

SECTION A:

PROJECT ELIGIBILITY

PROJECT TITLE:

Working it out together – a community-based approach to reducing greenhouse emissions.

IN BRIEF, WHAT WILL YOUR PROJECT DO?

The project will be specifically built around behavioural change.

Members of Waterworks Valley Community have to date run a successful sustainability program (see further below) that has already delivered lasting benefits. However, this has been intuitively driven and we have not had the resources to thoroughly document its success nor go on to build a more formidable program built specifically around barriers that inhibit climate change abatement.

The Aims of the project are to:

1. Utilise an outreach / social marketing program that is focused around barriers to change, the project will consolidate, extend and intensify the sustainability work that our community has already been undertaking so as to deliver tangible and lasting energy reductions and behavioural changes.
2. In so doing, develop a community model providing Tasmanian citizens with a practical demonstration of how any ordinary household can affordably reduce its greenhouse footprint.
3. To publicise the project and its outcomes via media and networks and broadly share information and methodology for the benefit of Tasmanian public and other community groups working on sustainability.

TARGET COMMUNITY:

Waterworks Valley community, Dynnyrne.

The valley itself contains a discreet community of some 200 homes, many of which have already taken steps towards improved water and energy efficiency. The community has recently successfully completed an award winning solar hot water implementation program.

COMMUNITY BARRIERS:

Our community demographic is mostly middle class, well educated and largely accepting and understanding of the concepts of climate change and the urgent need for policy, structural and behavioural changes.

Fostering sustainable behaviour in our community is thus limited not so much by denial or lack of information, but by the various psychological barriers to behavioural change that have been identified by social change specialists (such as visiting psychologist [Doug McKenzie-Mohr](#) and social change advocate Rob Hopkins, in Chapter 6 of his [Transition Handbook](#) – "Understanding the Psychology of Change").

During the past three years we have successfully made great strides in furthering sustainability in our community without the benefit of such marketing tools and are very conscious of the various blocks – such as disposable income, lifelong habits, lack of technology awareness and, most importantly, lack of self awareness of the mental blocks and social and institutional impediments that are limiting our further progress.

We also wish to broaden the participation rate in the community. At present 35 homes are engaged out of a population of some 200 homes.

The funded program would extend our work into non-participating households and will use inspired leadership, community engagement and social marketing as a basis for overcoming the above barriers.

COMMUNITY SUPPORT:

First and foremost, the project has the solid support of members of the residents' group, the *Waterworks Valley Sustainable Community*.

Our membership comprises a healthy range of professionals and practitioners, including two climate scientists, a professional planner, three environmental consultants, a financial planner, several IT professionals, two trained 'home energy assessors', two professional builders and an environmental journalist.

Eco Tasmania Inc, a non-profit business body with close ties, has agreed to handle the project's finances as well as offer its professional services.

SECTION B:

YOUR ORGANISATION

WHAT DOES YOUR ORGANISATION DO?

[Eco Tasmania Inc](#) grew out Waterworks Community's solar bulk purchase venture and has since been independently set up to foster sustainable technologies and practices. (Its solar hot water arm is now licensed to a commercial operator.)

[Waterworks Valley Sustainable Community](#) came into being three years ago. Its website portrays the community's various activities and interests.

The core objectives of the group are to: 1) nourish community spirit and 2) reduce our collective carbon footprint.

The community has undertaken a range of sustainability projects to date, the most visible of these being the bulk purchase of solar hot water units – an initiative that has grown well beyond our own community and has resulted in the uptake of over 250 solar hot water units throughout Southern Tasmania (now managed by Eco Tasmania).

This initiative, and other activities such as workshops on home energy auditing and the development of a reliable 'walking bus' resulted in our community being conferred with the HCC's Dr Edward Hall community prize in 2006.

By preference, we work informally, currently having the participation of around 35 households who enjoy the advantages that a sense of coherent community provides them.

On sustainable land use and water issues we partner with the longstanding [Waterworks Landcare Group Inc](#) and support its activities where possible.

YOUR DIRECTORS OR OFFICE BEARERS:

The Climate Connect funded program will be officially administrated through the 'mother' organization, Eco Tasmania Inc. Its office bearers are:

President: Christopher Thomas Harries, Researcher, Senior Vice President: Philip Scott Cocker, Public Servant, Junior Vice President: Caroline Haigh, Home Duties, Treasurer: Glenda Marie Hosking, Home Duties, Secretary: Roderick West, Manager, 6th Executive Committee Member: Carol Bristow, Teacher, Public Officer: Christopher Thomas Harries

The on ground program will be conducted through *Waterworks Valley Sustainable Community*, which is informally structured and works through a collective that meets monthly. (A précis of relevant backgrounds is appended to this application.)

ANNUAL REPORTS:

The financial statement for Eco Tasmania Inc the last financial year is appended. (Note: At that time Eco Tasmania was structured as a unit trust, it has since been re-incorporated as a non-profit company.)

Its constituted Objectives and Purpose are: *“The protection and enhancement of the natural environment, provision of information on sustainable living, education on low impact environmental technologies and development of community based programs to assist in a transition to strong sustainable local communities.”*

The Waterworks Valley community association does not produce an annual report.

PROJECT PARTNERS:

During the past three years our target community members themselves have invested approximately \$48,000 in solar hot water installations and \$12,000 in solar photovoltaic installations in their homes. (We have not yet tried to document other investments in other energy saving measures and appliances.)

We regard these active participants to be, in effect, project investors since many households in the community have the financial resources to make investments in sustainable infrastructure, albeit only once they have overcome any reservations about the suitability of their home or lack of awareness about possibilities or simply to overcome their own inertia. Household investments such as these are measurable and therefore one potential measure of project success.

Eco Tasmania Inc itself has offered office space and communication facilities at its Salamanca Place office to the extent that these are required for the project.

Eco-Energy Options Pty Ltd (Dr John Todd) has offered to make up a set of temperature data loggers to monitor ‘before’ and ‘after’ performance of people’s homes (10 at a time) – as an in-kind service for which they would normally charge \$6,000.

Other professionals within the community (see further below) have offered their time and expertise as advisory consultants to the project.

YOUR ORGANISATION'S EXPERIENCE IN YOUR TARGET COMMUNITY:

The broader target community has been approached twice so far: The first was an invitation to householders to attend a community presentation on climate change at the local primary school (Princes St, Sandy Bay) in 2007. The second was an invitation to householders to participate in a group purchase of solar hot water initiative (which broadened later to the purchase of 250 solar hot water units in other communities). The local invitations were undertaken through letterboxing.

We have also garnered strong community support for the installation of speed humps in the community, successfully agreed by Hobart Council and due to be implemented.

Community members are also involved in regular Landcare work coordinated by Hobart Council and the development of school gardens at Princes Street Primary School.

We envisage that person-to-person contact via this funded program and publicity accompanying a successful Climate Connect grant application will excite a deeper engagement.

SECTION C:

YOUR PROJECT

WHAT WILL YOUR PROJECT DO?

1. Identify geographical boundary of community and estimate the community's overall total annual energy consumption and greenhouse abatement levels. The geographical boundary can range from 200 homes to 500 homes and will partly be determined by response levels.
2. Engage suitable professionals to help design the marketing program and monitor its performance.
3. Invite all community households to participate in an exciting project outlining work already done to create peer pressure and increase recruitment success. Solicit verbal or written commitments from householders to participate.
4. Conduct surveys (face-to-face and online) within the community in order to develop an understanding of the barriers that inhibit ordinary Tasmanians from taking action to live sustainably. These will include both external barriers (those affecting general society) and internal barriers (those that pertain to the specific household).
5. Conduct two professionally conducted focus groups. These would assist to more closely understand what barriers are holding people back from undertaking sustainable living practices.
6. Seek commitment from participating households to implement change and to facilitate this by joining small household 'cluster' groupings (approx 5 local households) that would meet monthly to share ideas and support each other.
7. Provide regular information and other support to participating households, including home assessments and monthly updates of project.
8. Monitor the community's progress by measuring energy savings (and other sustainability criteria) at a community and household level. Monitoring could occur via household groupings – they would report each month on savings and changes in behaviour.

9. Engage suitable professionals to help design the marketing program and monitor its performance.
10. Conduct a follow-up survey following one year to monitor outcomes (behavioural changes and tangible energy efficiency gains).
11. Generate publicity so that the project's outcomes can add value to Tasmanian statewide sustainability efforts. The online survey will be fine tuned, in the light of project feedback, and made available for general use.

WHY IS THE PROJECT NEEDED?

Participating households have reported that, although keen to reduce their footprints further, they are thwarted by a range of barriers (such as basic disempowerment, disconnected and isolated communities, lack of technical know-how, lack of knowledge of resources / products available to them, perceived lack of time to undertake household improvements and the difficulty of overcoming ingrained habits).

Non-participating households would have a wider array of barriers confronting them. We hope to use this social marketing strategy to engender a strong sense of purpose, a sense of community pride and achievement and a visible display of our successes so that community members will feel highly motivated and supported to understand and overcome barriers that inhibit them from living more sustainably.

We believe that in this demographic area the most powerful key to success for most people is the act of identifying and coming to grips with the barriers that are actually holding them back and then to work through them with peer group support.

WHO WILL BE INVOLVED IN THE PROJECT?

The project will be coordinated by three personnel, Chris Harries (overall coordinator), Amanda Sully and Jonah Gouldthorp with professional support from community members – Jacqui Allan (environmental services), Robert Vincent (planning), Stuart Godfrey (climate science), Glenda Hosking (home assessments).

Community members will volunteer their time and professional services except where it is reasonable to award them a remuneration owing to extended time that would be involved (person-to-person interviews, design work and home advisory assessments).

External partners include:

Eco-Energy Options Pty Ltd (previously mentioned), which has offered monitoring and associated equipment and

Sustainable Living Tasmania which has offered its participation via its Home Energy Assessment team and provision of information packs to households on a low-cost basis.

HAS A PROJECT LIKE YOURS BEEN SUCCESSFULLY TESTED BEFORE ELSEWHERE?

We are aware that overseas and mainland groups are working on similar programs (see <http://www.sustainabilitystreet.org.au/>), using similar techniques to deliver energy efficiency gains of 30 percent and over.

'Transition Towns' are being established on the Mainland and these have similar aims.

WHAT IS NEW OR INNOVATIVE ABOUT YOUR PROJECT APPROACH?

Eco Tasmania and Waterworks Valley Community have already made unique contributions to sustainable living that have inspired others to take their own initiatives. We hope to build on these successes.

With regard to this project, several emerging communities in Tasmania have been fostering local sustainability, however we are unaware of any community in the state that has taken a deliberative approach in social marketing to identify and overcome barriers to change and to monitor results.

To the extent we are successful, we hope to be able to provide useful methodology and support to other Tasmanian communities.

HOW WILL YOUR PROJECT ACHIEVE EMISSION REDUCTION OR ENERGY CONSERVATION OUTCOMES?

The project will develop a framework for measuring direct and indirect (such as attitudinal changes) energy saving responses

- By prompting behavioural changes in the defined community will lead on to reductions in energy usage – either via changes of habit or purchase and installation of energy-saving technologies and ideas.

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- The installation of additional solar hot water and solar pv units in the community (easy to measure reductions in energy use).
- Take-up of low cost technologies such as low-flow shower heads, insulation (easy to evaluate reductions in energy use).
- Pledged commitments from householders to undertake certain actions, behavioural change, household modifications (use of their Aurora / petrol records to assist evaluation)
- The effect of other existing community initiatives – such as food growing, community garden development, car pooling, community education, harvest festival – will be more difficult to evaluate with hard numbers, but will be included in the analysis.
- The project will provide a state-of-the-art, positive and practical role model for the wider community highlighting the energy and many other benefits of growing together in response to the climate change crisis.

HOW WILL YOUR PROJECT SAVE COSTS TO YOUR COMMUNITY OVER TIME?

Some participating households have already markedly reduced their home energy bills. We will be using these as examples of how others can do likewise.

Typically, solar hot water installation is reducing hot water power bills by up to 60 percent. An array of measures (pellets, general insulation, behavioural change) has reduced household energy usage by 40 percent. Increased cycling and walking (community is within walking distance of Hobart town centre) has delivered much lower costs to some participating households.

Many behavioural changes come at no or low initial cost. Some infrastructure investments provide a very early return. Some (especially solar) may take several years to make a return.

Food gardening, although satisfying, does not generally lower household costs initially, though the greenhouse emission benefits can be tremendous owing to markedly reduced transportation of foodstuffs.

HOW WILL YOUR PROJECT ENGAGE AND ENCOURAGE THE COMMUNITY TO WORK TOGETHER?

The response we are receiving from a diverse group of people is escalating and encouraging. We strongly believe that local sustainability development is the most beneficial community response to the forecasts of dangerous climate change.

Social support systems that have been built through our group are extremely positive and well received.

There is no barrier to membership of the community association. All householders are welcome to all events, activities and meetings. Within our nuclear group of about 35 households, since they started in late 2005 monthly meetings have seldom had less than 10 people present and are sometimes up to 40.

Door-to-door invitations will be used to invite and engage as many as possible into the funded program.

A colour brochure explaining our community venture will be circulated to all households.

Prominent street signs (*'You are entering a sustainable precinct'*) will delineate the community and focus interest in participation.

The focus groups will afford an opportunity for interested households to engage at a deeper level if they wish to do so. These will be a basis for gaining deeper understanding of barriers.

Local events are being organised (such as a Harvest Fair in late March) to help build enthusiasm and showcase and share local produce, skills and ideas.

WILL YOUR PROJECT BUILD ANY SPECIAL NEW SKILLS WITHIN THE COMMUNITY?

We have a number of skilled community members (previously cited), and wish to extend this knowledge and skill base so that the entire community becomes centred around sustainability.

One avenue to lower the cost of installations is for the community to offer low-cost installation of some devices (such as window pelmets, shower head installation, hot water thermostat adjustment) by capable community members who are prepared to undertake such work for a modest fee.

WILL YOUR PROJECT INVOLVE AN EDUCATION COMPONENT?

Yes, in particular we believe the larger survey will play a key role in enabling householders to understand their own household dynamics and will spur them on to commit to making changes. Various events and meetings will help consolidate this.

Home Sustainability Assessments will assist householders to better understand specifically how their household uses energy and contributes to greenhouse emissions as well as understanding measures that can reduce their footprint.

TOTAL LENGTH OF PROJECT:

The funded project will occupy 12 months duration. However, it is not possible to fully evaluate outcomes within this confined period, since the energy saving stemming from behavioural changes and installation of energy saving technologies often require a longer period to deliver and monitor tangible and measurable results – especially owing to Tasmania’s strong seasonal variations. We therefore intend to monitor on an on-going basis.

PROJECT MILESTONES:

PROJECT START	0 months
Milestone 1: Outreach component: Publicity undertaken and invitations delivered, profile of community established, database set up. Agreements to participate finalised.	3 months
Milestone 2: Home assessments conducted in 20 households. Assistance rendered. Focus group 1 conducted. Subject matter to be determined partly as a result of initial contacts and feedback. First round of general surveys conducted. Preliminary analysis undertaken.	5 months
Milestone 3: Focus group 2 conducted. Subject matter to be determined as late as possible (ALAP) – having deciphered people’s concerns and feedback to date. Focus group findings circulated to participating households. Interim analysis of energy savings undertaken.	7 months
Milestone 4: Second round of general surveys conducted. Analysis of reported and observed behavioural changes undertaken. Household and community energy efficiency gains estimated.	11 months
PROJECT FINISH	12 months
Street celebration, publicity undertaken, evaluation report finalised.	

SECTION D:

HOW WILL YOU MEASURE THE SUCCESS OF YOUR PROJECT?

HOW WILL YOU ESTIMATE YOUR EMISSIONS, ENERGY AND COST SAVINGS?

What specific technology, behaviour or choice are you trying to change with your project?

Our main aim is to engender within the community an understanding of how to overcome their own specific barriers and thus motivate them to take specific actions that are appropriate for their own circumstance – ranging from installation of solar equipment to developing their own vegetable gardens.

Specific community experience and expertise in relation to the installation of solar systems, veggie gardens and insulation will be drawn upon where relevant to community.

What do people in your target community currently do in relation to that technology, behaviour or choice?

The community has been running an active awareness program and this has delivered results.

A number of households have made significant advances. To date, fifteen households in the valley have installed solar hot water and two have installed solar photovoltaic systems. Others have plans to do so. The school 'walking bus' has been operating for two years. Participating households have access to small library of relevant books and DVD resources, including those that pertain to psychological barriers to change. There is a high participation rate in walking / cycling to work and home gardening.

We would like to document these existing successes more thoroughly as part of the baseline analysis of the project.

Amongst participating households (approx 35) there is a stated wish within the community to live more sustainably, but this wish is not actualised for a number of reasons. We have less information about non-participating households, though the community is fairly close-knit and cooperative.

The community generally has a lower than average footprint, but not markedly different to broader society.

What volume of emissions or energy, on average, will be saved for each individual technology, behaviour or change in choice achieved by your project?

Some households have low scope for additional gains, but these can act as role models for other households.

We generally advocate that most households in the community can reduce their greenhouse footprint by 40 percent with a concerted effort, and this is a target we will promote.

Inertia dictates that this is not usually achievable within one year, but most 'low hanging fruit' initiatives can be undertaken within this time frame.

Within the intensive group of 20 households we wish to demonstrate the potential for maximum gains – that can then be translated to whole community. In the broader community an energy gain of 15 percent in one year would be a modest target we hope can be achieved, this providing the stimulus and momentum for further gains to be made in future years.

At the end of your project, how will you estimate how many individual changes you have facilitated?

Comparison between front-end and tail-end community surveys will provide strong guide as to substantial changes in attitude, perception and behaviour. These will be indicators of success.

Participating householders will be asked to self-report any energy saving initiatives that they have undertaken during the period along with any (costed) investments they have made towards that end. Also, where possible, their own estimate of likely or actual energy savings.

Households participating in intensive group will use their (present and historic) Aurora bills and petrol bills to indicate actual saving that are being made. Measuring devices will help to ascertain these results.

The combined community reductions in greenhouse emissions will be subsequently estimated and reported back to the community.

Note: So far, at community meetings, we have successfully used a "consensus" model for decision-making.

Towards the end of the project year, we will consult individuals and write a collaborative summary document, outlining what participants themselves see as the successes and failures of the project. A draft of this will be circulated via the internet, and amendments sought. At a final meeting we will seek any further input, and attempt to arrive at a consensus approval of the result.

WHAT OTHER PROJECT OUTCOMES DO YOU EXPECT FROM YOUR PROJECT?

Please indicate from the following list:

- Will underpin a partnership arrangement with another organisation
- Will create personal linkages within the community to encourage people to work together
- Will bring new skills to the community
- Will educate people within the community

ARE THERE ANY OTHER PROJECT OUTCOMES THAT MIGHT BE ACHIEVED?

To date we believe we have effected subliminal changes in broader Tasmanian society by publicising our achievements and inspiring other communities to do similar things.

We are hoping that the general survey when fully developed will be a resource that can be used statewide by any community.

SECTION E:

PROJECT FUNDING

HOW MUCH FUNDING ARE YOU SEEKING UNDER THE PROGRAM?

\$35,850

WILL PART OF THE PROJECT BE FUNDED FROM ANOTHER SOURCE?

We will be receiving substantial in-kind contributions but no direct financial aid from other sources has been secured.

IF YES:

WHO HAS PROVIDED FUNDING AND HOW MUCH HAS BEEN SECURED?

WILL YOUR PROJECT REQUIRE ADDITIONAL FUNDING TO CONTINUE BEYOND THE CLIMATECONNECT FUNDING PERIOD?

No, however the project will continue under community's own resources.

IF SO, HOW WILL OTHER FUNDING BE SECURED TO CONTINUE THE PROJECT?

An offshoot of the project may deliver the ability to undertake community surveys on behalf of other groups. This is not so much a continuation as a new prospect that we may wish to take up. Funding is not being sought for this.

HOW WILL THE BENEFITS DERIVED FROM THE PROJECT HAVE A LASTING POSITIVE IMPACT ON THE COMMUNITY?

We are hoping for an elevation of community identity and the development of the community as an icon of sustainable living. Our belief is that once habits and lifestyle changes are addressed they will have an enduring value, and through word of mouth and publicity, will act as a focus for similar cultural change elsewhere.

Our solar program has already successfully delivered these benefits.

SECTION F:

YOUR TOTAL PROJECT COSTS

Project items or services	Cost (\$)	Cost justification	Proposed Funding source
Project administration			
Project Coordination (1 Day per wk @ \$35,000 pro rata)	\$7,000	Essential for efficient management of program (This does not include committee meetings, but does include communication, media work, survey compilation, website updating... necessary for efficient operation of project.	Climate office
Administration o/heads	\$500	Incidental costs of phone calls, media work	In-kind contribution
Account auditing	\$500	Project requirement	Climate office
Community engagement			
Information brochure (design and layout)	\$1,000	Required to establish contact with community. Needs to be professionally done	Waterworks community
Information brochure (printing * 1,000)	\$1,500	Essential in order to engage community well.	Climate office
Information packs (250 packs at \$8 each)	\$2,000	Basic 'how to' handouts offered to all householders	Climate office
Purchase of 100 x low-flow shower heads	\$2,500	With this item we wish to convert entire community shower heads as a prime measure and as a prompt for people to take up more comprehensive measures.	Climate office
Samples of energy-saving appliances, insulation materials, LED lighting etc	\$2,000	Demonstration items to assist with education of householders on things they can implement themselves.	Climate office
Starter packs for intensive group of 20	\$1,000	Will help to motivate households	Climate office

Home Assessments			
30 x Home Energy Assessments @ \$70	\$2,100	Provided for signed-on householders who require this service. Other households can offer to pay for service.	Climate office
Two sets of energy / temperature measuring devices	\$1,300	Tools required for Home Assessors to evaluation and demonstrate household energy performance.	Climate office
Household / community monitoring			
Design & printing of major survey (* 200)	\$1,200	This needs to be professionally designed plus need to pay monthly charge to software provider.	Climate office
Face-to-face interviews	\$2,000	20 minutes x 200 households plus recording of results Repeated towards project end.	Climate office
Fabrication and installation of temperature data loggers	\$6,000	To measure house temperature and insulation performances and seasonal variations	In-kind Contribution
2 Focus groups	\$2,500	Requires professional approach and enticement to ensure unbiased participation.	Climate office
Communication and publicity			
Website upgrade	\$1,000	Special website node that residents can use to track project.	Climate office
Monthly newsletter updates	\$250	For those who do not have access to internet.	Climate office
Book Resource Library Fund	\$1,000	To purchase information resources such as "Transition Towns Handbook", accessible to community members.	Climate office
Street signs (2-3)	\$8,000	Would assist community's engagement and also with publicity of project.	Climate office

Total funding sought from the ClimateConnect Program	=	\$35,850
Total secured other funding	=	\$0
Total in-kind support	=	\$7,500
Total cost of the project	=	\$43,350

SECTION G:

REFERENCES

LETTERS OF SUPPORT:

Please list any letters of support from individuals and/or organisations. Please **attach copies of these letters** to this form.

REFEREES:

- (1) Name: **Phillipa Watson B.Arch (Hons) UQ**
Organisation/position: **PhD Candidate, University of Tasmania
(studying behavioural change)**
Contact details: **Ph: 0433 212 619, email: pip.watson@internode.on.net**
- (2) Name: **Margaret Steadman**
Organisation/position: **Sustainable Living Tasmania**
Contact details: **Ph 6234 5566 Email: info@sustainablelivingtasmania.org.au**

FINANCIAL REFERENCE:

The applicant, Eco Tasmania, is in a financially robust position, drawing on a regular fee from its solar hot water licensee (account summary provided).