

HOW WE RAN A BEHAVIOUR CHANGE PILOT PROGRAM AND THE LESSONS WE LEARNT

TELLING THE PERFORMANCE STORY OF CASTLEMAINE500



THANKS X 45:

ACKNOWLEDGEMENTS

Numerous people and groups have contributed to **Castlemaine 500** and the performance story that follows. From the beginning we would like to thank:

The **C500** Steering Committee for their work with the initial planning, the development of the evaluation plan and ongoing monitoring and review of the pilot: Bronwen Machin, Cr Phillip 'Puck' Schier, Nick Haslinghouse, Kay Charman, Terry White and Leigh Watkins.

This project would not have been possible without the funding support of the Victorian Department of Sustainability and Environment (DSE).

Our first local 'ears-to-the-ground' who helped us get to know the community, get feedback on progress and spread messages early in the project: Lucinda Young, Lucy Mow and Jillian Gibson.

The **C500** Community Leadership Team! You guys were (and still are) the backbone of this project. Many of your activities have become

key outcomes in the **C500** performance story and your roles today are involving others beyond the direct reach of **C500**. Your activities include household story collection, recruitment of **C500** households, home energy assessments, community workshops and participation in **C500** learning activities: Janet Phillips, Jacinta Walsh, Wendy French, Lucinda Young, Nigel Wales, Maureen Corbett, John Davey, John Anthony, Dianne Thomson, Maurice Hawkins, Laurel Freeland, Chris Watson, Sarah Austin, Jen Sharman, Cindy Leech, Leah Moy-Yoffee, Peter Dalkin, Morgan Kurragong, Debra Goldsmith, Jan Hancy and Barbara Pauer.

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Hope you enjoy the report. We had fun creating it!

SHOW ME C500!

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FOR THE HASTY ONES: A QUICK OVERVIEW!

In 2006, the Central Victorian Greenhouse Alliance (CVGA) secured the Victorian Government's support to fund a behaviour change program that would test - by engaging a significant proportion of a township in household energy reduction - whether major savings could be achieved and measured at the regional level. The objective was to get 500 households to commit to a long-term process that required active participation and input to achieve a 15 to 30% reduction in energy consumption. Both parties agreed that this process should be documented to assist other townships in their development of locally focussed projects.

With active support from the Department of Sustainability and Environment, the CVGA called for expressions of interest from townships with populations of between 5,000 and 10,000 residents (with access to reticulated gas). After short-listing, Castlemaine was selected, and a program of activities including workshops, home assessments, community conferences and a local leaders program (to support activities beyond the project timeframe) began.

Castlemaine 500 also had a strong focus on building community capacity and leaving behind a legacy in the Castlemaine community after the initial funding had ceased. To this end, the project ran a number of leadership activities with a core group of participants and attempted

to broker partnerships with key groups in the community. This side of the project has proved very successful, with some of the leaders going on to organise their own events, take part in a participatory evaluation and coordinate a network of interested people. Leaders have reported a range of new skills and knowledge as a result of their involvement in the project.

One leader was awarded the citizen of the year award for her work to assist households to reduce energy in her own community. Another leader has become the **C500** coordinator, employed through the local Community House, completing the handover of the project to the local community. In 2008, the efforts of the Castlemaine community were internationally recognised by a United Nations World Environment Day award.

Of significant interest in our findings is that the creation of social spaces proved to be one of the most influential aspects of the project. Participants reported that the opportunities to talk with each other and share their knowledge and experiences were vital to their capacity building processes. Events such as Energy Smart Workshops provided opportunities for participants to learn from and interact with each other.

Both the Energy Smart Workshops and Home Energy Assessments were highly useful as a way of supporting participants as they learned to change their behaviour and reduce energy use. Specific tools like the Home Energy Assessment Tool (HEAT), Home Energy Action Plan (HEAP), a free energy smart thermometer and a project letterbox sticker were also regarded as highly beneficial. This pilot project was always about much more than measuring reductions in energy consumption, and the feedback validates this.

Additionally (and unexpectedly), two new projects emerged in the project's second year. The Kyabram (Ky Can Do That!) and Ararat (Ararat Energy Savers) projects were instigated by the Central Victorian Greenhouse Alliance (CVGA), delivered in partnership with regional partners and funded by the Department of Sustainability and Environment. The newly appointed coordinators of both the Kyabram and Ararat project workers became involved in **C500** leadership activities, with their plans heavily influenced by the lessons learned during the **C500**'s first year. Notably, a number of other townships (large and small) expressed an interest in developing a similar model in their local area. Valuable learnings from these projects are described on pages 26 & 45 of this report; further detailed (and useful) information is available at the CVGA's website (www.cvga.org.au).

While the **C500** project has been very successful in achieving many of our goals, it also encountered many hurdles and challenges.

The initial target of signing up 500 houses proved overly ambitious, with a final tally of 351 households formally registered to **C500**. At the outset, the project steering committee bounded eligibility to households within the postcode 3450. After significant community feedback this restriction was expanded to include 3451, however, the project struggled to attract households from these parts of the Castlemaine community. Spin off projects at Kyabram and Ararat and a significant level of interest from other townships illustrates that the numbers were large, even if not formally based in the Castlemaine area.

Whilst the energy monitoring strategy yielded only small numbers of households with reliable, pre and post electricity and gas data, these small sample sizes still allowed us to make conclusions about overall changes in energy consumption across **C500** households. However, comparisons between different sub groups of households and project interventions were not possible. Results indicate an overall reduction in gas consumption in **C500** households by approximately 15%, and a reduction in electricity consumption by approximately 8%. It's important to keep in mind that small sample sizes limit our ability to be more specific.

The results presented in this report clearly point to the complex nature of behaviour change projects and the difficulty involved with attempts to attribute project activities to influencing 'impact level' data such as energy consumption. In our view, the project does demonstrate tangible outcomes - despite the difficulties encountered in proving concrete reductions in energy consumption (and greenhouse gas emissions). Our findings identify the need for projects of this nature to carefully consider their approach to behaviour change and to factor in the social context in which change occurs. There is also a need for future projects to be more prepared for the unexpected, to be flexible and adaptive and to conduct monitoring at various levels, using a mixture of techniques. Above all, projects of this nature must be committed to building ownership within the community. It is hoped that this report, which has strived to tell both the good and the more difficult aspects of delivering a behaviour change program, is a useful tool for other townships across Victoria as collectively we face the challenges of a changing climate.

INTRODUCTION:

ABOUT THIS REPORT

In the exploratory spirit that the **Castlemaine 500** pilot project (**C500**) has adopted throughout its short life, this evaluation report attempts a different way of presenting our evaluation findings and other contextual information by using pictures, graphics, and innovative design. We hope that this report will offer an easily accessible resource to people involved in behaviour change projects. We have attempted to present the core of what we have learnt throughout this pilot project, and to display it in a fashion that will have relevance to similar projects. In this way we hope to contribute to the evolving body of knowledge on how behaviour change happens, and how we can harness the powers of community action to bring about a more sustainable world.

Don't have time to read the whole report? Look at the pictures! They will tell you a lot, and in some cases a lot more than the text. Jump to the principles in Chapter 3. These distil what we have learned from this project into a set of ideas that we feel will be useful for people about to design or fund similar projects. Otherwise: Chapter 1 tells the performance story of the pilot project - what was achieved in respect to what was expected to happen. Have a look at this section if you are keen to see what we actually achieved. Drawing on a number of different perspectives, Chapter 2 goes on to offer some interpretation of what occurred in **C500** and why. The majority of the key achievements and issues presented in this section

were developed by the participants of the 'Learning Summit' held as part of the evaluation process in 2007. These have been further embellished with the learnings of the **C500** project team gathered since this summit. The final part of Chapter 2 provides a set of conclusions against our original key evaluation questions. Concluding our report, Chapter 3 takes all of the information from Chapters 1 and 2 and asks: "Ok, so what does this mean for the future?" Here we offer a series of principles for behaviour change programs that may be of use to similar projects into the future. These are based on our understanding of this particular behaviour change pilot project as well as the emerging body of literature on this topic.

BASIC METHODOLOGY

This report is the result of a participatory evaluation process that was built into the **C500** project from the beginning. In the report we draw on evidence from a number of evaluation methods used throughout the life of the project. In summary these are:

- 15 stories of 'Most Significant Change' collected by participants in the leadership program from other **C500** participants
- 6 semi structured interviews with 'key informants' conducted by Clear Horizon to provide a strategic overview
- 20 semi structured interviews with participants who showed significant reductions or increases in energy consumption
- An online survey to gauge the level of practice change amongst participants, completed by 88 participants
- A telephone survey to strengthen the numbers of the online survey, completed with 55 participants
- Entry surveys with all participants (351)
- 93 sets of valid pre and post project

energy consumption data for **C500** participants including 47 for gas consumption and 46 for electricity consumption

In respect to data analysis, a 'Learning Summit' was held in 2007 and brought together around 25 people involved in the project or other similar projects to pass judgement on the data collected through these processes. The majority of the key achievements and issues presented in Chapter 2 of this report were produced by participants on this day. A second workshop was held in 2008, this time with a smaller group of people (including funders and the **C500** team) to analyse the journey of the project and what could be learnt from it. Some of the principles in Chapter 3 of this report were generated on this particular occasion with others coming from the **C500** Project Team.

References to texts and **C500** processes are made throughout this evaluation report and are denoted by a number in brackets like this (3). Details about these references can be found in the Evidence

Base toward the end of the report (p 64). This report has been a collaboration between Geoff Brown of the Third Ecology team and Curtis Riddington of Clear Horizon (the evaluation part of the **C500** team). It builds on a short report of the Learning summit in 2007, the workshop in 2008, and comments from both CVGA and DSE.

The Third Ecology project team also included Mark Sanders (Third Ecology team leader), Russell Fisher, Anthony Mangelsdorf, Les Robinson, Viv McWaters, Jess Dart (also from Clear Horizon) and administrative support at the Third Ecology office from Shirley Horn, Belinda Hageman and Jackie Corless.

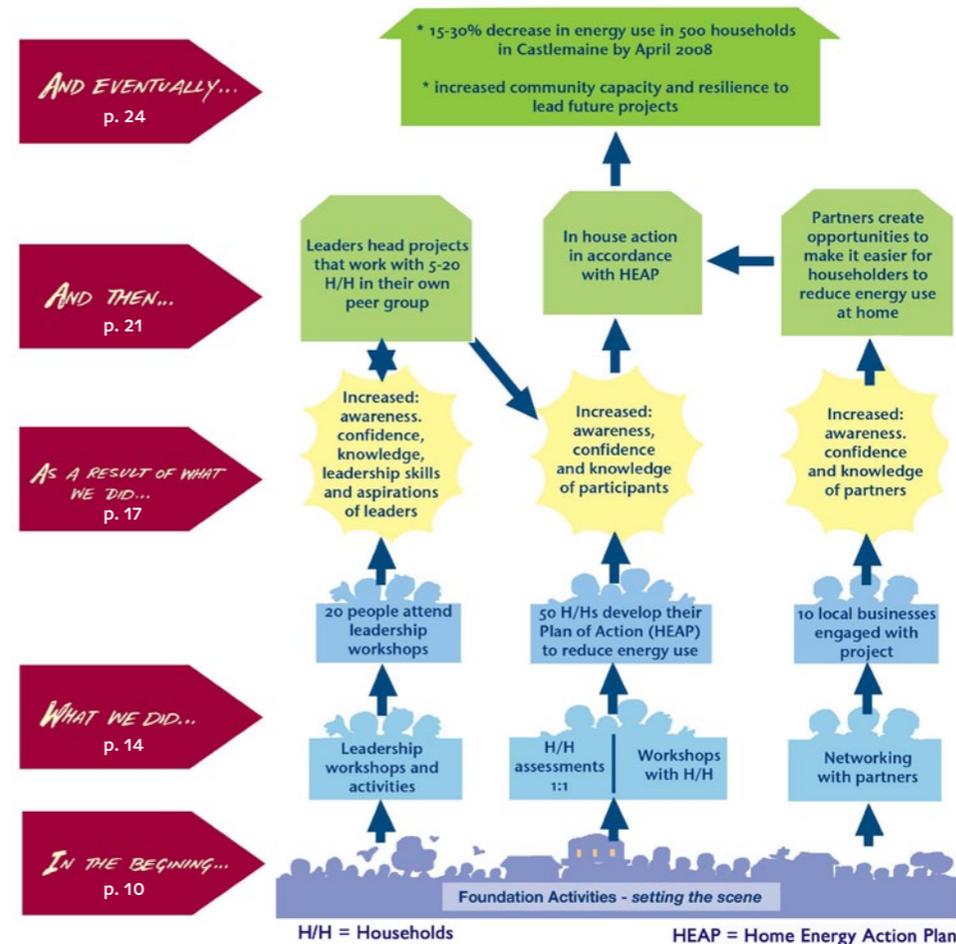
For more information on this report contact Geoff Brown, on 0403 763 660 or geoff@tangentconsulting.com.au
For more information about the C500 project, contact Bronwen Machin, Executive Officer at the Central Victorian Greenhouse Alliance, 03 54725388.

CHAPTER ONE:

THE PERFORMANCE STORY

This chapter presents the performance story of the **Castlemaine 500** project ✂ the story of what we expected to see happen as a result of our project, and what we can actually see happening in the Castlemaine community as a result of the project. We tell the story against the structure of a program logic model which is presented on the next page. The program logic illustrates how we believed change would occur, and it reflects a simplified version of our understanding of the world when we began the project. It shows that we intended to run three interrelated “legs” of the project: firstly to focus on leaders, secondly households, and thirdly partners. In reality, things were not so defined, and the different legs tended to merge together. Also, the links between cause and effect in behaviour change projects are inherently difficult describe, measure and predict. Nonetheless, this chapter of the report takes you through this complex journey, beginning with the foundational activities and eventually arriving at the outcomes that we can see in the broader community.

OUR PROGRAM LOGIC - FROM ACTIVITIES TO OUTCOMES



IN THE BEGINNING...

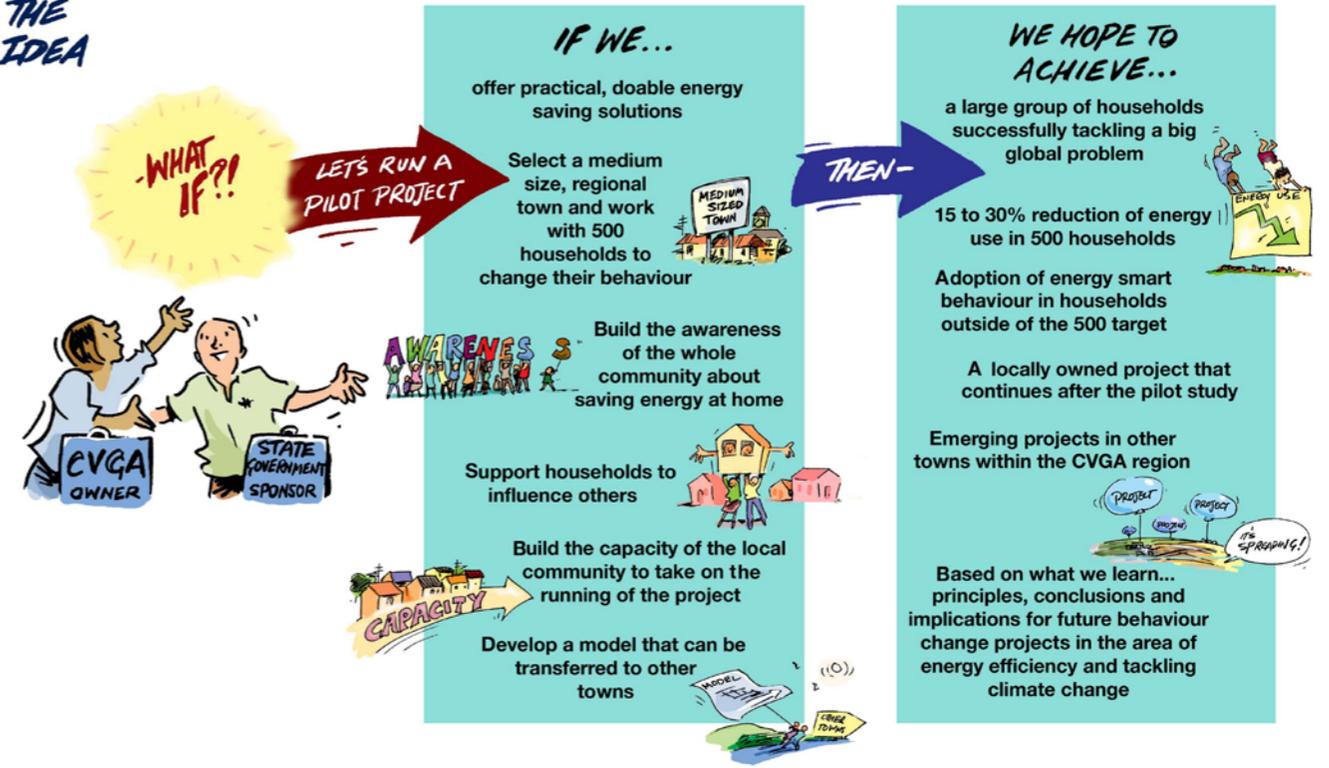
The rationale for the project came from a desire to offer some practical action in the face of the looming spectre of climate change.

THE WHY?

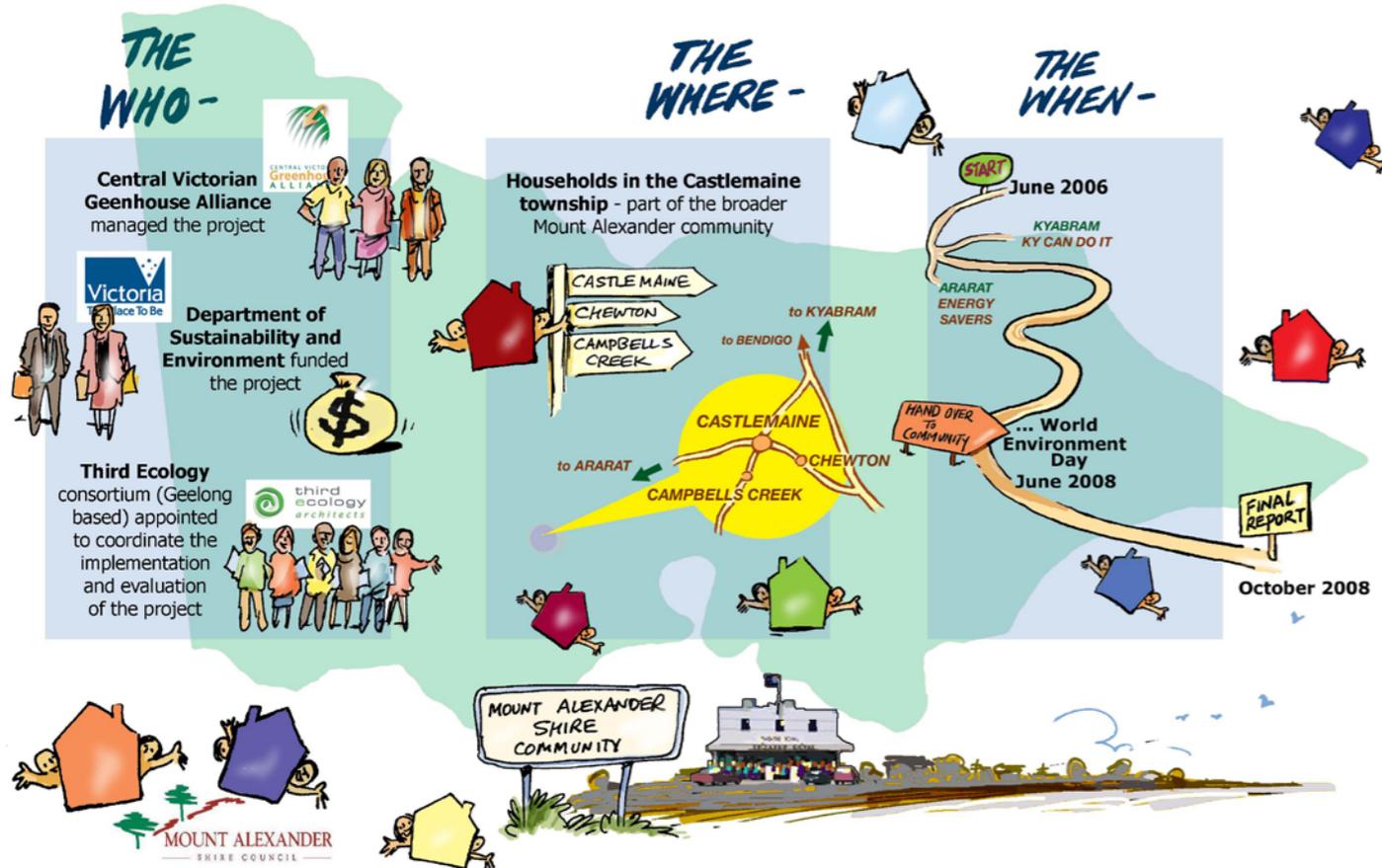


Like most projects, C500 simply started from a conversation between a few people.

THE IDEA



Every project has people, places and timelines. Here's the C500 story



Every project team needs some underpinning principles and approaches.

THE HOW... OUR OVER-ARCHING APPROACH

- 1. To Cultivate a 'Community of Practice' (15) & leave behind a lasting legacy**
 Allow for evolution based on existing community networks
 Promote conversations between people inside and outside Castlemaine
 Invite different levels of participation
 Create a rhythm of events & activities
 Use a mix of public and private spaces
 Transfer coordination of project to local ownership
- 2. Participatory Evaluation Principles**
 Build participant's capacity to collect/analyse Stories of Most Significant Change (MSC) (22e)
 The Evaluation Summit technique to make judgements on C500 findings (22d)
- 3. Facilitated Conversations & Events**
 Facilitation used to promote group learning
 Energy Smart Workshops
 Community Open Space Conference
 World Cafe - Conversations
 Community Leadership Program
- 4. Self Assessment & Goal Setting**
 to promote household behaviour change
 Goal Setting approach adapted from the Living Smart Program (24)
 Action Planning adapted from Enviro Best Management Practices (EBMP) on Farms (23)
- 5. Build Community Capacity**
 to lead future projects
 Casuarina Project (25) model adopted and modified
 Work with local leaders and involve them in decision making
 Participatory Evaluation techniques
 Staging community events
- 6. Invest in & build partnerships**
 with local groups and agencies
- 7. Provide information and technical support**
 to households

This quote sums up our intent in applying the communities of practice approach to C500:

"To successfully tackle climate change and household behavior change, we need people with a shared passion. We need a space where these people build relationships, share information and tools, support each other and celebrate success. In a network this is done voluntarily, with the kind of give-and-take that emerges when people know and trust each other. Networks like these are powerful: they create knowledge and shape opinion."

E. Wenger, Communities of Practice, Cambridge: Cambridge University Press, 1998; and Wenger, McDermott and Snyder, Cultivating communities of Practice, Boston: Harvard Business School Press, 2002.

WHAT WE DID... (OUR ACTIVITIES AND OUTPUT)

THE HEADLINES OF OUR ACHIEVEMENT

A range of community leadership events have been held ranging from a community conference with 100 people to evaluation training for the core leadership group. Other activities include training community members in home assessments and support for a community based **C500** network.

The **C500** project has involved 351 people in home energy assessments and/or energy smart workshops. In this sense the project has not achieved its target of 500 households. As a result of pursuing this target, more intensive efforts with the 350 households involved were limited; in particular open house events were not conducted and follow up opportunities were limited.

Collection of data was also problematic; ultimately we obtained valid pre and post intervention data for only 15% of all **C500** Households (351).

While the project has built strong partnerships with local business and groups, and energy retailers, in reality this 'arm' of the logic was not distinguishable from the leadership 'arm'.

The project built strong partnerships with a number of local businesses, groups and some energy retailers.

The project has benefited from ongoing monitoring and evaluation which informed the workshop series and improved delivery. The participatory approaches have involved leaders and other stakeholders in collection and analysis of data.

WHAT WE PROMISED EXPECTED OR AIMED FOR

Year 1 The contract requirements

Household Program

Every Castlemaine household to receive an invitation to be involved in the **C500** – through direct mail outs/letterbox drops, launch-events, Café conversations and via word-of-mouth.

500 household assessments and action plans (to be completed by either professional assessors, trained peers or via self assessment).

A range of events and workshops (to be completed in 3 stages in the first 12 months).

*3 x 3 Living Smart with energy workshops.

*at least 3 Open House events/days.

Data from at least 500 households including household, demographic and energy consumption patterns.

Community Leadership Program

Formation of a community development group comprising individuals from the local community.

Design and implement a Community Leadership Program over 12 months to foster new community projects that contribute to the pilot study goals.

A group of community peers trained to become household energy assessors; Informal agreement with Sustainable School's program.

Partners Program

Formal partnership with Origin Energy (and other retailers where required) to obtain household energy data (2 years pre pilot and 2 years post pilot).

Formal partnerships with a range of local groups and organisations to help support households to reduce energy consumption.

Informal partnerships with local groups and businesses to support the change process.

THE EVIDENCE TO SHOW WHAT WE'VE ACHIEVED

Overall

→ 40+ events with over 1000 different people.

Household Program

→ 351 Registered Households.

→ 345 Home Energy Assessment Plans created (approx 300 of these registered to **C500**).

→ Collected 220 signed Consent to Release energy data forms (less than 50% of these are valid).

→ 18 Energy Smart workshops with 174 people.

→ 118 Home energy Assessments with 150 people.

→ 25 Online Energy Smart Workshops completed.

Community Leadership Program

→ 4 full days of community leadership training with 16 initial participants.

PLUS

→ 6 full days of 'other' training with 30+ additional people from Castlemaine & beyond.

Partner's Program

→ Over 30 local partnerships developed.

→ Staged 7 open community events involving 20 partners and over 300 people.

→ 30+ meetings and workshops held with local partners.

→ 12 meetings held with other partners outside of Castlemaine.

→ Hundreds of email and phone calls with partners over the journey.

→ 11 local partners supplying ways & wares actively involved workshops.



OTHER EVIDENCE THAT'S IMPORTANT TO NOTE

Anecdotal evidence suggests that house to house recruitment (ie. Adopt a Neighbour campaign) yielded very few new household registrations. Reasons given included the lengthy registration process and lack of confidence to "invite" peers.

Recruitment strategies at Film Nights and other peripheral events (eg. fetes and markets) did not lead to 'direct' recruitment of households.

After an initial surge of registrations in the first 6 months, registration rates steadily declined over the next 12 months. The final workshop series (Aug 07) only attracted 12 new households despite a sustained and widespread marketing campaign. While there were over a hundred people in attendance at the open-

ing event a lack of preparedness meant people could not register on the night.

Media saturation of Climate Change from October 06 to April 07 made it much more difficult to grab community attention and get project stories in the local media.

Our recruitment strategy for the Community Leadership Program was unsuccessful in 2006. Reasons given by community members included:

1. **C500** was trying to recruit households AND grow leaders. These messages became mixed.
2. Potential leaders wanted to participate as a household first and then become a leader of the cause.
3. There was a sense that this Community Leadership Program lacked credibility and integration with existing programs.

40+ households who attended energy smart workshops did not register to the project.

continue on the next page →

**OTHER EVI-
DENCE THAT'S
IMPORTANT
TO NOTE** ✘ Initial pilot project rules that limited participation in the project to the Castlemaine township sent out the wrong messages early on, and this was difficult to reverse later on. As a result we had very few registered households from Chewton and Campbell's Creek.

It is the view of **C500** project staff that time and resources spent pursuing the target of 500 households hindered the ability to provide a higher quality of service to the households who were already involved (such as holding open house days, or a combined home assessment and workshop for households).

Our Household Energy Data Collection strategy was fraught with difficulty!

✘ Participating households were unreliable in returning signed consent to release data forms

✘ Many consent forms received had invalid customer numbers listed

✘ 4 of the smaller energy companies did not respond to repeated requests to set up meetings and data sharing arrangements

✘ Late in the project, 2 of the larger

power companies required new consent forms and privacy statements drafted to satisfy legal advice.

Due to small sample sizes and problems with access to household energy data, many of the Project Contract (Schedule 2) Outputs are not possible to report on.

Formation of an 'intentional' Community of Practice did not work out as planned, largely due to the fact that there were already various networks in existence. The intentional facilitation of this aspect by the project team was halted in April 07, and the network was taken over by the Castlemaine Community House with a renewed focus and local knowledge. Creating a Social Network Map (17, 18) of local groups and people is just one of the activities happening now.

MIDLAND EXPRESS

Signed up for seachange

More than 120 households have already signed up for the Castlemaine 500 sea-change that is now underway round town.

And now the call has gone out to find home handypeople who can help participants with their energy efficient retrofits.

After just the first round of workshops in what is going to be a 12 month community building endeavour, almost a quarter of the target 500 households have committed to monitor and then change their daily energy using habits.

Further rounds of workshops will be held in November as well as next year.

Although commitment requires a bit of effort in the first instance, the lifestyle change on offer with this national-first energy saving trial will save a lot of people a considerable amount of money, as well as giving them environmental "green-points" for helping reduce their emissions of climate-harming greenhouse gases.

"We are looking to develop a list of tradespeople, as well as suppliers, consultants Geoff Brown told The Express last week.

"The Castlemaine 500 team want to be able to provide participants with a listing of local builders and hardware operators, as well as housing designers and architects, who can readily assist them as the project proceeds into the home-adaptation phase.

"One thing where there is still a point of confusion is over eligibility," Mr Brown said last week.

"We are dealing only with people in the Castlemaine postcode area in this round but we have had such strong feedback from people in Campbells Creek, Chewton and Wesley Hill, who want this as well.

"It is very clear these people feel they are part of the Castlemaine community," he said.

"In the future, we will be involving them in any way we can."



It's time: Castlemaine 500 project team members Geoff Brown, at left, and Mark Sanders.

Mr Brown said the next stage was an important one as it involved developing the community links that will allow people to make adaptations to their homes that they may not be confident of undertaking themselves.

"Also, there will be work around plumbing and solar installations but 90 per cent of the retrofits will use commonly available, off-the-shelf products," Mr Brown said.

Products such as seals against drafts and low-flow shower heads are within the scope of most households but when one's only power source is fuelled by brown coal - the burning of which is the world's single greatest contributor of greenhouse gas pollution - minimising the use of electricity is critical.

"The key is to switch appliances off at the wall," Mr Brown said.

"Somewhere between 10 and 15 per cent of energy use is on stand-by power - the little red lights on TVs and DVDs.

"Printers and computers, even when not in use, drain a lot of power," he said.

"A lot of the tips we are giving are no-brainers - they don't cost anything and can save hugely."

Other sensible moves can be made by checking the temperature of hot water, or even the living areas, and adjusting the temperature controls.

Turning a hot water service down from 75 degrees to 60 degrees can save 10 percent of the cost of heating that water and will not impact on hot water needed for the nightly showers, similarly with temperature settings in fridges and freezers.

Builders and home handypeople, appliance and hardware suppliers wanting to

be involved in this exciting Castlemaine 500 project, contact the project team by email at info@castlemaine500.org.au, phone 5470-5954 or visit www.castlemaine500.org.au.

AS A RESULT OF WHAT WE DID...

(CHANGES IN KNOWLEDGE, ATTITUDES, SKILLS & ASPIRATIONS IN THE HOUSEHOLDS)

**THE HEADLINES
OF OUR
ACHIEVEMENT**

Participants show a greater understanding of their own energy use and where there are potential savings. Some also report feeling empowered and motivated by their involvement in the project. However interviews suggest that this motivation may often be short lived and without follow-up engagement interest may tend to wane.

The Home Energy Assessment Plan and Tool (the HEAP and the HEAT) were very well regarded in general and provided participants with a simple process to follow through with energy saving actions.

Some attendees to the workshops report feeling like they were part of a broader community movement to tackle climate change. Those who only had the home assessments had less opportunity for this to occur.

**WHAT WE
PROMISED
EXPECTED OR
AIMED FOR**

Increased awareness, confidence and knowledge of **C500** participants

**THE EVIDENCE
TO SHOW**

**WHAT WE'VE
ACHIEVED**

Almost three quarters (74%) of respondents to the online survey indicated that their plans (HEAP) were useful or very useful. One participant tells that it "meant we could do a little bit at a time" (33). Some people we interviewed 2 years after completing the course were still using their plans to implement changes.

Thermometers were regarded as very useful by over 50% of respondents to the online survey

plus there were some reports of participants lending them to family and friends.

Of those respondents who received **C500** stickers over 50% have displayed them on their letter boxes

Of those respondents who received a free light globe voucher, over 70% picked them up and installed them.

Energy smart workshop participants recruited 20 new households to the project and the feedback from participants was very positive. For example, one participant remarked:

"At the workshops it was wonderful to work with a group of people. We could talk with each other about what we had done. It provided solidarity that our town cares" [33]

Over 30% of respondents to the online survey report speaking about **C500** to friends and neighbours. Over 40% of respondents to the online survey report encouraging others to participate in **C500**.

The collected MSC stories highlighted a number of examples of participants inspiring and influencing change in their broader peer groups.

"Most useful having contact with other people who want to make a difference and feeling part of a group." (workshop participant)

**OTHER EVI-
DENCE THAT'S
IMPORTANT
TO NOTE**

Semi-structured interviews with participants suggest some people were inspired for a short time after the workshop or home assessments and then the motivation wore off

Some participants indicated that there was a lack of follow up support, and that it would have been useful for them to participate in both the workshops and home assessments

In July to October 2008, the **C500** Project Team spent time assisting households to analyse and understand their energy bills and changes over time. Participants reported that this process was extremely valuable, and leads the project team to think that in hindsight, not enough time was spent with households and their bills.

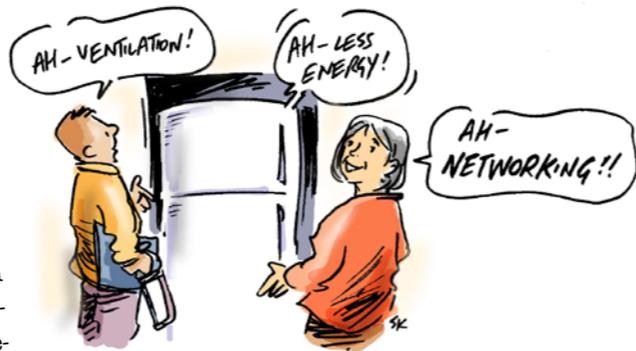
VIGNETTE #1

SHARING SKILLS AND KNOWLEDGE WITH OTHER WORKSHOP PARTICIPANTS

A vignette is a short excerpt from an interview. The vignettes found in this document are taken from interviews with participants, conducted by volunteers from the leaders group. The vignettes presented here were selected from amongst 18 vignettes by the participants at the 2007 C500 Learning Summit as representing the "most significant changes" that the project has achieved.

This vignette was chosen because it shows:
The structure of the program allows people to help people
Positive networking leads to successful change
Willingness and persistence to act in face of difficulty
Personal sense of achievement is important

When I was at the workshop ... the one piece of information that startled me the most was the impact that our fridges can have. And particularly the current trend of boxing our fridges in with no form of ventilation around them or behind them. Which is exactly the thing that we



had created in our newly renovated kitchen before I did the workshop. So um... I was reeling a bit and thinking "Oh god, how am I going to change? We have just designed the kitchen and ... one of the major changes that I really need to make, how am I going to do it aesthetically? The guy who told me about it was a fellow participant during one of the discussion workshops. I mentioned to him what we had done and he said he could come and have a look and see if we had room in the roof. I said no we wouldn't because we had just put a cupboard there... that's where all my medicines were kept and I was really quite distressed about this whole thing. And he had a look and there was room above the fridge behind the new cupboard and so he just very simply, on the day that he was there, cut quite a large whole above the fridge into our roof. And while he was there he checked out all our insulation, so I ticked that one off my list as well. And so the fridge was able to ventilate up into the roof space and therefore used less energy so that was to me my greatest coup and success in what I've achieved with the workshops.

AS A RESULT OF WHAT WE DID...

(CHANGES IN KNOWLEDGE, ATTITUDES, SKILLS & ASPIRATIONS IN THE LEADERSHIP PROGRAM)

THE HEADLINES OF OUR ACHIEVEMENT

WHAT WE PROMISED EXPECTED OR AIMED FOR

There is strong evidence to show some of the leaders are applying skills and knowledge within the community through self implemented projects, information stalls and events. Half of the initial leaders group are no longer involved.

Geoff Brown (Third Ecology Team) spends many hours supporting and mentoring leaders in their own community projects.

Leadership group have helped to spread the word, recruit new households into C500 and inspire others to take action.

12-15 community leaders applying their new skills within the community.

Increased awareness, confidence, knowledge, leadership skills and aspirations.

THE EVIDENCE TO SHOW WHAT WE'VE ACHIEVED

20 independent home energy assessments were conducted by some of the leaders in partnership with the Mount Alexander Sustainability Group, and were paid by the project.

Some of the leaders managed their own information stands at Castlemaine Community House, Home Hardware, Printz's Plumbing and Castlemaine Library during years 1 and 2.

Leaders collected 15 MSC (Most Significant Change) stories from C500 participants.

Some leaders are using MSC in their own areas (ie. Castlemaine Community House).

There were 11 requests from partners to attend household events/workshops and display their ways & wares (to tackle climate change).

18 individuals (at targeted, local groups/businesses) remained proactively involved and helped to spread the word about C500 in their own networks.

30 groups were involved in a 'marketing network' spreading C500 messages in the lead up to key events.

Numerous C500 partners attended C500 training days and some joined the C500 Network in Year 2.

The Mount Alexander Shire Council were responsible for recruiting approx 40 to the community open space conference.

OTHER EVIDENCE THAT'S IMPORTANT TO NOTE

Approximately half of the leadership group are not participating actively in the project or other leadership areas anymore.

“The good news is that our 16 solar panels are now hooked up and operational. Yay! And hopefully by Christmas we will have insulation.” (33)



AND THEN... (BEHAVIOUR CHANGE IN HOUSEHOLDS)

THE HEADLINES OF OUR ACHIEVEMENT

The data that we have (from around half of the participants) is encouraging and shows significant changes in behaviour around the house that could be assumed to lead to reductions in energy consumption.

Changes are still happening 12 months after household participation.

WHAT WE PROMISED EXPECTED OR AIMED FOR

In house action in accordance with the documented actions in individual Home Energy Assessment Plans

THE EVIDENCE TO SHOW WHAT WE'VE ACHIEVED

The following list shows how **Castlemaine 500** participants performed against the Top 10 actions listed in the Victorian State Government's Black Balloons campaign. Respondents report that as a result of **Castlemaine 500**:

1. 18% installed/topped up ceiling insulation, 25% insulated windows and 10% insulated their floors.
2. 20% switched off additional fridges/freezers.
3. Almost half the respondents take shorter showers and 24% have installed low flow shower roses (45% already had them installed) (31).
4. Over 80% now switch off electrical appliances at the wall (31).
5. 35% now maintain space heating/cooling temperatures within the energy smart range, and 41% report they already were before **C500**.
6. Over 20% switched from washing clothes in warm to cold water.

7. 20% close off areas of the house that do not require heating.
8. 80% who received a free globe voucher picked up their free Compact Fluoro Lightglobes from the Origin Shop and 70% of people have already installed them (31).
9. 40% sealed gaps around external doors and windows, and 33% already had good seals (31).
10. 100% are now switching off lights when not needed (80% doing before C500).

Other Actions

- * 20% of respondents have subscribed to Green Power (40% were already subscribed).
- * Over 20% of respondents now limit their use of portable electric heaters (31).
- * Over 20% reduced the temperature of their hot water unit and 20% insulated hot water pipes.
- * 10% upgraded washing machines/dishwashers to more energy efficient models.

Interviews (33) conducted with 20 **C500** households revealed many examples of ongoing change, long after their involvement in **C500**. This suggests a 'lag-effect', indicating that many behaviour changes happen a long time after participation.

OTHER EVIDENCE THAT'S IMPORTANT TO NOTE

We have data on behaviour changes for only about a half of the participants involved in the project.

Key barriers to adoption reported by participants include the up front cost factor of some energy smart actions, and existing house design or infrastructure. Being a renter was also considered a barrier to undertaking actions which required structural changes or big investment.

Some respondents report that a lack of access to local products and services was a significant barrier to adoption of energy smart behaviour.

“I have only just topped up insulation in my ceiling and under the floor. It has made a big difference” (33) (October 2008)

VIGNETTE #2

WALKING MORE LIGHTLY ON THE EARTH...

I first heard about Castlemaine 500 in the paper. I saw it and thought great because since moving into this new rental home, I have been focused on walking more lightly on the earth. The project even relates to some aspects of teaching in theology at the church

I have done everything on my action plan and feel very proud about it. I have even joined up to Green Power! I always find myself checking to see if things are left on... It makes me feel good when I switch things off!

Since the home assessment, I have switched off my second freezer. I really didn't need it on. I have even made my own draught sausages for the front and back doors and some of the inside doors to bedrooms and the bathroom...

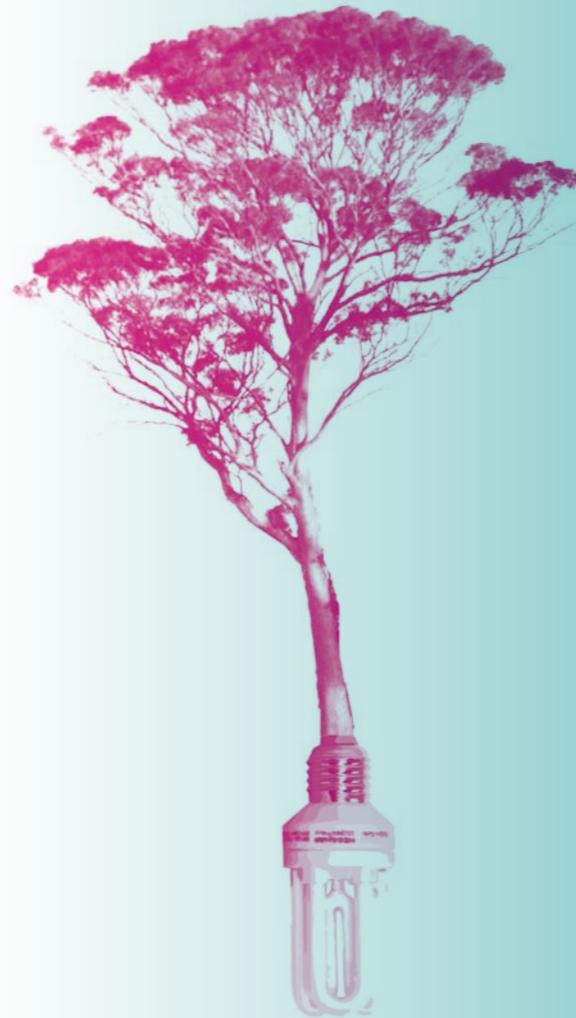
Castlemaine 500 has given me basic information about the energy I use at home... and I never realised where most of it gets used

I am much more careful about the energy I use and am always turning things off at the wall, like my TV. I have learned that it is ok to wash my clothes in cold water and I believe that the changes to my habits are long term, even permanent.

I feel really satisfied and it shows that even if you do not own your own home and you are on a pension (like me), simple lifestyle changes can make a big difference to your energy use and greenhouse emissions ... quite apart from saving on energy bills.



This vignette was chosen because it shows:
A broader understanding of energy and appreciation of the story teller's wider context
Inspiration to act and a feeling of empowerment
Ownership and being embedded in the community



AND EVENTUALLY... (LONGER TERM OUTCOMES IN HOUSEHOLDS)

THE HEADLINES OF OUR ACHIEVEMENT

On average we estimate that **C500** participants are using less energy than they were 2 years ago. We estimate that:

- Out of the 291 participants that have gas connected, 142 reduced their gas consumption by 15% or more. However due to our small sample size, the real figure may be plus or minus 38 participants.
- And out of the 351 participants in the project, 153 reduced their electricity consumption by 15% or more, plus or minus 47.
- This equates to an overall saving of 320 tonnes of CO2 emissions per annum by the 351 participants.

Around half of the respondents to the surveys report a noticeable reduction in energy consumption.

Due to the documented difficulties with collection of energy data, we cannot make conclusive statements around comparing different sub groups of C500 households.

WHAT WE PROMISED EXPECTED OR AIMED FOR

15 - 30% reduction in energy use in 500 households.

continue on the next page →

THE EVIDENCE TO SHOW WHAT WE'VE ACHIEVED

The large difference between **C500** participants and the general Castlemaine population (postcodes 3450 and 3451) is demonstrated in graph 1. Prior to the project commencing, the seasonally adjusted consumption of **C500** households was considerably lower than regular tariff consumers. This difference increased over the duration of the project. The seasonally adjusted difference between **C500** participants and the general community was 363 Kwh per household per quarter for quarter 3 in 2005. This difference increased to 481 kwh per household per quarter by quarter 4 2007. [39]

The trends in electricity consumption for our sample size of 46 participants (see graph 2) shows that 65% reduced their electricity consumption, and 43% reduced their consumption by 15% or more. The

most common result was for a reduction by 15-30%. If we extrapolate this to the entire **C500** population of 351 households, we can say that on average **C500** participants decreased their electricity use by 8.25%. However, due to our small sample size, this figure may in reality be plus or minus 7.25%. [40]

As with electricity consumption, graph 3 shows that our sample of **C500** participants (n=47) were already consuming significantly less gas than the broader Castlemaine community (postcodes 3450 and 3451) before the project started. This graph draws on data from two energy retailers for **C500** participants (r1 and r2) and one retailer for the broader population (whole). The graph shows that **C500** households demonstrate a larger reduction in gas consumption than the broader community, but more recently **C500** consumption appears to be increasing at a faster rate than for the broader community. [39]

Graph 4 shows that of those **C500** participants in our sample size with reliable gas data (n=47) the majority of households (72.3%) reduced their gas consumption. 48.9% of this

sample reduced their consumption by 15% or more. If we extrapolate this finding to the entire **C500** population of 351 households, we can say that on average **C500** participants decreased their gas consumption by 14.55%. However, due to our small sample size, this figure may in reality be plus or minus 7%. [40]

Almost half of the respondents to the online and phone survey report that they have a sense that their energy consumption has gone down as a result of C500 (31). However, in more detailed follow up (33) most people did not know if their electricity bills had reduced or increased over the past 4 years.

OTHER EVIDENCE THAT'S IMPORTANT TO NOTE

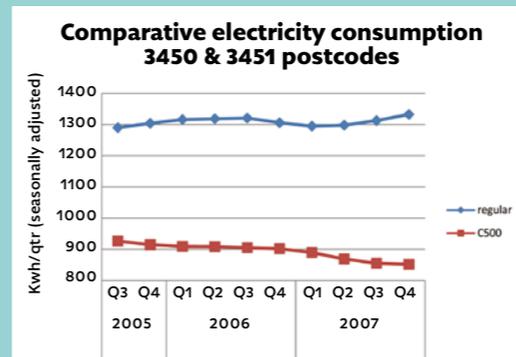
Although 351 households signed up to the project, we failed to get signed consent forms from all participants which were needed to access their energy data. This was the first step that occurred to reduce our sample size significantly. The process went like this: Out of 351 participants:

- We received 221 signed electricity consent forms.
- And 191 gas consent forms.
- A number of people provided invalid customer numbers.
- Some people had just moved, or just signed up with a new energy company meaning we could not access pre project data.
- Some people moved or changed providers during the project, meaning we could not access post project data.
- 4 out of 8 energy companies in the area were unable or unwilling to provide data to the project.
- Some data that we received was

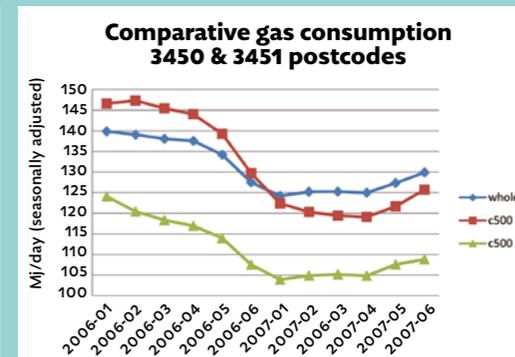
extremely abnormal and through verification with participants we excluded it.

- There were 2 outliers for electricity removed (1 high and 1 low) and 3 for gas (2 high and 1 low).
- This left us with a sample size of 46 for electricity and 47 for gas.

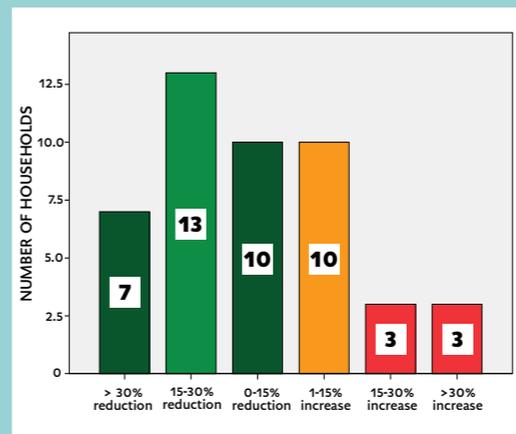
Electricity data received from one retailer appeared abnormal, which caused us to verify it with participants. We discovered that the data appeared to be exactly double for many of the customers (although their bills showed the correct usage). We identified those participants where this was the case, and manually halved their data. We are confident that the results are accurate. Almost 15% of respondents use wood as their main source of heating, excluding them from our sample. Many respondents report changes in covariate information such as changes in the amount of time spent at home, or the number of people living at the house. This impacts on our ability to make conclusive statements around the impact of the project on changes in energy consumption.



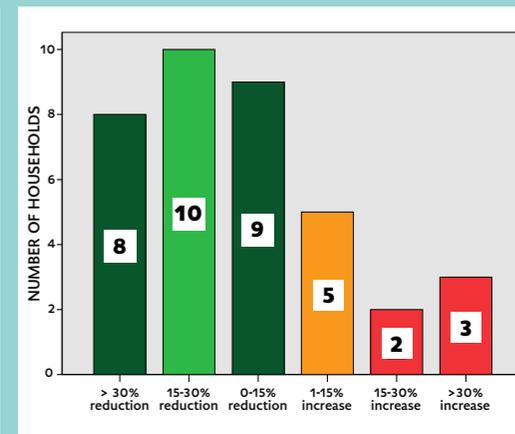
Graph 1. Electricity Consumption – Pre/Post Project



Graph 3. Gas Consumption change – Pre/Post Project



Graph 2. Change in Electricity Consumption



Graph 4. Change in Gas Consumption

AND EVENTUALLY... (LONGER TERM OUTCOMES IN THE BROADER COMMUNITY)

THE HEADLINES OF OUR ACHIEVEMENT

There are various indications which suggest the **Castlemaine 500** project has contributed to lasting change in the community and more broadly within the region. The recognition of the Castlemaine community by the United Nations award and other media is significant. The projects undertaken by some in the leaders group and the activities of the **C500** network suggest a significant "buzz" around energy efficiency and climate change in the Castlemaine community.

The development of the two projects in Kyabram and Ararat are evidence of the transferability of the model developed in the **C500** pilot project. Community lead projects like Tarrangower20 are further evidence of this.

WHAT WE PROMISED EXPECTED OR AIMED FOR

(according to the original funding proposal) Create buzz and conversation around energy efficiency within the community.

Leave behind a legacy in the Castlemaine community.

A pilot model that is transferable to other communities throughout the CVGA region and across Victoria.

A website that enables online access to pilot information and activities for community members.

THE EVIDENCE TO SHOW WHAT WE'VE ACHIEVED

Castlemaine community makes the front page of the Age newspaper and other ABC media for its climate change efforts.

Castlemaine community received a United Nations World Environment Day Award in June 2008 for its efforts in tackling climate change.

One of the leaders, Wendy French, received received a Citizen of the Year award for her work in assisting Tarrangower households to reduce energy.

The **C500** community network lives on with a coordinator employed through the Castlemaine Community House.

The **C500** network provides input into the Mount Alexander Shire Council greenhouse strategy. Kyabram (Ky can do that!) and Ararat (Ararat Energy Savers) projects were planned on the back of the Les Robinson's Enabling Change training

and the 2007 Learning Summit. As a result of this Kyabram has formed its own sustainability group called SKY (Sustainable Kyabram).

Tarrangower20 emerged from **C500** leadership program- involving 2 energy smart workshops run by one leader.

Newstead Fortune20 was inspired by Tarrangower20- involving more energy smart workshops run by another leader.

Leaders ran a number of fete and festival stalls for **C500** throughout the year.

Energy smart workshop was staged with local arts network members.

This report contains a number of lessons and recommendations which point to a transferable model for other behaviour change projects.

OTHER EVIDENCE THAT'S IMPORTANT TO NOTE

There are clearly a number of other influences at this level, and we cannot pinpoint the precise contribution of the **Castlemaine 500** project to these outcomes.

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MELBOURNE'S DAMS 28.7% OF CAPACITY

Castlemaine: doing its bit to turn a nation's black environmental numbers green

By LIZ MINCHIN
ENVIRONMENT REPORTER

JUST over 150 years ago, hundreds of thousands of people flocked to central Victorian towns like Castlemaine seeking gold. Today, Castlemaine is buzzing again — only this time it's all about going green.

The town of 8000 has seen people from all walks of life — from businesses and schools to the council — working to slash the town's greenhouse emissions and water use.

Sydney'sider Ross Blade has just moved there with his family and small business, converting ordinary cars into electric.

"When I was invited down to visit Ballarat and I was taken aback by how much was happening down here on sustainability and climate change," Mr Blade said.

More than 300 homes in the town, or roughly one in 10, are halfway through a two-year State Government trial aimed at reducing emissions by a third.

The council has set a target of 30 per cent by 2010. Its decision to do so before outlining a strategy was controversial, but that research is now under way, alongside work on how to achieve zero net emissions by 2020.

This year's Castlemaine State Festival claims to have been carbon neutral, by reducing energy and petrol use and offsetting remaining emissions by paying for renewable energy and planting trees. A key part of the festival was an art-based campaign showing people how to reduce their eco-footprint.

And while an official announcement is still some time off, the town's biggest green- do their part, in a project led by the Mount Alexander Sustainability Group and the CSIRO, the most processing plant, foundry, carpet factory and hospital, all within about a kilometre of each other, have pledged money and time for research into pooling their energy resources.

"You hear people talking about cutting emissions, and how we should reduce them by 30 per cent here in the shire. That's easy, just shut us down," jokes Bill Youl, a manager at bacon and ham producer Kit Castlemaine, the region's biggest employer. "But that's not in anyone's interests if you also want to keep the jobs here. The good thing about this project is it's involving industry in a win-win situation; we hope to save money by doing something good for the environment."

The cornerstone of many initiatives has been the Mount Alexander Sustainability Group (MASG), set up last year with donations of about \$200,000 from 30 local businesspeople.

One of its members is Lucy

► Continued NEWS 6

26.4 Tonnes of greenhouse gases per person. Australians are among the world's highest greenhouse polluters.

559 Greenhouse gas emissions in millions of tonnes Australia produces in a year.

50% The minimum cut many scientists say developed nations must make to emissions by 2050 to avoid "dangerous" climate change.

24% How much our emissions are on track to rise by 2020.

82% Decline in waterbirds numbers in eastern Australia from 1983 to 2004.

Small text: Sources: Australian Greenhouse Office; United Nations Framework Convention on Climate Change; State of the Environment report; Water Services Association of Australia.

PICTURE: JASON SMITH

25

Mayor Jim Norris, Jane Knight, Sarah Austin, David Burt, Bill Youl and Trevor Butcher.

VIGNETTE #3

A CHANCE TO BRING CHANGE TO MY OWN COMMUNITY!

I was absolutely driven and determined to be a part of the Castlemaine 500 program the day I saw the first article about it, even though I realised I was out of the project's area.

With the C500 project happening just down the road and other forces (such as the Stern Report on Climate Change) I decided to apply for the C500 Community Leadership Program.

The Community Leadership Program then gave me the opportunity to build my skills and confidence and bring it to Maldon. "Finally!" I thought. "Here is my chance to be pro active and help bring change to my own community."

To be amongst like-minded people in that C500 training program was such a huge relief. We learned many skills and gained great knowledge in areas like behaviour change and facilitation of groups. Part of the C500 Community Leadership Program required us to run a Community Conference with Geoff and Russell of the C500 Team. That was inspiring, there were 100 people there! It gave me heart and direction. It could be done.

A Wine and Cheese celebration in Maldon gave me the opportunity to have an information stall about climate change during those festivities, AND to advertise the Tarrengower 20 workshops. Fourteen people, twelve households, signed up for the 2 x 2hr Home Energy Smart workshops. We were off!

My anxiety meant that I was ridiculously over prepared, every breath was timed. Twelve turned up the first night, with ages ranging from 25 to 72 years old. The more mature participants added a valuable dimension, such as the thermal qualities of newspaper, to keep fruit, vegies and drinks cool and to keep humans warm, under sheets and between blankets.

My timing fell apart when the Mayor gatecrashed, but there is no doubt, his enthusiasm for our goal of reducing energy consumption and so emissions, made everyone in the room feel good. Fourteen people arrived for the second session, and we now share our latest energy saving strategies if we meet in the street. I was relieved when it was over, but after this test run, I feel confident enough now to run more workshops next year.

The Maldon community has embraced with open arms the recent program of installing 9000 CFLs in homes, the footy club are getting PV's to feed back to the grid and the Folk Festival have taken the first step towards the Festival becoming carbon neutral by encouraging the businesses and organisations involved to purchase 100% GreenPower for the 4 days of the Festival. I've got a feeling the chrysalis is moving and one source could probably go back to the impetus and confidence that being involved with C500 gave me.

One thing I notice that has changed for others in my own community is that people are more willing to talk about the possibility of reducing energy consumption. The conversation has begun!



This vignette was chosen because it shows:
A "chance to bring change to my own community"
Lots of lessons about how change happens
How capacity and confidence building creates a multiplying effect
Validation from the mayor
People brought together

CHAPTER TWO:

INTERPRETATION OF THE RESULTS

The previous chapter has provided an overview of the achievements of the C500 project- the evidence for actual achievements presented against what we believed would occur. This chapter further synthesises this information into “key achievements”, and “key issues”. These sections are largely based on findings that were analysed in a participatory manner at the 2007 Learning Summit. Since the summit however, further analysis of the data by the C500 Project Team has yielded extra points. Following the key achievements and issues, this chapter provides a short discussion of the findings against the key evaluation questions.

(The first four achievements presented below originate from the C500 team. The rest were developed at the 2007 Learning Summit.)

CHAPTER TWO:

2.1 KEY ACHIEVEMENTS

THE CAPACITY OF LOCAL

LEADERS HAS BEEN INCREASED

Through training events, various partners and participants in the leadership program display increased skills and knowledge in areas including: participatory evaluation methods such as the “Most Significant Change” technique, the “Open Space” approach to facilitation (22a), and experience in running workshops and organising other events such as Café conversations (22c).

THE LEGACY OF CASTLEMAINE

500 IS EVIDENT

A formal hand over event was organised by the C500 network on World Environment Day (2008). The C500 project team role in this event was merely a supporting one and the event demonstrated the extent to which the Castlemaine Community is in charge for future initiatives and ideas. A C500 coordinator has been employed through the Castlemaine Community House. There are also trained energy as-

sessors connected through the Mount Alexander Sustainability Group who were employed by the project to undertake paid home energy assessments in May 2008. The project has also set up online resources and tools and a website that reflects the regional focus of household projects in the CVGA region.

C500 HAS HAD AN IMPACT ON

OTHER COMMUNITIES

Related to point 1.1 above, the Kyabram (Ky can do that!) and Ararat (Ararat Energy Savers) projects were planned on the back of the Enabling Change training (Les Robinson) and the 2007 C500 Learning Summit. As a result of this, Kyabram has formed its own sustainability group called SKY (Sustainable Kyabram). In addition to this 1 leader from Maldon started her own mini-C500 project and assisted 20 households in her own community to reduce energy use. Wendy French has since been named Maldon Citizen of the Year. Other leaders also instigated grassroots climate change workshops in Newstead and Hepburn. The online Home Energy Assessment Tool and

THE C500 COMMUNITY DEVELOPMENT MODEL HAS BEEN ADOPTED BY OTHER REGIONS

The **C500** Community Development Model evolved as **C500** progressed and merged into a Participatory Evaluation program. The essence of the model is 2 parallel programs that complement each other. In **C500** the Community Leadership Training Program built the capacity of local community members to better understand themselves and learn new skills in facilitation, project design and communication. The **C500** Household Change program provided the supportive 'space' in which they could practice their new skills and gain the confidence to run their own projects, independently of **C500**. This approach has directly influenced the City of Port Phillip in its SLAH (Sustainable Living at Home) Program and the Surf Coast Shire with the Casuarina Project (Community Leadership) in partnership with the ACF Green Home Program.

MANY PARTICIPANTS REPORT CHANGES IN BEHAVIOUR!

Responses to our surveys indicate that **C500** had a significant impact on people's behaviour around the home (30,1,2). While actions undertaken may well be short-lived after the initial involvement in the project, in-depth interviews with some participants indicate that tools such as the HEAP (Home Energy Action Plan) are helping participants to maintain their enthusiasm (33). It appears that the project was very successful in pointing out the small things that can be done around the house at little or no cost. One workshop participant commented that, "We were expecting that we would have to spend thousands and thousands of dollars, but we learnt to do things straight away that would start to have an impact." Significant trends evident in responses to our surveys include more than 80% of respondents switching off appliances that use stand by power, 40% improving draft sealing on doors and windows, and 35% lowering their winter thermostat temperature to an energy smart standard (18-20 C).

THE C500 SUPPORT TOOLS WERE HIGHLY VALUED

A Home Energy Assessment Tool (HEAT) and a Home Energy Action Plan (HEAP) were completed by every workshop and home assessment participant. Approximately 36% of respondents to the phone survey (32) reported that the HEAP helped "a great deal" in overcoming barriers to behaviour change. One participant was still using his plan when we interviewed him nearly 2 years after his involvement in the project, "The plan was the major thing that helped, particularly to overcome the barriers of cost. It meant we could do a little bit at a time" (workshop participant, 33). Also a respondent to the online survey noted that the plan "...acts as a benchmark for what I'm aiming for. A constant reminder to what I committed to, even if I'm not sticking exactly to it" (participant, 30). 41% of respondents reported that the energy smart thermometer helped a "great deal" in overcoming barriers to behaviour change (32). A flow rate cup, power mate and energy smart thermometer have been available for loan at the local library since late 2006, and the loan rate has been very high throughout the project.

THE PROJECT REACHED A DIVERSE MIX OF THE COMMUNITY

The registration data shows that 35% of all registered households were already connected to Green Power when they signed up to the project. This is well beyond the Victorian average at the time suggesting that the project was "preaching to the converted". However the data also shows that **C500** participants represent a wide range of household types and age groups. In addition, on entering the project 50% of households indicated that they had "just started to get going" with energy smart actions.

PARTICIPANTS EXPRESS INCREASED INSPIRATION AND MOTIVATION

Many participants report that **C500** activities contributed to increased motivation and inspiration to take action at home in regards to energy consumption. “The workshop spurred me on. A week after the workshop I got under the house and did more (floor insulation)” (workshop participant). Some respondents report becoming inspired by the realisation of the cost savings, or that changes could be made relatively easily. Others report the project presented things in a positive light and helped to inspire through a community based project. At the conclusion of workshops, many participants reported that the interaction with others in the community motivated them to take action – “Most useful having contact with other people who want to make a difference and feeling part of a group” (workshop participant).

C500 CONTRIBUTED TO THE BUZZ AROUND ENERGY EFFICIENCY AND CLIMATE CHANGE

There is evidence to suggest the **C500** project has contributed to increasing the level of energy and interest around climate change in the Castlemaine community. “I have got a sticker on front of my house to encourage others. I have spoken to members of the community to get it up to the 500” (**C500** participant). The project helped to foster new and existing networks of interested people. Over 35% of respondents to the online survey indicated that they speak about the project to friends and neighbours on a regular basis. Despite this evidence of a ‘buzz’ and word of mouth conversations between participants and their peers, it did not translate into the expected number of registrations to the project. For further details see Chapter 2.2 below.

KEY PARTNERSHIPS AND RELATIONSHIPS WERE DEVELOPED

The Communities of Practice model (15) is dependent upon relationships and joint action in partnership. Despite having a reduced “local presence” the **C500** Project Team has built strategic partnerships with key groups and individuals in the community, including the Mount Alexander Sustainability Group, the Theatre Royal and the Mount Alexander Shire Council. Key external partners included energy retailers Origin Energy, TRU Energy and AGL. Origin Energy also offered 500 boxes of 6 CFL’s to participating households. This offer was critical to the success of our incentives package. The Alternative Technology Association (ATA) assisted with information particularly around the development of the Home Energy Assessment process.

2.2 KEY ISSUES

As with the key achievements above, the issues presented below are largely the result of the analysis undertaken by the participants of the 2007 Learning Summit. Again we have included extra points from our own analysis of the data.

(The first four achievements presented below originate from the C500 team. The rest were developed at the 2007 Learning Summit.)

THE PROJECT FAILED TO REACH 500 HOUSEHOLDS

Possible reasons include:

- The project failed to capitalise on initial excitement and buzz that was evident at the beginning of the project - for instance, 120 people turned up to the opening event, but because the registration database and website were not ready, people could not be immediately signed up.
- The exclusion of households in some towns in the initial communication.

- The onset of climate change as a big media item, may have contributed to the difficulty found in getting C500 media attention.
- The lengthy registration process may have turned people off.
- The project team failed to predict the sudden downturn in participant registrations toward the end of Year 1.

WE FAILED TO COLLECT ADE- QUATE ELECTRICITY AND GAS CONSUMPTION DATA FROM PARTICIPANTS

The strategy of collecting energy consumption data directly from companies was fraught with difficulty. Based on a previous successful process adopted in Cool Communities projects (www.greenhouse.gov.au), the Third Ecology team decided that electricity and gas billing data would be collected directly from energy retailers such as Origin Energy. There

have been major problems around this aspect of the project, and as a result the data does not provide statistically reliable conclusions. Issues around the collection of energy data include:

- Energy Retailer marketing campaigns in Castlemaine (2006/07) resulted in many participating households switching to new retailers after they registered to C500 (27% [30]). This limited our access to pre & post project consumption data, and invalidated consent forms that had been collected prior.
- The electricity consumption data provided to C500 from 1 retailer was inaccurate. Through ground truthing with participants we highlighted the error, which appeared to be a doubling of electricity use. We rectified this, checked back with the retailer, and are now confident in the data.
- Turnover of key contact people at energy retailers has been high and legal requirements have meant that 3 retailers were unwilling to share data with the project and the CVGA.
- Despite repeated mail outs and reminders, poor return rates of Consent to Release Information

Forms from participating households have plagued our processes. (Consent forms are required for the project to access customer data from energy retailers).

C500 FAILED TO MEET ITS TARGET OF A 15% TO 30% REDUCTION IN ENERGY USE IN ALL PARTICIPATING HOUSEHOLDS

Based on our analysis, we estimate that 149 participants who are connected to gas failed to reduce their gas consumption by more than 15%. This figure is an estimate extrapolated to the population based on our sample of 47 and must be taken with a caveat that the real figure may be 38 above or below 149.

For electricity we estimate that 198 participants did not achieve a reduction of more than 15%, and again this figure may actually be 47 above or below, due to our small sample size.

THE PROJECT WAS NOT

ADAPTIVE IN YEAR 1

From the perspective of the Third Ecology project team, in the first year of operation the project failed to adapt quickly enough to what was and wasn't working on the ground. Potential reasons for this include a focus on prescriptive key performance indicators and targets, which was required through the initial tendering process and the subsequent proposal. There was also poor communication between the steering committee and the project team in between the quarterly meetings. The Community Leadership Program failed to recruit participants during the first phase of the project which meant that locally owned projects did not begin until the end of year 1. It was the project team's intention to support local projects and initiatives from the outset.

In the second year of the project, communication improved significantly and the project became more responsive to opportunities as they emerged.

LACK OF LOCAL PRESENCE &

OWNERSHIP

The Third Ecology project team ran **C500** from its Geelong Office. Despite spending significant amounts of time in Castlemaine running events and training programs, the absence of a local, visible home-base proved a significant hurdle to communication with the local community. Anecdotal evidence, reported by participating households and local leaders, suggests that many neighbouring households chose not to register because **C500** was run by a project team from "out-of-town".

PILOT REGISTRATION PROCESS

WAS COMPLEX AND LENGTHY

Registering to the **C500** Pilot was too complex and too lengthy. Despite numerous attempts to simplify the registration process, we did not get it right. Evidence from interviews, talking with people on the street and survey support this view.

LOCAL ACCESS TO ENERGY

EFFICIENT PRODUCTS AND

SERVICES WAS LIMITED

Through its partnership program, **C500** aimed to link participating households with local/regional/statewide services and product providers. However responses to our evaluation indicate that participants needed more support to access these services, or in some instances that products and services were not available.

COMMUNICATING THE

"INTENT" OF THE PROJECT

It was reported that there was too much information presented in the beginning of the project and that it wasn't always clear whether you would be signing up to a workshop or a leadership program. Also in the beginning of the project it was communicated that only Castlemaine residents were eligible for the project, and although this was later expanded to include neighbouring towns (and advertised widely), it appears that the initial messages stuck.

MORE FOLLOW-UP SUPPORT

REQUIRED

In February/March 2007, evidence collected from participating households suggested the need for more support to implement their Home Energy Action Plans (HEAPs). In response we created more spaces to provide support including an online Forum, a Community Conference and a series of informal Cafe Conversations. However, the level of participation from targeted households was low.

In October 2008, phone interviews (33) were conducted to collect pre and post project billing data from **C500** households. Participants reported that the process of analysing bills in detail over time has helped them to gain a deeper level of understanding about their energy consumption. Some participants reported that they had a renewed commitment to doing more to reduce their energy consumption at home.

2.3 WHAT CAN WE MAKE OF ALL THIS?

The following statements are made against the Key Evaluation Questions which were developed at the beginning of the project by the C500 Project Team to guide project monitoring and evaluation. Together, these questions serve as a useful structure against which to summarise the achievements of the program.

WHAT WAS THE IMPACT OF THE PROJECT?

WHO ADOPTED WHAT PRACTICES AT THE HOUSEHOLD LEVEL AND WHY?

The project has clearly had an impact on the behaviour of the participants in the household assessments and workshops. This is evident in the responses to the online and telephone surveys where respondents report undertaking various changes to their household energy behaviour as a result of **Castlemaine 500**.

It is difficult to ascertain why people adopted new behaviours. Interviews with those participants that showed significant changes in energy consumption (both positively or negatively) were inconclusive in terms of matching practice change with corresponding changes in actual energy consumption. In some cases, actions that changed energy consumption

(and greenhouse gas emissions) were unintentional. In one case, a participant was concerned about the health impacts of indoor gas appliances and, during her involvement in **C500**, changed to electrical heating and cooking. In another case a masseuse working from home decided to ask her clients to bring their own towels which resulted in a significant drop in both electricity and water consumption.

Being in a participant's home appears to be a powerful way to enable change in energy consumption habits. When participants could see the 'proof' of how much an appliance (eg. second fridge) was costing via a feedback device (eg. Powermate meter), participants were able to make instant and well informed decisions. However this evidence is observational only.

Some participants suggested that the process of completing a Home Energy Assessment Plan (HEAP) helped to support changes to their behaviour. For instance one participant was still using his plan almost two years after involvement in the project, and

was still making incremental changes (33). However another participant reports undertaking a lot of activity immediately after being involved in the project, and then not thinking much about taking further action. Two participants interviewed were about to renovate their home and incorporate sustainable design and energy efficient appliances such as solar hot water and heating systems. They reported that participation in **C500** informed their final plans and they expect to see significant reductions in energy consumption in the near future.

Participants report being inspired by others at the workshops and other **C500** social events. Another common motivation cited was to take some responsibility for climate change by doing something around the house.

WHICH INTERVENTIONS LED TO THE MOST SIGNIFICANT CHANGES?

The evidence from self reported behaviour change (30) does not show any significant difference between the actions undertaken by those who participated in the workshops, and those who had a home assessment. However the graph below presents interesting information on gas consumption, indicating that those participants who had a workshop plus home assessment reduced gas the most. However the results are not considered to be statistically significant. There is anecdotal evidence to suggest that those participants who had follow up support and involvement in extra activities (such as café conversations, or the **C500** network) felt more supported and inspired to take action.

C500 Intervention	Change in Gas Consumption	Sample Size
Workshops plus Home Assessment	- 31%	2
Workshop Only	- 20%	25
Home Assessment Only	- 10%	14
No Intervention	+ 2%	6

n=26 for an aquate group size

The level of change in gas consumption between households who participated in different interventions makes for interesting reading. Unfortunately, the sample sizes of the sub groups are too small to produce statistically significant results (as shown below)

It appears that the self assessment process is effective in helping people to set achievable, personal goals.

The Leaders Program has certainly led to significant changes such as leaders running their own workshops in their own towns, and organising large scale events. However it is difficult to view the leadership program in isolation to the workshop and home assessment series.

OVERALL HOW MUCH ENERGY WAS SAVED AS A RESULT OF THE PROGRAM?

On average we estimate that **C500** participants are using less energy than they were 2 years ago. If we extrapolate the findings from our sample populations of participants that did have reliable energy data to the total **C500** participants we find:

→ An energy saving that equates to 320 tonnes of Co2 per annum by the 351 participants (including 167 tonnes from reduced electricity use and 153 tonnes from reduced gas use)

→ Out of the 291 participants that have gas connected, 142 reduced their gas consumption by 15% or more. However, due to our small sample size, the real figure may be plus or minus 38 participants

→ And out of the 351 participants in the project, 153 reduced their electricity consumption by 15% or more, plus or minus 47

Note: Why didn't we have a Control Group in C500?

It is difficult to establish a control group in a voluntary practice change project, largely due to the following two factors:

1. The control group must have the same propensity to change as the treatment group. Significant pre testing cost is required to establish a control group with the same propensity to change as the treatment group. It is also likely that householders who fit the criteria for the control group will want to join the program as participants.

2. Voluntary nature of program - participants often leave and join a treatment group in an ad hoc manner throughout the life of the project, and members of the control group may join the program or leave the district. Both factors will reduce the validity of the study design.

Without a cost effective way of forming a control group – a proxy for a control group was sought. Electricity and gas consumption data from one energy provider for the Castlemaine postcodes of 3450 and 3451 has been used as a proxy for a control group.

HOW EFFECTIVE WAS THE PROJECT DELIVERY PROCESS?

HOW EFFECTIVE DID THE PARTICIPANTS FIND THE WORKSHOPS/HOUSEHOLD ASSESSMENTS?

Feedback from workshops was generally positive, particularly in the later rounds of workshops. Participants report that the workshops helped to show them simple things that could be done around the house without costing a fortune. Also the workshops were generally regarded as being well facilitated and allowing for interaction and learning between participants.

TO WHAT EXTENT WERE OPPORTUNITIES AND STRUCTURES CREATED TO SUPPORT HOUSEHOLD ENERGY REDUCTION?

TO WHAT EXTENT DID PARTNERS ENGAGE IN THE PROJECT AND CONTRIBUTE TO MAKING ENERGY REDUCTION CONVENIENT IN CASTLEMAINE?

The project team found this part of the project difficult due to being from “out of town” and potentially because it was not made clear to partners what

benefits would be gained by their participation. Nonetheless strong partnerships were formed with a small amount of partners (such as Theatre Royal, MASG, CCH, Home Hardware), but not across the broader Castlemaine community.

TO WHAT EXTENT DID LEADERS ACTIVELY LEAD IN THE CASTLEMAINE 500 PROJECT?

The leaders have been the success story of **Castlemaine 500**. They have actively played a great role in the project, and continue to lead in their community. Highlights include working on information stalls at community fetes, running energy smart workshops in various communities, organising a World Environment Day celebration and formally taking on the coordination of the **C500** project.

TO WHAT EXTENT WAS THE PROJECT INTERVENTION SUSTAINABLE?

WHAT WAS THE LEGACY OF THE CASTLEMAINE 500 PROJECT – WHAT STRUCTURES AND OPPORTUNITIES WERE CREATED THAT WILL CONTINUE AFTER THE PROJECT ENDS?

In the second year of the project there was a lot of effort put into creating a community of practice with leaders and partners. This has resulted in various skills being left within the community. The project also worked in conjunction with the CVGA to develop a structure for coordination once the pilot funding ceased. This has been successful and continues to evolve with one of the leaders becoming an employed coordinator at the Castlemaine Community House.

Through participatory evaluation the project has helped to keep the valuable knowledge that is generated through an evaluation process within the community. Furthermore, the project leaves behind a number of tools valuable to future projects such as workshop plans, tool kits, the HEAP and HEAT, trained home energy assessors, and finally this document itself.

Another legacy of **C500** can be seen in the projects in Ararat and Kyabram that were modelled on **C500**.



CHAPTER THREE:

DISCUSSIONS FOR THE FUTURE

PRINCIPLES FOR EMBARKING

UPON A COMMUNITY BASED

BEHAVIOUR CHANGE PROJECT

LESSONS FROM CASTLEMAINE 500

Story behind the Principles

The principles set out below have been written with an audience in mind - designers, coordinators and sponsors of community behaviour change projects. The principles have emerged from the following processes:

1. C500 project team action learning – Throughout the C500 journey, many unexpected things emerged which lead us to inquire and ask “Why?” Along the way, we discovered new models and information that ‘made sense’ when we looked at what was happening in C500. These lessons are contained in the first part of this Chapter, “Getting the Mindset Right”.

2. Learning Summit held with the C500 project team and the Project coordinators from Kyabram (Ky can do that!) and Ararat (Energy Savers), Department Sustainability and Environment (C500 sponsor), Castlemaine Community House (current C500 coordinator) and Ann-Maree Dowd (CSIRO researcher). The purpose was to identify recommendations for coordinators/managers of future behaviour change projects based on our experiences from C500, Ararat, Kyabram and beyond. These lessons are contained in the second part of this Chapter, the “Nuts & Bolts: Putting it all into practice”.

We assume that the audience for these principles has:

1. An openness to new ideas and ways of looking at the way change happens
2. A willingness to challenge personally held world-views – values, assumptions and beliefs
3. A willingness to dig a little deeper and read some of the references offered in this chapter



PRINCIPLES: GETTING THE 'MINDSET' RIGHT

UNDERSTANDING CHANGE IN

THE 'REAL WORLD'

1. We are a social species and not primarily 'individualistic'. We are programmed to seek out others and to interact with them (2). Our behaviour is therefore shaped by our interaction with others. This context is a good place to start trying to understand and harness the power of mass behaviour (1).

Implications for future 'behaviour change' projects

- Do not look at participants as a number of 'individuals' that live separately to each other. Instead, look at your participants as a tribe living in a complex, social system.
- Build up a picture of these social systems and networks and try to understand their 'attributes' first. One way is to use Social Network Analysis and Mapping (17), (18).

2. Our individual behaviour is influenced more by other people around us than by external voices and experts (2). In other words, things start to change (and "tip") when "large numbers of easily influenced individuals influence each other". (14)

2 opposing theories exist on 'influence' (many others exist too!):

- i. Influentials Theory – if we get the most 'influential people' involved in our project or adopting our desired practice then a trend will take-off
- ii. Anti-influentials Theory – where anyone can be influential, provided the community is ready to embrace a trend. If the community isn't ready then not even the 'influential people' can help.

Implications for future 'behaviour change' projects

- Create many opportunities for your participants to influence (and inspire) each other. Any face to face gathering should provide opportunities for dialogue and conversation.
- Build more than 1 'Influence' theory into your strategy:
 - i. Assume that everyone can influence others ... Support your participants to influence and share their own stories/experiences with peers. (eg. Ask them what they need from you to support their efforts to recruit others) ... and
 - ii. Assume that some people are more influential ... "Find out who are the key influential people around town, and get them on board. If they can be seen to be part of the project, or doing the actions that you want others to do, then you're on a winner." (36).

"It makes me so happy. To be at the beginning again, knowing almost nothing. . . . The future is disorder. . . . It's the best possible time to be alive, when almost everything you thought you knew is wrong." (Tom Stoppard, *Arcadia*, pp.47-8)

3. Word of Mouth (WoM) is a powerful tool because people chat to each other all the time and this creates a valuable form of influence(1). However, you cannot predict the outcomes that result from these interactions (13); (14), so it is important to keep an ear to the ground.

Implications for future 'behaviour change' projects

- You can't 'force change' on anyone (or any group), so find out what motivates them and discover their passions. You need to 'listen' more than you 'dictate'.
- Every activity and interaction in your project can generate WoM. So, make WoM the real goal of everything you do. (eg. In visiting local groups encourage them to talk to others).
- Find ways of observing WoM. Link these observations back to your learning program.

4. Project to participant communication, NOT information transmission. How your participant(s) responds to the 'communications' that you generate is not the whole story. It's what the individuals do with your communication in their real-life interaction with other individuals in their social systems – the context of mass behaviour – that is more important (1).

Implications for future 'behaviour change' projects

- Your communication is an 'action'. So, the information (or content) you convey is less important than the impact your communication has on the way the social system operates. Some important questions to ask your self include:
 - i. Does this communication create 'talkability, create energy, WoM or something else in my community?
 - ii. Does it draw the broader community's attention to the issue or behaviour that you are concerned with? (1)

IT'S COMPLEX OUT THERE!

“Does the flap of a butterfly’s wings in Brazil set off a tornado in Texas”

E. Lorenz, 1972



Implications for future ‘behaviour change’ projects

- Learn to improvise (19), (20).
- Be ‘agnostic’ to what you think will ‘take-off’ as a result of your actions. In other words, ‘let go’ of preconceived ideas of outcomes.
- Be present and really ‘notice’ what is happening and what people are saying. Don’t get distracted by past mistakes or future milestones!
- Be prepared (and don’t be fearful) of trying new things that might not work.
- Learn through actions! Solutions lie in actions, not words and written plans. If in doubt about the next step just start anywhere .

If individual behaviour change is **COMPLEX**, then mass behaviour change is even more complex! By the way, it is NOT ‘complicated’.

- Complicated is like building a bridge or a jumbo jet. Best Practice solutions work and problems remain solved after sufficient analysis. Cause and effect relationships are known.
- Behaviour change is inherently ‘complex’ - a little like Mayonnaise! Complex social systems are based on the interaction of individual agents (1). You cannot take mayonnaise apart and then put it back together again.

Implications for future ‘behaviour change’ projects

- In the beginning, notice and explore what trends are ‘taking off’ in that community/network. Even if it’s unrelated to your topic you might learn something about how to create excitement in your project.
- Don’t plan too much! You need a documented plan to communicate your intended activities and outcomes. Be prepared, however, to change the plan and negotiate with sponsors ahead of time.
- Forget about 1 big initiative ... “Probe” by doing a few little actions at the same time. It’s like throwing a few mud pies against a wall and seeing which ones stick. “Sense” and watch closely to see which ones are working. Then “Respond” quickly to support favourable outcomes and mitigate the unfavourable outcomes (4), (5).

In Complexity (your project!), you can’t predict cause – effect relationships. In other words you can’t predict the relationship between your actions and the outcomes they will produce. Planning often doesn’t work as intended (4). Of course a good plan is crucial- the point is that it must be flexible and adaptive.

There is no magic lever! Unlike building a bridge, there is no ‘lever to pull’ to create the change we want. Models like Community Based Social Marketing (CBSM), the Diffusion of Innovations and the Tipping Point theory are all very useful and offer a better chance of success. BUT, just because they work in 1 project doesn’t mean they will work in yours!

Implications for future ‘behaviour change’ projects

- Learn to cope with change & be flexible (6).
- Be modest and don’t pretend you know everything – it is critical that your participants/community/partners know this.
- Be resilient! If no one shows up to a big event then ‘bounce back’ quickly and start again somewhere.
- Expertise outranks rank. Your participants and partners will have expertise that you don’t. Allow these people to have a decision making role in your project.

If it’s not working, don’t just rethink your strategy & tactics; rethink your goals and values! Sometimes you need to ask if your goals and targets are the right ones. Argyris (26) calls re thinking your goals and values **Double Loop Learning**. In single loop learning we do not question the goals, we simply change our tactics and strategy.

Implications for future ‘behaviour change’ projects

Engage your sponsors in discussion early on if you sense that the underlying goals and targets of the project are not the right ones. If feedback from your participants/partners point to more important values, then you’d be better be prepared to listen.

At the impact level the project activities are just one of the possible influences. This is illustrated in the following graphic from Douthwaite et al (2007) (28). It means that through quantitative monitoring alone it is very difficult to be able to tell the story of your impact.

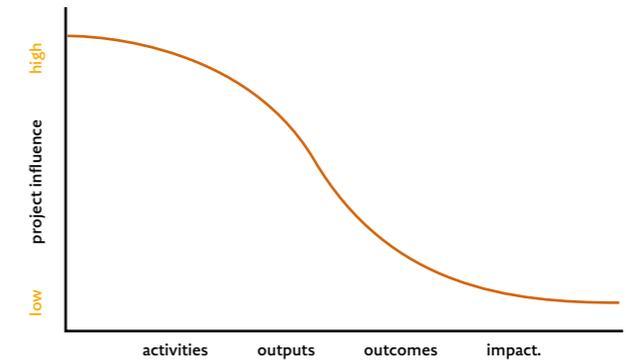


Figure 1: Potential project influence on outputs, outcomes and impact.

Implications for future ‘behaviour change’ projects

- If measurable reductions in energy consumption are critical, then minimise the ‘complexity’ and implement small actions that guarantee desired outcomes (5).
- Do research into a range of actions that are proven to reduce household energy consumption.
- Spend resources on ensuring those actions actually happen during the course of your project (eg. household retrofits – insulation, hot water system changes).
- Set up short term monitoring of the impact of those actions (eg. Household Energy Monitoring with Smart Meters).
- When success happens (ie. monitoring shows changes in energy consumption), share stories and invite other participants to interact with the solutions.
- Ensure that through your program logic you have well defined intermediate outcomes that will help you tell the story, when the impact level is hazy.
- Monitor at the intermediate outcome level, and use qualitative techniques
- Allow for unexpected outcomes in your monitoring system.

IT'S ALL ABOUT THEM!

“The proper question is not, ‘Why isn’t this person/ community motivated?’ but rather, ‘For what is this person/community motivated?’” William Miller & Stephen Rollnick - Motivational Interviewing

People are much more receptive in their own environments and when messages come from their peers

Implications for future ‘behaviour change’ projects

- Target people who are already connected to each other through social networks (ie. employers, community groups).
- Spend time with people/groups in their territory. Listen for what they value first; invite them into your project.

Encouraging ‘content creation’ and collaboration – Whether it’s asking your participants to design a project logo or contribute to a blog, inviting people to collaborate is a powerful call to action (2), (11, 12).

Implications for future ‘behaviour change’ projects

- Invite partners and participants into your project, make it easy for them to contribute and let them take some responsibility for their role. This might require you to let go of pre-conceived ideas of outcomes, and leaving it up to them. Partners that find real value in being involved in your program will stick around for the long term.



THE 'NUTS & BOLTS' PUTTING IT ALL INTO PRACTICE

BRINGING PEOPLE TOGETHER TO LEARN – WORKSHOPS, EVENTS AND GATHERINGS

People learn kinaesthetically, with solutions that they can touch and feel.

Implications for future 'behaviour change' projects

- Think more than information! When we engage groups or individuals (at workshops or home assessments) we need to provide practical and hands on demonstrations. People need to interact with the solutions, not through powerpoint presentations.



These principles are about the 'day to day' running of projects and reflect the lessons learned by the C500 Project Team from our evaluation program. The headings below also closely reflect the structure of the C500 project plans.

Conversation between people embeds learning (2) The 'critical information' that we think is necessary for enabling change in people's behaviour has a context - we make meaning of new information through conversations with others.

Implications for future 'behaviour change' projects

- When presenting information about a topic (eg. ways of saving energy at home), spend 30 to 50% of your time on the information and 50 to 70% on facilitating group discussion and learning.
- Conversations between you and your participants are powerful so facilitate them often.

Providing 'follow up' events is critical to reinforce enthusiasm and action on change.

Implications for future 'behaviour change' projects

- As a part of the rhythm of your project, plan for follow up events to re-engage people with each other and topic. They only need to be short and simple (eg. Café Conversation event or even a telephone call).

Vision trumps all other senses (29). Vision uses up 50% of our brain's resources. We learn best through pictures compared to text or the spoken word.

Implications for future 'behaviour change' projects

- Throw out Powerpoint presentations unless they contain pictures (including simple graphs) that reinforce your key messages
- Use pictures to illustrate what the solutions look like!

Taking a Solutions Focus is usually more useful than focusing on problems and barriers (3), (7).

Implications for future 'behaviour change' projects

- If you need to discuss the problems of the world and how hard it is, keep it brief. Use language and pictures that are about future possibilities and solutions. Whether you are presenting information or facilitating discussions, steer clear of problem solving and focus on future solutions.

Large numbers of interested people will sit at the edges of projects and rarely contribute.

Implications for future 'behaviour change' projects

- Invite different levels of participation and make your events warm and inviting (like a campfire) to draw people in from the edges (38). Venues should be accessible and have a relaxed atmosphere.

To some people, Interactivity may be the only attraction of a project, or it can be of marginal interest.

Implications for future 'behaviour change' projects

- Some events should be more about 'interaction' than information (eg. Project Launch and Facilitated Workshops) and others be focused on the 'topic' rather than the need to converse with others (eg. Street Stall). Different people respond to different levels of interactivity.

The rhythm (pulse) is the strongest indicator of a project's 'aliveness' (15).

Implications for future 'behaviour change' projects

Your events should create a Rhythm for the community. Ensure you have a planned schedule of events. Not too much to overwhelm or too little to bore (38).

Large Group processes such as Open Space Technology work!

Implications for future 'behaviour change' projects

- Use Open Space to create excitement and connect like minded people to specific topics or actions. An excellent process to kick off your project and create ideas for collaboration.
- Action Groups and projects can emerge from here (30).

Events offer a great chance to count things and measure the 'aliveness' of projects (38).

Implications for future 'behaviour change' projects

- Use your evaluation plan to work out the things you should measure at events:
 - i. Numbers & types of people.
 - ii. How they heard about your project.
 - iii. Participant interests, motivations and values.
 - iv. Their ideas for the project.
- Offer participants incentives to bring along a friend to the next event (or join your project).
- Let everyone in your project know that they are "Influential" and their invitations to others will work.
- Offer participants simple tools to invite others on board your project.

People learn best and talk more about an event when they enjoy themselves!

Implications for future 'behaviour change' projects

Make FUN and enjoyment a core target! Be less like a lecturer and don't take things too seriously!

BUILDING COLLABORATION, CAPACITY AND SKILLS

Involving participants in your project is an effective way to build their capacity and confidence to influence others.

Implications for future 'behaviour change' projects

- Invite participants to stage events in collaboration with you. Give people responsibility for something and let them run with it, even if it is a bit different to what you had imagined (eg. Get them to run the workshop, man the information stands and organise meetings if possible).
- A great way is to train participants in collecting evaluation evidence such as stories and anecdotes from others. (Please refer to Monitoring, Evaluation & Learning p59).
- Involve the community early on in the planning of the project. Build the logic model with them; consult them on the strategies you are planning to use to engage their community. No doubt they will know this turf better than you and involving them will help to build a sense of community ownership early on.



When your project management funding is spent, your participants and project partners are the only ones who can 'maintain the rage'!

Implications for future 'behaviour change' projects

- If a group of people show an interest in continuing your project's work, look for ways of supporting that group to find resources and a sponsor of its own. Ask them what they want to do and what they need to do it.

The best way for community leaders to gain confidence in new skills is to put them into practice.

Implications for future 'behaviour change' projects

- Provide opportunities for community leaders to 'practice' their skills and contribute to your project - presenting a story or topic information in a workshop; design a flier, web page or logo; going to speak on behalf of your project to other groups.



BRINGING PARTNERS ONBOARD YOUR PROJECT

Community partners can help participants overcome barriers and find solutions.

Implications for future 'behaviour change' projects

- Involving local businesses and partners is an excellent way to build rapport in the community.
- Encourage partners to develop a product and services base for your participants to use (one of the biggest barriers reported by our participants to the adoption of new practices was the lack of local service providers and products).

Projects that foster partnerships are more likely to be in tune with what is needed and wanted. Involvement allows proposals to be tested and refined before adoption, resulting in better use of resources. Local people are invariably the best source of knowledge (31).

Implications for future 'behaviour change' projects

- Take every opportunity to involve participants and partners in your project delivery. Even for specific tasks like recruitment or greeting people at a workshop, it all helps to build ownership and skills.

Most communities have well established networks that include your potential partners.

Implications for future 'behaviour change' projects

- Start by finding out who is connected to whom. Build a network map (17, 18) and start with what's already working. Tapping into existing networks and relationships is one of the most effective things you can do.

- Ensure you include local media outlets and community newsletters on your list.

Partners need to find 'value' in being involved.

Implications for future 'behaviour change' projects

- The project coordinator's role is to help potential partners find value in being involved. Value may emerge over time so be patient. The process of building commitment may look like this (36):

1st Cooperation: mostly recognition of each other; basic levels of commitment; more talk than action.

2nd Coordination: start working together on some activity; pooling of resources to ensure complete outcomes; implies actual working partnership.

3rd Collaboration: joint planning and coordination of implementation; reflects a quantum leap in commitment.

A partnership process or approach will help to bring others on board.

Implications for future 'behaviour change' projects

The following steps are taken directly from the Casuarina Project (25) participant course notes. Please refer to the Chapter: Bringing Others On Board.

- **In the beginning** – start with a small group of potential partners and encourage new participation.
- **First Steps** – have partners identify needs for collaboration; start with small steps and focus on solutions rather than problems; provide regular communication to partners.
- **Widen the Net** – promote shared ownership, don't try to force it; find informal time for talking; get early involvement of people who will help you achieve your goals.

SUPPORTING NEW PRACTICES WITH 'SOLUTION FOCUSED' TOOLS AND ACTIONS

In C500, the Home Energy Action Plan (HEAP) worked.

By developing their own plan of action based on their own learning, the HEAP process supports people to change their practices. In some cases it provided a framework for incremental change over the long term, beyond the life of the project.

Implications for future 'behaviour change' projects

It is important to have some sort of tool that gets participants to set their own practice change goals. The next step in this would be to facilitate monitoring of households towards their goals. The benefits of this process have been demonstrated in agricultural extension practice (23) and in other household change programs (24).

When combined with face to face processes (eg. Workshops/Home Assessments) solution focused tools are effective in supporting change.

Implications for future 'behaviour change' projects

In C500 the following solution focused tools were supported by face to face meetings where people could engage with and ask questions about the tools:

1. **Self guided assessment and goal setting processes (eg. in C500 the HEAT & the HEAP)**
2. **Energy Smart Thermometers** provided immediate feedback to households on important energy related 'measures' in the home

3. **Simple incentive product** (eg. low energy light globes) resulted in households taking mostly immediate action
4. **A social marker** (eg. project letterbox sticker) helped to build a sense of community and commitment to action
5. **Written invitations** (eg. postcards) provided a concrete tool for participants to recruit others on our behalf – and provide a 'talking point' about the project

The right mix of tactics & tools can support participants on a number of different levels to encourage them to change or try new things.

Implications for future 'behaviour change' projects

Think about 5 key tools or actions to support change in participants:

- Demonstration Actions** – have a shining example of the solution to show it is possible (eg. Solar House Days)
- Interchange Actions** – build awareness by getting people interacting and sharing their experiences/information/knowledge – like Café Conversations (22c)
- Story Actions** – These actions tell the 'new story' about the change, instituting the culture and norms that will sustain the change - like in use of MSC (22e)
- Training Actions** – Things you do to build people's ability or capacity to make the change (eg. hardware store runs session of draught sealing)
- Impact Actions** – do things that shake people up with a wake up call to the change ... make sure you offer solutions also (eg. Screening of An Inconvenient Truth)

MONITORING, EVALUATION & LEARNING

Even if your project inspires widespread adoption of new energy efficient behaviours, these outcomes do not necessarily translate into reductions in overall energy consumption.

Implications for future 'practice change' projects

Do not focus your monitoring 'solely' on absolute reductions in energy use as the key performance indicator for your program. Broaden your focus and measure behaviour changes and other intermediate outcomes as well. Collect data on unexpected outcomes too. This all helps to tell the story of your impact in a complex world.

Gaining access to reliable electricity and gas consumption data can be challenging.

Implications for future 'behaviour change' projects

When monitoring actual energy use, invite participants to measure daily/weekly consumption by reading their own meters. This can provide instant feedback to the participant, and valuable data to you.

If you plan to collect energy use data from power companies, spend time establishing a relationship with the 'right' person within the company – preferably someone who shares your passion for the project outcomes.

Accessing household consumption data would be best achieved through a single distributor (eg. Powercor) or by rolling out Smart Meters in participating households

Developing a Program Logic helps a project team to:

- evaluate or clarify the logic of the project intervention
- provide a framework to evaluate the performance of a project

Implications for future 'behaviour change' projects

Develop a Program Logic with the project team, partners and sponsors early on and before implementation, and refine it as your understanding changes. The benefits include:

- a. Promotes critical thinking and helps you to re think and improve your plans.
- b. Promotes shared understanding within and outside the project team.
- c. Forms the spine of a Monitoring, Evaluation and Learning Plan.

A Plan-of-Action in Evaluation is critical.

Implications for future 'behaviour change' projects

Develop a Monitoring, Evaluation and Learning Plan. This document includes your program logic and details the actual evidence you will collect, how you will collect it and why. Remember to include:

- a. Methods to capture goal based evidence – the 'expected' outcomes.
- b. Methods to capture the 'unexpected' outcomes of your project (eg. MSC Technique – 22e).

Participatory Evaluation activities build ownership, commitment and excitement.

Implications for future 'behaviour change' projects

Where possible use a participatory form of data collection and evaluation. Involving participants or other stakeholders in the collection of qualitative stories is particularly engaging and often a major form of evidence of change. Self monitoring by participants can also be an effective way to encourage behaviour change.

Outcomes and Flow on effects (or the ripples) from projects take time to grow and often happen after the funding has ceased.

Implications for future 'behaviour change' projects

Put in place a process that allows evidence of change to be collected beyond the life of your project. (eg. Allow future projects to build on the work you have started with your community).

Once rapport is established with participants, the telephone is an excellent way to capture feedback and evaluation evidence.

Implications for future 'behaviour change' projects

- In C500, telephone calls to participants became the most cost effective tool for collecting information from participants.
- Phone conversations allow for informal discussions about the 'aliveness' of your project. Participants will often offer suggestions for improvement. It's a great chance to listen and learn.

Online surveys work, however offline is still preferred by some.

Implications for future 'behaviour change' projects

Ensure that your registration and survey processes have an online option. Free survey tools (eg. Survey Monkey – 22f) will cut down your workload considerably. Remember, some participants will not respond online.

COMMUNICATIONS WITH THE COMMUNITY

Adoption of online Social Media applications is now a critical component of any project to encourage collaboration and coordination – don't forget the un-connected participants too!

Implications for future 'behaviour change' projects

- Unless you choose to exclude non internet users, your communication strategy will have to include both internet and traditional forms of media and communications.
- As a part of your online strategy, consider the following online applications:
 - i. A project blog within (or instead of) your website – they are free and easy to set up.
 - ii. A project Forum to allow self-organising conversations to take place between participants (and you).
 - iii. New applications such as Meetup (www.meetup.com) make it easy for participants to create an online community and get together to support each other in learning.
 - iv. Slideshare (www.slideshare.com) is an excellent tool to store any project powerpoint slides freely and easily.
 - v. Consider short, simple training sessions for participants in the use of online applications so they can stay informed and participate.

The first messages conveyed about a project will stick in a community.

Implications for future 'behaviour change' projects

- Make your first media release simple and keep it to the core of what your project is about.
- Make your first gathering or launch event accessible, simple and fun.



The 'Buzz' doesn't last forever.

Implications for future 'behaviour change' projects

The first phase of your project is critical! Capitalise on the fact that you are 'new' and be ready to sign people up and involve them in action early on.

People forget... so follow up and make communication regular (online and offline).

Implications for future 'behaviour change' projects

Create simple and regular newsletters that keep the community informed about progress and upcoming events. Even if they do not respond to your questions, most are still listening and appreciate your efforts.

Partners that value their involvement will spread your messages for you.

Implications for future 'behaviour change' projects

- Invite project partners to communicate about your project within their own social networks – this will often be 1 person who has a keen interest in your project.
- Keep your communication to partners short & simple so that only the core messages are communicated.

Regional, State or National media coverage builds credibility and reach.

Implications for future 'behaviour change' projects

Seek out partners or participants who have access to media outlets like newspapers, radio and television (and don't forget the internet).

Word of Mouth (WoM) is a powerful force in every community. It is self organising and unpredictable!

Implications for future 'behaviour change' projects

Continually seek new ways to create WoM about your project and the people in it. Make use of tools such as 'invitation cards' and stage events that create interest.

Bad News doesn't change or inspire many people.

Implications for future 'behaviour change' projects

Keep your communications positive and focused on Solutions! Positive messages in your communications could include:

- "Small things add up to make a big difference".
- "Everyone can make a difference".

Meeting with groups in their own space builds credibility and rapport.

Implications for future 'behaviour change' projects

Make the time to meet with existing networks and groups of people. Even if your time is short, you can communicate many things in 5 minutes and find out more about your target groups.

PROJECT COORDINATION:

THE CORE GROUP

Community projects need a local base and local face from the beginning.

Implications for future 'behaviour change' projects

(refer also to Getting the Mindset Right above)

Make you and your project visible and accessible to potential participants. Where possible, work within the community or be located nearby.

Climate change requires a 'long term' and 'coordinated' approach – As projects evolve they need to prepare for their own demise.

Implications for future 'behaviour change' projects

(refer also to Getting the Mindset Right above)

- Be realistic with your expectations in the beginning. Be ambitious but remember that it's really hard to understand behaviour change and how we impact groups of people. Ensure that you have this discussion with your funders.
- Build an exit strategy into the project from the start. Funding won't last forever, but the legacy of the project needs to continue. While it may feel like you're dumping a load of responsibility on the community with no funding, sometimes you need to just let it go. And trust in the amazing resourcefulness of an inspired community.

Being prepared and organised is everything.

Implications for future 'behaviour change' projects

- Being 'prepared' is much more than having a great project plan. The best plan in the world will need to change as your project unfolds any way. Being prepared is about adapting to the unexpected. Some examples include:
 - The capacity to 'flick a switch' and quickly communicate with your partners and participants.
 - The ability to run a workshop or a meeting at a moment's notice – you have everything ready to go all of the time.
 - Information systems are kept routinely updated.
 - Evaluation evidence is captured along the way and stored in an organised way – this enables communications against targets to your sponsors.

PROJECT GOVERNANCE –

INVOLVING SPONSORS AND

STEERING COMMITTEES

CONCLUSIONS

Flow on effects (or the ripples) from projects take time to grow and often happen after the funding has ceased.

Implications for future 'behaviour change' projects

- Projects need to be part of a long term strategy. Short programs need to build on each other in terms of the capacity built, data and knowledge generated.

The relationships between all parties in the governance of a project is critical for successful implementation.

Implications for future 'behaviour change' projects

- Sitting within an existing organisation such as local council might bring benefits with it such as administration abilities, and credibility. However it can also bring the restrictions of being inside an institution.
- Ensure that the project team- including the steering committee have clear roles and responsibilities.

Too many layers of reporting within the governance of a project can slow it down dramatically.

Implications for future 'behaviour change' projects

- Take active steps to build relationships between individual members of the project team, project manager and sponsor.
- Simplify governance reporting requirements and keep reporting to the essentials.

CHECK THE:

EVIDENCE BASE

1. M Earls (2007). Herd – How to change mass behaviour by harnessing our true nature. JW & sons.
2. G. Heaton & D. McLellan. The Age of Conversation: M. Earls. We not I – The Human Truths Revealed by The Age of Conversation (p. 28). 100 voices. 1 conversation (2007). Available online at <http://www.ageofconversation.com>.
3. L. Metcalf (1998). Solution Focused Group Therapy – Ideas for Groups in Private Practice, Schools, Agencies & Treatment Programs. The Free Press.
4. B. Dick (2006). Complex Social Systems and their facilitation. Conference Paper for the 2006 Australasian Facilitators Network Conference.
5. D. Snowden. Cognitive Edge Website Resources and White Papers. <http://www.cognitive-edge.com/blogs/dave/>
6. K. Weik & K. Sutcliffe (2001). Managing the Unexpected – Assuring High Performance in an Age of Complexity. University of Michigan Business School. Jossey-Bass.
7. P. Jackson & M. McKergow (2007). The Solutions Focus – Making Coaching & Change Simple. NB International.
8. C. Heath & D. Heath (2007). Made to Stick – Why Some Ideas Survive & Others Die. Random House.
9. G. Reynolds (2008). Presentation Zen – Simple Ideas on Presentation Design & Delivery. New Riders.
10. D. Roam (2008). The Back of the Napkin – Solving Problems & Selling Ideas with Pictures. Portfolio Group.
11. C. Shirky (2008). Here Comes Everybody – The Power of Organising Without Organisations. Penguin Press.
12. C. Shirky (2008). Institutions vs. Collaboration. TED Conference Talk. Online at http://www.ted.com/index.php/talks/clay_shirky_on_institutions_versus_collaboration.html
13. D. Watts (2008). Is the Tipping Point Toast? Available online at <http://www.fastcompany.com/magazine/122/is-the-tipping-point-toast.html>
14. D. Watts (2008). Word of Mouth for the Real World. Avenue a Razorfish Conference. Available online at <http://vid.atdmt.com/v/lp/aarfmarketing/WordofMouthfortheRealWorld.m4v>
15. E. Wenger (2005). Cultivating Communities of Practice. Harvard School Press.
16. M. Wesch (2008). An anthropological introduction to YouTube. Presented at the Library of Congress. Available online at http://www.youtube.com/watch?v=TPAO-lZ4_hU&url=http://www.yesandspace.com.au/?cat=13
17. V. Krebs & J. Holley (2002-2006). Building Smart Communities through Network Weaving. ACEnet.
18. E. Shiffer. Net-Map Toolbox Website – Influence Mapping of Social Networks. Available online at <http://netmap.wordpress.com/about/>
19. P. Madson (2006). Improv Wisdom: Don't Prepare, Just Show Up.
20. V. McWaters. Improvised facilitation: the paradox of being prepared to be spontaneous. Prepared for the 9th Annual IAF Facilitation Conference. Singapore 31 Aug – 1 Sept 2005.
22. In C500, we “facilitated” every face to face meeting and workshop using a wide range of small and large group techniques including:
 - a. Open Space Technology - March 2007 Community conference
* <http://www.openspaceworld.org/>
 - b. Solutions Focus - C500 Network workshops and Household Energy Smart Workshops
* <http://www.thesolutionsfocus.com/>
 - c. Cafe Conversations - Household follow up with the project team
* <http://www.theworldcafe.com/>
 - d. The “evaluation summit technique” to make judgements on our findings in a participatory manner
* <http://www.clearhorizon.com.au>
 - e. The “Most Significant Change (MSC) technique” to collect and analyse stories from within C500
* <http://www.clearhorizon.com.au>
23. M. Coulson. Environmental Best Management Practices of Farms (EBMP) Project Report (2006). Department of Primary Industries. Available online - [http://www.dpi.vic.gov.au/DPI/NRENSR.nsf/93a98744f6ec41bd4a256c8e00013aa9/d2a4d75466904b26ca2574cf001ed5b1/\\$FILE/info%20package%2020-9-02.pdf](http://www.dpi.vic.gov.au/DPI/NRENSR.nsf/93a98744f6ec41bd4a256c8e00013aa9/d2a4d75466904b26ca2574cf001ed5b1/$FILE/info%20package%2020-9-02.pdf)
24. C. Robson (2004). Achieving Environmental Behaviour Change through the use of Goal Setting: An evaluation of the 2004 Living Smart Program. Murdoch University. Available online at <http://www.livingsmart.org.au/pdfs/04NovLS2+3EvaluationReport.pdf>
25. Casuarina Project. A Surf Coast Shire community Building and Leadership Program. Information online at <http://www.surfcoast.vic.gov.au/casuarina.htm>
26. B. Dick & T. Dalmau (1999). Values in Action – applying the ideas of Argyris & Schon. Interchange. 2nd Edition.
27. Castlemaine 500 Online Forum – Viewable online here at <http://www.castlemaine500.org.au/forum/viewtopic.php?t=57>
28. Douthwaite et al (2007) Participatory Pathways Impact Analysis The Canadian Journal of Program Evaluation Vol 22no.2 pages127-159.
29. Dr J. Medina (2008). BRAIN RULES - 12 Principles for Surviving and Thriving at Work, Home, and School. Pear Press.
30. Online practice change survey conducted by Clear Horizon over a 1 month period in 2007/08, completed by 88 participants.
31. A combination of the online practice change survey (30) and a telephone survey conducted by Clear Horizon in August 2008. The phone survey was completed with 55 participants, bringing the total sample size for this piece of evidence to 143 participants, out of a total population size of 351.
32. Phone survey conducted with 55 participants by Clear Horizon in August 2008.
33. Based on initial energy consumption data we conducted semi-structured interviews with 20 people who showed significant increases or decreases.
34. R. Hopkins (2008). The Transition Handbook – From oil dependency to local resilience. Green Books.
35. N. Wates. (2000) The Community Planning Handbook. Earthscan Publications.
36. IERD Series – sharing Approaches that Work in Rural Development. The Institute of Cultural Affairs.

C500 TOOLS AND PROCESSES -

FOR HOUSEHOLDS AND COMMUNITY

PROJECT COORDINATORS

1. Home Energy Assessment Tool (aka HEAT) in Hard Copy
 - The HEAT was used by all C500 households as a way of understanding their own energy use
<http://www.myhomemyplanet.org.au/pdf/HEAT.pdf>
2. Home Energy Assessment Tool (aka HEAT) online
<http://www.myhomemyplanet.org.au/heat.php>
3. Home Energy Action Plan (aka) HEAP
<http://www.myhomemyplanet.org.au/pdf/HEAP.pdf>
4. The 5 Steps of the C500 Household Process
<http://www.myhomemyplanet.org.au/action.html>
5. C500 Links to other energy smart websites and fact sheets
<http://www.myhomemyplanet.org.au/links.html>
6. Energy Smart Workshop Plans – Workshop #1 & Workshop #2
<http://www.myhomemyplanet.org.au/pdf/ESW1plan.pdf>
<http://www.myhomemyplanet.org.au/pdf/ESW2plan.pdf>
7. Energy Smart Workshop Training – Facilitation Notes
<http://www.myhomemyplanet.org.au/pdf/ESWfacilitation.pdf>
8. Energy Smart Workshop Powerpoint Presentations
<http://www.myhomemyplanet.org.au/pdf/ESWslides.pdf>
9. Home Energy Assessment Processes – Online Videos for training community members
 - Video #1 – The Introduction & Context
<http://vimeo.com/1228073>
 - Video #2 – Overview of the Home Energy Assessment Process
<http://vimeo.com/1228334>
 - Video #3 – The How
<http://vimeo.com/1228465>

- Video #4 – More on The How
<http://vimeo.com/1229013>
10. Climate Change Tip Sheet developed by the Australian Psychological Association
<http://www.myhomemyplanet.org.au/pdf/APStipsheet.pdf>
 11. C500 Online Community Forums
<http://www.castlemaine500.org.au/forum/index.php>
 12. C500 Project Team Video – The Handover and Thankyou to the local community
<http://www.youtube.com/watch?v=iU2jT-n17F8>

C500 EVALUATION TOOLS

13. C500 Online (and postal) Practice Change Survey – sent to households 2 months after completion of workshops or home assessments
www.myhomemyplanet.org.au/practicechangesurvey.pdf
14. C500 Final Survey – this phone survey was conducted with a sample of households to test the outcomes from the Practice Change Survey
www.myhomemyplanet.org.au/finalsurvey.pdf
15. C500 Registration Survey – completed by all households upon entering the project
<http://myhomemyplanet.org.au/registrationC500.php>
16. C500 Consent to Release Elec/Gas Consumption Data – signed consent forms allowed access to data from 4 of the 9 energy retailers
17. Most Significant Change (MSC) Story Collection Guide – used by C500 participants to collect stories from households, leaders and partners

LIST OF ACRONYMS

- C500 – Castlemaine 500
HEAT – Home energy Assessment Tool
* the HEAT was completed as a self assessment by all households
HEAP – Home energy Action Plan
* the HEAP was completed by households and detailed the actions they planned to take to reduce energy consumption.
CVGA – Central Victorian Greenhouse Alliance
MASG – Mount Alexander Sustainability Group
KASA – Knowledge, Attitudes, Skills, Aspirations
MSC – Most Significant Change Technique
MEL – Monitoring, Evaluation & Learning
CFL – Compact Fluorescent Lightglobe
WoM – Word of Mouth

(3) – Numbers in brackets denotes a reference to the Evidence Base on page 64

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