff and 300 HACC clients.

Outcomes:

- Valid data sets and analysis to inform future household energy efficiency programs.

Project Performance Measures

Milestone	Completion Date	LIEEP funding	Other Contribution
First Milestone Funding Agreement Executed	24/7/13	\$40,000	\$0
Second Milestone Submission of a Milestone Report for acceptance by the	30/8/13	\$20,000	\$24,000



<p>Department, indicating the completion of the activities described below (and in accordance with Schedule 2 of the Funding Agreement):</p> <p>a) Provision of a certificate of currency for all insurances required by Item 5 of Schedule 1</p> <p>b) Submission of completed versions for the following documents for approval by the Department:</p> <p>i. Project Plan</p> <p>ii. Data Collection and Reporting Plan</p> <p>iii. Compliance Plan</p> <p>iv. Risk Assessment and Management Plan</p>			
<p>Third Milestone</p> <p>Submit a Milestone Report for acceptance by the Department demonstrating, and providing evidence of:</p> <p>a) the completed activities within this agreed period, in accordance with the Project Plan</p> <p>b) Submit data required for the Activity from the commencement of the Activity to 30 November 2013, in accordance with the Data Collection and Reporting Plan, and</p> <p>c) Recruit 35 HACC staff for the Project</p>	31/12/2013	\$100,000	\$18,250
<p>Fourth Milestone</p> <p>Submit a Milestone Report for acceptance by the Department demonstrating, and providing evidence of:</p> <p>a) the completed</p>	1/7/14	\$117,325	\$20,500



<p>activities within this agreed period, in accordance with the Project Plan</p> <p>b) Train 35 HACC Staff (including collection of baseline data) in accordance with the Project Plan, and</p> <p>c) Submit data required for the Activity from the 1 December 2013 to 31 May 2014, in accordance with the Data Collection and Reporting Plan</p>			
<p>Fifth Milestone</p> <p>Submit a Milestone Report for acceptance by the Department demonstrating, and providing evidence of:</p> <p>a) the completed activities within this period, in accordance with the Project Plan</p> <p>b) submit data required for the Activity from 01 June 2014 to 31 November 2014, in accordance with the Data Collection and Reporting Plan</p> <p>c) Implementation of energy efficiency measures in the 30 HACC staff homes; and</p> <p>d) Recruit 300 HACC clients to participate in the project</p>	31/12/2014	\$74,000	\$25,000
<p>Sixth Milestone</p> <p>Submit a Milestone Report for acceptance by the Department demonstrating, and providing evidence of:</p> <p>a) the completed activities within this period, in accordance with the Project Plan</p> <p>b) submit data required for the Activity from 01</p>	1/7/2015	\$85,000	\$27,700



December 2014 to 31 May 2015, in accordance with the Data Collection and Reporting Plan c) Implementation of energy efficiency measures in the 300 HACC client homes d) Conduct 5 Community Awareness Workshops/Forums			
Seventh Milestone Submit a Milestone Report for acceptance by the Department demonstrating, and providing evidence of: a) the completed activities within this period, in accordance with the Project Plan b) submit data required for the Activity from 01 June 2015 to 31 November 2015, in accordance with the Data Collection and Reporting Plan	31/12/2015	\$70,270	\$25,000
Eighth Milestone Submission for acceptance by the Department of the Final Report in accordance with Clause 8 of the Funding Agreement.	1/3/2016	\$31,000	\$11,700
Ninth Milestone Submission for acceptance by the Department for the final Financial Report in accordance with Clause 8.2 and 8.4.	30/3/2016	\$0	\$0

Detailed delivery schedule

Please see the attached Gantt Chart for the detailed delivery schedule of the Glenelg SAVES project (Project Plan Attachment A).



Project implementation

Approach and implementation of energy efficiency measures

Engagement and training of HACC staff

The first stage of the project involves recruiting Glenelg Shire HACC staff to participate in the project. Over the past three years the Glenelg Shire HACC have participated in the Victorian Government Sustainability Funded *Pass the Parcel Project* facilitated by SGGPCP. This project involved working with a small number of staff who volunteered to participate in the project; 12 staff participated, working with 55 clients. This was a valuable opportunity to ascertain training needs and interest of HACC staff. SGGPCP, together with support from Deakin University/Department of Health/ Department of Human Services Strategic Alliance facilitated further training for HACC staff through Kildonan Uniting Care. As a result, Glenelg Shire HACC are well placed to participate in the trial with a good framework to build on and management support, but more importantly a recognition on the importance of energy efficiency, and the impact of rising energy prices on the welfare of their low-income client group and their ability to intervene.

All Glenelg Shire HACC staff (support, maintenance, assessment, administrative and management) will be invited to participate in an initial information session to outline the project, including processes, support structures and outcomes. Attendance at the information session will be subsidised by the Glenelg Shire HACC to ensure access to all staff. The information session will highlight: processes for staff training, benefits of participation in training including “real life” experience, impact on personal household energy efficiency, processes to impact clients’ energy efficiency and value of the training for community participation. There are 70 HACC staff and this project will recruit 35 to participate. The project will also engage an existing HACC staff member, for 0.2EFT, to be the primary point of contact within the HACC staff, and also act as the project champion. The project aims to make energy efficiency improvements to 300 HACC client households, at approximately 10 households per HACC staff member. Recruiting 35 HACC staff members, will allow for staff changes and client changes over the life of the project.

35 HACC staff will receive 15 hours of formal training in home energy efficiency and auditing. This course will be delivered in Portland over two to three days to enable accessibility for the staff. Once trained the staff will collect baseline data (as required in Annexure C LIEEP data items) in-home and conduct home audits. Furthermore, they will learn to identify and prioritise recommendations, and arrange for energy efficiency implementation to be carried out in the home. Ballarat University will assist with data collection (see data plan). The energy efficiency implementation will then be carried out, including any linking to VEET and other energy efficiency projects, and post-implementation data collected. The project has a budget of \$200 per household to implement priority actions.

Recruitment of HACC Clients

35 Glenelg Shire HACC staff will work with ten of their clients each over the three year period to implement the project. Through their own experience in the project, HACC staff will be well placed to explain the benefits of the project to their clients. HACC staff will collect baseline data with their clients and conduct a household energy efficiency audit to prioritise activities for action. The Project Manager, Project Officer, along with the HACC Staff will work together to arrange for the energy efficiency improvements to be made at the HACC client homes: this may include HACC maintenance staff, local contractors/suppliers and linking to opportunities such as VEET. Throughout this process, HACC staff are well placed to continue monitoring



and supporting energy efficiency actions and home adaptation with their clients through ongoing relationships. Post-implementation data collection will occur after the energy efficiency improvements have been made.

Community awareness

This project will increase energy efficiency of low income households facilitating a parallel community awareness program with other stakeholders who have an existing relationship with HACC clients. The community education program will run alongside the implementation phase of the project to increase education and support throughout the community. This program will target family and those who have a significant relationship with HACC Clients; seniors groups, meals on wheels suppliers, allied health staff and community members. The community education campaign will include a communications and media component as well as workshops and forums.

Staffing and Resourcing Requirements

Glenelg SAVES will have sound governance and expert advice (see governance arrangements and associated diagram) with a multidisciplinary membership. The project will be managed through SGGPCP where a Project Director (0.1EFT) will be employed by SGGPCP to oversee the strategic direction of the project and provide project management advice and assistance to the Project Manager. The SGGPCP will employ a Project Manager (0.5EFT), who will be responsible for the co-ordination of the advisory group, reporting requirements and operational requirements of the project. The Glenelg Shire will employ a Project Officer (0.2EFT) who will be located within HACC at the Glenelg Shire to facilitate a close relationship with HACC staff and management, and act as a “champion” of the project for HACC staff. Office space at Glenelg Shire will be provided in-kind by the shire for both the Project Officer and the Project Manager (when required).

HACC staff (including support, administrative, management and maintenance) will be invited to an information session to outline the project process and impacts and to recruit 35 staff to undergo the training program. Glenelg Shire will resource staff to attend training and provide a venue to enable access for all staff. 35 HACC staff will attend 15 hours of home energy efficiency and auditing training. Training will include opportunities for HACC staff to conduct audits in their own home and prioritise areas for action. Each staff member has been allocated an additional 3 hours to conduct these initial audits which include working with Ballarat University to build capacity. An allocation of \$200 per HACC staff member has been allocated to implement priority changes in HACC staff homes.

HACC staff will be allocated 3 hours to conduct audits in each of the participating clients homes. This will enable an opportunity to discuss the project with their clients including process and impacts from their own experiences and collection of baseline data. Two hundred dollars per HACC client has been allocated to implement priority changes in HACC staff homes which will enable purchase and installation of equipment such as draught proofing and weather sealing and installation of window treatments as required.

Five Community Forums will be conducted as part of the parallel community awareness program targeted at stakeholders who work with or who have a significant relationship with HACC clients.



A significant component of the project is collection and analysis of data which will be completed by University of Ballarat. The University will work with HACC staff to collect data. UB will then manage the analysis and synthesis of data, assist with reporting and research requirements.

An independent financial audit will be conducted by external auditors to ensure appropriate expenditure and financial accountability.

Collection and analysis of project-related data

A longitudinal design will be employed, with measurements at baseline and at intervals throughout the remainder of the project. The three major data sources that will be collected and monitored for this study will be: energy use, participant surveys and climate data. This will include collection of data required for Annexure C LIEEP data items. Qualitative data will also be collected through discussions with HACC workers and Consortium members.

Electricity data collected will be recorded from the time of commencement until the conclusion of the project. Data on energy use from reticulated gas or other sources is collected via self-reporting of household bills. Participant information relating to LIEEP Data Items will be collected by HACC workers during client audits. A follow-up survey will also be conducted to measure adoption of recommendations, satisfaction with the program and other household changes that may influence energy use. Qualitative data will be collected in the form of focus groups and/or in-depth discussions with HACC and consortium representatives.

Prior to the commencement of any analysis, data will be subject to a systematic and rigorous process to ensure the information to be analysed is 'clean'. The data analysis will be directed toward identifying, quantifying and comparing the outcomes attributable to the program with regard to levels and patterns of energy usage. These analyses will include longitudinal statistical analyses of changes in energy usage measures, with appropriate consideration given to the potential influence of differing demographic, behavioural, attitudinal, housing and meteorological characteristics and there specific analyses of the collected data determined in consultation with the Department or other stakeholders



Project monitoring and evaluation

Measures of energy efficiency barriers will focus on the extent that HACC staff and clients believe they are able to enact energy efficient behaviour. Such measures will include the influence of the following economic and behavioural energy efficiency barriers:

- Credibility and trust in information sources
- Knowledge of cost-effective energy efficiency measures (i.e. imperfect information)
- Bounded rationality (i.e. clarity and accessibility of energy efficiency information, information and time constraints that lead to non-optimal energy-related decisions)
- Attitudes towards energy efficiency benefits
- Access to capital
- Perceived risk of energy efficiency investments
- Principle-agent relationships / split incentives
- Cultural influences (e.g. social pressure, normative behaviour)

To assess the influence of the program on alleviating these barriers, measures will be made during the baseline and follow-up surveys and discussed during the trial's qualitative research phase. Measurement of changes to the prevalence of these barriers, along with their influence on energy efficiency behaviour, will provide a detailed understanding of how the program has influenced participant behaviour.

The data analysis will be directed toward identifying, quantifying and comparing the outcomes attributable to the program with regard to levels and patterns of energy usage. These analyses will include:

- longitudinal statistical analyses of changes in energy usage measures (such as average daily consumption) with appropriate consideration given to the potential influence of differing and changing participant characteristics and climate variation;
- other specific analyses of the collected data determined in consultation with the Department or other stakeholders (i.e. Quarterly/Annual Statistical Projects);

Detailed Budget

Please see the attached detailed Budget (Project Plan Attachment B).

ⁱ VCOSS Victorian Council of Social Service (VCOSS), Climate Change and Drought Policy: Context recommendations for VCOSS, 2007

Project Plan Attachment A

ID	Task Name	Duration	Start	Finish	Predecessor	% Complete	Resource Names	Resource	1st Half		
									Qtr 1	Qtr 2	Qtr 3
1	GLENELG SAVES	50 days	Wed 24/07/13	Tue 1/10/13		2%					
2	Milestone One	1 day	Wed 24/07/13	Wed 24/07/13		100%					
3	Signing of funding agreement	1 day	Wed 24/07/13	Wed 24/07/13		100%	LIEEP	DRET			
4	Invoice LIEEP for Milestone One	1 day	Mon 29/07/13	Mon 29/07/13		100%	Project Manager	SGGPCP			
5	Recruitment of Project Officer	46 days	Mon 29/07/13	Mon 30/09/13		0%	Aged and Disabilit	Glenelg Shire			
6	Scoring of PD	10 days	Mon 29/07/13	Fri 9/08/13		0%	Aged and Disability	Glenelg Shire			
7	Position description approved by SM	5 days	Mon 12/08/13	Fri 16/08/13	6	0%	Aged and Disability	Glenelg Shire			
8	Advertise for Eol	10 days	Mon 19/08/13	Fri 30/08/13	7	0%	Aged and Disability	Glenelg Shire			
9	Applications received	10 days	Mon 2/09/13	Fri 13/09/13	8	0%	Aged and Disability	Glenelg Shire			
10	Interview and appointment of project officer at Glenelg	10 days	Mon 16/09/13	Fri 27/09/13	9	0%	Aged and Disability Services	Glenelg Shire			
11	Project Officer at Glenelg Shire commences	1 day	Mon 30/09/13	Mon 30/09/13	10	0%	Aged and Disability Services	Glenelg Shire			
12	Milestone Two	20 days	Tue 6/08/13	Mon 2/09/13	2	0%		SGGPCP			
13	Insurance Certificates	17 days	Tue 6/08/13	Wed 28/08/13		0%	Project Manager	SGGPCP			
14	Project Plan	17 days	Tue 6/08/13	Wed 28/08/13		0%	Project Manager	SGGPCP			
15	Compliance Plan	17 days	Tue 6/08/13	Wed 28/08/13		0%	Project Manager	SGGPCP			
16	Risk Plan	17 days	Tue 6/08/13	Wed 28/08/13		0%	Project Manager	SGGPCP			
17	Data Plan	17 days	Tue 6/08/13	Wed 28/08/13		0%	University	University of Ballarat			
18	Final Plans to Jim for approval	1 day	Wed 28/08/13	Wed 28/08/13		0%	Project Director	SGGPCP			
19	Submit Milestone to LIEEP	1 day	Thu 29/08/13	Thu 29/08/13	18	0%	Project Manager	SGGPCP			
20	LIEEP Approve Milestone TWO	1 day	Fri 30/08/13	Fri 30/08/13	19	0%	LIEEP	DRET			
21	Invoice LIEEP for Milestone Two	1 day	Fri 30/08/13	Fri 30/08/13		0%	Project Manager	SGGPCP			
22	Project Governance/Set-up Phase	15 days	Mon 19/08/13	Fri 6/09/13		33%	Project Manager	SGGPCP			
23	Initial meeting of consortium members	1 day	Mon 19/08/13	Mon 19/08/13		100%	Project Manager	SGGPCP			
24	Develop MOU with UB for project	1 day	Fri 6/09/13	Fri 6/09/13		0%	Project Manager	SGGPCP			
25	Terms of Reference for AG set		Mon 19/08/13			0%	Project Manager	SGGPCP			
26	HACC Worker Phase (PHASE ONE)	457 days	Mon 30/09/13	Tue 30/06/15		0%					
27	UB invoice WDHS for Milestone 1 (15%)	1 day	Mon 30/09/13	Mon 30/09/13		0%	UB	University of Ballarat			
28	Introduction of project to Glenelg Shire HACC workers (all workers - maintenance, administration, management, assessment)	12 days	Tue 1/10/13	Wed 16/10/13		0%	Project Officer				
29	Portland	1 day	Tue 1/10/13	Tue 1/10/13		0%	Project Manager	SGGPCP			
30	Staff meeting (2pm)	1 day	Tue 1/10/13	Tue 1/10/13		0%					
31	Staff meeting (6pm)	1 day	Tue 1/10/13	Tue 1/10/13		0%					
32	Heywood	1 day	Mon 7/10/13	Mon 7/10/13		0%	Project Manager	SGGPCP			
33	Staff Meeting (5pm)	1 day	Mon 7/10/13	Mon 7/10/13		0%					
34	Casterton	1 day	Wed 16/10/13	Wed 16/10/13		0%	Project Manager	SGGPCP			
35	Staff Meeting (3.30pm)	1 day	Wed 16/10/13	Wed 16/10/13		0%					
36	Determine which HACC workers will be part of the project	46 days	Mon 14/10/13	Mon 16/12/13	28	0%	Project Officer				

Project: 20130830 Project GANTT
Date: Thu 29/08/13

Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
Split		External Tasks		Inactive Summary		Manual Summary		Progress	
Milestone		External Milestone		Manual Task		Start-only			
Summary		Inactive Task		Duration-only		Finish-only			

Project Plan Attachment A

ID	Task Name	Duration	Start	Finish	Predecessor	% Complete	Resource Names	Resource	1st Half	
									Qtr 1	Qtr 3
37	Receive Eol from HACC workers who would like to be part of the project	18 days	Mon 14/10/13	Wed 6/11/13		0%	Project Officer	Glenelg Shire		Project Officer
38	Develop a "contract" for HACC workers to be part of the project	18 days	Thu 7/11/13	Mon 2/12/13	37	0%	Project Manager	SGGPCP		Project Manager
39	Assess Eol and identify 35 HACC workers to be part of the project	5 days	Tue 3/12/13	Mon 9/12/13	38	0%	Project Manager	SGGPCP		Project Manager
40	35 HACC workers sign the contract to be part of the project	5 days	Tue 10/12/13	Mon 16/12/13	39	0%	Project Officer	Glenelg Shire		Project Officer
41	Finalise the checklist/structure for determining home implementation	23 days	Tue 1/10/13	Thu 31/10/13		0%	Project Manager	SGGPCP		Project Manager
42	Research other programs that can link to/value-add to implementation (eg VEET)	175 days	Tue 1/10/13	Sat 31/05/14		0%	Project Manager and Project Officer	SGGPCP and Glenelg Shire		Project Manager and Project Officer
43	UB invoice WDHS for Milestone 2 (7.5%)	1 day	Tue 31/12/13	Tue 31/12/13		0%	UB	University of Ballarat		UB
44	Invoice LIEEP for Milestone 3	1 day	Tue 31/12/13	Tue 31/12/13		0%	Project Manager	SGGPCP		Project Manager
45	Training from Ballarat Uni for HACC wokers for data collection	20 days	Mon 3/02/14	Fri 28/02/14		0%	University	University of Ballarat		University
46	Actual collection of baseline data from HACC workers/workers homes	20 days	Mon 3/03/14	Fri 28/03/14		0%	University	University of Ballarat		University
47	HACC workers complete "home auditing" training	35 days	Mon 3/03/14	Fri 18/04/14		0%	Project Officer	Glenelg Shire		Project Officer
48	UB invoice WDHS for Milestone 3 (7.5%)	1 day	Mon 31/03/14	Mon 31/03/14		0%	UB	University of Ballarat		UB
49	HACC workers audit own homes/peer homes?	55 days	Mon 21/04/14	Fri 4/07/14		0%	Project Officer	Glenelg Shire		Project Officer
50	Implementation of recommendation in HACC worker homes	109 days	Tue 3/06/14	Fri 31/10/14		0%	Project Officer	Glenelg Shire		
51	Identify and group implemenation	39 days	Tue 3/06/14	Fri 25/07/14		0%	Project Manager and Project Officer	SGGPCP and Glenelg Shire		Project Manager and Project Officer
52	Linking to local suppliers	109 days	Tue 3/06/14	Fri 31/10/14		0%	Project Officer	Glenelg Shire		Project Officer
53	Implementation of actual recommendation	109 days	Tue 3/06/14	Fri 31/10/14		0%	Project Manager	SGGPCP		Project Manager
54	UB invoice WDHS for Milestone 4 (7.5%)	1 day	Mon 30/06/14	Mon 30/06/14		0%	UB	University of Ballarat		UB
55	Invoice LIEEP for Milestone 4	1 day	Tue 1/07/14	Tue 1/07/14		0%	Project Manager	SGGPCP		Project Manager
56	UB invoice WDHS for Milestone 5 (7.5%)	1 day	Tue 30/09/14	Tue 30/09/14		0%	UB	University of Ballarat		UB
57	End point data collection at HACC woker homes	65 days	Mon 1/12/14	Fri 27/02/15		0%	University and HACC workers	University of Ballarat		University and HACC workers
58	UB invoice WDHS for Milestone 6 (7.5%)	1 day	Wed 31/12/14	Wed 31/12/14		0%	UB	University of Ballarat		UB
59	Invoice LIEEP for Milestone 5	1 day	Wed 31/12/14	Wed 31/12/14		0%	Project Manager	SGGPCP		Project Manager

Project: 20130830 Project GANTT Date: Thu 29/08/13	Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
	Split		External Tasks		Inactive Summary		Manual Summary		Progress	
	Milestone		External Milestone		Manual Task		Start-only			
	Summary		Inactive Task		Duration-only		Finish-only			

Project Plan Attachment A

ID	Task Name	Duration	Start	Finish	Predecessor	% Complete	Resource Names	Resource	1st Half	
									Qtr 1	Qtr 3
60	Qualitative data collection with HACC workers	42 days	Mon 2/02/15	Tue 31/03/15		0%	UB	University of Ballarat		
61	Quantitative and qualitative data input and analysis	87 days	Mon 2/03/15	Tue 30/06/15		0%	UB	university of Ballarat		
62	UB invoice WDHS for Milestone 7 (7.5%)	1 day	Tue 31/03/15	Tue 31/03/15		0%	UB	University of Ballarat		
63	HACC Client Phase (PHASE TWO)	430 days	Mon 7/04/14	Fri 27/11/15		0%				
64	Identify HACC clients to be involved in project	40 days	Mon 7/04/14	Fri 30/05/14		0%	HACC workers	Glenelg Shire		
65	HACC workers to identifying potential HACC clients for involvement in project	40 days	Mon 7/04/14	Fri 30/05/14		0%	HACC workers	Glenelg Shire		
66	HACC clients to agree to the project (total 300)	40 days	Mon 7/04/14	Fri 30/05/14		0%	HACC workers	Glenelg Shire		
67	Baseline data collection for HACC clients	85 days	Mon 2/06/14	Fri 26/09/14		0%	University and HACC workers	University of Ballarat		
68	Home energy Audit for HACC clients	65 days	Mon 2/06/14	Fri 29/08/14		0%	HACC workers	Glenelg Shire		
69	Implementation of Audit recommendations	130 days	Mon 29/09/14	Fri 27/03/15		0%	Project Officer and HACC workers	Glenelg Shire		
70	End point data collection for HACC clients	85 days	Mon 1/06/15	Fri 25/09/15		0%	University and HACC workers	University of Ballarat		
71	UB invoice WDHS for Milestone 8 (7.5%)	1 day	Tue 30/06/15	Tue 30/06/15		0%	UB	University of Ballarat		
72	Invoice LIEEP for Milestone 6	1 day	Wed 1/07/15	Wed 1/07/15		0%	Project Manager	SGGPCP		
73	Qualitative data collection with HACC clients	65 days	Mon 3/08/15	Fri 30/10/15		0%	University	University of Ballarat		
74	Quantitative and qualitative data input and analysis	85 days	Mon 3/08/15	Fri 27/11/15		0%	University	University of Ballarat		
75	UB invoice WDHS for Milestone 9 (7.5%)	1 day	Wed 30/09/15	Wed 30/09/15		0%	UB	University of Ballarat		
76	HACC Clients Support community involvement (PHASE THREE)	195 days	Mon 2/06/14	Fri 27/02/15		0%				
77	Identify support sphere for HACC clients	65 days	Mon 2/06/14	Fri 29/08/14		0%	HACC workers	Glenelg Shire		
78	Identify themes between clients	21 days	Mon 1/09/14	Mon 29/09/14	77	0%	Project Manager and Project	SGGPCP and Glenelg Shire		
79	Workshops/forums for support community members	40 days	Mon 6/10/14	Fri 28/11/14	78	0%	Project Manager	SGGPCP		
80	Offer of home audits for sphere	40 days	Mon 6/10/14	Fri 28/11/14		0%	Project Manager	SGGPCP		

Project: 20130830 Project GANTT
Date: Thu 29/08/13

Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
Split		External Tasks		Inactive Summary		Manual Summary		Progress	
Milestone		External Milestone		Manual Task		Start-only			
Summary		Inactive Task		Duration-only		Finish-only			

Project Plan Attachment A

ID	Task Name	Duration	Start	Finish	Predecessor	% Complete	Resource Names	Resource	1st Half		
									Qtr 1	Qtr 2	Qtr 3
81	Offer of info on free installation programs for sphere	40 days	Mon 6/10/14	Fri 28/11/14	80	0%	Project Manager	SGGPCP			Project Manager
82	Survey for qualitative data of how the inclusion of the sphere affected the energy efficiency changes of the HACC clients	64 days	Mon 2/02/15	Thu 30/04/15	81	0%	Project Officer and University	University of Ballarat			Project Officer and University
83	UB invoice WDHS for Milestone 10 (7.5%)	1 day	Thu 31/12/15	Thu 31/12/15		0%	UB	University of Ballarat			UB
84	Invoice LIEEP for Milestone 7	1 day	Thu 31/12/15	Thu 31/12/15		0%	Project Manager	SGGPCP			Project Manager
85	Final Reporting and Information Dissemination	88 days	Tue 1/03/16	Thu 30/06/16		0%					
86	Final Report submitted to DCCEE	1 day	Tue 1/03/16	Tue 1/03/16		0%	Project Manager	SGGPCP			Project Manager
87	Invoice LIEEP for Milestone 8	1 day	Tue 1/03/16	Tue 1/03/16		0%	Project Manager	SGGPCP			Project Manager
88	UB invoice WDHS for Milestone 11 (7.5%)	1 day	Thu 31/03/16	Thu 31/03/16		0%	UB	University of Ballarat			UB
89	Final report accepted by DCCEE	67 days	Wed 30/03/16	Thu 30/06/16		0%	LIEEP	DRET			LIEEP
90	Dissemination of project findings to community	66 days	Thu 31/03/16	Thu 30/06/16		0%	Project Manager	SGGPCP			Project Manager
91	UB invoice WDHS for Milestone 12 (10%)	1 day	Thu 30/06/16	Thu 30/06/16		0%	UB	university of Ballarat			UB

Project: 20130830 Project GANTT
Date: Thu 29/08/13

Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
Split		External Tasks		Inactive Summary		Manual Summary		Progress	
Milestone		External Milestone		Manual Task		Start-only			
Summary		Inactive Task		Duration-only		Finish-only			

Risk Assessment and Risk Management Plan

No.	Cause/s <i>Anything that alone or in combination has the potential to give rise to a risk.</i>	Risk <i>The potential that a chosen action or activity will lead to a loss or undesirable outcome.</i>	Consequence <i>The effects that may occur in relation to the risk, including cost, impact on health, human life or property.</i>	CURRENT ASSESSMENT <i>See tables 1-3 for further guidance</i>				Treatment	
				Current Controls <i>A measure that is modifying or reducing the chance of a risk occurring.</i>	Consequence rating	Likelihood rating	Overall rating	Treatment description <i>A measure to modify or reduce the chance of a risk occurring.</i>	Responsibility <i>Person or organisation whose duty and liability it is to report on the progress of the treatment.</i>
e.g. 1	e.g. limited accredited or qualified personnel available to undertake the project. Key staff change during project delivery	e.g. unaccredited or unqualified personnel undertaking work or performing the installation of appliances. Delay mid-project, with additional recruiting and change of relationships during project and loss of project knowledge	e.g. faulty work or installation of appliances causes damage to property or injury to people. Reduced ability to complete the project on-time	e.g. only qualified and accredited personnel employed to work or perform installation as part of the project. e.g. Project Manager is required to view qualification and accreditation certification at the start of each project. Sound recruitment and clear position description, sound documentation and filing processes	Moderate Minor	Possible Possible	High Medium	e.g. all personnel undertake appropriate and regular training in relation to Commonwealth, State and Territory requirements. Ensure documentation, data and reports filed clearly, and clear communication between team members.	e.g. Project Manager or Organisation's Personnel Manager. Project Manager (through Lead Agency)
2	HACC staff changes	Possible delay mid-project, skills loss and loss of interest/trust from HACC clients	Reduced ability to achieve the outputs in the project plan	Project plan includes allowance for staff changover, including care of HACC clients when it occurs	Minor	Possible	Medium	Engage more staff in the training initially to ensure the target of 300 clients is reached	Project Manager, Project Officer and HACC staff
3	HACC client changes	HACC clients will not complete the program before outputs achieved	Reduced ability to achieve the outputs in the project plan	To engage more clients initially than what the outputs require	Insignificant	Almost certain	Medium	This risk is nearly unavoidable, however by involving more clients than required the consequence has been reduced can be factored into the project planning	Project Manager (through Lead Agency)
4	Consortium members fail on delivery of in-kind contributions	Change to budget, or change to consortium membership	Part of the project (dependent on consortium member) not deliverable	All consortium members have clear understanding of the project, including signing a MoU/letter of commitment	Major	Unlikely	Medium	Continued communication between the Lead Agency and all consortium members throughout the project	Project Manager (through Lead Agency)
5	VEET program (Victorian State Government) concludes or reduces	Reduction in what the participants can receive as incentives from the project	Participants not satisfied with what they receive from the project	Continue to stay up to date with the VEET program, and aware of what changes are being made	Moderate	Rare	Medium	Awareness of other programs and incentives that are able to be linked into VEET	Project Manager, together with consortium member Energised Homes
6	Lack of product availability for home implementation	Reduction in what the participants can receive as incentives from the project	Participants not satisfied with what they receive from the project	Continue to stay informed on what products are available for home implementation to improve energy efficiency	Moderate	Rare	Medium	Awareness of a wide range of products that are available for improving energy efficiency of homes, at a cost that fits within the project budget	Project Manager (through Lead Agency)
7	HACC clients do not participate in the program	The project is unable to proceed due to no/low participants	Inability to deliver the project to lack of participants	The project is designed to engage the HACC workers initially and then have them introduce the project to their clients	Major	Rare	Medium	Monitor the engagement/recruitment process and required	Consortium member Glenelg Shire, HACC workers, and Project worker
8	HACC maintenance staff do not accept the program	No planned sub-contractor to undertake retro-filting work	Possible increased costs for installation (and therefore reduced delivery) for retrofitting	The project is designed so that HACC staff (including maintenance workers) are aware of the project and it will fit within their work, with employer management commitment	Moderate	Rare	Medium	Monitor and if the risk is arising, then need of work with Glenelg Shire to gain support, otherwise contracting a new sub-contractor	Consortium member Glenelg Shire, HACC workers, and Project worker
9	HACC staff do not accept the program and do not take up the training offered to them	The project is unable to proceed due to no HACC staff participants	Inability to deliver the project to lack of participants	The project is following on from a 1 day seminar that has been delivered to HACC workers with very positive feedback and request for more involvement in energy efficiency programs	Major	Rare	Medium	Monitor the uptake and obtain feedback and evaluation to ensure HACC staff are committed to the project.	Consortium member Glenelg Shire, HACC workers, and Project worker

10	Installation product failure	Poor outcome for individual clients	Product installation causes harm to the homes and/or participants of the project	The project will utilise products from reputable suppliers, and where necessary products will comply with standards	Minor	Rare	Medium	All products used during installation will be compliant with appropriate standards and purchased from reputable suppliers	Lead agency and Project worker
11	Participants do not give permission for collection of data	Project is unable to recruit sufficient participants who are prepared to provide data, as per the funding agreement	Less data sets obtained than in the project plan	There is scope within the project plan to engage with more participants, if during the data collection, some HACC clients choose to cease their involvement in the project.	Moderate	Unlikely	Medium	All components of the project will be clearly outlined at the onset, and therefore all participants will be aware of the requirements	Project worker and Consortium Member Glenelg Shire
12	Workplace OH&S not complied with	Accident occurs, as a result of OH&S not being complied with	Injury to HACC staff, clients, and/or contractors	The compliance plan has been developed, and agreed upon by the Lead Agency and the Glenelg Shire, so that there is complete awareness of this commitment to this	Moderate	Unlikely	Medium	The compliance plan will be continually reviewed and communicated throughout the project, and adjusted when necessary	Consortium member Glenelg Shire, HACC workers, and Project worker and contractors
13	University of Ballarat fails to collect the correct data	The Project does not have the correct information to provide to DEECC	The Project fails to deliver as per the Data Plan	The University of Ballarat are aware of and experienced in data collection requirements, assisted in the development of the data plan and has committed to the project as a Consortium members	Moderate	Rare	Medium	Seek feedback from DCCEE following the submission of the first lot of data and make adjustments as required.	Lead agency, University of Ballarat
14	University of Ballarat fails to analyse the data correctly	The Project does not have the correct information to provide to DEECC	The Project fails to deliver as per the Data Plan	The University of Ballarat is well aware of the data analysis required, assisted in the development of the data plan, and is well equipped to undertake data analysis	Moderate	Rare	Medium	Seek feedback from DCCEE following the submission of the first lot of data analysis and make adjustments as required.	Lead agency, University of Ballarat
15	There is lack of attendance/interest by the community for workshops/further information	The workshops have no/low attendance	The Project fails to deliver on this phase of the project	The workshops will be well planned, and targeted to the specific groups/people that support the HACC clients. The lead agency has previously run well attended energy efficiency related workshops and will use this knowledge in planning.	Minor	Unlikely	Medium	Monitor, evaluate and adapt workshops as required if attendance is a problem.	Lead agency, project manager and project officer
16	Participants are not aware of the use of their data, and privacy around this	Participants do not complete or do not understand the data collection consent	Participants are not satisfied with the data collection, once it has been collected.	Participants will be made aware of the project data collection process, in a manner they can understand	Moderate	Unlikely	Medium	The University understand the need to ensure that all participants understand the collection of data process.	University, Project Manager
17	Participants data privacy is compromised	Participant data is obtained by or used not in accordance with the project	Participants data is released and used not in accordance with the project	Participant data will be collected, and stored securely as per the data plan.	Moderate	Rare	Medium	The University understands the need for data privacy and this will be monitored throughout the project.	University, Project Manager
18	Delay in signing the funding agreement	Project is unable to commence at planned time	Project delay in completion, as project is "season" based	The project application will be very clear and the lead agency has reviewed the funding agreement	Major	Unlikely	Medium	The project plan is reviewed and altered to limit this consequence	Lead agency, DCCEE
19	Delay in signing the Project, Compliance, Risk Management or Data Collection Plan	Project is unable to commence at planned time	Project delay in completion, as project is "season" based	The plans will be submitted with the application, allowing for time approval prior to the funding agreement being signed	Major	Unlikely	Medium	The lead agency will work with the Department to ensure that the plans are agreeable by all.	Lead agency, DCCEE
20	Loss of project data	The Project does not have program data to provide to DEECC	Project is unable to fulfil LIEEP data requirements, if it's not possible or feasible to recollect data	Data will be stored and backed-up on a secure UB file server. Paper records will be stored in locked filing cabinets in secure rooms by UB researchers. Uploads of data collected for the program will be uploaded to the LIEEP database on a regular basis.	Major	Unlikely	Medium	The University understands the need for data security and this will be monitored throughout the project.	University, Project Manager

COMPLIANCE PLAN

Commonwealth, state, territory and local government legislation and policies

Legislation	Commonwealth, state or local government requirement	Compliance Yes or No	Strategies
Occupational Health and Safety act 2004	State	Yes	All staff and contractors are required to meet the requirements of the OHS Act. With regards to Glenelg Shire Council employees and contractors, they are to notify Glenelg Council and the Glenelg SAVES Project Advisory Group of any faults or issues that would prevent them from carrying out their work in a safe manner. With regards to WDHS employees, they are to notify WDHS and the Glenelg SAVES Project Advisory Group of any faults or issues that would prevent them from carrying out their work in a safe manner.
OHS Regulations	State	Yes	All staff and contractors are required to meet the requirements of the OHS Regulations. With regards to Glenelg Shire Council employees and contractors, they are to notify Glenelg Council and the Glenelg SAVES Project Advisory Group of any faults or issues that would prevent them from carrying out their work in a safe manner. With regards to WDHS employees, they are to notify WDHS and the Glenelg SAVES Project Advisory Group of any faults or issues that would prevent them from carrying out their work in a safe manner.
Accident compensation act 1996	State	Yes	All staff and contractors are required to notify WDHS, the Glenelg Council (if an employee of the Glenelg Shire Council) and the Glenelg SAVES Project Advisory Group of any incidents that occur to ensure that they are appropriately remunerated whilst recovering from and injury and to ensure that the injury is learnt from
Privacy Act 1988 Information privacy act 2000	Commonwealth and State	Yes	WDHS staff are required to comply with these privacy acts, along with a number of policies of the organisation that relate to this. Glenelg Council has a privacy manual that all staff are required to comply with.
Health Records Act 2001	State	Yes	All staff under the privacy manual are required to keep client health records private. The Glenelg Council privacy manual outlines the requirements of the act



Safe work procedures	Local	Yes	All staff are required to comply with a range of safe work procedures to guide their work and ensure that it is completed in a safe manner. Staff participate in the development of safe work procedures
OHS policy	Local	Yes	All staff are required to comply with the organisational OHS policy to guide their work and ensure that it is completed in a safe manner. Staff participate in the development of OHS policy
Home safety checklist	Local	Yes	All HACC staff are required to complete two home safety checklists each year to ensure that the house is safe for them to work in

Terms and conditions of the funding agreement

The SGGPCP agrees to comply with the terms and conditions of the funding agreement.

The project will use HACC workers as the primary point of contact with the target population (HACC clients). HACC workers are already employed by the Glenelg Shire, have undertaken relevant checks and training around privacy and OH&S. The activities that will make up the in-home alterations, to improve energy efficiency, will primarily be undertaken by Glenelg Shire maintenance staff. In the instance where a sub-contractor may have to be used, then relevant police checks will be undertaken. Glenelg Shire staff will make the introduction of any sub-contractor to the HACC clients.

Any police checks will be retained on record by the lead agency.

Glenelg Shire have a Police Check policy that requires all staff and contractors to have a current police check. A copy of this policy is available upon request.

The Project Manager and Project Director, as employees of WDHS, are required to have a current police check.

Information privacy

The University of Ballarat will collect data that will include householders personal information . The university has developed guidelines to ensure that all research conducted by University staff and students occurs ethically. The University of Ballarat Human Research Ethics Committee (UBHREC) is responsible for ensuring that staff and students understand and comply with these guidelines. These guidelines are designed to ensure that research protocol gives acceptable consideration to participant’s welfare, rights, beliefs, perceptions, customs and cultural heritage, both individual and collective. All survey instruments will receive ethics approval before administration.

- The University is bound by the Victorian Information Privacy Act (2000). This legislation protects personal information held by public sector bodies in Victoria. The University has appointed a Privacy Officer and a Privacy Committee to ensure compliance with the University’s Privacy policy and to handle any matters arising. That policy, among other things, provides specific guidelines on



the collection, use and disclosure of personal information. A copy of the University Privacy Policy is available as required.

- UB will design and maintain a database of all data collected during the project. Appropriate privacy safeguards as specified within University of Ballarat Human Research Ethics Committee (UBHREC) guidelines, including separation of de-identified data from participant identification information, will be incorporated in the database design. Data will be stored in password-protected files (only accessible to the evaluation's researchers) and backed up on a secure UB file server. Paper records will be stored in locked filing cabinets in secure rooms within the Schools and Centres involved. At the project's conclusion, paper records will be stored for at least 7 years in locked filing cabinets at UB. Electronic data files will be held in the user domains of the researchers on a secure UB file server, and archived for at least 7 years on UB file system backups.

HACC staff will collect data capitalising upon their significant relationship with their clients, negating the need for an outsider to collect information from the clients. Staff will receive training from UB to assist with development of skills to gather data including research skills, interview skills, privacy, ensuring clients understand the purpose of data collection and informed consent. Staff will be able to discuss the purpose of data collection with their clients as well as to whom the data will be disclosed.

Compliance

Any identified compliance related issues, as identified by the Project Director, Manager, Officer, Consortium Member or HACC staff member, will be reported to the Project Manager and then considered and resolved by the Advisory Group. The Advisory Group will keep a record of any compliance issues, including the documentation leading to its resolution.

Financial Auditing will occur annually, as per Clause 8.2.

The University has developed guidelines to ensure that all research conducted by University staff occurs in accordance with the National Statement on Ethical Conduct in Human Research. The University of Ballarat Human Research Ethics Committee (UBHREC) is responsible for ensuring that staff understand and comply with these guidelines. All survey instrument used as part of this project will receive UBHREC approval before administration.

These guidelines are designed to ensure that the program's research protocol gives adequate consideration to participant's welfare, rights, beliefs, perceptions, customs and cultural heritage, both individual and collective.

UB will contact a random sample of program participants to ensure the quality of the data collected by HACC staff. This process will be used to verify the data submitted. UB will also provide on-going support for HACC staff to address any enquiries during the program's data collection phase.

Where sub-contractors are engaged to carry out work, which may be required during the home implementation phase of the project, they will be required to comply with Privacy and OH&S Acts as outlined in the table above.



Appendix D: Project Media Releases

13 April 2014

Media Release - Glenelg SAVES Launch

Thirty-five Community Support Workers (CSWs) will receive formal home energy assessment training to pass on to their clients, as part of a new project at Glenelg Shire Council.

The initiative, Glenelg SAVES – *Seniors Achieving Valuable Energy Saving*, was launched in late February and is being co-ordinated through the Council's Home & Community Care (HACC) department.

Together with data collection, CSWs will be funded to assess their own homes for energy efficiency as well as make some improvements to the energy efficiency of their homes.

CSWs will then involve their clients in the project, collecting pre and post data, conducting an energy efficiency assessment of the homes and also working with the client to arrange for the installation/adjustment to improve the energy efficiency of the home.

Council Mayor Cr John Northcott said it was exciting for Glenelg Shire to be at the forefront of initiating positive changes to assist our environment.

"Even if we all make the small differences in our homes, it adds up to a huge difference in energy savings overall," he said.

"I encourage all community members to work on improving the energy efficiency in their own homes and to follow the example set by Council.

"The real benefits aren't what we will feel immediately but they are what will affect the livelihoods of our children and future generations."

The project received funding from Australian Government Department of Industry as part of the Low Income Energy Efficiency Program and includes a formal consortium, consisting of the Glenelg Shire Council, Federation University (formally University of Ballarat) and the Southern Grampians Glenelg Primary Care Partnership, who have made considerable financial commitments to the project.

Data will be collected pre and post energy efficiency improvements and the consortium members will all work on the project throughout its duration, till its completion in March 2016.

18 September 2014

Media Release - Glenelg Shire Community Support Workers Saving Energy for Their Clients

An energy efficiency assessment, including heating and cooling, lighting, refrigeration, cooking and entertainment systems, has been undertaken by Glenelg Shire Community Support Workers in their own homes, giving them valuable knowledge to pass on to their clients.

The process was the next stage of Glenelg SAVES – *Seniors Achieving Valuable Energy Saving*, which was launched in late February 2014 and will result in more than 300 Glenelg Shire Home and Community Care (HACC) clients receiving energy efficiency improvements to their homes.

Community Support Workers (CSWs) will now be involved in the implementation of energy efficiency improvements to their own homes, identified as part of the assessment, including changes like draft sealing, blinds or curtains or even a contribution to appliance upgrades, before each Glenelg Shire HACC client receives the same assessment on their home. Already savings are being realised, with a CSW replacing inefficient halogen down-lights with more energy efficient LED down-lights, resulting in a saving of approximately \$17 per year per light changed.

Each CSW will work closely with their client, to identify what areas of their home could be modified to improve the energy efficiency of the home and ultimately reduce their energy expenditure.

The project received funding from Australian Government Department of Industry as part of the Low Income Energy Efficiency Program and includes a formal consortium, consisting of the Glenelg Shire Council, Federation University (formally University of Ballarat) and the Southern Grampians Glenelg Primary Care Partnership, who have made considerable financial commitments to the project.

Data will be collected pre and post energy efficiency improvements and the consortium members will all work on the project until its completion in March 2016.

The project is being managed by the Southern Grampians Glenelg Primary Care Partnership (SGGPCP) and is being co-ordinated through the Council's Home & Community Care (HACC) department.

For further information on the project, please contact Maureen Crisp on 5522 2200 or Penny Fraser (SGGPCP) on 5551 8471.

12 December 2014

Media Release - Saving Energy: It's "Nanna Technology"

"Losing precious heat during winter or cool air in summer as a result of drafts and gaps in our homes is a major cause of energy inefficiency."

This was one of the tips Moreland Energy Foundation's Jason Cox shared with Glenelg Shire seniors when he spoke at a series of energy efficiency workshops, facilitated by the Glenelg SAVES (Seniors Achieving Valuable Energy Savings) project in November.

The sessions focused on the benefits of "nanna technology" and attracted crowds of more than 95 people.

"Door snakes, cool towels near fans and a knee rug are some of the simple ways to save energy - much as our nanna used to tell us," Mr Cox said.

The Glenelg SAVES project is funded by the Australian Government's Department of Industry and is a collaboration between Western District Health Services (Southern Grampians Glenelg Primary Care Partnership), Glenelg Shire Council, and Federation University.

The aim of the project is to increase energy efficiency in the homes of Glenelg Shire Home and Community Care (HACC) clients, by enabling staff to learn more about energy efficiency techniques to share with their HACC clients.

The workshops brought expert information to a range of community members as part of the project and reminded the community of easy ways to save money and to be more comfortable in their homes.

Mr Cox spoke about the seven top tips for energy efficiency:

1. Wash in cold water
2. Draft seal the room
3. Heat to 20 degrees and cool to 26
4. Avoid using portable heaters
5. Avoid clothes dryers
6. Use fans before air conditioners
7. Use your windows to heat and cool your home.

More information about how to be energy efficient at home can be found at <http://www.energymadeeasy.gov.au/> or <http://www.energyrating.gov.au/for-consumers/energy-ratings-mobile-app/> or www.mefl.com.au.

15 May 2015

Energy Savings for Glenelg Shire Home and Community Care Clients through Glenelg SAVES

Customised energy efficiency improvements in the homes of more than 300 Glenelg Shire Home and Community Care (HACC) clients will result in improved energy use for clients and greater knowledge about easy ways to further reduce energy costs.

The improvements have been made as part of Glenelg SAVES – *Seniors Achieving Valuable Energy Saving*, which was launched in late February 2014 and is being co-ordinated through the Council's Home & Community Care (HACC) department.

The energy efficient changes that have taken place include things such as draft sealing, blinds or curtains and external awnings, and appliance upgrades.

Project Manager Joanne Brown said savings were already being realised.

“Replacing inefficient halogen down-lights with more energy efficient LED down-lights results in a saving of approximately \$17 per year per light changed,” she said.

“We have been able to engage a number of local businesses and firms across the Glenelg Shire, which has been fantastic.”

“With winter arriving across the Glenelg Shire, the timing couldn't be better. By simply reducing drafts in your home, you are able to stay much warmer.”

The project also involved an energy efficiency assessment, including looking at heating and cooling, lighting, refrigeration, cooking and entertainment systems, which was undertaken by Glenelg Shire Council Community Support Workers in the client homes.

“Having the Glenelg Shire worker complete the assessment made it feel a lot safer for me – I already knew the person coming into my home”, one participant said.

The final phase of the project will involve gathering energy use data from each household, and also conducting surveys with the participants. Final reporting will be completed by 1 March 2016, and all participants will be able to access the information that comes from the project.

The project received funding from the Australian Government and includes a formal consortium, consisting of the Glenelg Shire Council, Federation University (formally University of Ballarat) and the Southern Grampians Glenelg Primary Care Partnership (Western District Health Service), who have made considerable financial commitments to the project.

The project is being managed by the Southern Grampians Glenelg Primary Care Partnership (SGGPCP) and is being co-ordinated through the Council's Home & Community Care (HACC) department.

For further information on the project, please contact Maureen Crisp on 5522 2200 or Penny Fraser (SGGPCP) on 5551 8471.

10 June 2015

University major contributor to energy efficiency program

Federation University Australia has been selected to provide important research services to the Glenelg SAVES project, a grant recipient of the Commonwealth Government's Low Income Energy Efficiency Program (LIEEP).

"The aim of this project is to enable carers and their clients to increase energy efficiency in their own homes, reduce energy bills and also improve home comfort," David Lynch, Chief Investigator, Federation University Australia, said.

"Glenelg SAVES has already provided over 20 Home and Community Care (HACC) staff with home energy assessment training that they have used to improve the energy efficiency of both their own homes and that of their clients.

"The response to Glenelg SAVES has been very encouraging with over 300 HACC clients deciding to join the program."

LIEEP has been set up to test and evaluate many different approaches in various locations across Australia designed to help low income households become more energy efficient.

The program has also been designed to capture and analyse data and information to inform energy efficiency policy and future program approaches.

Glenelg SAVES was launched in February 2014 and is being co-ordinated through the Glenelg Shire Council's HACC department.

The Glenelg SAVES project includes a formal consortium, consisting of the Glenelg Shire Council, Federation University Australia and the Southern Grampians Glenelg Primary Care Partnership (Western District Health Service).

Glenelg SAVES is targeted at the Glenelg Shire Council's HACC staff and clients.

As part of the Glenelg SAVES consortium, with Southern Grampians Glenelg Primary Care Partnership (Western District Health Service) and the Glenelg Shire Council, Federation University Australia is the program's research partner.

Federation University Australia's main role is to evaluate the program's effectiveness and better understand the influence of such energy efficiency programs on energy use behaviour.

Research services have been delivered by staff from Federation University Australia's Centre for Regional Innovation and Competitiveness (CRIC), National Centre for Sustainability (NCS) and Centre for Informatics and Applied Optimization (CIAO).

"Overall project management has been provided by the Western District Health Service with support from the Glenelg Shire," David Lynch said.

"Final reporting will be completed by March 2016, and all participants will be able to access the information that comes from the project.

"This activity received funding from the Australian Government."

For further information about this study please contact David Lynch on 03 5327 9487 or at d.lynch@federation.edu.au

Media enquiries: Matthew Freeman 03 5327 9510; 0408 519 674

The views expressed herein are not necessarily the views of the Commonwealth of Australia, and the Commonwealth does not accept responsibility for any information or advice contained herein.

24 August 2015

Glenelg Shire's Home and Community Care Clients save energy through Glenelg SAVES project

Over 300 clients of the Glenelg Shire's Home and Community Care (HACC) project have benefited from their involvement in the Glenelg SAVES – *Seniors Achieving Valuable Energy Savings* project. The project commenced in February 2014, with Glenelg Shire Community Support Workers (CSWs) given the opportunity to participate in *Home Energy Efficiency Assessment* training. Although not traditionally part of the normal scope of work for CSWs, there are clear links between comfort in the home and health outcomes, as well as benefits of improved energy use.

The CSWs were then able to introduce the concept of energy efficiency assessments and customised improvements to all of the participants, with the project being able to financially contribute to this improvement.

“Being able to provide a customised improvement to each participant has been a fantastic part of this project – we haven't just offered one thing to everyone”, Project Officer Maureen Crisp said. “I feel that this project has really been able to work with the clients and provide them with a home improvement that they have felt comfortable with”. The energy efficient changes that have taken place include things such as draft sealing, blinds or curtains and external awnings, remote control standby power controllers and appliance upgrades.

The project has also provided information sessions to those members of the community who attend Planned Activity Groups through the Shire, once again, spreading reliable information about easy ways to reduce energy costs and also answering questions from attendees. “Having an expert from the Moreland Energy Foundation visit the region for these workshops was fantastic. What's even better is now we have this information– you can't unlearn things!”.

Although now in the final data collection phase, the project officers will continue to communicate future energy efficiency ideas to participants, to ensure that they are able to benefit from any future initiatives that may be of benefit. “The Victorian Energy Efficiency Target (VEET) has been in limbo for a while, however has recently been extended and expanded, so we will be able to introduce this to participants”, Project Officer Penny Fraser said.

Project Manager Joanne Brown said savings were already being realised. “Replacing inefficient halogen down-lights with more energy efficient LED down-lights results in a saving of approximately

\$17 per year per light changed,” she said. “We have been able to engage a number of local businesses and firms across the Glenelg Shire, which has been fantastic.”

The final phase of the project will involve gathering energy use data from each household, and also conducting surveys with the participants. Final reporting will be completed by 1 March 2016, and all participants will be able to access the information that comes from the project.

The project received funding from the Australian Government and includes a formal consortium, consisting of the Glenelg Shire Council, Federation University (formally University of Ballarat) and the Southern Grampians Glenelg Primary Care Partnership (Western District Health Service), who have made considerable financial commitments to the project.

The project is being managed by the Southern Grampians Glenelg Primary Care Partnership (SGGPCP) and is being co-ordinated through the Glenelg Shire Council’s Home & Community Care (HACC) Services Unit.

For further information on the project, please contact Maureen Crisp on 5522 2204 or Penny Fraser (SGGPCP) on 5551 8471.

31 August 2015

HACC clients save

More than 300 Glenelg Shire Home and Community Care (HACC) clients have shaved their electricity bills under a successful new program.

The Glenelg SAVES (Seniors Achieving Valuable Energy Savings) project was launched in February last year to help people make their homes more energy efficient.

Project Officer Maureen Crisp said the project could be tailored to suit individual needs and including measures such as draft sealing, adding blinds, curtains or external awnings, upgrading to energy-efficient lighting and other appliances.

The project has also provided information sessions for Planned Activity Groups across Glenelg Shire. “Having an expert from the Moreland Energy Foundation visit the region for these workshops was fantastic,” Ms Crisp said.

The final phase of the project will involve gathering energy use data from each household, and also conducting surveys with the participants.

Final reporting is expected to be completed by 1 March 2016, and all participants will be able to access the information that comes from the project.

The project received funding by the Australian Government with contributions from Glenelg Shire Council, Federation University, Southern Grampians Glenelg Primary Care Partnership.

The project is being managed by the Southern Grampians Glenelg Primary Care Partnership (SGGPCP) and is being co-ordinated through the Council’s Home & Community Care (HACC) department.

For further information on the project, please contact Maureen Crisp on 5522 2200 or Penny Fraser (SGGPCP) on 5551 8471.

11 December 2015

Glenelg 'SAVES' more than just money

More than 300 Glenelg Shire Home and Community Care clients are saving hundreds of dollars on their energy costs thanks to an innovative green living program.

Over the past two years Glenelg SAVES (Seniors Achieving Valuable Energy Saving) has transformed homes through the installation of energy efficient products and by encouraging clients to make smart lifestyle changes around the home.

The Federally funded project, a partnership between Southern Grampians Glenelg Primary Care Partnership and Glenelg Shire Council's Aged and Disability Services Unit, has documented the energy savings being achieved through the installation of new shower heads, energy efficient light globes and other energy saving initiatives.

Council's 21 community support workers implemented the program in their own homes, before passing on the green living tips to Glenelg based clients.

Glenelg Shire Mayor Cr Max Oberlander this week recognised the staff involved with a certificate of achievement for the outstanding results.

"This program has helped not only save money for more than 300 Home and Community Care clients, but has made a lasting difference to our environment," Cr Oberlander said.

"Staff are still collecting data from clients homes to demonstrate how these small steps, such as installing florescent globes and using cold water to wash clothes, can significantly help reduce our energy costs around the home.

"Every cent counts for many of these clients and this program has illustrated that small steps and lifestyle changes can make big differences to our energy accounts.

"Every resident can, and should, take on these important green living measures"

Federation University Australia will document the projects energy saving results, which are due to be finalised in March 2016.

Appendix E: Data Collection and Reporting Plan

DATA COLLECTION AND REPORTING PLAN

Data Collection

A longitudinal design will be employed, with measurements at baseline (and before baseline for some measures) and at intervals throughout the rest of the project. Three major data sources will be collected and monitored for the purpose of evaluating project outcomes:

- energy use
- participant information
- climate data

Energy use:

The data requirements for the evaluation require energy use data from all participating households. Depending on data accessibility from Powercor (the region's electricity distributor) electricity use measures will be collected from either meter data (NEM12/NEM13) or through billing data. Data on energy use from reticulated gas or other sources will be collected by self-reporting of household bills. Energy data will be collected from the time of commencement until the conclusion of the project. Information about pre-program energy use will also be collected retrospectively, for up to three years. This pre-program energy use (adjusted for climate variations) will be used as a baseline to assess changes attributable to program participation.

Participant information:

To collect information about the determinants of household energy consumption, baseline surveys will be administered with all participating households as part of the energy audit process. HACC staff will also administer a face-to-face follow-up survey (approximately 12 months after implementation) with participants to measure changes in household characteristics, adoption of recommendations, program satisfaction, free-ridership, spill-over and other suitable items. These surveys will include all relevant LIEEP Data Items and other determinants of household energy use (e.g. attitudes and barriers relating to energy efficiency) and energy efficiency barriers.

Measures of energy efficiency barriers will focus on the extent that HACC staff and clients believe they are able to enact energy efficient behaviour. Such measures will include the influence of the following economic and behavioural energy efficiency barriers:

- Credibility and trust in information sources
- Knowledge of cost-effective energy efficiency measures (i.e. imperfect information)
- Bounded rationality (i.e. clarity and accessibility of energy efficiency information, information and time constraints that lead to non-optimal energy-related decisions)
- Attitudes towards energy efficiency benefits
- Access to capital
- Perceived risk of energy efficiency investments
- Principle-agent relationships / split incentives
- Cultural influences (e.g. social pressure, normative behaviour)

To assess the influence of the program on alleviating these barriers, measures will be made during the baseline and follow-up surveys and discussed during the trial's qualitative research phase (refer below). Measurement of changes to the prevalence of these barriers, along with their influence on energy efficiency behaviour, will provide a detailed understanding of how the program has influenced participant behaviour.

Qualitative data will also be collected through discussions (focus groups and in-depth interviews) with HACC workers and consortium members. This research will focus on identifying recommendations for improving the design and administration of future energy efficiency programs targeted at low income households.

Climate data:

Variations in weather conditions have a major influence on energy use. To control for this influence, local climate data will be sourced from the Bureau of Meteorology (BOM). It is expected that the most relevant meteorological measures will be heating and cooling degree days. Energy use data will be adjusted, using a Normalised Annual Consumption (NAC) index, to control for temperature variations and allow for robust comparisons between pre and post program energy use.

Data Entry and Analysis

Data entry for the household surveys will occur through UB's computer-assisted data entry (CADE) system, which uses optical mark recognition technology to simplify data entry, by minimising the need for manual entry by data entry operators. Before commencing any analysis, data will be subject to a systematic and rigorous process to ensure the information to be analysed is 'clean'. Data cleaning is an often underestimated (and sometimes overlooked) task in providing quality research. This process will involve the detection and correction (or removing) corrupt or inaccurate records.

All data sets will be subject to stringent examination to ensure the negative impacts of survey errors (sampling, coverage, non-response, measurement, specification and processing errors), missing data, outliers and violations to assumptions of statistical tests are mitigated. Such quality control procedures will ensure that findings reported throughout the evaluation have a rigorous foundation.

The data analysis will be directed toward identifying, quantifying and comparing the outcomes attributable to the program with regard to levels and patterns of energy usage. These analyses will include:

- longitudinal statistical analyses of changes in energy usage measures (such as average daily consumption) with appropriate consideration given to the potential influence of differing and changing participant characteristics;
- other specific analyses of the collected data determined in consultation with the Department or other stakeholders (i.e. Quarterly/Annual Statistical Projects);

Database design and management

UB will maintain records of all project activities, all participants (HACC staff and clients) recruited into the project, and all energy efficiency recommendations adopted. The content of the database will include:

- Household energy consumption data (from meter or billing data)
- Household and demographic data relating to LIEEP Data items
- Weather data (from Bureau of Meteorology data files)
- Household attitudinal and other data

UB will be involved in and responsible for all matters pertaining to data collection and monitoring, including data structures and data formats. Data will be uploaded to the Department's database quarterly from March 2014 and in agreed formats.

Privacy

The University has developed guidelines to ensure that all research conducted by University staff and students occurs ethically. The University of Ballarat Human Research Ethics Committee (UBHREC) is responsible for ensuring that staff and students understand and comply with these guidelines. These guidelines are designed to ensure that research protocol gives acceptable consideration to participant's welfare, rights, beliefs, perceptions, customs and cultural heritage, both individual and collective. All survey instruments will receive ethics approval before administration.

The University is bound by the Victorian Information Privacy Act (2000). This legislation protects personal information held by public sector bodies in Victoria. The University has appointed a Privacy Officer and a Privacy Committee to ensure compliance with the University's Privacy policy and to handle any matters arising. That policy, among other things, provides specific guidelines on the collection, use and disclosure of personal information. A copy of the University Privacy Policy is available as required.

UB will design and maintain a database of all data collected during the project. Appropriate privacy safeguards as specified within University of Ballarat Human Research Ethics Committee (UBHREC) guidelines, including separation of de-identified data from participant identification information, will be incorporated in the database design. Data will be stored in password-protected files (only accessible to the evaluation's researchers) and backed up on a secure UB file server. Paper records will be stored in locked filing cabinets in secure rooms within the Schools and Centres involved. At the project's conclusion, paper records will be stored for at least 7 years in locked filing cabinets at UB. Electronic data files will be held in the user domains of the researchers on a secure UB file server, and archived for at least 7 years on UB file system backups.

Project Management – Data Collection and Reporting

The following key individuals will provide intellectual and organisational leadership for the evaluation.

Role	Affiliation	Responsibilities/Expertise
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Project Manager	NCS	<ul style="list-style-type: none"> • Project Management • Research Design • Project reporting
Research Design & Data Analysis	CRIC	<ul style="list-style-type: none"> • Research Design • Interviewer Training • Data collection <p>Statistical Analysis</p> <p>Project reporting</p>
Data Management	CIAO	<ul style="list-style-type: none"> • Database design and management • Data input and upload
Research Assistant	CRIC	<ul style="list-style-type: none"> • Data entry, cleaning and coding • Create, maintain and update participant database • Research administration support • Project reporting
Field Work	HACC Staff	<ul style="list-style-type: none"> • Survey interviewing

Time frames

Analysis of energy use will occur as data is made available; however in the first twelve (12) months the emphasis will be on data collection, establishing base line information using historical energy use, climatic and demographic characteristics. It is expected that the major work in relation to data analysis and evaluation will occur in 2015 and 2016.

Project Outputs

The key outputs and deliverables are:

- Training of HACC staff in survey interviewing
- The design of survey instruments to collect data on household demographics, appliance and energy use and attitudes, beliefs and knowledge about energy consumption
- Develop appropriate databases to store information collected from data collection instruments and other sources such as meter data and the Australian Bureau of Statistics and the Bureau of Meteorology
- Undertaking a longitudinal statistical analysis of energy use to evaluate the impact of the program and inform future energy efficiency policy and program approaches
- The provision of data, in prescribed formats to DCCEE

Reporting

UB will provide a baseline report, annual progress reports and a final report to other consortium members, which will provide the basis for regular reporting to DCCEE. These reports will include:

- Quarterly monitoring and evaluation activity reports to consortium members, which will be incorporated into regular project reports provided to DCCEE;
- Annual statistical research projects determined in collaboration with consortium members and DCCEE; and
- A final evaluation report on the program's impact on energy efficiency, market transformation and education and training. This report will also provide evidence-based recommendations for future energy efficiency policy and program approaches

Milestones

Milestone	Date	Activities
1.	Sept 2013	<ul style="list-style-type: none"> On signing of contract <ul style="list-style-type: none"> Development and confirmation of Program Logic, Evaluation Design and Conceptual Framework Database development and testing
2.	Dec 2013	<ul style="list-style-type: none"> Development and piloting of baseline survey instruments Ethics approval for survey instruments Database development and testing Development of data collection, verification and transfer protocols Preparation of interviewer training materials
3.	Mar 2014	<ul style="list-style-type: none"> Delivery of data collection training Data entry, coding and cleaning Database management Provision of data, in prescribed formats to the Department
4.	June 2014	<ul style="list-style-type: none"> Data entry, coding and cleaning Data analysis Database management Provision of data, in prescribed formats to the Department
5.	Sept 2014	<ul style="list-style-type: none"> Baseline Evaluation Report (draft) Data analysis Database management Provision of data, in prescribed formats to the Department
6.	Dec 2014	<ul style="list-style-type: none"> Baseline Evaluation Report (final) Development and piloting of follow-up survey instruments Ethics approval for survey instruments Database management Provision of data, in prescribed formats to the Department
7.	Mar 2015	<ul style="list-style-type: none"> Data entry, coding and cleaning Database management Provision of data, in prescribed formats to the Department
8.	June 2015	<ul style="list-style-type: none"> Data entry, coding and cleaning Data analysis Database management Provision of data, in prescribed formats to the Department
9.	Sept 2015	<ul style="list-style-type: none"> Database management Data analysis Provision of data, in prescribed formats to the Department
10.	Dec 2015	<ul style="list-style-type: none"> Database management

		<ul style="list-style-type: none"> • Data analysis • Provision of data, in prescribed formats to the Department
11.	Mar 2016	<ul style="list-style-type: none"> • Database management • Data analysis • Provision of data, in prescribed formats to the Department • Final Evaluation Report (draft)
12.	June 2016	<ul style="list-style-type: none"> • Final Evaluation Report (final)

LIEEP Data Items – as per ANNEXURE B, SCHEDULE 4

Trial Characteristics

#	Field name	Field description	Field values
1.	Trial name	Identifies the project to which the data relates	Trial001 – Trial999
2.	Unique LIH identifier	Unique identifier for each household serviced.	HH001-0001 – HH001-9999
3.	Trial approach	Project approach /engagement method	Home visits Door knocking Previous contact Referral from other agency Other
4.	Barriers being addressed by trial	List the types of energy efficiency barriers being addressed by the project	Information Education Split incentives Financial Other
5.	Overview of Planned Trial	Type of measures or service undertaken:	Comparison of: <ul style="list-style-type: none"> Community based education Home Energy Assessment/Audit In-Home Display
6.	Trial Commencement Date	The date on which this trial of work commenced	01/01/2013
7.	Trial End Date	The date on which this trial of work was finalised	31/12/2016

Energy Efficiency Measure Characteristics

#	Field name	Field description	Field values
8.	Energy Efficiency Measure/Service Program Name	Unique Name the Measure/Service is to be known by	Short Text
9.	Short Description of Energy Efficiency Measure/Service	Short Description of the measures or service undertaken:	Short Text – for example: <ul style="list-style-type: none"> Home Energy Assessment /Audit In-Home Display Education/Information

#	Field name	Field description	Field values
10.	Long Description of Energy Efficiency Measure/Service	Long Description of the measures or service undertaken:	Long Text – detailed description of the measure or service
11.	Particular Barrier being addressed	List the types of energy efficiency barriers being addressed by this Measure/Service	Information Education Split incentives Financial Other
12.	Anticipated saving of Measure/Service (per year)	The anticipated savings in dollars per year terms of the implemented Measure/Service.	\$0-\$99,999 \$ range may be required.
13.	Compliance indicator	Conducted in the approved format/process by qualified/trained personnel.	Yes No
14.	Energy Efficiency Measure/Service Program Name	Unique Name the Measure/Service is to be known by	Short Text
15.	Date of Measure/Service was undertaken	Date on which the service was undertaken/completed.	01/01/2013 – 31/12/2016
16.	Actual Cost of service	The cost of service per household.	\$0-\$99,999 Product \$0-\$99,999 Installation \$0-\$99,999 other costs
17.	Item being replaced	Type of item being replaced,	Item Type Energy use

Household Characteristics

#	Field name	Field description	Field values
18.	Gender of people in household	Gender of participant	Female, Male.

19.	Number and age of people in household	Total number of individuals living in the household with the age of each individual	1-99 0-4 years 5-9 years 10-14 years 15-19 years 20-24 years 25-29 years 30-34 years 35-39 years 40-44 years 45-49 years 50-54 years 55-59 years 60-64 years 65-69 years 70-74 years 75-79 years 80-84 years 85 years and over
20.	Education status of people in household	Level of education	No. of school age Primary school High school Y10 High school Y12 TAFE Tertiary Degree/Diploma Not provided Not known
21.	Indigenous indicator	Are any individuals Indigenous or Torres strait islander	Non-Indigenous Aboriginal Torres Strait Islander Both Aboriginal and Torres Strait Islander Not provided
22.	Birthplace Indicator	Were the individuals born in Australia or Overseas?	Born In Australia Born Overseas Overseas place of birth
#	Field name	Field description	Field values
23.	Primary language spoken in the household?	Indicator of English or other language spoken at household	English only spoken at home Households where two or more languages are spoken. Other languages spoken

24.	Main source of household income What was your predominant employment status for the last 12 months?	Identify the main source of household income, e.g. pension/benefits, full time employment, part-time employment. Employment status indicator	Worked full-time Worked part-time Away from work Unemployed
25.	Income level of household (Annual)	Approximate level of annual household income	Negative income Nil income Partial income stated All incomes not stated \$0-\$10,000 \$10,001-\$20,000 \$20,001-\$35,000 \$35,001-\$50,000 \$50,001-\$65,000 \$65,001-\$80,000 \$80,001- \$110,000 \$110,001 - more
26.	Target group of household		Low Income Household Senior Renters Indigenous CALD Financial hardship Refugees Single parents Other
27.	Past behaviour	Previous energy efficiency activities undertaken by the participant/household. If yes, specific activities should be recorded.	Insert behaviour actions Turn lights off when not required More efficient use of hot water eg. shorter showers Effective use of curtains and blinds Turn appliances off at power point when not in use Take into account energy efficiency rating when purchasing appliances Set appropriate temperatures for heating/cooling

#	Field name	Field description	Field values
28.	Level of energy efficiency interest	Gauges the participant's level of interest in energy efficiency. How interested are you, in conserving energy in the home?	Very interested Interested Neutral Rarely interested Not interested

29.	Household comfort status	How comfortable do the householders feel? (heating/cooling/lighting/etc)	Very comfortable Comfortable Neutral Rarely comfortable Not comfortable
30.	Empowerment status	How empowered do the householders feel in relation to their energy consumption?	Very empowered Empowered Neutral Rarely empowered Not empowered
31.	Finance control status	How in control of their finances do the householders feel?	In control Sometimes in control Neutral Rarely in control Not in control
32.	Behaviour change status	How much has the householder's behaviours changed over the last 2 years?	Very energy efficient Sometimes energy efficient Neutral Rarely energy efficient Not energy efficient

Dwelling Characteristics

#	Field name	Field description	Field values
33.	State	The state/territory in which the project is taking place	VIC
34.	Climate zone	The climate zone in which the project is taking place, based on temperature and humidity (BOM 2003)	
35.	Postcode	Postcode of the household.	0000-9999
36.	Dwelling status	Whether the home is owned outright, mortgaged, property is rented or occupied without payment	Owned outright Mortgaged Rental property

#	Field name	Field description	Field values
37.	Dwelling Structure	Type/structure of dwelling.	Separate house Semi-detached, row or terrace house, townhouse etc Flat, unit or apartment Other dwelling

38.	Age of dwelling	The year the household was built.	1900-2013
39.	Wall construction	Major outside wall material	Fibro Brick Double Brick Timber Weath
40.	Roofing construction	Major roofing material	Metal Tiles Timber Concrete Mixed Roof colour – Light/Intermediate/Dark Other
41.	Number of stories	Number of stories in dwelling	1-99
42.	Number of bedrooms	Total number of bedrooms	1-19
43.	Number of bathrooms	Total number of bathrooms	1-9
44.	Number of living rooms	Total number of living rooms	1-9
45.	Size m2	Total area of the household in m2 (excludes garage and outdoor areas)	1-999m2
46.	Nationwide House Energy Rating Scheme (NatHERS) star rating or equivalent	NatHERS star rating of the household	1-10

#	Field name	Field description	Field values
47.	Insulation	Indicates if the house is the house insulated e.g. none, ceiling or wall and ceiling. Also indicates type of insulation e.g. foil, etc	None Ceiling Wall Floor Type and Rating Foil Wool Glass Other
48.	Window type	Type of glass in most windows	Single glaze Double glaze Tinted Other

49.	Window coverings	Type of window coverings on most windows	Blinds Curtains Type Backing Other
50.	Smart Meter	Household has a Smart meter installed	Number of Smart Meters Attached to Mains/Off Peak/Solar PV Brand/model NMI Number
51.	PV	Household has a PV installed	Yes/No Size (Kw)
52.	Modifications made to dwelling in last 12 months	Any changes or modifications made to dwelling in last 12 months.	Renovation Extension Installation of energy efficiency ... Upgrade to energy efficiency ... Installing new hot water system Identify type (solar, gas, heat pump, electric, lpg) Installing solar electricity (PV panels) Installing insulation Window treatments Replaced space heating or cooling equipment Replaced major whitegoods with new energy efficient models Draught proofing Double glazing Installed ceiling fans Added Pergola or external shading Changes to lighting systems (replaced all lights) Major renovation to improve energy efficiency design of dwelling Unable to (tenant) Other

Energy Supply Characteristics

#	Field name	Field description	Field values
53.	Types of energy sources used within the household	Select the types of energy sources used within the household	Electricity Gas – mains Gas – bottled Wood Solar Other (Diesel, etc)

54.	Energy Service Retailer	For each energy type list the retailers name	Example: AGL Energy Australia
55.	Tariff Name	The name the retailer calls the tariff scheme	Example: Super Saver, Energy Plus, Green Energy
56.	Tariff type		Flat rate Time of use Net of PV Direct Load control Other
57.	Tariff Structure	Detail the periods and charge Rates of the periods within the tariff scheme	Example: Period #1: 0700h – 0900h \$0.220 / kWh Period #2: 0900h – 1700h \$0.187 /kwh Period #3: 1700h – 2000h \$0.220 / kWh Period #4: 2000h – 2200h \$0.187 /kwh Period #5: 2200h – 0700h \$0.0125 /kWh

Energy Consumption Characteristics

#	Field name	Field description	Field values
58.	Heating	Type of space heating and energy input requirements (Watts), if available	Ducted gas Reverse-cycle air cond (heat pump) system Wall-mounted gas Wall-mounted electric Portable electric Portable gas Star rating = 1-7 Other – please specify
#	Field name	Field description	Field values
59.	Cooling	Type of space cooling and energy input requirements (Watts), if available	Reverse-cycle air cond (heat pump) system Evaporative cooler Wall/Window mounted air conditioner. Portable air-conditioner Ceiling fan Portable fan Star rating = 1-7 Other – please specify

60.	Water heating	Main method/fuel used for watering heating and energy input requirements (Watts), if available	Electric Gas Solar – gas boosted Solar – electric boosted
61.	Lighting	Number and type of light globe used in household and energy input requirements (Watts), if available	Compact fluorescent lamps Halogen lights Light emitting diode (LED) Incandescent (GLS) Other globe (specify) Number in household
62.	Refrigeration	Type of refrigeration and energy input requirements (Watts), if available	Combined fridge/freezer Separate fridge Separate freezer Other (e.g. mini bar, wine/beer cooler, wine cabinets) Star rating = 1-7 Number and age in household
63.	Cooking - oven, stove, microwave	Type and method/fuel used for cooking eg. oven, stove, microwave and energy input requirements (Watts), if available	Electric Gas Wood Time used (hrs) Number in household
64.	Computers	Number and type and energy input requirements (Watts), if available	Desktop Laptop Tablet Star rating = 1-7 Time used (hrs) Number in household
#	Field name	Field description	Field values
65.	Home entertainment appliances	Number and type of and energy input requirements (Watts), if available	TVs DVD players/recorders Games consoles Set top boxes VCRs Audio equipment - Sound systems

66.	Laundry appliances	Number and type and star rating, and energy input requirements (Watts), if available	Front loader Top loader Dryer Washer/Dryer combo Time used (hrs) Number in household
67.	Pool/Spa pumps	Number and type of pool or spa pumps and energy input requirements (Watts), if available	Pool pump Spa pump Other pump Time used (hrs) Size and time in use.
68.	Other appliances	Number and Type of Other appliances and energy input requirements (Watts), if available	Time used (hrs) Number in household
69.	Prior EE measure energy usage	Period/Quarterly energy usage in kWh for the period prior to the EE measure	NEM 12 data – Interval energy usage in kWh NEM 13 data – Accumulation energy usage in kWh
70.	Post EE measure energy usage	Period/Quarterly energy usage in kWh for the period post the EE measure	NEM 12 data - Interval energy usage in kWh NEM 13 data – Accumulation energy usage in kWh

Appendix F: Ethics Application

Application for HREC Approval (Standard)

Human Research Ethics Committee



PROJECT DETAILS

Project title:

Gleneilg SAVES

What type of project is this? (Tick as many as apply)

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Funded Consultancy | <input type="checkbox"/> Clinical Trial | <input type="checkbox"/> Staff Research Project |
| <input type="checkbox"/> Practical Class | <input type="checkbox"/> Student Research Project | <input type="checkbox"/> Doctorate |
| <input type="checkbox"/> PhD | <input type="checkbox"/> Masters | <input type="checkbox"/> Postgraduate Diploma |
| <input type="checkbox"/> Honours | <input type="checkbox"/> Undergraduate | <input type="checkbox"/> Other |

Through which School/Section is the research to be conducted?

Centre for Regional Innovation and Competitiveness (CRIC);
National Centre for Sustainability (NCS); and
Centre for Informatics and Applied Optimization (CIAO)

Your project must not commence until **full** approval is granted.

What is your expected **completion** date? (Approval will be granted up until this date)

30/6/2016

RESEARCHERS

Principal Researcher (STAFF MEMBER ONLY)

Title & Name:	Mr. David Lynch
Position:	Research Fellow
School/Section:	CRIC, The Business School
Phone number:	Ext. 9487
Email address:	d.lynch@federation.edu.au
Please list academic qualifications:	B. Bus (Marketing) (Hons. First Class) Ballarat Grad Cert Ed.(Tertiary Education) Ballarat
Describe what this researcher will do in the context of this project:	Responsible for managing the project's survey design, data collection and analysis activities
Include a brief summary of relevant experience for this project:	David joined CRIC in 2005, after five years experience in the market research industry. He is responsible for the design and implementation of CRIC's survey research projects. Although David's experience covers a range of quantitative and qualitative methodologies, his speciality area is data analysis using a variety of advanced multivariate techniques. He was also the lead researcher for the University's evaluation of the Central Victoria Solar City program and has published in the areas of energy efficiency evaluation and social marketing.

Application for HREC Approval (Standard)

Human Research Ethics Committee



<u>Other Researcher</u>	
Title & Name:	Mr. Craig Hurley
Position:	Manager, National Centre for Sustainability
School/Section:	The Business School
Phone number:	5335 3717
Email address:	c.hurley@federation.edu.au
Please list academic qualifications:	
Describe what this researcher will do in the context of this project:	Project Manager
Include a brief summary of relevant experience for this project:	National VET Skills for Sustainability Professional Development Program – Evaluation; Hopetoun Community Renewable Energy Initiative; Goulburn Broken Local Government Sustainability Training Program

<u>Other Researcher</u>	
Title & Name:	Mr. Sasha Ivkovic
Position:	Lecturer
School/Section:	School of Science, Information Technology and Engineering (SITE)
Phone number:	Ext. 9390
Email address:	s.ivkovic@federation.edu.au
Please list academic qualifications:	Master of IT (by Research) - University of Ballarat BComp (Hons) - University of Ballarat CNA (Novell) Diploma of Project Management - University of Ballarat
Describe what this researcher will do in the context of this project:	Database Management
Include a brief summary of relevant experience for this project:	Sasha has over 15 years experience in: application / system programming, open source and Linux, Database Management Systems, Business Information Systems, Database Design – Oracle and Dynamic web development (Linux Apache MySQL PHP - LAMP). Sasha has published several academic papers in areas of Data Mining and Project Communication. Sasha has worked as a database administrator and application programmer.

Application for HREC Approval (Standard)

Human Research Ethics Committee



<u>Other Researcher</u>	
Title & Name:	Prof. Keir Reeves
Position:	Professor of Regional Engagement & Director CRIC
School/Section:	CRIC, The Business School
Phone number:	Ext. 9699
Email address:	k.reeves@federation.edu.au
Please list academic qualifications:	BA; BECON; MA; PhD
Describe what this researcher will do in the context of this project:	Overall project direction
Include a brief summary of relevant experience for this project:	Prof. Keir Reeves, commenced as the Director of CRIC in 2014. Keir is particularly interested in how history tourism and heritage studies can be understood as part of sustainable regional development. Keir will use his experience in sustainable regional development to help guide this study.

<u>Other Researcher</u>	
Title & Name:	Dr. Chris McConville
Position:	Senior Research Fellow
School/Section:	CRIC, The Business School
Phone number:	0423 714 119
Email address:	c.mcconville@federation.edu.au
Please list academic qualifications:	BA;MA;Ph D.
Describe what this researcher will do in the context of this project:	Chris will provide research support for the project, particularly in ensuring the study is policy oriented and the findings are clearly communicated to inform future energy efficiency programs.
Include a brief summary of relevant experience for this project:	Dr Chris McConville has worked widely in the areas of popular culture studies, politics of memory and environment and heritage planning. His current research activities are in the area of landscape and the politics of sustainability. This broad interest includes a project on landscape issues, alternative energy and river catchments in the Central Goldfields area of Central Victoria. With colleagues at Monash University, Chris, is currently developing a broad research project on regional environmental, memory and equity issues, focussed on the 'Volcanic Plains' of Western Victoria and drawing on comparative examples in New Zealand and North America.

Application for HREC Approval (Standard)

Human Research Ethics Committee



Other Researcher	
Title & Name:	Assoc. Prof. Jerry Courvisanos
Position:	Associate Dean, Research
School/Section:	BComm (NSW); MComm (NSW); GradDipEd (NSW); PhD (Newcastle)
Phone number:	5327 9417
Email address:	j.courvisanos@federation.edu.au
Please list academic qualifications:	BComm (NSW); MComm (NSW); GradDipEd (NSW); PhD (Newcastle)
Describe what this researcher will do in the context of this project:	Overall project direction
Include a brief summary of relevant experience for this project:	Jerry's key research interests are innovation dynamics and innovation and investment policies for regional development. Jerry has researched and published widely in these fields and will use this knowledge and experience to assist with the overall direction of the study.

LAY DESCRIPTION

Provide a brief outline of the project describing in everyday, jargon-free language the key aspects of the research (e.g., who will be participating, what information will be collected and by what means, what participants will be required to do, etc.) and the key research aims. The lay description must be in everyday, jargon-free language that is comprehensible by the average educated layperson. Define any technical terms or discipline-specific phrases, and use the full form of all acronyms the first time they are used. (300 words max.)

The Low Income Energy Efficiency Program (LIEEP) has been established by the Commonwealth Government to provide grants to consortia of government, business and community organisations to trial approaches to improve the energy efficiency of low income households and enable them to better manage their energy use.

As a grant recipient, the Glenelg SAVES program is targeted at Western District Health Service's Home and Community Care (HACC) staff and clients. The aim of this project is to enable these groups to increase energy efficiency in their own homes; which will in turn decrease money spent on energy and also improve comfort in the home. This will involve providing HACC staff with home energy assessment training that they can use to improve the energy efficiency of both their homes and that of their clients. The program also has a strong data collection component, which will be used to evaluate it's effectiveness and better understand the role and influence of such energy efficiency programs.

The project is complex, as it involves three consortium member organisations, an external training provider and two different target groups (HACC Staff and Clients). Added to this complexity is that many activities are integrated for both the purpose of administering and evaluating the program (e.g. recruitment of participants, training, uploading of data to the Government's central LIEEP database).

Application for HREC Approval (Standard)

Human Research Ethics Committee



As part of the Glenelg SAVES consortium (with Western District Health Service and the Glenelg Shire), FedUni will provide the monitoring and evaluation and survey interviewing components of the program. This will be delivered by staff from the Centre for Regional Innovation and Competiveness, National Centre for Sustainability and Centre for Informatics and Applied Optimization. Overall project management will be provided by the Western District Health Service (lead agency) with support from the Glenelg Shire. The program's home energy assessment training component will be delivered by an external party, the Moreland Energy Foundation.

RESEARCH AIMS & SIGNIFICANCE

State the aims, key research questions, and significance of the project. Where relevant, state the specific hypothesis to be tested. Also please provide a brief description of the relevance of your proposed project to current research (supported by a literature review and references – refer to National Statement 1.1c), a justification as to why your research should proceed, including an explanation of any expected benefits to the community and its potential to contribute to existing knowledge. (600 words max.)

The evaluation will assess changes in energy use attributable to the Glenelg SAVES program. The methodology applied to the Glenelg SAVES evaluation has been designed to allow for evidence-based policy making by studying questions such as:

- What influence did the Glenelg SAVES program have on energy use behaviour of HACC staff and clients?
- What influence did the Glenelg SAVES program have on HACC staffs' knowledge and ability to provide advice on household energy efficiency opportunities?
- Which types of participants benefited most from the Glenelg SAVES program?
- What types of low-income consumers are attracted to energy efficiency programs and technologies?
- What factors influence adoption of energy efficiency technologies and curtailment behaviour?
- How does program participation influence the drivers of energy use behaviour?
- What influence did program participation have on the relationship between HACC staff, HACC clients and Western District Health Service (WDHS)?

A longitudinal design will be employed, with measurements at baseline (and before baseline for some measures) and at intervals throughout the rest of the project. Three major data sources will be collected and monitored for the purpose of evaluating project outcomes:

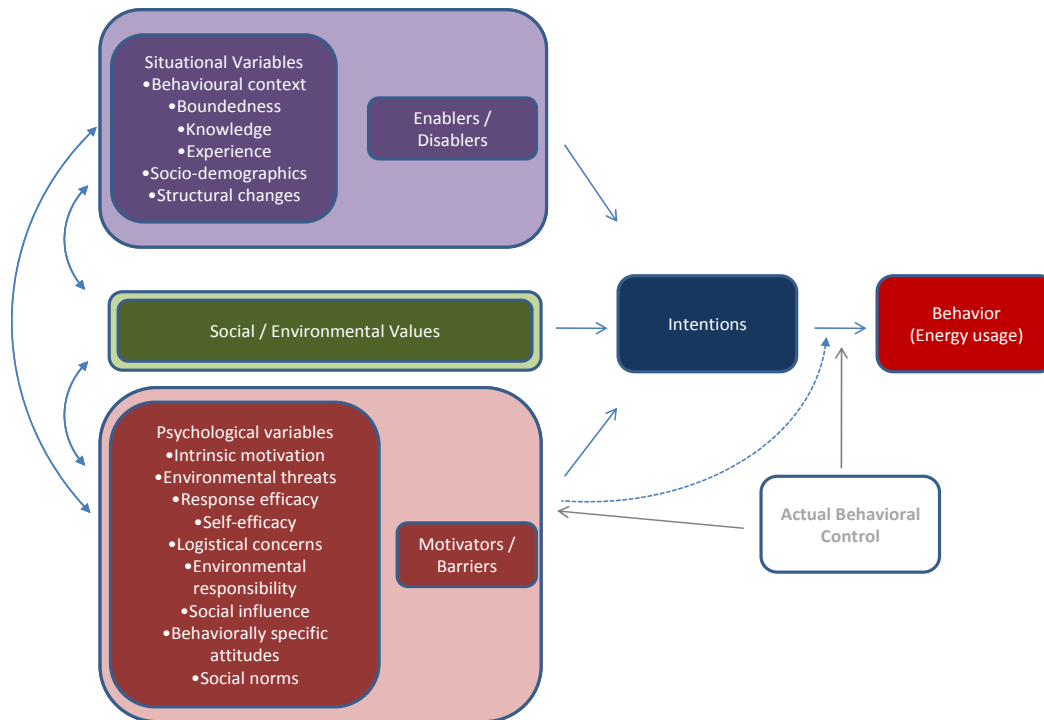
- energy use
- participant information
- climate data

A review of the literature highlighted the need to understand the characteristics of households as well as the context in which they live in order to understand energy behaviour and how it might be changed. The Glenelg SAVES conceptual framework proposes that energy behaviour (and behavioural intentions) is a function of situational variables, social/environmental values, and psychological factors that motivate or act as barriers for households to use energy in a particular way. This conceptual framework will be used as a basis to guide the evaluation and development

Application for HREC Approval (Standard)

Human Research Ethics Committee

of associated survey instruments. This framework builds on other research undertaken by FedUni into identifying and understanding the determinants of conservation behaviour.



Source: Adapted from Barr & Gilg (2007) and Ajzen & Fishbein (1980, 2005)

Significance of the study

The most vulnerable groups in Australia to rising energy costs are likely to include the elderly, the chronically ill and the socio-economically disadvantaged. More generally, resource constraints, rising energy prices and the potential for climate change also require better allocation and use of energy resources. This research, by conducting a longitudinal study of energy use of low income households, will identify the drivers of efficient consumption and provide the basis for a model that can guide public policy.

The data to be collected from Glenelg SAVES participants can be used to not only measure the behaviour changes that result from technical, educational and economic measures, but more importantly can identify how these specific measures affect overall changes in the demand for power, and which combinations of measures are the most energy and economically efficient for disadvantaged groups.

The key outputs and deliverables of the evaluation are:

- Training of HACC staff in survey interviewing
- The design of survey instruments to collect data on household demographics, appliance and energy use and attitudes, beliefs and knowledge about energy consumption
- Develop appropriate databases to store information collected from data collection instruments and other sources such as electricity meter data, the Australian Bureau of Statistics and the Bureau of Meteorology
- Undertaking a longitudinal statistical analysis of energy use to evaluate the impact of the program and inform future energy efficiency policy and program approaches

Application for HREC Approval (Standard)

Human Research Ethics Committee



- The provision of data, in prescribed formats to the Department of Industry and their database management partner, CSIRO.

FUNDING & FINANCIAL BENEFITS

Researchers should include any source of funding (e.g., departmental, commercial, non-commercial, governmental) The HREC will consider whether there is a conflict of interest.

Are any of the researchers affiliated with or in receipt of any financial benefit from any of the external organisations involved in your research? Yes No

If yes, explain how, how much and for what purpose:

Has this protocol received research funding or is this submission being made as part of an application for research funding? Yes No

What is the source of the funding?

The research is funded by the Federal Government's Department of Industry as part of its Low Income Energy Efficiency Program (LIEEP). Total funding for FedUni is \$206,720.

What is the status of the funding application? Approved Refused Pending

What is the project grant title and proposed grant duration?

Low Income Energy Efficiency Program Round 2 (completion June 2016)

What is the registration number of the grant/funding application?

N/A

What is the deadline for the granting body?

June 2016 (completion of study)

Does project require HREC approval before consideration for funding? Yes No

How will participants be informed of the source of the funding?

This is described in the PLIS

MULTI CENTRE RESEARCH

Other HREC Approvals

The principal researcher is responsible for informing each HREC of all other sites at which the research is being proposed or conducted; disclosing to each HREC any previous decisions regarding the research made by another HREC; and informing each HREC of whether the protocol is presently before another HREC.

Is this protocol being submitted or has it been previously submitted to another Human Research Ethics Committee? Yes No

Application for HREC Approval (Standard)

Human Research Ethics Committee



If yes, give details of other centres involved; the approval status of the study at each centre; and details of any required amendments.

EXTERNAL APPROVALS

If your research involves participants from other organisations (e.g., educational institutions, companies, agencies, collectives), you may need to obtain authorised approval before approaching participants; for example from Department of Education and Training, school principals, school councils (for research involving government schools); Catholic Education Office (Catholic schools); school boards (independent schools); senior officers (commercial or government entities); Elders (Aboriginal communities); or representative bodies (collectives). Copies of approval letters must be attached to this application or, if pending at the time of submission, forwarded to HREC when available. Some authorities may decline to provide permission letters until ethics approval has been granted. In such cases, you should submit your application to the HREC for provisional approval pending receipt of the documentation.

Does research involve or impact on participants from external agencies or organisations?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, has required permission been obtained from relevant agencies?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

If yes, please specify from whom and attach a copy

MOU has been developed between Western District Health Service (lead agency) and FedUni (attached)

If no, please explain when this will be obtained

RESEARCH METHODOLOGY

Provide an outline of the proposed method, including details of data collection techniques, tasks participants will be asked to do, the estimated time commitment involved, and how data will be analysed. If the project includes any procedure that is beyond already established and accepted techniques please include a description of the procedure. (500 words max.)

The methodology for the Glenelg SAVES evaluation has been explicitly designed to ensure a careful, deliberate and ethical approach to the study, which allows for evidence-based policymaking.

A longitudinal design will be employed, with measurements at baseline (and before baseline for some measures, e.g. energy use) and at intervals throughout the rest of the project. Three major data sources will be collected and monitored for the purpose of evaluating project outcomes:

- energy use
- participant information
- climate data

The data collection process will follow the best practice procedures recommended by Dillman's

Application for HREC Approval (Standard)

Human Research Ethics Committee



(2007) *Total Survey Design* method. The key principles of this approach are to create respondent trust, highlight benefits and reduce costs for participants and minimise survey error. In accordance with this philosophy, the data collection phase will be undertaken in a manner that reflects positively on both the Glenelg SAVES program and FedUni.

The data collection procedures will be preceded by recruitment of program participants by Western District Health Service and home assessment training for HACC staff participants. To collect information about the determinants of household energy consumption, baseline surveys will be administered with all participating households as part of the energy assessment process. HACC staff will also administer a face-to-face follow-up survey¹ (approximately 12 months after implementation) with participants to measure changes in household characteristics, adoption of recommendations, program satisfaction, free-ridership, spill-over and other suitable items. These surveys will include relevant LIEEP Data Items (mandated fields) and other determinants of household energy use (e.g. attitudes and barriers relating to energy efficiency) to help answer the evaluation's research questions. The study's key constructs relating to attitudes and opinions will be operationalised by using existing scales from the literature.

The HACC workers will undergo extensive survey interviewing training (in accordance with Australian Market & Social Research Society's guidelines) to enable them to administer the survey aligning with best practice research requirements. This training will also provide the opportunity to clarify any technical terms in the survey instrument (mainly appliance related). Due to the flexibility required in the survey booklet (e.g. skipping back and forth between pages relating to different areas of the house) and potentially low computer literacy of participants, a paper-based survey booklet has been considered the most efficient way to collect data for the project.

Data entry for the household surveys will occur through FedUni's computer-assisted data entry (CADE) system, which uses optical mark recognition (OMR) technology to simplify data entry, by minimising the need for manual entry by data entry operators. Statistical models will primarily be based on an interrupted time-series design. This procedure will use a weather-adjusted Normalised Annual Consumption (NAC) index to control for the confounding effects of climate variation. The analysis will also develop estimates of spill-over and free ridership in accordance with the U.S. Environmental Protection Agency's Model Energy Efficiency Program Impact Evaluation Guide. This approach is well accepted by the Energy Efficiency Program Evaluation Community and specific techniques have been designed to develop statistically sound energy saving estimates (e.g. Princeton Scorekeeping Method).

RECRUITMENT OF PARTICIPANTS

Participant Details

Provide number, age range and source of participants, giving a justification of your proposed sample size, including details of statistical power of the sample where appropriate.)

The Glenelg Shire and Western District Health Service will be responsible for the recruitment of approximately 30 HACC Staff and 300 HACC Clients to participate in this study.

¹ This survey will be submitted to the HREC for evaluation prior to data collection

Application for HREC Approval (Standard)

Human Research Ethics Committee



The confidence level of the sample will be +/- 12.8 for the HACC Staff group and +/- 4.7 for the HACC Clients group. The statistical power² for the HACC Staff group will be 13.6% and 53.5% for the HACC Clients group. Due to the relatively low number of HACC Staff (approximately 60), the study is restricted in the number of participants obtainable from this target population. Appropriate consideration will be given in analysing and reporting data from this group.

Target participants

Who are the target participants? (Tick as many as applicable)

<input type="checkbox"/> Students or staff of this University
<input checked="" type="checkbox"/> Adults (over the age of 18 years and competent to give consent)
<input type="checkbox"/> Children/legal minors (under the age of 18 years, with parental consent)*
<input checked="" type="checkbox"/> Elderly individuals
<input type="checkbox"/> Individuals from non-English-speaking backgrounds <input type="checkbox"/> People in other countries
<input checked="" type="checkbox"/> Pensioners or welfare recipients
<input type="checkbox"/> Intellectually or mentally impaired individuals unable/with compromised capacity to provide consent
<input type="checkbox"/> Physically disabled individuals
<input checked="" type="checkbox"/> Patients or clients of professionals
<input type="checkbox"/> Prisoners, parolees, or wards of the state
<input type="checkbox"/> Individuals highly dependent on medical care with a compromised capacity to give consent
<input type="checkbox"/> Aboriginal and/or Torres Strait Island communities
<input type="checkbox"/> Other collectives where leader/council of elders may need to give consent <input type="checkbox"/> Women who are pregnant and the human foetus <input type="checkbox"/> People who may be involved in illegal activities

*Parental consent may not be required in some instances - see National Statement 4.2.8 and 4.2.9

Proposed Recruitment Method

A copy of all recruitment materials used (e.g., printed advertisements, radio and television advertisement transcripts, posters, letters of invitation) must be attached to this application.

What is the proposed recruitment method? (Tick all that apply)
<input type="checkbox"/> Mail-out
<input type="checkbox"/> Email

² Based on the Most Pessimistic Variance Assumption

Application for HREC Approval (Standard)

Human Research Ethics Committee



<p>Have you attached a copy of the text of the email that will be sent? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If no, please explain:</p>
<p><input type="checkbox"/> Telephone</p>
<p><input type="checkbox"/> Contact details obtained from public documents (e.g., phone book)</p>
<p><input type="checkbox"/> Recruitment by researcher(s)</p>
<p><input type="checkbox"/> Participants from a previous study</p>
<p><input type="checkbox"/> Snowball (participants suggest other potential participants)</p>
<p><input type="checkbox"/> Personal contacts – Provide details:</p>
<p><input checked="" type="checkbox"/> Other – please explain:</p> <p>Recruitment of program participants will be undertaken by the Glenelg Shire and Western District Health Service. This process will include:</p> <p>Recruitment of HACC staff group:</p> <ul style="list-style-type: none"> • Conduct an information awareness session on the project and outline the home energy efficiency and auditing training for all Glenelg Shire HACC staff and recruit 35 staff to undertake training • Deliver Basic Home Sustainability Auditing for Volunteers training. • Enable recruited HACC staff to collect prescribed baseline data (through research interviewing training), conduct audits in their own homes to priorities actions for improving energy efficiency • Support HACC staff to action energy efficiency priorities by assisting HACC staff to implement home adaptation and behaviour change strategies in their own homes and collect post-improvement data <p>Recruitment of HACC client group:</p> <ul style="list-style-type: none"> • Trained HACC staff to each recruit 10 HACC clients for the project and conduct home audits and collect baseline and post-implementation data • Implement audit recommended home adaptations for the HACC client homes by linking with HACC maintenance, government and community projects and outside contractors • Supporting HACC Clients to undertake behavioural change to improve energy efficiency • Deliver a targeted community energy efficiency awareness education program. <p><i>Please refer the attached Project Plan and MOU for further information.</i></p>
<p><input type="checkbox"/> Advertisement (e.g. for a noticeboard or Federation University Communicate)</p> <p>Have you attached a copy of the advertisement? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If no, please explain:</p>
<p><input type="checkbox"/> Facebook</p> <p>Have you attached a copy of the advertisement that will be posted on Facebook?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If no, please explain:</p>
<p><input checked="" type="checkbox"/> Recruitment by a third party (e.g., employer, doctor)</p> <p>Have you attached a copy of the letter requesting their assistance, and/or the letter confirming their willingness to assist? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

Application for HREC Approval (Standard)

Human Research Ethics Committee



Recruitment procedures are listed above. Copies of current recruitment materials to be used by Western District Health Service and the Glenelg Shire have been attached. Further materials developed during the project (i.e. information packs for prospective HACC Client participants) will be forwarded to the HREC for evaluation.

If no, please explain:

- Private sources
Have you attached a copy of the relevant approval letter? Yes No
If *no*, please explain:

BURDENS OF RESEARCH (RISK & RISK MANAGEMENT)

This section raises the issue of your duty of care for those about whom you are learning things. To what risks are participants subjected? What will you do should an emergency occur, or should a participant become upset or distressed?

Likely Benefits

Are participants likely to gain direct or indirect benefit from the research? Yes No

If yes, provide details

Both HACC Staff and Client participants will benefit by developing a better understanding of their energy consumption and being provided with information to make their household more energy efficient and reduce their energy bills. Participants will not incur any financial cost for taking part in the study and recommendations will be tailored for low income households (e.g. energy curtailment, low cost options). Indirect benefits will also come through the influence that this study has on public policy concerning energy resource allocation and development for disadvantaged groups.

How will potential benefits to participants or community outweigh the risks?

There is a minor risk to the participants involved in the study, in terms of psychological distress as a result of consideration of some issues within the survey. However, this risk is considered to be extremely small, and outweighed by participant and the broader public benefits of this research.

Research Activities

Which of the following activities will the research involve? (Tick as many as apply)

- | |
|--|
| <input checked="" type="checkbox"/> Use of a questionnaire (attach copy) |
| <input type="checkbox"/> Interviews (attach interview questions) |
| <input type="checkbox"/> Observation of participants without their knowledge |
| <input type="checkbox"/> Participant observation |
| <input type="checkbox"/> Audio- or video-taping of interviewees or events |
| <input type="checkbox"/> Access to personal and/or confidential data (including student, patient or client data) without participants' specific consent |
| <input type="checkbox"/> Administration of any stimuli, tasks, investigations or procedures which may be experienced by participants as physically or mentally painful, stressful or unpleasant during or after the research process |

Application for HREC Approval (Standard)

Human Research Ethics Committee



<input type="checkbox"/>	Performance of any acts which may diminish the self-esteem of participants or cause them to experience embarrassment, regret or depression
<input type="checkbox"/>	Investigation of participants involved in illegal activities
<input type="checkbox"/>	Procedures that involve deception of participants
<input type="checkbox"/>	Administration of any substance or agent
<input type="checkbox"/>	Use of non-treatment of placebo control conditions
<input type="checkbox"/>	Collection of body tissues or fluid samples
<input type="checkbox"/>	Collection and/or testing of DNA samples
<input type="checkbox"/>	Participation in a clinical trial
<input type="checkbox"/>	CTN Trial <input type="checkbox"/> CTX Trial <i>Please provide Phase number, i.e., either 1, 2, 3 or 4</i>
<input type="checkbox"/>	Testing a medical/diagnostic device

Risk Management Procedures

Identify as far as possible all potential risks to participants (e.g., physical, psychological, social, legal, economic) associated with the proposed research. Explain what risk management procedures will be put in place. (Any potential risks should be outlined in the Plain Language Information Statement along with contact details of an appropriately qualified person for participant reference in case of distress.)

Where will the research be conducted? (Tick as many as apply)	
<input checked="" type="checkbox"/> Federation University	<input checked="" type="checkbox"/> Other location(s)
If <i>other</i> , please <i>give details (including the URL for web-based studies)</i>	
The survey will be completed at the premises of participants.	

Are facilities at the research location appropriate for the scientific needs of the research?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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If *no*, please elaborate

Are the facilities appropriate to meet any physical, emotional or other needs of participants that result from their participation?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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If *no*, please elaborate

Are there any specific risks to researchers?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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If *yes*, please describe

What plans are in place to deal with adverse/unexpected outcomes?

Participants will be advised from the beginning of their capacity to withdraw from the project, and will be provided with the contact details of the researcher to contact at any time, as well as that of the Lifeline Counselling Service.
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Will parts of this project be carried out by independent contractors?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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Application for HREC Approval (Standard)

Human Research Ethics Committee



If yes, please confirm that the independent contractor will receive from the first-named Principal Researcher, a copy of the approved ethics protocol and be made aware of their responsibilities arising from it.

Other Glenelg SAVES consortium members will receive a copy of the approved ethics protocol and will be briefed on their responsibilities by the Principal Researcher.

If necessary, has the Principal Researcher ensured that the other researchers have undergone a police check and a Working With Children check?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
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How will the conduct of the project be monitored to ensure that it conforms to the procedures set out in this application, the University's human ethics guidelines and the *National Statement*? (In the case of student projects please give details of how the supervisor/s will monitor the conduct of the project; e.g., how often student and supervisor will meet; how meetings will be conducted: email/phone/in person; how efforts will be coordinated if a number of researchers are involved.)

The study's researchers will be in regular contact to coordinate research activities. They will meet formally with each other regarding the project on a regular basis, at least once per fortnight for the duration of the project. The research team will jointly oversee the conduct of the research with other consortium members and will conduct a briefing session with them prior to the commencement of recruitment and surveying.

Will there be support provided for participants? (You may need to consider having additional support for participants during or after the study, depending on risks to participants. Consider whether your project would require additional support and what support would be available.)

Support will be available to participants in the form of contact information of the researcher, who will provide advice as required. This will be supported by a telephone help desk and a project website.

What debriefing will participants receive following the study and when? (Attach a copy of any written material or statement to be used in such a debriefing. Participants may need to talk with the researchers about the experience of being involved in the study as well as learn more about the aims of the research.)

Participants will receive feedback on the outcomes of the project via the reports provided on a periodical basis.

INCENTIVES FOR PARTICIPATION

Note that while participants may, in certain circumstances, be paid or reimbursed for their inconvenience and time, the payment should not be of an amount that risks inducement to participate, thus potentially biasing the project's results. If rewards are to be used, all participants are to receive the reward.

Are financial or other rewards proposed to be given to participants?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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If yes, describe how much and in what form the payment/incentive will take (e.g., money to reimburse travel costs, vouchers for movie tickets, chocolate frogs).

Application for HREC Approval (Standard)

Human Research Ethics Committee



CONSENT

Dependent or Unequal Relationships

The consent of a person to participate in research must not be subject to any coercion. Research involving those in dependent or unequal relationships (e.g., teacher/student, manager/employee, parent/child, doctor/patient) may compromise a participant's ability to give consent that is free from any form of pressure (real or implied) arising from this unequal power relationship. The HREC therefore recommends that, where possible, researchers should choose participant cohorts where no dependent relationship exists. However, if the researcher believes that research involving people in dependent relationships is purposeful and methodologically defensible, the HREC will require additional information explaining why this is so and how any risks inherent in the dependent and unequal relationship will be managed. The HREC will also need evidence to show that participants have been reassured that refusal to participate will not result in any discrimination or penalty. Applicants should note that reasons of convenience will not normally be considered adequate justification for conducting research in situations where dependent relationships exist.

Does a dependent or unequal relationship exist between any participant and researcher, particularly those involved in recruiting? <i>* Please refer to the National Statement on Ethical Conduct in Human Research – Chapter 4.3 for information on unequal relationships before answering this question.</i>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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If yes, please explain the relationship and the steps to be taken by the researchers to ensure that the participant's participation is purely voluntary and not influenced by the relationship in any way.

Although, ideally data would be collected by an independent third party, previous work and anecdotal reports from the Glenelg Shire reveal that using a HACC worker who has an established relationship with the client is the best way to gather data and is the foundation for this project.

In accordance with the *National Statement of Ethical Conduct in Human Research*, the following protocols will be used during the consent process:

- HACC clients will be encouraged to discuss their participation with someone who is able to support them in making their decision
- Where potential participants are especially vulnerable or powerless, HACC clients will be encourage to appoint a participant advocate
- HACC staff and consortium members will be briefed to take particular care throughout the research to minimise the impact of any dependency
- As part of the consent process, persons declining to participate in or decide to withdraw from the study will be ensured that they do not suffer any negative consequences, such as unfair discrimination, reduction in the level of care or any other disadvantage
- HACC staff will also be informed that if they decline to participate in or decide to withdraw from this study they will not suffer any negative consequences, such as unfair discrimination, dismissal from employment or any other disadvantage

Informing Participants

Providing an explanation to potential participants is an essential part of the process of obtaining consent. To conform to ethical and legal requirements, the potential participant should be provided with information *at their level of comprehension* about the purpose, methods, demands, risks, inconveniences, discomforts, and possible outcomes of the research (including the likelihood and form of publication of research results).

The correct template for the PLIS can be found at:

Application for HREC Approval (Standard)

Human Research Ethics Committee



<http://federation.edu.au/research-and-innovation/research-support/ethics/human-ethics/human-ethics3>

Have you attached a copy of the Plain Language Information Statement (PLIS) for participants?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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If no, please explain

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Application for HREC Approval (Standard)

Human Research Ethics Committee



Does the PLIS comply with the following guidelines?	YES	N/A
It is presented on the Fed Uni HREC approved template, downloaded from the website	<input checked="" type="checkbox"/>	*
It has clear identification of the University, the School(s) involved, the project title, the Principal and Other Researchers (including contact details).	<input checked="" type="checkbox"/>	*
It details what involvement in the project will require (e.g., involvement in interviews, completion of questionnaire, audio/video-taping of events), estimated time commitment, any risks involved.	<input checked="" type="checkbox"/>	*
It advises how participants' contact details were obtained and/or how potential participants were selected	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If staff or students of the Federation University are to be involved as participants, it advises that the project has received clearance by the HREC	<input type="checkbox"/>	<input checked="" type="checkbox"/>
It advises that if the sample size is small this may have implications for privacy/anonymity.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
It states clearly that if participants are in a dependent relationship with any of the researchers involvement in the project will not affect ongoing assessment, grades, employment, management or treatment of health (as relevant).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
It states clearly that involvement in the project is voluntary and that participants are free to withdraw their consent to participate at any time, and to withdraw any unprocessed data previously supplied.	<input checked="" type="checkbox"/>	*
It states that arrangements will be made to protect confidentiality of data, including that confidentiality of information provided is subject to legal limitations (e.g., subpoena, freedom of information claim, or mandatory reporting in some professions).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
It advises whether or not data will be destroyed after a minimum period.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
It provides any other relevant information.	<input checked="" type="checkbox"/>	*

* Required

Obtaining and Documenting Consent

How will informed consent be obtained/recorded?
<input checked="" type="checkbox"/> Signed consent form
<input type="checkbox"/> Recorded verbal consent
<input type="checkbox"/> Implied by return of survey <i>*NB If consent is to be implied by return of survey, all information that would normally be presented on the consent form must be included in the PLIS</i>
<input type="checkbox"/> Other (Please specify):

The correct template for the consent form can be found at:

<http://federation.edu.au/research-and-innovation/research-support/ethics/human-ethics/human-ethics3>

Is a copy of the consent form attached to this application form?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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Note: Two different versions of the PLIS and consent form have been developed for the study's two target groups: HACC staff and HACC clients.

If no, please explain how consent will be documented:

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Application for HREC Approval (Standard)

Human Research Ethics Committee



Does the consent form comply with the following guidelines?	
<input checked="" type="checkbox"/>	It is presented on the Fed Uni HREC approved template, downloaded from the website
<input checked="" type="checkbox"/>	It states the title of the project and names of the researchers
<input checked="" type="checkbox"/>	It confirms that the project is for research
<input checked="" type="checkbox"/>	It confirms that involvement in the project is voluntary and that participants are free to withdraw at any time or withdraw any unprocessed data previously supplied
<input checked="" type="checkbox"/>	It details specific requirements of participants (e.g., interviews will be audio-/video-taped) (<i>contained within PLIS</i>)
<input checked="" type="checkbox"/>	It advises of any legal limitations to data confidentiality
<input checked="" type="checkbox"/>	It advises that if the sample size is small this may have implications for privacy/anonymity (<i>contained within PLIS</i>)
<input checked="" type="checkbox"/>	It provides any other information relevant to obtaining participant consent

DISCONTINUING PARTICIPATION

Are participants advised as part of the informed consent process that they have the right to withdraw at any time or withdraw any unprocessed data previously supplied?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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If *yes*, please detail how participants are informed of this right.

This is stated explicitly in the Plain Language Information Statement.

If *no*, please explain why this advice has not been given

INFORMATION PROTECTION (DATA STORAGE & SECURITY)

Confidentiality

Please give attention to implications for compliance with legislative requirements including, for example, Guidelines Approved under Section 95A of the Privacy Act 1988, produced by NHMRC, and Statutory Guidelines on Research Issued for the Purposes of Health Privacy Principles produced by the Victorian Department of Human Services.

Which method will be used to guarantee confidentiality/anonymity? (Tick all that apply) (Where the sample size is very small, it may be impossible to guarantee anonymity or confidentiality of participants' identity, and participants involved in such projects need to be advised of this limitation.)	
<input type="checkbox"/>	Non-identifiable (anonymous) data , which have never been labelled with individual identifiers or from which identifiers have been permanently removed, and by means of which no specific individual can be identified.
<input checked="" type="checkbox"/>	Re-identifiable data , from which identifiers have been removed and replaced by a code, but it remains possible to re-identify a specific individual by, for example, using the code or linking different data sets.
<input type="checkbox"/>	Individually identifiable data , where the identity of a specific individual can reasonably be ascertained. Examples of identifiers include the individual's name, image, date of birth or address.
<input type="checkbox"/>	Participants will have the option of being identified in publications arising from the research.
<input type="checkbox"/>	Participants will be referred to by pseudonym in publications arising from the research.
<input type="checkbox"/>	Personal information will be obtained from a Commonwealth department or agency? (If yes, you may need to comply with the requirements of the Privacy Act 1988).
<input type="checkbox"/>	Any other method of protecting the privacy of participants (e.g., use of direct quotes with

Application for HREC Approval (Standard)

Human Research Ethics Committee



	specific, written permission only; use of real name with specific, written permission only). Please describe:
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Security and Storage

Does the Principal Researcher accept responsibility for the security of the data collected?	<input checked="" type="checkbox"/> Yes
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Who will have access to data?	
<input checked="" type="checkbox"/> Access by named researchers only	<input type="checkbox"/> Access by other(s) than named researcher(s)

If others have access to data, identify who, at which storage site, for what purpose, and their connection to the project.

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Which of the following methods will be used to ensure data security?	
<input checked="" type="checkbox"/> Data will be kept in locked filing cabinets	
<input type="checkbox"/> Data and identifiers will be kept in separate, locked filing cabinets	
<input checked="" type="checkbox"/> Access to computer files will be available by password only	
<input type="checkbox"/> Other (<i>please describe</i>)	

Does data storage comply with Joint NHMRC/AVCC <i>Statement and Guidelines on Research Practice for the Management of Research Data and Records</i> ?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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If *no*, please explain

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Please confirm that at the conclusion of the study, the data will be kept in locked facilities in the School through which the project is being conducted	<input checked="" type="checkbox"/> Yes
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If data is to be kept elsewhere during fieldwork, please explain how and where data will be held, including arrangements for data security

After completion of surveys, HACC staff are instructed to return the a) completed questionnaire, b) signed informed consent form and c) contact details form in the envelope provided (reply paid envelope addressed to Principal Researcher).

Please confirm that any data collected will be kept for a minimum of 5 years from date of research publication.	<input checked="" type="checkbox"/> Yes
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Will the data be destroyed at some point after being kept for the minimum 5 year period?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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If yes:

How will data be disposed of?

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Application for HREC Approval (Standard)

Human Research Ethics Committee



When will data be disposed of?

N/A

Please confirm that any data collected will be disposed of by the Principal Researcher, who must have responsibility for the data

Yes

Dissemination of Results

Explain when, how, where and to whom results will be disseminated, including whether participants will be provided with information on the project's findings or outcomes.

FedUni will provide a baseline report, annual progress reports and a final report to other consortium members, which will provide the basis for regular reporting to the department. These reports will include:

- Quarterly monitoring and evaluation activity reports to consortium members, which will be incorporated into regular project reports provided to the department;
- Annual statistical research projects determined in collaboration with consortium members and the department; and
- A final evaluation report on the program's impact on energy efficiency, market transformation and education and training. This report will also provide evidence-based recommendations for future energy efficiency policy and program approaches

How will results be made available to participants(s)? (Tick as many as apply)

Written summary of results

Copy of final manuscript (thesis, article, etc.)

Verbal presentation (info session, debriefing, etc.)

Presented to all participants

Presented if requested

Presented to representative participants (e.g., CEO, school principal)

Other *Please explain:*

None *Please explain:*

How will results be made available to peers and colleagues: Tick as many as apply

Conference papers

Journal article(s)

Thesis

Book

Other *Please explain*

None *Please explain*

LEGAL ISSUES

Does the project involve subject matter or conduct that may give rise to legal vulnerability of participants or researchers?

Yes

No

If yes, please give details

Are adequate precautions to be taken?

Yes

No

N/A

If yes, please give details

Application for HREC Approval (Standard)

Human Research Ethics Committee



Confidentiality of information provided can only be protected within the limitations of the law. Depending on the research proposal, you may need to state these limitations specifically (subpoena, freedom of information claim, mandated reporting by some professions, etc.) Have you included appropriate information on the legal limitations of protecting confidentiality in the PLIS and consent form?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
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If *no*, please advise how participants will be advised

CHECKLIST OF ATTACHMENTS

Please check that the following documents are attached to your application. Applicants should note that where questionnaire or interview questions are submitted in draft form, a copy of the final documentation must be submitted for final approval when available.

Are the following documents attached?	Yes	No	N/A
Recruitment advertisement (e.g. for noticeboard or Fed Uni Communicate)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Plain Language Information Statement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	*
Consent form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evidence of external approvals related to the research	<input checked="" type="checkbox"/> <input type="checkbox"/> Pending	<input type="checkbox"/>	<input type="checkbox"/>
Questionnaire	<input type="checkbox"/> <input checked="" type="checkbox"/> Draft	<input type="checkbox"/>	<input type="checkbox"/>
Interview Schedule	<input type="checkbox"/> <input type="checkbox"/> Draft	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Debriefing material	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Required

Application for HREC Approval (Standard)

Human Research Ethics Committee



DECLARATIONS

Researcher Declarations:

The information contained herein is, to the best of my knowledge and belief, accurate. I have read the University's current human ethics guidelines, and accept responsibility for the conduct of the procedures set out in the attached application in accordance with the guidelines, the National Health & Medical Research Council's *National Statement on Ethical Conduct in Research Involving Humans* and any other condition laid down by the Federation University's Human Research Ethics Committee or its sub-committees. I have attempted to identify all risks related to the research that may arise in conducting this research and acknowledge my obligations and the rights of the participants. I and my co-researchers or supporting staff have the appropriate qualifications, experience and facilities to conduct the research set out in the attached application and to deal with any emergencies and contingencies related to the research that may arise.

<p>.....</p> <p><i>Principal Researcher</i></p> <p>DAVID LYNCH (Print name in block letters)</p> <p>Date:/...../.....</p>	
<p>.....</p> <p><i>Other Researcher</i></p> <p>CRAIG HURLEY (Print name in block letters)</p> <p>Date:/...../.....</p>	<p>.....</p> <p><i>Other Researcher</i></p> <p>SASHA IVKOVIC (Print name in block letters)</p> <p>Date:/...../.....</p>
<p>.....</p> <p><i>Other Researcher</i></p> <p>KEIR REEVES (Print name in block letters)</p> <p>Date:/...../.....</p>	<p>.....</p> <p><i>Other Researcher</i></p> <p>CHIRS McCONVILLE (Print name in block letters)</p> <p>Date:/...../.....</p>
<p>.....</p> <p><i>Other Researcher</i></p> <p>JERRY COURVISANOS (Print name in block letters)</p> <p>Date:/...../.....</p>	<p>.....</p> <p><i>Other Researcher</i></p> <p>..... (Print name in block letters)</p> <p>Date:/...../.....</p>

Application for HREC Approval (Standard)

Human Research Ethics Committee



***NB:** If the following section is not completed, the application will not be accepted for review.

Declaration by designated School Ethics Coordinator (SEC)

OR

Associate Dean of Research:

The SEC/Associate Dean of Research has reviewed this project and considers the methodological/technical aspects of the proposal to be appropriate to the tasks proposed and recommends its approval. The SEC/Associate Dean of Research considers the Researcher(s) has/have the necessary qualifications, experience and facilities to conduct the research proposed and to deal with any emergencies and contingencies that may arise.

Comments/Provisos

Signature:

Please print name:.....

School Ethics Coordinator**

Associate Dean of Research

Date/...../.....

****NB:** If the SEC is named as a researcher on the project, then the School level review must be undertaken by the Associate Dean of Research

Plain Language Information Statement

HACC Staff

**Centre for Regional Innovation & Competitiveness (CRIC);
National Centre for Sustainability (NCS); and
Centre for Informatics & Applied Optimisation (CIAO)**

PROJECT TITLE:	Glenelg SAVES
PRINCIPAL RESEARCHER:	Mr. David Lynch
OTHER RESEARCHERS:	Mr. Craig Hurley Mr. Sasha Ivkovic Prof. Keir Reeves Dr. Chris McConville Assoc. Prof. Jerry Courvisanos

As a staff member of the Glenelg Shire's Home and Community Care (HACC) service, you are invited to participate in this research project being undertaken by Federation University Australia (FedUni) as part of the Glenelg SAVES program.

Purpose and Background:

Glenelg SAVES is an energy efficiency program designed to assist people to increase energy efficiency in their own homes; which will in turn decrease money spent on energy and also improve comfort in the home. The focus of the project is to increase capacity and knowledge of the HACC staff by providing them with energy efficiency training. HACC staff will use this training to make their own houses more energy efficient. HACC staff will also provide participating clients with a free home energy assessment and suggest recommendations for clients to reduce their energy bills and increase the energy efficiency of their homes. HACC staff will also provide on-support to clients if they require any assistance or further information about implementing these recommendations.

The project is funded by the Australian Government through the Department of Industry's Low Income Energy Efficiency Program. This study is being managed by the Glenelg SAVES consortium, which includes Western District Health Service, Glenelg Shire and Federation University Australia.

The major purpose of this study is to gain a better understanding of the factors that influence household energy use, which will help to evaluate the success of the Glenelg SAVES project, while also informing future research and public policy. This study is being conducted by three of FedUni's research and training centres: Centre for Regional Innovation and Competitiveness (CRIC); National Centre for Sustainability; and Centre for Informatics and Applied Optimisation (CIAO).

It is expected that 30 HACC staff and 300 HACC clients will participate in this project. Aside from the research potential of this project, we hope that you will also receive personal benefit through a better understanding of your household's energy use. A summary of the study's results will be made available to all participants.

Plain Language Information Statement

The information collected will be used for the purpose of this research project and potentially other studies evaluating the effectiveness of energy efficiency programs. Although the sample size for HACC staff is relatively small, your answers are completely confidential and the results will be released only as summaries in which no individual's answers can be identified. There are no right or wrong answers, we are only interested in your opinion. This survey is voluntary. You may withdraw your involvement at any time and should you do so, your participation in the research will immediately cease and any information collected from you will not be used. You should note, however, that once identification has been removed from the data it is not possible to withdraw consent to participate. No personal details identifying individuals will be made available either publicly or to the organisations funding the study.

Procedures:

Participation in this project will involve:

1. Attend an information awareness session, which will outline the Glenelg SAVES study and the project's home energy efficiency and auditing training component
2. Completion of two-day course on Home Sustainability Auditing for Volunteers (delivered by Moreland Energy Foundation) and survey interviewing (delivered by Federation University Australia)
3. Completion of the enclosed baseline paper-based survey about your house, appliances, energy-related attitudes and demographics. This survey will take approximately 45 minutes and needs to be returned with a signed informed consent form and your separate contact details form
4. Recruitment of 10 of your HACC clients, in conjunction with Western District Health Service and the Glenelg Shire, to participate in this study after providing them with relevant project information
5. Undertake an energy assessment with each of your recruited HACC client participants and completion of the baseline paper-based survey
6. Provide on-going support to assist clients with the implementation of energy efficiency recommendations
7. Completion of a 30 minute follow-up survey for your own household in mid-2015
8. Completion of a 30 minute follow-up survey with your participating HACC clients in mid-2015

Risks and Support:

Although it is unlikely, it is possible that you may experience some minor psychological distress from consideration of some issues in this study. You should note that you are able to withdraw from the research at any time. If you don't feel comfortable answering a particular question, just leave it blank and move on to the next question. You can also contact the researchers listed below if you have any concerns, or contact the Lifeline Counselling Service on 13 11 14.

If you decline to participate in or decide to withdraw from this study you will not suffer any negative consequences, such as unfair discrimination, dismissal from employment or any other disadvantage.

Plain Language Information Statement

Data Protection:

In order to protect confidentiality of your data, the collected data will be stored on a secure database, only accessible to the researchers. You should note however that the confidentiality of information that you provide is subject to legal limitations (e.g., subpoena or a freedom of information claim).

Once you understand what the project is about and if you agree to take part in it, please sign the informed consent form (attached). By signing the informed consent form, you indicate that you understand the information and that you give your consent to participate in the research project.

If you have any questions, or you would like further information regarding the project titled **Glenelg Saves**, please contact the Principal Researcher, **(David Lynch)** of the Centre for Regional Innovation and Competitiveness:

PH: (03) 5327 9318

EMAIL: d.lynch@federation.edu.au

Should you (i.e. the participant) have any concerns about the ethical conduct of this research project, please contact the Federation University Ethics Officer, Research Services, Federation University Australia, PO Box 663, Mt Helen VIC 3353. Telephone: (03) 5327 9765, Email: research.ethics@federation.edu.au

CRICOS Provider Number 00103D

Plain Language Information Statement

HACC Clients

**Centre for Regional Innovation & Competitiveness (CRIC);
National Centre for Sustainability (NCS); and
Centre for Informatics & Applied Optimisation (CIAO)**

PROJECT TITLE:	Glenelg SAVES
PRINCIPAL RESEARCHER:	Mr. David Lynch
OTHER RESEARCHERS:	Mr. Craig Hurley Mr. Sasha Ivkovic Prof. Keir Reeves Dr. Chris McConville Assoc. Prof. Jerry Courvisanos

As a recipient of the Glenelg Shire's Home and Community Care (HACC) service, you are invited to participate in this research project being undertaken by Federation University Australia (FedUni) as part of the Glenelg SAVES program.

Purpose and Background:

Glenelg SAVES is an energy efficiency program designed to assist people to increase energy efficiency in their own homes; which will in turn decrease money spent on energy and also improve comfort in the home. The focus of the project is to increase capacity and knowledge of HACC staff by providing them with energy efficiency training. HACC staff will use this training to make their own houses more energy efficient. HACC staff will also provide participating clients with a free home energy assessment and suggest recommendations for clients to reduce their energy bills and increase the energy efficiency of their homes. HACC staff will also provide on-support to clients if they require any assistance or further information about implementing these recommendations.

The project is funded by the Australian Government through the Department of Industry's Low Income Energy Efficiency Program. This study is being managed by the Glenelg SAVES consortium, which includes Western District Health Service, Glenelg Shire and Federation University Australia.

The major purpose of this study is to gain a better understanding of the factors that influence household energy use, which will help to evaluate the success of the Glenelg SAVES project, while also informing future research and public policy. This study is being conducted by three of FedUni's research and training centres: Centre for Regional Innovation and Competitiveness (CRIC); National Centre for Sustainability; and Centre for Informatics and Applied Optimisation (CIAO).

It is expected that 30 HACC staff and 300 HACC clients will participate in this project. Aside from the research potential of this project, we hope that you will also receive personal benefit through a better understanding of your household's energy use. A summary of the study's results will be made available to all participants.

Plain Language Information Statement

The information collected will be used for the purpose of this research project and potentially other studies evaluating the effectiveness of energy efficiency programs. Your answers are completely confidential and the results will be released only as summaries in which no individual's answers can be identified. There are no right or wrong answers, we are only interested in your opinion. This survey is voluntary. You may withdraw your involvement at any time and should you do so, your participation in the research will immediately cease and any information collected from you will not be used. You should note, however, that once identification has been removed from the data it is not possible to withdraw consent to participate. No personal details identifying individuals will be made available either publicly or to the organisations funding the study.

Procedures:

Participation in this project will involve:

1. Receive a free Home Energy Assessment from your HACC staff carer, which will identify recommendations for improving your household's energy efficiency
2. Completion of the enclosed baseline paper-based survey about your house, appliances, energy-related attitudes and demographics with your HACC staff carer. This survey will take approximately 45 minutes and will be returned by your HACC staff carer with a signed informed consent form and your separate contact details form
3. Completion of a 30 minute follow-up survey for with your HACC staff carer in mid-2015

Risks and Support:

Although it is unlikely, it is possible that you may experience some minor psychological distress from consideration of some issues in this study. You should note that you are able to withdraw from the research at any time. If you don't feel comfortable answering a particular question, just leave it blank and move on to the next question. You can also contact the researchers listed below if you have any concerns, or contact the Lifeline Counselling Service on 13 11 14.

If you are unsure about participating in this study, please:

- discuss your participation with someone who is able to support you in making this decision
- appoint a guardian (i.e. family member, carer) to consider your participation and if considered appropriate, consent on your behalf (refer informed consent form)
- if you or your guardian decline to participate in or deciding to withdraw from this study you will not suffer any negative consequences, such as unfair discrimination, reduction in the level of care or any other disadvantage

Data Protection:

In order to protect confidentiality of your data, the collected data will be stored on a secure database, only accessible to the researchers. You should note however that the confidentiality of information that you provide is subject to legal limitations (e.g., subpoena or a freedom of information claim).

Plain Language Information Statement

Once you understand what the project is about and if you agree to take part in it, please sign the informed consent form (attached). By signing the informed consent form, you indicate that you understand the information and that you give your consent to participate in the research project.

If you have any questions, or you would like further information regarding the project titled **Glenelg Saves**, please contact the Principal Researcher, **(David Lynch)** of the Centre for Regional Innovation and Competitiveness:

PH: (03) 5327 9318

EMAIL: d.lynch@federation.edu.au

Should you (i.e. the participant) have any concerns about the ethical conduct of this research project, please contact the Federation University Ethics Officer, Research Services, Federation University Australia, PO Box 663, Mt Helen VIC 3353. Telephone: (03) 5327 9765, Email: research.ethics@federation.edu.au

CRICOS Provider Number 00103D

Consent Form

HACC Staff

PROJECT TITLE:	Glenelg Saves
RESEARCHERS:	Mr. David Lynch Mr. Craig Hurley Mr. Sasha Ivkovic Prof. Keir Reeves Dr. Chris McConville Assoc. Prof. Jerry Courvisanos

Code number allocated to the participant:	
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Consent – Please complete the following information:

I, of
.....
hereby consent to participate as a subject in the above research study.

The research program in which I am being asked to participate has been explained fully to me, verbally and in writing, and any matters on which I have sought information have been answered to my satisfaction.

If you decline to participate in or decide to withdraw from this study you will not suffer any negative consequences, such as unfair discrimination, dismissal from employment or any other disadvantage.

I understand that: all information I provide (including questionnaires) will be treated with the strictest confidence and data will be stored separately from any listing that includes my name and address.

- aggregated results will be used for research purposes and may be reported in scientific and academic journals
- data collected from this study may be used for future research projects that are related to improving household energy efficiency
- ***I am free to withdraw my consent at any time during the study in which event my participation in the research study will immediately cease and any information obtained from it will not be used.***
- ***once information has been aggregated it is unable to be identified, and from this point it is not possible to withdraw consent to participate***

SIGNATURE: **DATE:**

Consent Form

HACC Clients

PROJECT TITLE:	Glenelg Saves
RESEARCHERS:	Mr. David Lynch Mr. Craig Hurley Mr. Sasha Ivkovic Prof. Keir Reeves Dr. Chris McConville Assoc. Prof. Jerry Courvisanos

Code number allocated to the participant:	
--	--

Consent – Please complete the following information:

I, of
.....
hereby consent to participate as a subject in the above research study.

The research program in which I am being asked to participate has been explained fully to me, verbally and in writing, and any matters on which I have sought information have been answered to my satisfaction.

If you are unsure about participating in this study, please:

- discuss your participation with someone who is able to support you in making this decision
- appoint an advocate (i.e. family member, carer) to consider your participation and if considered appropriate, consent on your behalf (by signing the form on the next page)
- if you or your advocate decline to participate in or decide to withdraw from this study you will not suffer any negative consequences, such as unfair discrimination, reduction in the level of care or any other disadvantage

I understand that: all information I provide (including questionnaires) will be treated with the strictest confidence and data will be stored separately from any listing that includes my name and address.

- aggregated results will be used for research purposes and may be reported in scientific and academic journals
- data collected from this study may be used for future research projects that are related to improving household energy efficiency
- ***I am free to withdraw my consent at any time during the study in which event my participation in the research study will immediately cease and any information obtained from it will not be used.***
- ***once information has been aggregated it is unable to be identified, and from this point it is not possible to withdraw consent to participate***

SIGNATURE: **DATE:**

Consent Form

Consent of Advocate:

I,, advocate of (HACC client's name)
of (address)
hereby consent to (HACC client's name) participating in the
above research study.

SIGNATURE: **DATE:**

Appendix G: Baseline Survey



Low Income Energy Efficiency Program (LIEEP)

HACC Clients Survey Booklet

After your energy assessment, your assessor will return your consent forms and completed survey in the enclosed envelope to:

Maureen Crisp, Project Officer
Glenelg Shire; Aged & Disability Services

PO Box 152
Portland, Vic, 3305



"This activity received funding from the Department of Industry as part of the Low Income Energy Efficiency Program."

Privacy Notice and Consent Form

In Australia we have specific privacy legislation; such as the *Privacy Act 1988* (Commonwealth), the recent *Privacy Amendment (Enhancing Privacy Protection) Act 2012* (Commonwealth) and the *Information Privacy Act 2000* (Victoria). These laws protect your privacy when organisations collect and use personal information about you and your family. As a result, we request that you sign this consent form to acknowledge that you understand your legal rights to privacy and confidentiality.

Before signing this form please read this document in full, to understand what you are signing.

We will tell you:

- who our partners are, and who we share information with
- in the case that we share information – for research purposes - how we treat such information so that you cannot be identified
- what kind of information we will collect
- how your information is stored to retain your privacy
- how you can make a complaint if you believe your information has not been kept private
- who you can contact if you would like to correct, complete or change the information you gave us.

Our Partners

The Australian Government funded the Glenelg SAVES project to help households reduce their energy usage in the home. The partners in this project are:

- Western District Health Service – Southern Grampians Glenelg Primary Care Partnership (SGGPCP)
- Federation University
- Glenelg Shire Council

Our partners will have access to your information. They are committed to protecting the privacy of everyone who participates in the program. All household information collected will be stored in accordance with the new *Privacy Amendment (Enhancing Privacy Protection) Act 2012* (Commonwealth) and the *Information Privacy Act 2000* (Victoria).

The Australian Government and the Commonwealth Scientific and Industrial Research Organisation (CSIRO) will also receive information on households participating in this project. We will ensure that your personal information is not sent to the CSIRO so that it will not be possible to identify anyone in your household.



What we collect and how we will keep your information confidential?

- We will collect information about your energy usage, knowledge and behaviours, the type of house you live in and the electrical appliances you have
- We will ask you information about number, age, education, estimated income of people living in the household
- We will store the information in a locked filing cabinet and destroy the information in 7 years, only those with authorised access will see the information
- **We will remove your personal information from any disclosure made with the Commonwealth government so that you cannot be identified**
- You have legal rights to privacy and confidentiality of your personal information
- We will not share your personal information to anyone not listed in this statement without your consent
- The only exception by law where we may have to share information to other parties, is if we believe it is necessary to lessen or prevent a serious threat to life, health or safety of any individual, or to public health and safety
- If you believe a project partners has breached your right to privacy or confidentiality, you have the right to make a complaint
- To make a complaint contact your Glenelg Shire Council HACC worker, or to another member of staff, who will explain the complaints process to you

You have a right to see what personal data we have about you and you can ask us to correct, complete and change the information we have about you. You will be asked to provide adequate proof of your identity before being granted access to your data. To request this please contact:

Name: Penny Fraser

Address: PO Box 283, Hamilton 3300

Phone Number: 03 5551 8565

Email Address: penny.fraser@wdhs.net



Your consent

I (name):

of (address):.....

consent to the collection and use of my personal information by the project partners for the purposes of the Glenelg SAVES Low Income Energy Efficiency Program (LIEEP):

1. The personal information I provide is confidential and cannot be disclosed to any other person or authority in a form that identifies me or my household for any reason except the reason stated in point 4 of this consent;
2. All reporting using this personal information will occur in such a way that it will not be possible to identify my household or me;
3. The personal information I provide is for the purposes of conducting research in household energy consumption for the Glenelg SAVES LIEEP project;
4. The personal Information I provide will be disclosed to the Department of Industry and the Commonwealth Scientific and Industrial Research Organisation (CSIRO); however my name and address will be removed from the data before transferring it so that it will not be possible to identify anyone in my household; and
5. The personal information I provide may be used for future research; however that information will not contain any personal information that can be used to identify my household or me

Signature:

Date:



"This Activity received funding from the Department of Industry as part of the Low Income Energy Efficiency Program."



I/We, the account holder(s) at the address below authorise you, Powercor, the electricity supplier, to release electricity billing information for this address to the Glenelg SAVES project. I authorise you to release all available billing data associated with the nominated electricity account, for the periods specified by the project officer.

Name:

Address:

Signature/s:.....

Account Details:

Electricity retailer:

NMI (meter number):

Electricity Account number:



Contact Details

Your contact details will not be stored with your questionnaire. However, to let us know that your questionnaire has been returned, please complete and return this form with your completed questionnaire.

.....

Name: _____
(your name - please print)

Address: _____

Town: _____

Postcode: _____

e-mail address: _____

Phone: _____

Thank you very much for your help with this important study.



--	--	--	--	--

Survey # (office use only)

Before you begin...

1. Selecting answers:

When selecting an answer from the categories provided, please mark:

Like this: Not like this:

2. Corrections:

If you make a mistake or need to change your answer please cross out the incorrect response like this:



3. Important – use a pen:

Please use a black or blue pen and print clearly



4. If you are unable to answer a question, please leave the answer blank



Section A - Site Details

A1. What is your NMI number?

6	2	0								
---	---	---	--	--	--	--	--	--	--	--

? The NMI number is the National Meter Identifier. Every electricity meter in Australia has one so it can be identified. Your 11 digit NMI is identified on your electricity bill, usually at the top or near the use statement and graph (the first three numbers are 620). It will usually be clearly identified and easily found on the bill. If you cannot find your bill, the NMI number is also located on your electricity meter.

A2. Which of the following best describes the structure of your house (i.e. the material of your outside wall)?

(Mark all that apply)

Brick Veneer

Concrete

Concrete block

Double brick

Fibro

Mixture

Timber

Weatherboard

Other (please specify below \swarrow)*

*Please specify other: _____



A3. How many of the following rooms does your house have?

? If you do not have any, please enter **0**

Bathrooms (including any ensuites)?

Number of living rooms? (e.g. lounge/dining rooms)

Number of bedrooms?

A4. Roughly, how long ago was your house built?

? If unsure, please provide your best guess

(Mark one box only)

0 to 5 years

5 to 9 years

10 to 14 years

15 to 19 years

20 to 29 years

30 to 39 years

40 to 49 years

50 to 59 years

60 years or more

Not sure

A5. What is the size of your home?

? If unsure, please provide your best guess

(Mark one box only)

Compact (<10.8 squares)

Small (10.8-16.0 squares)

Medium (16.1-26.8 squares)

Large (26.9-37.7 squares)

Spacious (>37.7 squares)

Not sure



A6. What type of residence is your house?

(Mark ● one box only)

- Separate house
- Apartment/Unit/Flat
- Semi-detached, row or terrace house, townhouse
- House semi-detached (attached to another house on only one side)
- Other (please specify below ↵)*

*Please specify other: _____

A7. What colour is the roof of your house?

(Mark ● one box only)

- Light
- Intermediate
- Dark
- Not applicable (apartment block)

A8. How many floors/storeys does your residence have?

? If you live in an apartment building, only include the floors/storeys of your apartment.

|



A9. Does your house have a gas connection (i.e. mains connected or bottled gas)?

(Mark ● one box only)

Yes

No ▶ Skip to A12

Not sure ▶ Skip to A12

A10. What sort of gas connection do you have?

(Mark ● all that apply)

Reticulated gas (i.e. mains connected)

Bottled gas

Not sure ▶ Skip to A12

A11. Now looking at your gas bills, please record the total amount of your bills over the last 12 months (you will need to add up the amount due on each bill excluding any amounts overdue from previous bills). If you are unable to find your gas bills for the last 12 months, please take your best guess of the amount you paid. *If unsure please leave blank.*

❓ Please round off to whole dollars (i.e. do not include cents). E.g. \$1,000.23 = \$1,000

\$ - amount
(before concessions or rebates)

Gas bills (total for last 12 months) \$,

A12. Now looking at your electricity bills, please record the total amount of your bills over the last 12 months (you will need to add up the amount due on each bill excluding any amounts overdue from previous bills). If you are unable to find your electricity bills for the last 12 months, please take your best guess of the amount you paid. *If unsure please leave blank.*

❓ Please round off to whole dollars (i.e. do not include cents). E.g. \$1,000.23 = \$1,000

\$ - amount
(before concessions or rebates)

Electricity bills (total for last 12 months) \$,



A13. Do you own or rent this property?

(Mark ● one box only)

- Owned outright
- Owned with a mortgage
- Rented
- Being occupied rent-free
- Bring purchased under a rent/buy scheme
- Being occupied under a life tenure scheme
- Other (please specify below ◀)*

*Please specify other: _____

A14. Does your premises have any solar panels/photovoltaics that generate electricity?

(Mark ● one box only)

- Yes
- No ▶ Skip to A16
- Not sure ▶ Skip to A16

A15. What size is your Household Solar Electricity system?

(Mark ● one box only)

- 1.5kW
- 2kW
- 3kW
- 5kW
- Not sure
- Other (please specify below ◀)*

*Please specify other (kW): _____



A16. How many weeks of the year is your house occupied?

(Enter 52 weeks if occupied all year round)

weeks

A17. Which of the following features do you have in your residence?

(Mark ● the appropriate response for each item)

	Yes ▼	No ▼	Not Sure ▼
External Blinds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal window awnings/shades	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Curtains	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Double-glazed windows	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tinted Windows	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ceiling insulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wall insulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Floor insulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Draft stoppers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Section B - Appliances

The following questions require you to provide details concerning the appliances in your household.

Fridges or Freezers

B1. How many fridges or freezers (including fridge/freezer combination units) do you have in your household?

? If you do not have a fridge or freezer enter **0** and skip to next appliance

|

▶ If 0 skip to B3

B2. What is the a) age, b) average usage, c) condition and d) type of each fridge or freezer?

? Please enter the details of each appliance. If you have more than four, enter the details in the appropriate column, e.g. Unit #1 for the 1st, Unit #2 for the 2nd, Unit #3 for the 3rd, etc. If you have more than 4, enter the details of the 4 units that are used most often by your household.

	Unit #1 ▼	Unit #2 ▼	Unit #3 ▼	Unit #4 ▼
a) Age (years) ? If less than 1 year please enter 0	<div style="border: 1px solid black; width: 80px; height: 30px; margin: 0 auto; text-align: center; line-height: 30px;"> </div> years	<div style="border: 1px solid black; width: 80px; height: 30px; margin: 0 auto; text-align: center; line-height: 30px;"> </div> years	<div style="border: 1px solid black; width: 80px; height: 30px; margin: 0 auto; text-align: center; line-height: 30px;"> </div> years	<div style="border: 1px solid black; width: 80px; height: 30px; margin: 0 auto; text-align: center; line-height: 30px;"> </div> years
b) On average, how many <u>MONTHS</u> of the year do you operate each fridge or freezer? ? If you keep the fridge/freezer on all the time – enter 12 months	<div style="border: 1px solid black; width: 80px; height: 30px; margin: 0 auto; text-align: center; line-height: 30px;"> </div> months	<div style="border: 1px solid black; width: 80px; height: 30px; margin: 0 auto; text-align: center; line-height: 30px;"> </div> months	<div style="border: 1px solid black; width: 80px; height: 30px; margin: 0 auto; text-align: center; line-height: 30px;"> </div> months	<div style="border: 1px solid black; width: 80px; height: 30px; margin: 0 auto; text-align: center; line-height: 30px;"> </div> months
c) Condition (Mark ● response)	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>
d) Type of fridge	Fridge/Freezer <input type="radio"/> Fridge only <input type="radio"/> Freezer only <input type="radio"/>	Fridge/Freezer <input type="radio"/> Fridge only <input type="radio"/> Freezer only <input type="radio"/>	Fridge/Freezer <input type="radio"/> Fridge only <input type="radio"/> Freezer only <input type="radio"/>	Fridge/Freezer <input type="radio"/> Fridge only <input type="radio"/> Freezer only <input type="radio"/>



Microwaves

B3. How many Microwaves do you have in your household?

? If you do not have a Microwave enter **0** and skip to next appliance

|

▶ If **0** skip to **B5**

B4. What is the a) age, b) average use and c) condition of each Microwave?

? Please enter the details of each appliance. If you have more than one, enter the details in the appropriate column, e.g. Unit #1 for the 1st, Unit #2 for the 2nd. If you have more than 2, enter the details of the 2 units that are used most often by your household.

	Unit #1 ▼	Unit #2 ▼	
a) Age (years) If less than 1 year please enter 0	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> </div> years	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> </div> years	
b) On average, how many <u>times a</u> <u>week</u> does your household use each Microwave?	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;"> </div> Times a week	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;"> </div> Times a week	
c) Condition (Mark ● response)	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>	



Ovens (not including microwaves)

B5. How many Ovens do you have in your household?

? If you do not have an Oven enter **0** and skip to next appliance

|

▶ If **0** skip to **B7**

B6. What is the a) age, b) fuel type, c) average use and d) condition of each Oven?

? Please enter the details of each appliance. If you have more than one, enter the details in the appropriate column, e.g. Unit #1 for the 1st, Unit #2 for the 2nd. If you have more than 2, enter the details of the 2 units that are used most often by your household.

	Unit #1 ▼	Unit #2 ▼	
a) Age (years) If less than 1 year please enter 0	<div style="border: 1px solid black; width: 60px; height: 40px; display: flex; align-items: center; justify-content: center;"> </div> years	<div style="border: 1px solid black; width: 60px; height: 40px; display: flex; align-items: center; justify-content: center;"> </div> years	
b) What fuel type is used to power each of these appliances? (Mark ● response)	Electricity <input type="radio"/> Gas <input type="radio"/> Wood <input type="radio"/>	Electricity <input type="radio"/> Gas <input type="radio"/> Wood <input type="radio"/>	
c) On average, how many <u>hours</u> <u>per week</u> does your household use each Oven?	<div style="border: 1px solid black; width: 80px; height: 40px; display: flex; align-items: center; justify-content: center;"> </div> Hours per week	<div style="border: 1px solid black; width: 80px; height: 40px; display: flex; align-items: center; justify-content: center;"> </div> Hours per week	
d) Condition (Mark ● response)	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>	



Cooktops / Stoves

B7. How many Cooktops / Stoves do you have in your household?

? If you do not have a Cooktop / Stove enter **0** and skip to next appliance

|

▶ If **0** skip to **B9**

B8. What is the a) age, b) fuel type, c) average use and d) condition of each Cooktop / Stove?

? Please enter the details of each appliance. If you have more than one, enter the details in the appropriate column, e.g. Unit #1 for the 1st, Unit #2 for the 2nd. If you have more than 2, enter the details of the 2 units that are used most often by your household.

	Unit #1 ▼	Unit #2 ▼	
a) Age (years) If less than 1 year please enter 0	<div style="border: 1px solid black; width: 60px; height: 30px; display: flex; align-items: center; justify-content: center;"> </div> years	<div style="border: 1px solid black; width: 60px; height: 30px; display: flex; align-items: center; justify-content: center;"> </div> years	
b) What fuel type is used to power each of these appliances? (Mark ● response)	Electricity <input type="radio"/> Gas <input type="radio"/> Wood <input type="radio"/>	Electricity <input type="radio"/> Gas <input type="radio"/> Wood <input type="radio"/>	
c) On average, how many hours per week does your household use each Cooktop / Stove?	<div style="border: 1px solid black; width: 80px; height: 30px; display: flex; align-items: center; justify-content: center;"> </div> Hours per week	<div style="border: 1px solid black; width: 80px; height: 30px; display: flex; align-items: center; justify-content: center;"> </div> Hours per week	
d) Condition (Mark ● response)	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>	



Air Conditioners (including split/reverse cycle)

B9. How many Air Conditioners do you have in your household?

? If you do not have an Air Conditioner enter **0** and skip to next appliance

-

▶ If **0** skip to **B11**

B10. What is the a) age, b) average use, c) condition and d) type of each Air Conditioner?

? Please enter the details of each appliance. If you have more than one, enter the details in the appropriate column, e.g. Unit #1 for the 1st, Unit #2 for the 2nd. If you have more than 2, enter the details of the 2 units that are used most often by your household.

	Unit #1 ▼	Unit #2 ▼
a) Age (years) If less than 1 year please enter 0	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> - </div> years	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> - </div> years
b1) On average, how many <u>hours per week</u> does your household use each air conditioner in summer ?	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;"> - - - </div> Hours per week in summer	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;"> - - - </div> Hours per week in summer
b2) On average, how many <u>hours per week</u> does your household use each air conditioner in winter ?	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;"> - - - </div> Hours per week in winter	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;"> - - - </div> Hours per week in winter
c) Condition (Mark ● response)	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>
d1) Type of air conditioner	Split system <input type="radio"/> Window wall <input type="radio"/> Ducted <input type="radio"/> Small/Portable <input type="radio"/> Other (specify below !)* <input type="radio"/> *other: _____	Split system <input type="radio"/> Window wall <input type="radio"/> Ducted <input type="radio"/> Small/Portable <input type="radio"/> Other (specify below !)* <input type="radio"/> *other: _____
d2) Is the unit used for heating?	Yes <input type="radio"/> No – cooling only <input type="radio"/>	Yes <input type="radio"/> No – cooling only <input type="radio"/>



Heating units

B11. How many Heating units (e.g. Central, Slab, Electric, Oil, Gas, Reverse Cycle, Portable heater, Wood fire heating) do you have in your household?

? If you do not have a Heating unit enter **0** and skip to next appliance

|

▶ If **0** skip to **B13**

B12. What is the a) age, b) type of each Heating unit c) fuel type, d) average use and e) condition?

? Please enter the details of each appliance. If you have more than one, enter the details in the appropriate column, e.g. Unit #1 for the 1st, Unit #2 for the 2nd, Unit #3 for the 3rd. If you have more than 3, enter the details of the 3 units that are used most often by your household.

	Unit #1 ▼	Unit #2 ▼	Unit #3 ▼
a) Age (years) If less than 1 year please enter 0	<div style="border: 1px solid black; width: 80px; height: 35px; margin: 0 auto; text-align: center;"> </div> years	<div style="border: 1px solid black; width: 80px; height: 35px; margin: 0 auto; text-align: center;"> </div> years	<div style="border: 1px solid black; width: 80px; height: 35px; margin: 0 auto; text-align: center;"> </div> years
b) Type of heating unit	Ducted <input type="radio"/> Bar Heater <input type="radio"/> Column Oil <input type="radio"/> Portable <input type="radio"/> Reverse Cycle <input type="radio"/> Wood fire <input type="radio"/> Other (specify below)* <input type="radio"/> *other: _____	Ducted <input type="radio"/> Bar Heater <input type="radio"/> Column Oil <input type="radio"/> Portable <input type="radio"/> Reverse Cycle <input type="radio"/> Wood fire <input type="radio"/> Other (specify below)* <input type="radio"/> *other: _____	Ducted <input type="radio"/> Bar Heater <input type="radio"/> Column Oil <input type="radio"/> Portable <input type="radio"/> Reverse Cycle <input type="radio"/> Wood fire <input type="radio"/> Other (specify below)* <input type="radio"/> *other: _____
c) What fuel type is used to power each of these appliances?	Electricity <input type="radio"/> Gas <input type="radio"/> Oil <input type="radio"/> Wood <input type="radio"/>	Electricity <input type="radio"/> Gas <input type="radio"/> Oil <input type="radio"/> Wood <input type="radio"/>	Electricity <input type="radio"/> Gas <input type="radio"/> Oil <input type="radio"/> Wood <input type="radio"/>
Continued on next page			



	Unit #1 ▼	Unit #2 ▼	Unit #3 ▼
d1) On average, how many <u>hours per week</u> does your household use each Heating Unit in winter ?	 Hours per week in winter	 Hours per week in winter	 Hours per week in winter
d2) On average, how many <u>hours per week</u> does your household use each Heating Unit in summer ?	 Hours per week in summer	 Hours per week in summer	 Hours per week in summer
e) Condition (Mark ● response)	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>



Hot Water Service

B13. How many Hot Water Service units do you have in your household?

? If you do not have a Hot Water Service enter **0** and skip to next appliance

-

▶ If **0** skip to **B15**

B14. What is the a) age, b) fuel type, and c) type of each Hot Water Service unit?

? Please enter the details of each appliance. If you have more than one, enter the details in the appropriate column, i.e.. Unit #1 for the 1st, Unit #2 for the 2nd. If you have more than 2, enter the details of the 2 units that are used most often by your household.

	Unit #1 ▼	Unit #2 ▼
a) Age (years) If less than 1 year please enter 0	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> - </div> years	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> - </div> years
b) What fuel type is used to power or boost each of these appliances? (Mark <input checked="" type="radio"/> all that apply)	Electricity <input type="radio"/> Gas <input type="radio"/> Oil <input type="radio"/> Solar: gas booster <input type="radio"/> Solar: electric booster <input type="radio"/> Heat Pump <input type="radio"/> Wood <input type="radio"/>	Electricity <input type="radio"/> Gas <input type="radio"/> Oil <input type="radio"/> Solar: gas booster <input type="radio"/> Solar: electric booster <input type="radio"/> Heat Pump <input type="radio"/> Wood <input type="radio"/>
c) Is this unit an instant or stored water device?	Instant <input type="radio"/> Stored <input type="radio"/> Not sure <input type="radio"/> Not applicable <input type="radio"/>	Instant <input type="radio"/> Stored <input type="radio"/> Not sure <input type="radio"/> Not applicable <input type="radio"/>



Clothes Dryers (powered)

B15. How many Clothes Dryers (powered) do you have in your household?

? If you do not have a Dryer enter **0** and skip to next appliance

|

► If **0** skip to **B17**

B16. What is the a) age, b) average use and c) condition of this Clothes Dryer?

? If you have more than 1, please enter the details of the clothes dryer most often used by your household.

	Unit #1 ▼
a) Age (years) If less than 1 year please enter 0	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> </div> years
b1) On average, how many <u>hours</u> per week does your household use this Clothes Dryer in winter ?	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> </div> Hours per week in winter
b2) On average, how many <u>hours</u> per week does your household use this Clothes Dryer in summer ?	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> </div> Hours per week in summer
c) Condition (Mark ● response)	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>



Washing Machines

B17. How many Washing Machines do you have in your household?

? If you do not have a Washing Machine enter **0** and skip to next appliance

|

▶ If **0** skip to **B19**

B18. What is the a) age, b) average use and c) condition and d) type of this Washing Machine?

? If you have more than 1, please enter the details of the Washing Machine most often used by your household.

	Unit #1 ▼	
a) Age (years) If less than 1 year please enter 0	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> </div> years	
b) On average, how many hours per week does your household use this Washing Machine?	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;"> </div> Hours per week	
c) Condition (Mark ● response)	Excellent <input type="radio"/> Good <input type="radio"/> Adequate <input type="radio"/> Poor <input type="radio"/> Unknown <input type="radio"/>	
d) Is this unit a top or front loader?	Top loader <input type="radio"/> Front loader <input type="radio"/> Not sure <input type="radio"/>	



Televisions

B19. How many Televisions do you have in your household?

? If you do not have a Television enter **0** and skip to next appliance

|

▶ If **0** skip to **B21**

B20. What is the a) age, b) average use and c) type of each Television?

? Please enter the details of each appliance. If you have more than one, enter the details in the appropriate column, e.g. Unit #1 for the 1st, Unit #2 for the 2nd, Unit #3 for the 3rd, etc. If you have more than 5, enter the details of the 5 units that are used most often by your household.

	Unit #1 ▼	Unit #2 ▼	Unit #3 ▼	Unit #4 ▼	Unit #5 ▼
a) Age (years) If less than 1 year please enter 0	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> </div> years	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> </div> years	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> </div> years	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> </div> years	<div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 auto; text-align: center;"> </div> years
b) On average, how many <u>hours</u> <u>per week</u> does your household use each Television?	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;"> </div> Hours per week	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;"> </div> Hours per week	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;"> </div> Hours per week	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;"> </div> Hours per week	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;"> </div> Hours per week
c) What type of television is this unit? (Mark ● response)	LCD <input type="radio"/> Plasma <input type="radio"/> CRT <input type="radio"/> Unknown <input type="radio"/>	LCD <input type="radio"/> Plasma <input type="radio"/> CRT <input type="radio"/> Unknown <input type="radio"/>	LCD <input type="radio"/> Plasma <input type="radio"/> CRT <input type="radio"/> Unknown <input type="radio"/>	LCD <input type="radio"/> Plasma <input type="radio"/> CRT <input type="radio"/> Unknown <input type="radio"/>	LCD <input type="radio"/> Plasma <input type="radio"/> CRT <input type="radio"/> Unknown <input type="radio"/>

? Cathode ray tube (CRT) TVs are older model tube box sets

? Plasma TVs generally have a glass screen, while LCD TVs generally have a plastic layer over the screen



Ceiling Fans

B21. How many Ceiling Fans do you have in your household?

? If you do not have a Ceiling Fan please enter 0

Portable Fans

B22. How many Portable Fans do you have in your household?

? If you do not have a Portable Fan please enter 0

Lighting

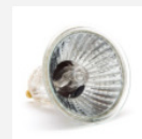
B23. Thinking about lighting, how many of the following do you have in your house?

? If you do not have any of these lights please enter 0

Standard (incandescent) light globes



Halogen lights



LED lights



Energy efficient (CFL) light globes internally



Fluorescent tube lights





Section C - Energy Use Behaviour

C1. How often do you do the following? Please indicate on the following scale, from never to always.

(Mark ● the appropriate response for each item)

	Never ▼	Rarely ▼	Sometimes ▼	Usually ▼	Always ▼
Minimise appliance use in your home to save energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Minimise energy use for <i>heating</i> in your home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Minimise energy use for <i>cooling</i> in your home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Minimise hot water use in your home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Switch off lights in unoccupied rooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C2. How often do you do the following to keep your home warm in winter? Please indicate on the following scale, from never to always.

(Mark ● the appropriate response for each item)

	Never ▼	Rarely ▼	Sometimes ▼	Usually ▼	Always ▼
Close windows	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Draw blinds or curtains when the sun goes down	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open blinds or curtains during the day to let in light and heat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Close doors to keep heat in rooms you are using	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Turn heating up	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



C5. The following is a list of statements that some people make about household energy efficiency information. For each one could you please indicate your opinion using a scale of 1 to 5 (1=strongly disagree and 5=strongly agree)

(Mark ● the appropriate response for each item)

	① Strongly disagree ▼	② Disagree ▼	③ Neither agree nor disagree ▼	④ Agree ▼	⑤ Strongly agree ▼
It is difficult to find information on reducing energy use	①	②	③	④	⑤
I use many different information sources to help reduce energy use	①	②	③	④	⑤
It is difficult to understand information about reducing energy use	①	②	③	④	⑤
Information on how to reduce energy is generally too technical	①	②	③	④	⑤
I do not have enough time to consider most information about reducing energy use	①	②	③	④	⑤



Section D - Attitudes about Energy

D1. The following is a list of statements that some people make about household energy efficiency. For each one could you please indicate your opinion using a scale of 1 to 5 (1=strongly disagree and 5=strongly agree)

(Mark ● the appropriate response for each item)

	① Strongly disagree ▼	② Disagree ▼	③ Neither agree nor disagree ▼	④ Agree ▼	⑤ Strongly agree ▼
Energy efficiency is too much hassle	①	②	③	④	⑤
Energy efficiency means I have to live less comfortably	①	②	③	④	⑤
My quality of life will decrease if I reduce my energy use	①	②	③	④	⑤
Energy efficiency will restrict my freedom	①	②	③	④	⑤
Energy efficiency is not very enjoyable	①	②	③	④	⑤

D2. How comfortable do you generally feel in your home in regards to temperature?

(Mark ● one box only)

Very comfortable

Comfortable

Mixed comfort

Uncomfortable

Very uncomfortable

Not sure

**D3. How would you rate the current energy efficiency level of your home?**

? Scale: 1=Not energy efficient; 5=Very energy efficient

(Mark one box only)

1= Not energy efficient

2

3

4

5=Very energy efficient

Not sure

D4. How empowered do you feel in relation to your energy consumption?

? Scale: 1=Not empowered; 5=Very empowered

(Mark one box only)

1= Not empowered

2

3

4

5=Very empowered

Not sure

D5. How interested are you in conserving energy in your home?

? Scale: 1=Not interested; 5=Very interested

(Mark one box only)

1= Not interested

2

3

4

5=Very interested

Not sure



D6. How in control of your finances do you feel?

? Scale: 1=Not in control; 5=In control

(Mark ● one box only)

1= Not in control

2

3

4

5=In control

Not sure

D7. The following statements relate to attitudes towards energy conservation. On a scale of 1 (strongly disagree) to 5 (strongly agree) please indicate your opinion about the following statements...

(Mark ● the appropriate response for each item)

	① Strongly disagree ▼	② Disagree ▼	③ Neither agree nor disagree ▼	④ Agree ▼	⑤ Strongly agree ▼
It is too difficult for my household to use energy in a better way	①	②	③	④	⑤
I plan to use less energy in my household over the next twelve months	①	②	③	④	⑤
Reducing my household's energy bill will make a big difference to my financial situation	①	②	③	④	⑤
Using less energy will reduce my household's impact on the environment	①	②	③	④	⑤
It is important to me that I pay my energy bills on time	①	②	③	④	⑤
Using less energy will save my household money	①	②	③	④	⑤



D7. The following statements relate to attitudes towards energy conservation. On a scale of 1 (strongly disagree) to 5 (strongly agree) please indicate your opinion about the following statements...

(Mark ● the appropriate response for each item)

	① Strongly disagree ▼	② Disagree ▼	③ Neither agree nor disagree ▼	④ Agree ▼	⑤ Strongly agree ▼
The decision to use less energy in my household is beyond my control	①	②	③	④	⑤
Reducing my household's impact on the environment would be a good thing	①	②	③	④	⑤
Generally speaking, I care greatly how important people in my life think I should use energy	①	②	③	④	⑤
Most people whose opinions I value would approve if I used less energy	①	②	③	④	⑤
Using less energy will make it much easier to pay my energy bills on time	①	②	③	④	⑤

D8. How much do you feel you know about each of the following issues...

(Mark ● the appropriate response for each item)

	① Nothing ▼	② A little ▼	③ A moderate amount ▼	④ A lot ▼	⑤ Expert ▼
Energy efficiency	①	②	③	④	⑤
How much energy your household uses	①	②	③	④	⑤
Energy prices	①	②	③	④	⑤



Section E - Household Characteristics

E1. In what year were you born?

E2. Including yourself, how many people live in your household?

▶ If 1 skip to E4

E3. Including yourself, please indicate how many people in each age group permanently reside at your house?

Age group 0 - 9 Years

Age group 10 - 19 Years

Age group 20 - 29 Years

Age group 30 - 39 Years

Age group 40 - 49 Years

Age group 50 - 59 Years

Age group 60 - 69 Years

Age group 70 - 79 Years

Age group 80 - 89 Years

Age group 90 - 99 Years

Age group 100+ Years



E4. What is the primary language spoken in your household?

(Mark one box only)

English

Other (please specify below ↵)*

*Please specify other: _____

E5. In what country were you born?

(Mark one box only)

Australia

Other (please specify below ↵)*

*Please specify other: _____

E6. What is the level of the highest qualification you have completed?

(Mark one box only)

Primary school

High school – year 10

High school – year 12


TAFE

Tertiary

Other (please specify below ↵)*

*Please specify other: _____

E7. How long have you lived at your current address?

 If less than 1 year please enter 0 below

--

**E8. Are you of Aboriginal or Torres Strait Islander origin?**

(Mark all that apply)

Yes, Aboriginal

Yes, Torres Strait Islander

No, neither

Rather not say

E9. It is very important that we are able to compare responses across different income groups. Therefore, can you please indicate the approximate total annual income of all members of your household last financial year before tax?

? This information is confidential and will only be used for statistical purposes

(Mark one box only)

\$10,399 or less (\$199 or less per week)

\$10,400 - \$15,599 (\$200-\$299 per week)

\$15,600 - \$20,799 (\$300-\$399 per week)

\$20,800-\$31,199 (\$400-\$599 per week)

\$31,200-\$41,599 (\$600-\$799 per week)

\$41,600-\$51,999 (\$800-\$999 per week)

\$52,000-\$64,999 (\$1,000-\$1,249 per week)

\$65,000-\$77,999 (\$1,250-\$1,499 per week)

\$78,000-\$103,999 (\$1,500-\$1,999 per week)

\$104,000 or more (\$2,000 or more per week)

Don't know

Rather not say



Section F - Energy Efficiency Assessment

F1. Date of Home Energy Assessment (D/M/Y)

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F2. Which of the following energy measures were recommended as part of the Glenelg SAVES program?

(Mark ● the appropriate response for each item)

Ⓨ = Yes

Ⓝ = No

ⓓ = Does not apply

Issue	Action	Agreed to be actioned as part of the Glenelg SAVES program?
Hot Water		
Washes clothes in hot water	Turn off hot tap	Ⓨ Ⓝ ⓓ
	Only wash full loads	Ⓨ Ⓝ ⓓ
	Set machine to cold wash	Ⓨ Ⓝ ⓓ
Large Showerhead	Replace with low flow shower head	Ⓨ Ⓝ ⓓ
	Reduce shower times	Ⓨ Ⓝ ⓓ
Washes dishes under running water	Install tap aerator	Ⓨ Ⓝ ⓓ
	Use plug	Ⓨ Ⓝ ⓓ
Dishwasher	Use Eco function	Ⓨ Ⓝ ⓓ
	Only wash full loads	Ⓨ Ⓝ ⓓ
Other hot water recommendations? (please detail)	1.	
	2.	
	3.	
	4.	
	5.	



Issue	Action	Agreed to be actioned as part of the Glenelg SAVES program?
Heating		
No insulation	Install insulation	(Y) (N) (D)
	Close doors to keep one room warm	(Y) (N) (D)
Drafty house	Fill gaps and cracks	(Y) (N) (D)
	Heat yourself first, put on a jumper	(Y) (N) (D)
House gets too hot	Set thermostat to most efficient temp	(Y) (N) (D)
	Close curtain at night to keep heat in	(Y) (N) (D)
No thermostat	Use a thermometer	(Y) (N) (D)
	Open curtain in the day to let heat in	(Y) (N) (D)
Uses a portable heater	Reduce use	(Y) (N) (D)
	Use a fixed heater	(Y) (N) (D)
Other heating recommendations? (please detail)	1.	
	2.	
	3.	
	4.	
	5.	



Issue	Action	Agreed to be actioned as part of the Glenelg SAVES program?
Cooling		
No insulation	Install insulation	(Y) (N) (D)
	Shade windows to avoid heat coming in	(Y) (N) (D)
Drafty house	Fill gaps and cracks	(Y) (N) (D)
	Keep curtains closed during the day	(Y) (N) (D)
House gets too cold	Set thermostat to most efficient temp	(Y) (N) (D)
	Close doors to cool one room	(Y) (N) (D)
No thermostat	Use a thermometer	(Y) (N) (D)
	Open windows at night to cool the house	(Y) (N) (D)
	Fit external awnings on west and north windows	(Y) (N) (D)
Lack of fans	Install ceiling fan(s)	(Y) (N) (D)
	Install portable fan(s)	(Y) (N) (D)
Other cooling recommendations? (please detail)	1.	
	2.	
	3.	
	4.	
	5.	



Issue	Action	Agreed to be actioned as part of the Glenelg SAVES program?
Clothes Drying		
Excessive use of the dryer	Dry clothes on the line	(Y) (N) (D)
	Use a clothes horse if it is raining	(Y) (N) (D)
	Only dry full loads	(Y) (N) (D)
Other clothes drying recommendations? (please detail)	1.	
	2.	
	3.	
	4.	
	5.	



Issue	Action	Agreed to be actioned as part of the Glenelg SAVES program?
Lighting		
Halogen downlights	Limit use of downlights	(Y) (N) (D)
	Replace with LEDs	(Y) (N) (D)
	Replace with CFL bulbs	(Y) (N) (D)
	Use daylight when possible	(Y) (N) (D)
	Use lamps if possible	(Y) (N) (D)
Incandescent bulbs	Replace with CFL bulbs	(Y) (N) (D)
	Turn off lights when not in use	(Y) (N) (D)
Other lighting recommendations? (please detail)	1.	
	2.	
	3.	
	4.	
	5.	



Issue	Action	Agreed to be actioned as part of the Glenelg SAVES program?
Appliances		
Fridge	Set fridge and freezer to the correct temperature	(Y) (N) (D)
	Don't put hot food in the fridge	(Y) (N) (D)
	Check seals are working properly	(Y) (N) (D)
	Keep doors closed when possible	(Y) (N) (D)
Standby power	Turn off appliances that are not in use	(Y) (N) (D)
	Use a standby power controller if needed	(Y) (N) (D)
Other appliance recommendations? (please detail)	1.	
	2.	
	3.	
	4.	
	5.	

Other energy efficiency recommendations		
Other recommendations? (please detail)	1.	
	2.	
	3.	
	4.	
	5.	
	6.	
	7.	



F3. You have now reached the end of the survey. Is there anything else you would like to add?

A large rectangular area with a solid black border, containing 25 horizontal dashed lines for writing.

Thank you for your time and participation

We will contact you about the follow-up survey in about 12 months time.

Appendix H: Follow-up Survey

Blank Survey

Glenelg **SAVES**

Low Income Energy Efficiency Program (LIEEP)

HACC Clients Follow-up Survey

***Please return your completed survey in
the enclosed envelope to:***

Maureen Crisp, Project Officer
Glenelg Shire; Aged & Disability Services

PO Box 152
Portland, Vic, 3305



***"This activity received funding from the Department of Industry and Science as
part of the Low Income Energy Efficiency Program."***



Blank Survey

Contact Details

Important:

- Please only use this blank survey if you are unable to source the matching survey for this participant.
 - Ensure that the following contact details are provided.
-

Name: _____
(your name - please print)

Address: _____

Town: _____

Postcode: _____

Phone: _____

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Survey # (office use only)

Before you begin...

1. Selecting answers:

When selecting an answer from the categories provided, please mark:

Like this: Not like this:

2. Corrections:

If you make a mistake or need to change your answer please cross out the incorrect response like this:



3. Important – use a pen:

Please use a black or blue pen and print clearly



Do not use a pencil or highlighter pen



4. If you cannot answer a question, please leave the answer blank

START HERE:

Are you still living at the same address as you were when you first took part in the Glenelg SAVES program?

(Mark one box only)

Yes

No ► **Terminate Survey***

*Please return all documentation to the address provided.

A3. Now looking at your electricity bills, please record the total amount of your bills over the last 12 months (you will need to add up the amount due on each bill excluding any amounts overdue from previous bills). If you cannot find your electricity bills for the last 12 months, please take your best guess of the amount you paid. *If unsure please leave blank.*

? Please round off to whole dollars (i.e. do not include cents). E.g. \$1,000.23 = \$1,000

\$ - amount
(before concessions or rebates)

Electricity bills (total for last 12 months) \$

--

 ,

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A4. Does your house have a gas connection (i.e. mains connected or bottled gas)?

(Mark one box only)

Yes

No ▶ Skip to B1

Not sure ▶ Skip to B1

A5. What sort of gas connection do you have?

(Mark all that apply)

Reticulated gas (i.e. mains connected)

Bottled gas

Not sure ▶ Skip to B1

A6. How do you believe your household's current gas use compares with your gas use before you joined the Glenelg SAVES program?

(Mark ● one box only)

Much higher (more than 10% increase)

Slightly higher (1-10% increase)

About the same ▶ Skip to A8

Slightly lower (1-10% decrease)

Much lower (more than 10% decrease)

Did not have a gas connection before joining the program

Not sure ▶ Skip to A8

A7. What do you believe are the main reasons your household's gas use has changed since joining the program?

A8. Now looking at your gas bills, please record the total amount of your bills over the last 12 months (you will need to add up the amount due on each bill excluding any amounts overdue from previous bills). If you cannot find your gas bills for the last 12 months, please take your best guess of the amount you paid. If unsure please leave blank.

🔍 Please round off to whole dollars (i.e. do not include cents). E.g. \$1,000.23 = \$1,000

\$ - amount
(before concessions or rebates)

Gas bills (total for last 12 months)

\$

--	--

,

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Section B - Energy Use Behaviour

The next questions look at how you use energy in your household. There are no right or wrong answers.

B1. Which of the following changes have you made to your residence since taking part in the Glenelg SAVES program?

(Mark ● the appropriate response for each item)

	Yes ▼	No ▼	Not Sure ▼
Replaced heater/cooler/air conditioner with a more energy efficient model	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Replaced major whitegood with a more energy efficient model	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Replaced hot water system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Installed solar hot water system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Installed solar electricity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Installed insulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Installed ceiling fans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Installed double glazed windows	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Installed louvre windows	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Installed more energy efficient light globes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Installed external blinds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Installed internal blinds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other energy related changes (please specify below ↙)*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Please specify other:

1.

2.

3.

4.

5.

B2. How often do you do the following? Please indicate on the following scale, from never to always.

(Mark ● the appropriate response for each item)

	Never ▼	Rarely ▼	Sometimes ▼	Usually ▼	Always ▼
Minimise appliance use in your home to save energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Minimise energy use for <i>heating</i> in your home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Minimise energy use for <i>cooling</i> in your home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Minimise hot water use in your home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Switch off lights in unoccupied rooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B3. How often do you do the following to keep your home warm in winter? Please indicate on the following scale, from never to always.

(Mark ● the appropriate response for each item)

	Never ▼	Rarely ▼	Sometimes ▼	Usually ▼	Always ▼
Close windows	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Draw blinds or curtains when the sun goes down	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open blinds or curtains during the day to let in light and heat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Close doors to keep heat in rooms you are using	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Turn heating up	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B4. How often do you do the following to keep your home cool in summer? Please indicate on the following scale, from never to always.

(Mark ● the appropriate response for each item)

	Never ▼	Rarely ▼	Sometimes ▼	Usually ▼	Always ▼
Close windows during hot days to keep cool air inside	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open blinds or curtains when the sun goes down	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open windows during the evening to allow cross ventilation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section C - Attitudes about Energy

The following questions ask your opinions about energy use. There are no right or wrong answers.

C1. The following is a list of statements that some people make about household energy efficiency. For each one could you please indicate your opinion using a scale of 1 to 5 (1=strongly disagree and 5=strongly agree)

(Mark ● the appropriate response for each item)

	① Strongly disagree ▼	② Disagree ▼	③ Neither agree nor disagree ▼	④ Agree ▼	⑤ Strongly agree ▼
Energy efficiency means I have to live less comfortably	①	②	③	④	⑤
Energy efficiency is too much hassle	①	②	③	④	⑤
Energy efficiency is not very enjoyable	①	②	③	④	⑤
My quality of life will decrease if I reduce my energy use	①	②	③	④	⑤
Energy efficiency will restrict my freedom	①	②	③	④	⑤

C2. How comfortable do you generally feel in your home in regards to temperature?

(Mark ● one box only)

Very comfortable

Comfortable

Mixed comfort

Uncomfortable

Very uncomfortable

Not sure

C3. How would you rate the current energy efficiency level of your home?

? Scale: 1=Not energy efficient; 5=Very energy efficient

(Mark ● one box only)

1= Not energy efficient

2

3

4

5=Very energy efficient

Not sure

C4. How empowered do you feel in relation to your energy consumption?

? Scale: 1=Not empowered; 5=Very empowered

? Empowered means confidence in being able to control your household energy use

(Mark ● one box only)

1= Not empowered

2

3

4

5=Very empowered

Not sure

C5. How interested are you in conserving energy in your home?

? Scale: 1=Not interested; 5=Very interested

(Mark ● one box only)

1= Not interested

2

3

4

5=Very interested

Not sure

C6. How in control of your general finances do you feel?

? Scale: 1=Not in control; 5=In control

(Mark ● one box only)

1= Not in control

2

3

4

5=In control

Not sure

C7. The following statements relate to attitudes towards energy conservation. On a scale of 1 (strongly disagree) to 5 (strongly agree) please indicate your opinion about the following statements...

(Mark ● the appropriate response for each item)

	①		③		⑤
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	▼	▼	▼	▼	▼

It is important to me that I pay my energy bills on time	①	②	③	④	⑤
--	---	---	---	---	---

Reducing my household's impact on the environment would be a good thing	①	②	③	④	⑤
---	---	---	---	---	---

Reducing my household's energy bill will make a big difference to my financial situation	①	②	③	④	⑤
--	---	---	---	---	---

The decision to use less energy in my household is beyond my control	①	②	③	④	⑤
--	---	---	---	---	---

Using less energy will reduce my household's impact on the environment	①	②	③	④	⑤
--	---	---	---	---	---

C7. The following statements relate to attitudes towards energy conservation. On a scale of 1 (strongly disagree) to 5 (strongly agree) please indicate your opinion about the following statements...

(Mark ● the appropriate response for each item)

	① Strongly disagree ▼	② Disagree ▼	③ Neither agree nor disagree ▼	④ Agree ▼	⑤ Strongly agree ▼
It is too difficult for my household to use energy in a better way	①	②	③	④	⑤
Using less energy will make it much easier to pay my energy bills on time	①	②	③	④	⑤
Energy efficiency means I have to live less comfortably	①	②	③	④	⑤
I plan to use less energy in my household over the next twelve months	①	②	③	④	⑤
Using less energy will save my household money	①	②	③	④	⑤
Most people whose opinions I value would approve if I used less energy	①	②	③	④	⑤

C8. How much do you feel you know about each of the following issues...

(Mark ● the appropriate response for each item)

	① Nothing ▼	② A little ▼	③ A moderate amount ▼	④ A lot ▼	⑤ Expert ▼
Energy efficiency	①	②	③	④	⑤
How much energy your household uses	①	②	③	④	⑤
Energy prices	①	②	③	④	⑤

C9. The following is a list of statements that some people make about household energy efficiency information. For each one could you please indicate your opinion using a scale of 1 to 5 (1=strongly disagree and 5=strongly agree)

(Mark ● the appropriate response for each item)

	① Strongly disagree ▼	② Disagree ▼	③ Neither agree nor disagree ▼	④ Agree ▼	⑤ Strongly agree ▼
Information on how to reduce energy is generally too technical	①	②	③	④	⑤
It is difficult to find information on reducing energy use	①	②	③	④	⑤
I use many different information sources to help reduce energy use	①	②	③	④	⑤
It is difficult to understand information about reducing energy use	①	②	③	④	⑤
I do not have enough time to consider most information about reducing energy use	①	②	③	④	⑤

Section D - Household Characteristics

The next section is about you and your household. This information will only be used to compare groups and to make sure we have surveyed a good cross-section of clients.

D1. Since joining the Glenelg SAVES program has there been a change in the people who live in your household on a regular basis?

? This includes either a change in the people living in the household or the number of residents

(Mark one box only)

Yes

No ▶ Skip to D4

Not sure ▶ Skip to D4

D2. Including yourself, how many people have generally lived in your household since you took part in the Glenelg SAVES program?

▶ If 1 skip to D4

D3. Including yourself, please indicate how many people in each age group permanently reside at your house?

Age group 0 - 9 Years

Age group 10 - 19 Years

Age group 20+ Years

D4. How many weeks of the year has your house been occupied since joining the Glenelg SAVES program?

(Enter 52 weeks if occupied all year round)

weeks

Section E - Energy Efficiency Assessment

E1. Below is a list of reasons which may have influenced your decision to take part in the Glenelg SAVES program. What were the major reasons why you decided to take part in the program?

(Mark all that apply)

- Reduce energy bill / save money
- Sustainability concerns (e.g. sustainable management of resources)
- Save Energy
- Financial support for an energy efficiency purchase
- Learn more about energy characteristics of my home
- Evaluate the efficiency of my home
- Friend(s)/Relative(s) advised me to join the program
- Climate change concerns (e.g. reduce carbon emissions)
- HACC Staff member advised me to join the program
- Other HACC Client(s) advised me to join the program
- Other (please specify below ↵)*

*Please specify other: _____

E2. Listed below are some statements about the Home Energy Assessment. Using a scale of 1 to 5 (1=strongly disagree and 5=strongly agree), please indicate your opinion on each of the following statements:

(Mark the appropriate response for each item)

	① Strongly disagree ▼	② Disagree ▼	③ Neither agree nor disagree ▼	④ Agree ▼	⑤ Strongly agree ▼
Communication with the assessor before the energy assessment was excellent	①	②	③	④	⑤
The energy assessment was easy to schedule	①	②	③	④	⑤

E2. Listed below are some statements about the Home Energy Assessment. Using a scale of 1 to 5 (1=strongly disagree and 5=strongly agree), please indicate your opinion on each of the following statements:

(Mark ● the appropriate response for each item)

	① Strongly disagree ▼	② Disagree ▼	③ Neither agree nor disagree ▼	④ Agree ▼	⑤ Strongly agree ▼
The energy assessment was comprehensive	①	②	③	④	⑤
The energy assessor was knowledgeable about ways to reduce energy	①	②	③	④	⑤
The recommendations made by the assessor were easy to understand	①	②	③	④	⑤
The recommendations made by the assessor were useful	①	②	③	④	⑤
The energy assessor had your best interests at heart	①	②	③	④	⑤
Information about financial support for an energy efficiency purchase was easy to understand	①	②	③	④	⑤

E3. Your Home Energy Assessor recommended a number of ways you could reduce your energy use. Did you...

(Mark ● one box only)

Carry out all or most of the actions ► **Skip to E5**

Carry out some but not all actions ► **Skip to E5**

Carry out none of the actions

Do not recall identifying actions

E4. What were the major reason(s) why you have not carried out any of the actions from your energy efficiency assessment?

? Please **skip to E6** after responses have been collected for this question

(Mark all that apply)

Required too much effort/hassle/too difficult

Did not understand how to do it

Too basic

Changes would reduce my household's comfort level

I am planning to do it in the future

Financial Considerations (too expensive)

No Time

I don't believe the recommended changes would result in energy savings

Other (please specify below ↵)*

*Please specify other: _____

SKIP to E6 (page 19)

E5. Which of the following actions have you undertaken since receiving your home energy assessment?

(Mark all that apply)

Issue	Action	Undertaken since Home Energy Assessment? ▼
Washes clothes in hot water	Turn off hot tap	<input type="radio"/>
	Only wash full loads	<input type="radio"/>
	Set machine to cold wash	<input type="radio"/>
Large Showerhead	Replace with low flow shower head	<input type="radio"/>
	Reduce shower times	<input type="radio"/>
Washes dishes under running water	Install tap aerator	<input type="radio"/>
	Use plug	<input type="radio"/>
Dishwasher	Use Eco function	<input type="radio"/>
	Only wash full loads	<input type="radio"/>
No insulation	Install insulation	<input type="radio"/>
	Close doors to keep one room warm	<input type="radio"/>
Drafty house	Fill gaps and cracks	<input type="radio"/>
	Heat yourself first, put on a jumper	<input type="radio"/>
House gets too hot	Set thermostat to most efficient temp	<input type="radio"/>
	Close curtain at night to keep heat in	<input type="radio"/>
No thermostat	Use a thermometer	<input type="radio"/>
	Open curtain in the day to let heat in	<input type="radio"/>
Uses a portable heater	Reduce use	<input type="radio"/>
	Use a fixed heater	<input type="radio"/>
No insulation	Install insulation	<input type="radio"/>
	Shade windows to avoid heat coming in	<input type="radio"/>
Drafty house	Fill gaps and cracks	<input type="radio"/>
	Keep curtains closed during the day	<input type="radio"/>
House gets too cold	Set thermostat to most efficient temp	<input type="radio"/>
	Close doors to cool one room	<input type="radio"/>
No thermostat	Use a thermometer	<input type="radio"/>
	Open windows at night to cool the house	<input type="radio"/>
	Fit external awnings on west and north windows	<input type="radio"/>
Lack of fans	Install ceiling fan(s)	<input type="radio"/>
	Install portable fan(s)	<input type="radio"/>

Issue	Action	Undertaken since Home Energy Assessment? ▼
Excessive use of the dryer	Dry clothes on the line	○
	Use a clothes horse if it is raining	○
	Only dry full loads	○
Halogen downlights	Limit use of downlights	○
	Replace with LEDs	○
	Replace with CFL bulbs	○
	Use daylight when possible	○
	Use lamps if possible	○
Incandescent bulbs	Replace with CFL bulbs	○
	Turn off lights when not in use	○
Fridge	Set fridge and freezer to the correct temperature	○
	Don't put hot food in the fridge	○
	Check seals are working properly	○
	Keep doors closed when possible	○
Standby power	Turn off appliances that are not in use	○
	Use a standby power controller if needed	○
Other	Other (please specify below ↙)*	○

*Please specify other:

1.
2.
3.
4.
5.
6.
7.

E6. Which of the following statements describe the actions you would have taken on your own home if you did not

take part in the Glenelg SAVES program:

(Mark all that apply)

- Would not have implemented any energy efficiency changes
- Would have done some repairs on equipment or your home
- Would have postponed energy efficiency changes by more than one year
- Would have made fewer energy efficiency changes
- Would have made exactly the same energy efficiency changes
- Would have made less energy efficient changes

E7. Since joining the Glenelg SAVES program, have you discussed or shared ideas on how to save energy with other people you know?

(Mark one box only)

- Yes
- No
- Not sure

E8. Have you made any extra purchases outside the Glenelg SAVES program to increase the energy efficiency of your home since receiving your Home Energy Assessment?

? This does not include any purchases made through program.

(Mark one box only)

- Yes
- No ► Skip to F1
- Not sure ► Skip to F1

E9. How likely would you have been to make these purchases if you had not received a Glenelg SAVES Home Energy Assessment?

(Mark ● one box only)

Very likely

Likely

Neither likely nor unlikely

Unlikely

Very unlikely

Not sure

Section F - Program Satisfaction

The next section is about your satisfaction with taking part in the Glenelg SAVES program.

F1. Please indicate how strongly you agree or disagree with the following statements about your participation in the Glenelg SAVES program (1=strongly disagree, 5=strongly agree)

(Mark the appropriate response for each item)

	<input type="radio"/> 1 Strongly disagree ▼	<input type="radio"/> 2 Disagree ▼	<input type="radio"/> 3 Neither agree nor disagree ▼	<input type="radio"/> 4 Agree ▼	<input type="radio"/> 5 Strongly agree ▼
My decision to take part in the Glenelg SAVES program was a wise one	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
I am delighted with my experience of taking part in the Glenelg SAVES program	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Overall, I am satisfied with what I received from the Glenelg SAVES program	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
I believe I did the right thing by taking part in the Glenelg SAVES program	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

F2. Did you purchase or receive any products (appliances, blinds, light bulbs, showerheads, insulation or other household items) through the Glenelg SAVES program?

(Mark one box only)

Yes

No ► Skip to G1

Not sure ► Skip to G1

F3. Thinking about the quality and price of the product(s) you received through the program, on a scale of 1 to 5 (1=strongly disagree and 5=strongly agree), could you please indicate your opinion regarding each of the following statements.

? There are no right or wrong answers, we are only after your opinion

The product(s) I received through the Glenelg SAVES program...

(Mark ● the appropriate response for each item)

	① Strongly disagree ▼	② Disagree ▼	③ Neither agree nor disagree ▼	④ Agree ▼	⑤ Strongly agree ▼
Are very well made	①	②	③	④	⑤
Work as they should	①	②	③	④	⑤
Will last a long time	①	②	③	④	⑤
Were reasonably priced	①	②	③	④	⑤
Were easy to get installed	①	②	③	④	⑤
Have improved my comfort at home	①	②	③	④	⑤
Will save me money in the long run	①	②	③	④	⑤

F4. Which of the following statements describe the actions you would have taken if the Glenelg SAVES program's support for obtaining energy efficiency products was not available:

(Mark all that apply)

- Would not have made any energy efficiency purchases
- Would have done some repairs on equipment or your home
- Would have postponed energy efficiency purchases by more than one year
- Would have made fewer energy efficiency purchases
- Would have made exactly the same energy efficiency purchases
- Would have bought less energy efficient products

Section G - Further Information

G1. Please list any other changes not covered in this survey that might have influenced energy use in your home since joining the Glenelg SAVES program?

? Please consider any appliance purchases/replacements or changes to the number of people living in your household.

A large rectangular area with a solid black border, containing 25 horizontal dashed lines for writing.

G2. You have now reached the end of the survey. What improvements would you recommend for future programs?

A large rectangular area with a black border, containing 25 horizontal dashed lines for writing.

Thank you for your time and participation in the Glenelg SAVES program

Thank you for taking the time to
complete this survey and for
taking part in Glenelg SAVES.

Your assistance in providing this information is very much appreciated

If you have any questions about this study please call us on
(03) 5522-2200 or e-mail: mcrisp@glenelg.vic.gov.au

Appendix I: Introduction to Social Research & Interviewing (DVD Note Booklet)

Introduction to Social Research & Interviewing

DVD Note Booklet

Please make notes in this booklet as you go through the contents on the accompanying DVD.

These notes will help you with undertaking surveys for the Glenelg SAVES project.



"This activity received funding from the Department of Industry as part of the Low Income Energy Efficiency Program."

Overview

- Section 1
 - Background to the study
- Section 2
 - The research process
 - Data collection
- Section 3
 - The role of the interviewer
 - Conducting the interview
 - Types of questions & probing
- Section 4
 - The Glenelg SAVES Survey

Presenters

Craig Hurley

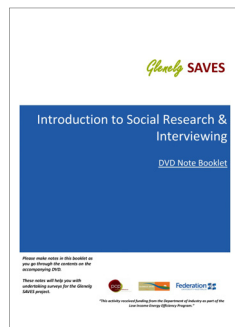
- Manager, National Centre for Sustainability at Federation University Australia (NCS-FedUni)
- Project Manager (FedUni), Glenelg SAVES

David Lynch

- Research Fellow, Centre for Regional Innovation and Competitiveness (CRIC)
- Manage CRIC's Survey Research Centre



DVD Note Booklet



Section 1

Background to the Study

Glenelg Seniors Achieving Valuable Energy Savings



Glenelg SAVES



- Funded by the Australian Government's Low Income Energy Efficiency Program (LIEEP)
- LIEEP works with groups of support and service providers to test different approaches to improve the energy efficiency of low income households across Australia.

Glenelg SAVES



- Other LIEEP grants include:
 - Brisbane City Council's **Green Wisdom** project
 - Brotherhood of St Laurence's **Home Energy Efficiency Upgrade Project**
 - Environment Victoria's **Future Powered Families**
 - GV Community Energy's **Affordable Energy Efficiency for Low Income Households** (Central Victoria)
 - Kildonan Uniting Care's **Koorie Energy Efficiency Project**
 - Nature Conservation Council of NSW's **Power Savers Challenge**
 - South East Councils Climate Change Alliance's **Low Income Energy Saver Direct Care and Motivators Project** (Victoria)
 - The City of Gosnells' **Switched on Homes (SoHo)** (WA)
 - Northern Grampians Shire Council's **Innovation and Opportunities in Energy Efficiency for Disadvantaged Members of Our Community**
 - The Environment Centre's **Smart Cooling in the Tropics** (NT)

Glenelg SAVES

- Designed to build on existing relationships between Home and Community Care (HACC) staff and their clients.
- Increase capacity and knowledge of HACC workers.
- HACC staff will:
 - use this training to make their own houses more energy efficient
 - provide participating clients with a home energy assessment

Glenelg SAVES

- Roughly 30 HACC workers and 300 HACC clients will participate in this program.
- Data collected will help to evaluate the success of the Glenelg SAVES project and inform future research and public.
- A summary of the study's results will be made available to all participants.



What is involved?

For HACC Workers:

1. Attend an information awareness session
2. Completion of two-day course on Home Sustainability Auditing for Volunteers
3. Completion of a 30 minute baseline paper-based survey about your house, appliances, energy-related attitudes and demographics.
4. Recruitment of 10 HACC clients
5. Undertake an energy assessment with each HACC client participants and completion of the baseline paper-based survey with your client
6. Completion of a 30 minute follow-up survey for your own household and that of your HACC client participants in mid-2015.

What is involved?

For HACC Clients:

1. Receive a free Home Energy Audit from a HACC staff carer.
2. Completion of a 30 minute baseline paper-based survey about your house, appliances, energy-related attitudes and demographics with your HACC staff carer
3. Completion of a 30 minute follow-up survey for with your HACC staff carer in mid-2015.

Section 2

- The research process
- Data collection

Stages in the research process

1. Select aims and objectives
2. Develop research questions
3. Design study
4. Collect data
5. Analyse data
6. Interpret data
7. Inform others

Data collection methods

- Desk research
- Sales data analysis
- Observational studies including audits and mystery shopping.*
- Qualitative research including focus groups and in-depth interviews*
- Quantitative research including door-to-door, telephone and central location interviews* and
- Self-completion studies including mail out and web interviews.

*Interviewer fieldwork is needed for observational studies, qualitative and quantitative techniques.

The interviewing process

Interviewers are vital to the success of research

- The quality of every study is only as good as the interviewing that is done.
- The key purpose of interviewing is to obtain accurate information, which can then be used to inform decision making.
- If the interviewing is not of the highest standard, then the whole study will have no value and could even be damaging if poor decisions are based on poor research.

Research Errors

- Can occur at any stage of the research process.
- A key responsibility of the research team (including interviewers) to minimise errors.



Minimising interviewing errors

- Interviewing errors can include:
 - Interviewer bias;
 - Not following instructions;
 - Not following question order; and
 - Clerical mistakes.
- Any of the above practices will compromise the study's results, leading to inaccurate conclusions being drawn.
- **They are to be avoided at all costs!**

Interviewing – best practice

Make sure you:

- Alert your supervisor to high refusal rates
- Ask questions professionally
- Stick to instructions
- Pay attention to detail in recording answers



Section 3

- The role of the interviewer
- Conducting the interview
- Types of questions & probing

Role of interviewers

Interviewers play three main roles:

1. Creating a conducive atmosphere
2. Doing the interview effectively
3. Recording the information accurately

Creating a conducive atmosphere

- Involves making the initial contact with a potential respondent.
- Makes the potential respondent relaxed, comfortable and positive about participating in the research.
 - The interviewer welcomes and reassures respondents.
 - The interviewer acts responsibly and is a good ambassador for the company, the client and the industry.
 - The interviewer complies with the employing organisation's policies and instructions (in your case, the Glenelg Shire).
- One of the advantages of how the Glenelg SAVES study has been designed is that you will have an existing relationship with respondents.

Doing the interview effectively

- Ask questions of all respondents in the survey in exactly the same way and in a neutral manner.
- Conduct interview according to the briefing given.
- Use time and resources effectively.

Recording information accurately

- The third role is to record correctly all the relevant responses as accurately as possible.
- Completes and submits documentation as directed.

Role of the interviewers

- Interviewers need to have a strong grasp of the following:
 - The purpose of the study
 - Dealing with refusals and problems
 - How to conduct questionnaires and record answers verbatim
 - How to use pre-coded questionnaires and how to record open-ended answers
 - How to clarify non conforming responses
 - How to close an interview / provide reassurances
 - How to complete necessary administration

What attitude is required?

To conduct interviews you need to be able to:

- Deal with people objectively, responsibly and honestly
- Guard against personal bias
- Operate in a positive, affirming manner
- Operate courteously and with sensitivity to the respondents
- Have regard to personal safety
- Understand the need to safeguard people's personal information / data protection

Reliability

An Interviewer needs to be reliable. This means:

- Interviewing the right people according to the project briefing instructions
- Obtaining complete and accurate information
- Working to a schedule, and
- Checking interviews

Role of the Interviewer - summary

- The interviewer's role is to put the respondent at ease, to pose questions in a neutral and consistent way to all respondents and to record data accurately.
- As an interviewer you will be part of a team. You will be using specifically designed questionnaires and following very specific instructions.

Conducting the Interview

- Interviewers are asked to attend a briefing before starting a survey.
- This briefing is to explain:
 - the purpose of the study
 - how the questionnaire is to be administered, and
 - other details relating to the study
- This DVD acts as the briefing for Glenelg SAVES

Types of interviewing

- **Door-to-door interviewing (Glenelg SAVES)**
- Central Location Interviewing
- Business Interviews – face to face
- Telephone Interviewing
- Mystery shopping and other observational studies (e.g. audits)

Door-to-Door interviewing

What is it?

- Door to door interviewing means interviewing people in their own homes.
- It involves face-to-face communication between an interviewer and respondent, during which the interviewer gathers data from the respondent.
- Gathers information by administering the same set of questions in a consistent way to all selected respondents.

Door-to-Door interviewing

Preparing for interviews

- Preparation is a vital ingredient in successful door-to-door surveys



Before the Interview

Before Approaching the Respondent

- Be familiar with the questionnaire.
- Try several practice interviews beforehand.
- You will also gain experience from completing the survey for your own household

How should you approach people?

- General tips for approaching people to take part in a study are:
 - Follow procedures as part of your role as a HACC Worker
 - Speak slowly and clearly
 - Never comment about the person their home
 - Always maintain eye contact
 - Dress in your HACC Worker uniform.
 - Should you call at a household at an inconvenient time, such as during a meal, offer to call back at a more convenient time
 - Thank the people you speak to – whether they complete the survey or not

Ethical Considerations



- The consent of a person to participate in research must not be subject to any coercion
- Particular concern for the Glenelg SAVES study
- Encourage HACC clients to discuss their participation with someone who is able to support them in making their decision
- Where potential participants are especially vulnerable or powerless, ensure HACC clients appoint a participant advocate
- As part of the consent process, strongly inform persons that they will not suffer any negative consequences, such as unfair discrimination, reduction in the level of care or any other disadvantage if they choose not to take part

Appointment of Advocate

- If HACC clients are unsure about participating in this study, please encourage them to:
 - discuss participation with someone who is able to support you in making this decision
 - appoint an advocate (e.g. family member, friend, carer) to consider their participation and if considered appropriate, consent on their behalf (refer informed consent form)

Starting out

- Introduce yourself, the Glenelg SAVES Program and participation requirements.
- Remember that all respondents have the right of refusal.
- Respondents also have the right to terminate an interview at any stage.

Starting Out

- Interviewers should terminate an interview if they believe that an interview is producing false responses or is not being taken seriously. You are in control and may finish at any appropriate place.
- Always provide an accurate estimate of the survey's length.
- The Glenelg SAVES survey is a relatively long survey, it is important to tell this to the respondent

Conducting the Interview

Approaching the respondent

- If you speak and behave as if you know the respondent will co-operate, most will.
- If you can make the interview as much of a conversation as possible it will help.
- **Above all be friendly, natural and positive.**

Approaching Respondents

- People are always a little apprehensive when first approached about anything. The task of the interviewer is simply to remove any apprehension by making a positive friendly introduction and getting the respondent thinking about the survey as quickly as possible.
- If necessary mention that all answers are confidential.
- Emphasise the study's importance.

Responsibilities to respondents

- The purpose of research is to collect and analyse information and not to directly sell or promote goods or services, influence respondents' opinions or engage in other nonresearch activities.
- Respondents' identities must not be revealed without their consent to anyone not directly involved in the research project or used for any non-research purpose.
- Nobody shall be adversely affected or harmed as a direct result of participating in a research study.
- Respondents must be able to check without difficulty the identity and credibility of researchers.
- Respondents' co-operation in a research project is entirely voluntary at all stages; they must not be misled when being asked for their co-operation.

Right to privacy and confidentiality

- Researchers and interviewers must not act in any way which could bring discredit to the research profession or lead to loss of public confidence.
- The respondent has three fundamental rights:
 - The right to decide to participate
 - The right to be assured of anonymity
 - The right to safety in avoiding any physical or mental harm

Identity badges

- When undertaking interviews, it is important that you have an identity badge
- It should include the following:
 - You full name
 - Name of your employing organisation
 - Often a photo and date of issue and expiry is provided on the card; and
 - It is usually laminated
- Face to face interviewers must wear their ID badge in a clear and identifiable position (i.e. pinned to your chest).
- Wear your HACC Worker ID Badge at all times

Dealing with Refusals

- The tough part of the job!
- Aim to limit the number of refusals and to deal with the interviews you do get as effectively as possible.
- The refusal is the hardest problem to overcome. Don't get "hung-up" about it.
- Some people will be rude - don't further antagonise the situation by being rude back.
- Some people don't understand what research is all about – if they ask, tell them you are not selling anything.

Dealing with Refusals



- If the person does not seem willing to take part in the survey, never pressure the person. In some cases, the person may hesitate or decline when more information or reassurance from you is needed. You may then use one of the following possible responses in asking for their participation:

Possible Responses to Refusal Attempts

- Too busy: We can complete the survey at a time that suits you.
- Feel inadequate: The questions are not at all difficult. There are no right or wrong answers.
- Not interested: It's very important that we get the opinions of everyone. Otherwise, the results won't be very useful.
- No one's business: Reinforce confidential nature

The difficult respondent

- Be as polite as you possibly can and explain that you are sorry to have disturbed them.
- Thank them for their time.
- If they are too aggressive forward them on to your supervisor



Don't take it personally

- Be confident when you get a refusal and they are rude. Don't let it upset you. Just thank them and continue your relationship as a HACCC worker.



The abusive respondent

- If you have tried to be as polite as possible and there seems to be no way to end the discussion that you are having with an angry HACC Client, allow them to contact your supervisor immediately.



Administering the interview

Five basic rules:

1. STICK TO THE TOPIC
2. BE NEUTRAL
3. PROJECT A POSITIVE IMAGE
4. BE PROFESSIONAL
5. BE POLITE



The do's and don'ts of administering questionnaires

- There are many do's and don'ts when administering questionnaires.
- If everyone conducted the interviews in a single study in different ways, the results would be severely compromised.



The don'ts of administering surveys



- Don't change the questionnaire wording
- You may be tempted to change the wording of questions to make them clearer to respondents
- A change of wording can very easily change the response obtained
- **Do not change question wording**

The don'ts of administering surveys



Don't change the question order:

- Question sequence is planned for continuity and to promote a conversational atmosphere.
- The sequence is also arranged so that early questions will not influence respondents' answers to later questions.
- Question order must be standard from respondent to respondent.

The do's of administering surveys



Stay neutral

- Interviewers must not influence respondents with their own ideas or opinions.
- Give your undivided attention and respect the opinions of the respondent.
- Never express surprise or any other emotion to a response.
- Even though you probably have an opinion on the subject being discussed, it is very important that you remain completely neutral at all times.

The do's of administering surveys



Repeat misunderstood questions

- Some may misunderstand what is asked. When this happens, repeat the question just as it is printed on the questionnaire.
- If a respondent needs time to think about a question, simply wait. There is no need to press for an immediate answer. If the respondent appears to need reassurance, a neutral conversational remark may be added.
 - "We're just trying to get people's ideas on this" or "There are no right or wrong answers. I'd just like to hear your ideas on it."
 - If the respondent does not give an answer in terms of the words and meaning of the question, move on to the next question. Make a note that the respondent did not understand the question.

The do's of administering surveys



Use all change-over or lead-in statements

- Often the questionnaire will have a lead-in statement, which helps change the scene. When a lead-in appears in the questionnaire, it is very important that you use it.
- Again, all interviewers must ask the questions in the same way to ensure standardisation of interviewing.

Section B - Appliances

The following questions require you to provide details concerning the appliances in your household.

Fridges or Freezers

- B1. How many fridges or freezers (including fridge/freezer combination units) do you have in your household?**
- If you do not have a fridge or freezer enter 0 and skip to next appliance

 ▶ If 0 skip to B3

The do's of administering surveys



Always record exactly what respondents say in their own words – don't put it in your own words

- Write quickly and neatly. Every word is important and the interviewer's job is to record the respondent's answers exactly.
- We will discuss open-ended questions later.

The do's of administering suveys



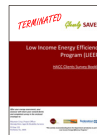
Know what to do if a respondent changes their mind

- If respondents change an opinion, for example, as a result of hearing later questions in the interview, the previous answer must not be changed. However, if there has been a mistake in a factual answer (e.g. age, income), a change to the previous answer may be needed.
- Respondents may seek to qualify or withdraw consent to be interviewed during or after the interview.

Terminated Interviews

A terminated interview does not count

- Return all terminated (i.e. started but not finished) questionnaires to the office, marking them clearly on the front page.
- A terminated interview does not count as part of the sample.



The do's and don'ts – key points

1. Use a separate questionnaire for each respondent
2. Administer the questionnaire exactly instructed
3. Endeavour to interview respondents by themselves
4. Interview the right person in a household
5. Keep respondents on track - don't let them stray from the subject of the interview
6. Do not let respondents see the questionnaire



Interviewer Manner



- Make the respondent feel that his or her contributions are valuable.
- Speak slowly and clearly.
- Remember that for questions concerning opinions/ attitudes, there are no right or wrong answers.
- Do not pause unnecessarily between questions.
- Concentrate on the survey topics and do not allow the respondent to stray.
- Organise call backs.
- Keep your appointments with the respondent without fail.

Completing the Interview

Concluding an interview and recording information

- Before concluding the interview, do not forget to thank the respondent for their cooperation and assistance.
- Before leaving check to ensure that you have asked all the questions and recorded all the answers.
- It is important not to leave the questionnaire or other survey materials behind with the respondent.
- Interviewer must sign the back page of the survey (in the space provided) to certify that the interview has been completed.

Completing the Interview

- Return all completed questionnaires, including signed consent forms to:

Maureen Crisp, Project Officer
Glenelg Shire; Aged & Disability Services
PO Box 152
Portland, Vic, 3305

- Return all documents pertaining to the study to your office ASAP.



Tips from an Interviewer

Check your work:

- "I always check through my questionnaires before handing them into the supervisor. If you do this immediately after the interview, any information missed is still in your head."

Types of Questions

All questions in a questionnaire may be categorised into one of three basic types:

- Closed questions (or pre-coded questions)
- Open-ended questions
- Scaling questions

Closed questions or pre-coded questions

- A closed-ended or pre-coded question, is one where a pre-determined list of alternate responses is presented to the respondent.
- These questions are appropriate when the range of alternate responses is limited or when the majority of responses can be foreseen.
- Pre-coded questions can either be single response (one answer only) or multiple response (more than one answer).

Open ended questions

- Open-ended questions allows the respondent to answer it freely in his or her own words.
- Interviewers are asked to record word-for-word what respondents say.
- Write as quickly and legibly as possible. This takes practice. If respondents reply too quickly, they will understand if you ask them to slow down.
- Using common abbreviations to assist writing speed is permissible, e.g.
 - D/K = don't know
 - CR = can't remember
 - □ = because
 - & = and

Probing

Probes have three major functions. They motivate respondents to communicate more fully so that they:

- enlarge on what they have said
- clarify what they have said and/or
- explain the reasons behind what they have said

Probing



- Almost all open-ended questions require probing.
- Remain neutral.
- The quality of an interview depends a great deal on interviewers' ability to probe successfully.

Probing - example

- If you ask, ***Please list any other changes to your household over the last 12 months that you believe may have influenced your energy use:?*** and the reply is “appliances”. Then the answer needs clarification.
- An easy way to find out what is meant is simply to repeat the word “*appliances?*” and let the respondent say what they meant by that word.
- Do not lead respondents.

Probing - example

Question: *Please list any other changes to your household over the last 12 months that you believe may have influenced your energy use:?* (PROBE)

RESPONDENT: appliances

(Clarify 1:) INTERVIEWER: What sort of appliances?

RESPONDENT: Well, we replaced our hot water service and bought and got rid of some other things

(Clarify 2:) INTERVIEWER: What other things did you buy?

RESPONDENT: We bought a new TV and microwave

(Clarify 3:) INTERVIEWER: What things did you get rid of?

RESPONDENT: We threw out our second fridge as we don't need it anymore

Probing - example

1ST PROBE INTERVIEWER You have suggested that the main things that have influenced your energy use have been buying new appliances and getting rid of others? Can you think of any other changes to your household over the last 12 months that you believe may have influenced your energy use:?

RESPONDENT: Oh, um, my son moved in to help take care of me.

(Clarify 1:) INTERVIEWER: When did your son move in?

RESPONDENT: Um, must have been September last year

2ND PROBE INTERVIEWER What other changes to your household over the last 12 months may have influenced your energy use:?

RESPONDENT: Oh, um, nothing else I can think of.

Scaling questions

- Rating scales are frequently included in questionnaires. These are answers with a range of possible responses designed to measure the 'strength' of respondents' replies.

C3. How often do you do the following to keep your home cool in summer? Please indicate on the following scale, from never to always.

(Mark the appropriate response for each item)

	Never	Rarely	Sometimes	Usually	Always
Close windows during hot days to keep cool air inside	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open blinds or curtains when the sun goes down	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open windows during the evening to allow cross ventilation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D2. How comfortable do you generally feel in your home in regards to temperature?

(Mark one box only)

- Very comfortable
- Comfortable
- Mixed comfort
- Uncomfortable
- Very uncomfortable
- Not sure

Scaling questions

Mark or number scales

- These are questions where respondents are asked to give answers in terms of scores on a scale.

D7. The following statements relate to attitudes towards energy conservation. On a scale of 1 (strongly disagree) to 5 (strongly agree) please indicate your opinion about the following statements...

(Mark the appropriate response for each item)

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
It is too difficult for my household to use energy in a sustainable way	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I plan to use less energy in my household over the next twelve months	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reducing my household's energy use will make a big difference to my personal situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using less energy will reduce my household's input on the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to me that I pay my energy bills on time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using less energy will save my household money	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D5. How interested are you in conserving energy in your home?

Scale: 1=Not interested, 5=Very interested

(Mark one box only)

- 1=Not interested
- 2
- 3
- 4
- 5=Very interested
- Not sure

Skip or filter instructions

- On most questionnaires there are questions which do not have to be asked if the answer to other questions goes a certain way.
- In the absence of skip or filter instructions, always go to the next question.

A9. Does your house have a gas connection (i.e. mains connected or bottled gas)?

(Mark one box only)

- Yes
- No **Skip to A12**
- Not sure **Skip to A12**

Classification data

- Answers to questions in a survey are usually analysed by the classification or demographic data.
- This allows researchers to look for differences in responses between various groups of people.



Asking the classification (demographic) questions

- Vital part of questionnaires and need to be asked in the same tone as other questions.
- If you use a negative tone, respondents will probably refuse to answer.
- A brief lead-in explanation is usually provided on the questionnaire. This explains the purpose of this section of the interview to the respondent.
- Classification questions are almost always asked at the end of interviews after the trust of respondents has been gained.
- Reassurance participants that this information will be used for statistical purposes only.

Summary - checklist

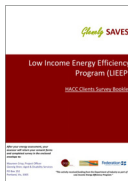
- Pay attention during briefing and make notes on your briefing copy of points to remember.
- Practice the interview by reading the questions aloud several times so the words come smoothly and you are familiar with the order.
- Check you have all materials including you have all materials you'll need:
 - identification badge
 - at least two pens of the appropriate colour (black or blue)
 - clipboard
 - questionnaires
 - call sheets, maps, etc.
 - a watch to time interviews
 - personal items
- Your presentation will be important: you are representing the Glenelg SAVES program. The respondent's initial reaction to you will depend on your appearance, approach and manner.
- Contact your Supervisor before you go out and during the conduction of the study if you have any questions.

Section 4

The Glenelg SAVES Survey

Package Contents

- Letter and plain language statement
- Survey booklet
 - Privacy Notice and Consent Form
 - Powercor Consent Form
 - FedUni Consent Form
 - Survey instructions
 - Survey questions



Further Information

- Maureen Crisp, Project Officer, Glenelg Saves
 - email: mcrisp@glenelg.vic.gov.au
 - Phone: (03) 5522 2200

Glenelg **SAVES**



Appendix J: Discussion Guides

HACC Staff Focus Group: Discussion Guide

i. Explanation

(Moderator to introduce themselves and to go through the following points with participants:)

- A. Explain what a focus group is: *a focus group is a research term for a form of group interviewing. Focus groups are led by a moderator and provide an in-depth discussion on a particular topic or idea. Today we will discuss your experience of being involved in the Glenelg SAVES program.*
- B. There are no correct answers – we are only after your opinion. I don't work for the Glenelg Shire, so please feel comfortable in sharing your opinions. I want to get your honest responses to the questions I ask during this discussion.
- C. Confidentiality: The results of the discussion will be collated with results from other focus group discussions to develop a report for the Government's Department of Science and Industry. Specific names will not be linked to any comments made and results from this group will be included with results from other groups in the report, so what you tell me today/tonight will remain confidential.
- D. We NEED to hear from everyone
- E. Introduce associates – they are very interested in your opinions
- F. We will be taking notes because we want to keep a record of what you have to say. We will record the session's audio with your consent, but let me assure you it will be used only to help us better understand energy efficiency programs. This is to help us capture all your comments.
- G. Please – only one person talking at a time. No side discussions – we don't want to miss anything you have to say
- H. We are here to discuss your experience. What we think is not important for this discussion.
- I. If your view on an issue is different from that of others in the group, that's important for us to know. Don't be afraid to be different. We're not looking for everyone to agree on something unless they really do.
- J. We need to cover a series of topics, so I'll need to move the discussion along at times. Please be patient and don't be offended. We will give you a chance to say whatever you have to contribute
- K. Please turn mobile phones on silent
- L. The discussion will last about 90 minutes.
- M. Logistics: Availability of refreshments and food; directions to restrooms, any questions before we begin?

ii. **Participant Warm-up (5 minutes)**

1. **As we go around the table, please introduce yourself and tell me how long you have been working with HACC and roughly, how many Home Energy Assessment you undertook with HACC clients?**

iii. **Participation and Recruitment (20 mins)**

2. **What did you think when you first heard about the Glenelg SAVES program?**

PROBE: Benefits? Concerns? Risks? Incentives? Was the information at the time enough? What more could have been provided?

3. **What methods do you believe worked best for recruiting a) staff and b) clients?**

PROBE: Any other methods?

- Financial incentives?
- Marketing material (brochures or flyers)?
- Personal networks?
- Word-of-mouth / referrals?
- Other?

4. **What do you believe are the major reasons your clients took part in the program?**

PROBE: Any other reasons?

- Reduce energy bill / save money?
- Environmental concerns?
- Learn more about energy characteristics of home?
- Word-of-mouth?
- Purchase support?

5. **How would you best describe clients that did take part in the program?**

PROBE: Any other characteristics?

- Younger/older clients?
- Care and support requirements?
- Household structure?
- Knowledge about energy matters?

6. How would you describe clients that were difficult to engage in the program?

PROBE: Any other characteristics? How could they be best engaged? What worked? What didn't work? Any other groups?

- Younger/older clients?
- Care and support requirements?
- Household structure?
- Knowledge about energy matters?
- Renters?
- Younger/older clients?
- Migrants?

7. Were there any particular problems that made recruitment difficult?

PROBE: Any other reasons? How did you try to address these problems?

- Research needs?
- Care and support requirements?
- Poor customer knowledge?

iv. Home Energy Assessments (20 mins)

8. Has receiving the Home Energy Efficiency training and experience influenced your household's everyday behaviour or energy-related purchases?

PROBE: What influence has this had? What changes have you made?

9. What did you find were the most common changes clients could make to reduce energy consumption?

PROBE: Any other common changes?

- Physical changes (appliances, lighting)?
- Behavioural changes (e.g. appliances on stand-by, turning off lights)?

10. Were there parts of energy use that you or your clients were interested in that were not covered by the assessment?

PROBE: Anything else?

- More information? What type?
- Specific cost savings calculations?
- Parts not covered in the HEA?
- Time assigned to each HEA?
- Other?

v. Training and Support (10 mins)

11. What parts of the energy efficiency training did you find most useful?

PROBE: How did you find them useful? Any other parts?

If necessary: This was the Home Energy Efficiency training provided by the Moreland Energy Foundation at the Glenelg Shire Council's main office.

12. What additional training and support measures would have improved the assessments?

PROBE: Any other support?

- More technical education and training?
- More financial support?
- More training in communication?
- Contacting clients for follow-ups?
- Changes in the way the information is presented?
- Support for installation of energy efficiency purchases made through the program?
- Other?

Overall Impressions (20 mins)

13. What parts of the Glenelg SAVES program worked well to:

- Engage HACC staff?
- Engage HACC clients?
- Improve knowledge of energy efficiency matters?
- Generate interest in the program?

PROBE: Any other parts that worked well?

14. What parts of the program do you think could be improved?

PROBE: How? Any other parts?

15. If we were going to start out on this program again, what would you suggest be done differently?

PROBE: How? Any other suggestions?

16. If you could tell the program's managers one thing or give one piece of advice, what's the most important thing you'd like to tell them about the Glenelg SAVES program?

17. Anything else you would like to add?

Thank you for sharing your opinions and taking the time to participate, your input is greatly appreciated.

Consortium member interviews: Discussion Guide

Note: Some questions will not be applicable to all participants

i. Explanation

(Moderator to introduce themselves and to go through the following points with participants:)

- A. There are no correct answers – we are only after your opinion. I don't work for the Glenelg Shire, so please feel comfortable in sharing your opinions. I want to get your honest responses to the questions I ask during this discussion.
- B. Confidentiality: The results of the discussion will be collated with results from other interview discussions to develop a report for the Government's Department of Science and Industry. Specific names will not be linked to any comments made and results from this discussion will be included with results from other interviews in the report, so what you tell me today will remain confidential.
- C. I will be taking notes because we want to keep a record of what you have to say. We will also record the interview's audio with your consent, but let me assure you it will be used only to help us better understand energy efficiency programs. This is to help us capture all your comments.
- D. The interview will last about 90-120 minutes.
- E. Any questions before we begin?

ii. Substantive Interview

1. What is your/your organisation's involvement in the Glenelg SAVES program? What were your major reasons for getting involved?
2. What were the main contributions your organisation made to the Glenelg SAVES program? What were overall benefits of the program from your perspective?
3. What were the main objectives/expectations for your organisation joining the consortium? Have these been met? Did your expectations change over time?
4. Where there any unforeseen changes that affected how the program was delivered? How did you address these changes? What impact did they have on meeting the program's objectives?
5. How effective do you believe the Consortium model was for governing the program? What worked well? What could be improved? What would you do differently?

6. Were there any issues or conflicts between members of the consortium?
 - a. Prompt: What strategies did you find most worked best for addressing these issues? What strategies were least effective?
7. What arrangements/changes, if any, did your organisation make to fulfil its role in the consortium? Prompt: recruitment? training? research? Implementation?
8. How effective were the initial information sessions with Glenelg Shire HACC workers in obtaining support and long-term commitment? Prompt: What could be improved in this process of recruiting HACC workers?
9. Did you receive any complaints from program participants and if so, what common complaints did you receive and how did you manage these complaints?
10. Do you think providing energy efficiency advice could become part of the regular HACC service?
 - a. Prompt: What would make this difficult? What would be required to achieve this?
11. What can/will you do now as a result of participation in the Glenelg SAVES Project to improve the energy efficiency of low income households?
12. Has participation in the Glenleg SAVES Project increased your knowledge of the needs of local vulnerable people?

PROBE: In what way? How do you think this might change your organisation's policies and strategies when working with HACC staff and clients?

13. If you could tell the Department of Science and Industry one thing or give one piece of advice, what's the most important thing you'd like to tell them about the Glenelg SAVES program?
14. If we were going to start out on this program again, what would you suggest be done differently?

PROBE: How? Any other suggestions?

15. Anything else you would like to add?

Thank you for sharing your opinions and taking the time to participate, your input is greatly appreciated.

Supplier / contractor interviews: discussion guide

i. Explanation

(Moderator to introduce themselves and to go through the following points with participants:)

- A. There are no correct answers – we are only after your opinion. I don't work for the Glenelg Shire, so please feel comfortable in sharing your opinions. I want to get your honest responses to the questions I ask during this discussion.
- B. Confidentiality: The results of the discussion will be collated with results from other interview discussions to develop a report for the Government's Department of Science and Industry. Specific names will not be linked to any comments made and results from this discussion will be included with results from other interviews in the report, so what you tell me today will remain confidential.
- C. I will be taking notes because we want to keep a record of what you have to say. We will also record the interview's audio with your consent, but let me assure you it will be used only to help us better understand energy efficiency programs. This is to help us capture all your comments.
- D. The interview will last about 15-20 minutes.
- E. Any questions before we begin?

ii. Substantive Interview

1. What was your/your organisation's involvement in the Glenelg SAVES program?

PROBE: What are the major reasons for getting involved?

2. How effective was the process for arranging and installing energy purchases made through the program?

PROBE: What worked well? What could be improved? Any common issues? How were these addressed? What was most problematic? Would it have been beneficial if you were involved in the program's energy efficiency training?

3. During installations, did you identify other energy-related changes that participants could make to improve their energy efficiency?

PROBE: Any common changes? Did you discuss these opportunities with HACC staff/clients? Were you able to implement any of these changes?

4. What support from the Glenelg SAVES project manager did you find most valuable for arranging installations?

PROBE: Was preparation and ongoing advice adequate? What additional support would have been valuable?

5. Has participation in the Glenelg SAVES Project increased your knowledge of the needs of local vulnerable people?

PROBE: In what way? Has this experience increased your general knowledge around energy efficiency?

6. Would you take part in a similar program if contacted?

PROBE: Why? Why not?

7. If you could tell the Department of Science and Industry one thing or give one piece of advice, what's the most important thing you'd like to tell them about the Glenelg SAVES program?

8. Anything else you would like to add?

Training Provider: discussion guide

i. Explanation

(Moderator to introduce themselves and to go through the following points with participants:)

- A. There are no correct answers – we are only after your opinion. I don't work for the Glenelg Shire, so please feel comfortable in sharing your opinions. I want to get your honest responses to the questions I ask during this discussion.
- B. Confidentiality: The results of the discussion will be collated with results from other interview discussions to develop a report for the Government's Department of Science and Industry. Specific names will not be linked to any comments made and results from this discussion will be included with results from other interviews in the report, so what you tell me today will remain confidential.
- C. I will be taking notes because we want to keep a record of what you have to say. We will also record the interview's audio with your consent, but let me assure you it will be used only to help us better understand energy efficiency programs. This is to help us capture all your comments.
- D. The interview will last about 15-20 minutes.
- E. Any questions before we begin?

ii. Substantive Interview

1. What was your/your organisation's involvement in the Glenelg SAVES program?

PROBE: What are the major reasons for getting involved?

2. How effective was the process for arranging and undertaking home energy assessment training delivered through the program?

PROBE: What worked well? What could be improved? Any common issues? How were these addressed? What was most problematic?

3. Were the objectives of the training clearly defined to you?

PROBE: Did you think the objectives were practical? What changes would you recommend for future programs?

4. What support from the Glenelg SAVES project team did you find most valuable for arranging and undertaking HEA training?

PROBE: Was preparation and ongoing support adequate? What additional support would have been valuable?

5. How suitable do you think the training content was for HACC staff?

PROBE: How could this be improved? Were there any barriers to HACC staff learning? Was enough time allocated for training sessions? Were facilities conducive for teaching and learning?

6. What aspects of the training could be improved?

PROBE: In what way? Any other improvements?

7. If this program was run again, what additional energy efficiency training do you believe HACC staff would benefit from most?

PROBE: What benefit would be provided from this extra training? Any other training suggestions? What would you do differently?

8. Have you changed the way your organisation delivers HEA training based on your experience with Glenelg SAVES?

PROBE: In what way?

9. Anything else you would like to add?