

**Northern Alliance for
Greenhouse Action
Final report – Regional
Partnership program
July 2005 – January 2007**



**NORTHERN
ALLIANCE FOR
GREENHOUSE
ACTION**

c/- Moreland Energy Foundation Limited
Level One 233 Sydney Road Brunswick
Postal Address PO Box 276 Brunswick 3056
Telephone 03 9381 1722
Facsimile 03 9381 1733
judy@mefl.com.au

Table of Contents

Executive Summary	2
Introduction.....	2
Recruitment.....	2
NAGA members and project partners	4
NAGA Planning and Coordination.....	6
<i>NAGA Strategic Planning.....</i>	<i>6</i>
<i>NAGA Working Groups.....</i>	<i>7</i>
<i>NAGA Website</i>	<i>7</i>
<i>Municipal data management.....</i>	<i>7</i>
Regional Alliances.....	8
<i>Regional Coordinators' Quarterly meetings.....</i>	<i>8</i>
<i>DSE Review of Regional Alliances</i>	<i>8</i>
<i>Strategic Planning Day</i>	<i>8</i>
<i>MAV Policy Forum</i>	<i>8</i>
Details of new funding	9
Quantification.....	9
NAGA Projects and Funding	10
<i>Project 1: Energy Services Sector Development – Green Electricians</i>	<i>10</i>
<i>Project 2: Strengthening Communities – Sustainability Street Northern Metropolitan Melbourne Community Greenhouse Action.....</i>	<i>13</i>
<i>Project 3: Vic1000 Sustainable Business Management Program</i>	<i>16</i>
<i>Project 4: NAGA 2006-9 Public Lighting Action Program.....</i>	<i>17</i>
Other NAGA Projects:	18
<i>Community Power.....</i>	<i>18</i>
<i>Northern Metropolitan TravelSmart</i>	<i>18</i>
<i>Darebin Business Breakfast Climate Change Everybody's Business</i>	<i>18</i>
<i>Your Home Our Environment Cities of Banyule and Manningham, Shire of Nillumbik.....</i>	<i>19</i>
<i>Sustainable Homes Project.....</i>	<i>21</i>
<i>Carbon Neutral Communities: Making the Transition.....</i>	<i>22</i>

Executive Summary

The Northern Alliance for Greenhouse Action has been operating since 2002 as an informal network that shares information, coordinates Councils' community based emission reduction activities and cooperates on the research and development of innovative corporate emissions projects.

NAGA's founding members are the Cities of Banyule, Darebin, Hume, Moreland, Whittlesea, Nillumbik Shire Council and the Moreland Energy Foundation Limited (MEFL); in early 2006, the Cities of Manningham, Melbourne and Yarra joined NAGA.

In April 2005 the Victorian Government released the Victorian Greenhouse Strategy Action Plan Update, which provided funding under the Greenhouse Regional Partnership Program for NAGA to expand the Alliance's work on local greenhouse issues, by providing funding for the employment of a coordinator. NAGA is the program's newest Regional Partnership, and also currently its only fully metropolitan partnership.

As part of involvement in the Regional Partnership program, NAGA has initiated four major emission reduction projects (as well as transport demand management projects), established associated project partnerships and written a number of strategy documents including a Strategic Plan to guide future priorities and projects, a membership strategy and a projects assessment framework.

Introduction

The Northern Alliance for Greenhouse Action was formed in 2002 as an informal network that shares information, coordinates Councils' community based emission reduction activities and cooperates on the research and development of innovative corporate emissions projects.

NAGA's founding members are the Cities of Banyule, Darebin, Hume, Moreland, Whittlesea, Nillumbik Shire Council and the Moreland Energy Foundation Limited (MEFL); in early 2006, the Cities of Manningham, Melbourne and Yarra joined NAGA.

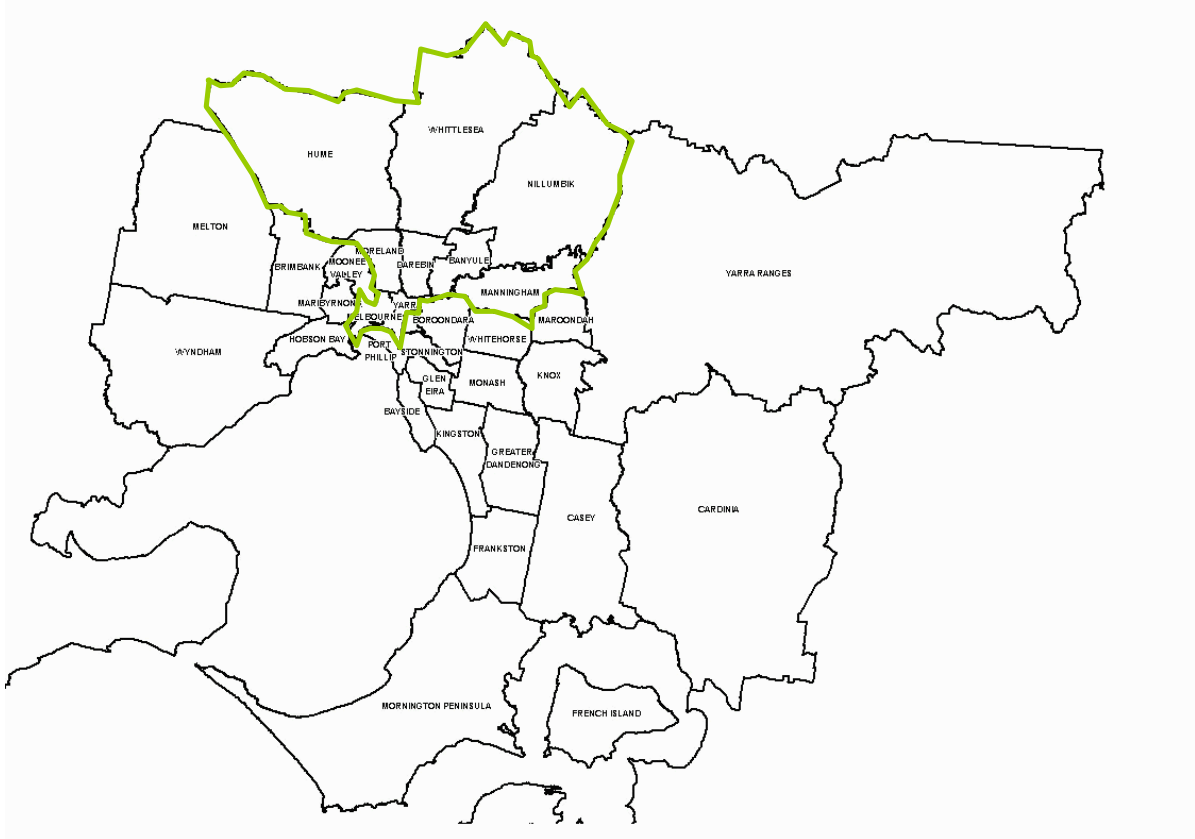
In April 2005 the Victorian Government released the Victorian Greenhouse Strategy Action Plan Update, which provided funding under the Greenhouse Regional Partnership Program for NAGA to expand the Alliance's work on local greenhouse issues, by providing funding for the employment of a coordinator. This report covers the period of the first round of funding under the Regional Partnerships Program, July 05 – January 07.

Recruitment

As part of funding to NAGA from the Regional Partnerships Program, NAGA was required to expand its membership by at least 2 organisations. To plan for this expansion, NAGA prepared an Expansion Strategy (October 2005) to guide recruitment of organisations. The Expansion Strategy identified the following categories for involvement in NAGA:

1. *NAGA Committee Members* participate at a Committee level and have responsibility for guiding the development of NAGA and ensuring the terms of the DSE contract are met;
2. *NAGA Project Partners* are non-Council organisations that work with NAGA on particular projects;
3. *"Fellow Travellers"*, organisations with whom NAGA has a relationship, but with whom NAGA is not actively working on projects;
4. And, over time, a *NAGA Network* of NAGA partners and other interested organisations to help further community emission reduction in the northern suburbs.

It was agreed that the NAGA operated well with a strong local government focus amongst its members. As a result, three additional local governments, the cities of Manningham, Melbourne and Yarra, joined NAGA in early 2006, bringing NAGA's membership to 10 and extending NAGA's geographic coverage to stretch from the CBD to the urban-rural fringe within the northern region of metropolitan Melbourne.



Metropolitan Local Government Areas, NAGA region indicated in green

NAGA decided to maintain a largely urban focus in its membership to allow a continued focus on climate change action within the urban context amongst its members (recognising that there is an additional suite of issues faced by rural communities, that could potentially have stretched NAGA's capacities too thin). NAGA feels that its current size is appropriate for its functionality, interests and activities and is not seeking to add additional members.

NAGA is continuing to establish and maintain linkages and partnerships beyond the local government sector through project implementation and sharing of information and resources, however will continue to engage with others in the region through stakeholder project partnerships, etc.

NAGA members and project partners

NAGA members	
Banyule City Council	area 62km ² , population 113,696 established residential municipality, low-medium cultural diversity
Darebin City Council	area 54km ² population 122,821 municipality spanning inner-city, established suburbs & relatively new residential areas, high cultural diversity
Hume City Council	area 504 km ² population 132,976 municipality with established residential areas, industry, rural areas and future growth areas, high cultural diversity
Manningham City Council	area 114 km ² , population 107,079 municipality with well-established, residential medium density to large-lot non-urban areas, parklands and open space, high cultural diversity
City of Melbourne	area 37 km ² , population 58,031 capital city municipality with business, administrative, cultural and recreational hub; residential revitalisation and urban consolidation, high cultural diversity
Moreland City Council	area 51 km ² , population 136,894 largely residential, highly developed municipality, with high cultural diversity
Nillumbik Shire Council	area 430 km ² , population 58,160 municipality spanning urban & rural areas, including remote bush properties, low cultural diversity
City of Whittlesea	area 489 km ² , population 113,7784 municipality with major growth areas, as well as rural areas (farming & grazing; forest & conservation reserves), high cultural diversity
City of Yarra	area 20 km ² , population 67,052 inner metropolitan municipality with historical industrial, working class presence, public housing estates; more recent gentrification, medium-high cultural diversity
Moreland Energy Foundation	MEFL is an independent not-for-profit organization established by the Moreland City Council to help reduce the Moreland community's greenhouse gas emissions.
	<i>total area of NAGA region</i> <i>1762km²</i>
	<i>total population of NAGA region</i> <i>910,493</i>

NAGA Project Partners	project involvement
Department of Sustainability and Environment	funding to NAGA under the Regional Partnerships program coordination/liaison with Regional Coordinators' forum, quarterly meetings Sustainability St – member of Working Group
ICLEI	coordination/liaison with Regional Coordinators' forum, quarterly meetings Streetlighting project – VSPLAG member, technical input
Municipal Association of Victoria	coordination/liaison with Regional Coordinators' forum, quarterly meetings Streetlighting project – VSPLAG member, local government liaison
Sustainability Victoria	coordination/liaison with Regional Coordinators' forum, quarterly meetings Eco Electricians project – assistance with NAGA pilot project - funding body for NFEE project (2007) Streetlighting project – VSPLAG member, technical input
Australian Greenhouse Office	Eco Electricians project - provision of funding Streetlighting Project – technical input, regulatory context/input
Clipsal	Eco Electricians project – assistance with NAGA pilot project (provision of venue and speakers for seminars)
Department of Victorian Communities	Sustainability St – provision of funding - member of Working Group
Electrical Trades Union	Eco Electricians project – assistance with NAGA pilot project
Electricity Distribution Businesses	Streetlighting Project – technical input, liaison re establishing costs in VSPLAG process
The Energy Doctor	Eco Electricians project – presentation to seminars and training course, provision of advice on seminar content
The Environment Shop	Eco Electricians project – presentation to training course, provision of innovative energy efficiency materials Sustainability St - presentation to training course, provision of innovative energy efficiency materials
Essential Services Commission	Streetlighting Project – regulatory context/input
Melbourne Electrical Specialists	Eco Electricians project – advice/assistance with NAGA pilot project - presentation to seminar
National Electrical and Communications Association	Eco Electricians project – assistance with NAGA pilot project - lead agency implementation of NFEE project (of which NAGA is a member of the Advisory Committee)
RMIT	Eco Electricians project – training implementation
Victoria University	Sustainability Street project – evaluation
Village Green	VIC 1000 project – implementation
Vox Bandicoot	Sustainability Street project – implementation
Yarra Valley Water	Sustainability Street project – provision of in-kind support; water efficient materials to project participants Vic 1000 project – level 2 supporter

NAGA Planning and Coordination

NAGA Strategic Planning

Following receipt of DSE funding under the Regional Partnerships Program, and employment of a NAGA Coordinator, NAGA has undertaken a number of formal strategic planning processes, leading to the preparation of the following strategies (attached):

NAGA Expansion and Membership Recruitment Strategic Plan	October 2005
NAGA Projects Strategic Assessment Framework	January 2006
NAGA Strategic Plan 2006	November 2006

The Expansion and Membership Recruitment Strategic Plan was prepared in response to DSE requirements for NAGA to expand its membership (see earlier section - Recruitment).

The Projects Assessment Strategic Framework was prepared to provide NAGA with strategic guidance in the selection of the 4 major projects that NAGA was required to initiate during the term of the DSE funding contract. The Framework aimed to explicitly identify the key factors and priorities required to be met by any projects undertaken by NAGA. These factors and priorities are:

- community emissions focus
- Level of emission reductions achievable, as well as 3 of the 4 projects to have quantifiable emission reductions
- Targeting gaps and/or leveraging
- Cutting edge and replication
- Demand creation and demand satisfaction
- regional scale delivery; and the potential for inter-regional roll-out
- 'Implementability' of projects
- Involvement of at least 2 NAGA members in each project, and all NAGA members involved in at least one of the 4 projects

The Framework included an overview of potential target audiences by municipality, as well as a project planning assessment template, and a matrix of NAGA projects to ensure that the 4 projects would create a 'balanced portfolio' that would meet the range of criteria and work with a range of sectors and project partners.

The Strategic Plan was developed following NAGA's annual Strategic Planning Meeting on 9th August 2006. The meeting was facilitated by Russell Fisher of *Sustainability in Mind* and included presentations from Alan Pears (Adjunct Professor RMIT University, and Director, Sustainable Solutions Pty Ltd), Andrew Rowe (CEO, VLGA) and Mike Hill (CEO MEFL, Chair Victorian Local Sustainability Accord). The speakers covered issues including: overview of global, federal, state and local strategies and actions on climate change; sustainability and climate change issues as part of Local Government priorities; and the drivers, forces, pressures and opportunities for Councils in delivering energy and other sustainability initiatives.

The meeting reviewed progress on items developed in the 2005 Strategic Planning meeting, as well as planning the coming year's activities and projects.

The Strategic Plan summarises NAGA's formation, membership and structure; lists NAGA's current (05-6) projects; outlines the strategic planning process that led to the development of the plan; describes the current strategic context, trends and issues; and defines a vision and mission for NAGA. The following key strategic directions have been identified:

1. Increase NAGA's influence and support through strong relationships and linkages
2. Increase community knowledge and action on climate change
3. Increase sustainable energy options and uptake within the NAGA region
4. Sustain NAGA

NAGA Working Groups

NAGA has established five Working Groups to allow more detailed, in-depth work on specific issues between the 6 weekly meetings of the NAGA committee of management. The Working Groups report to the NAGA Committee. NAGA's Working Groups formed to date include:

- Strategic Planning
- Data Management
- Sustainability Street
- Streetlighting
- Vic 1000

NAGA Website

NAGA has established a website presence that can be accessed at www.naga.org.au, as well as via MEFL's website www.mefl.com.au. The website summarises NAGA's structure, membership and project, and includes links to NAGA members' and project partners' websites as well as relevant federal and state government information sources. Website users can also contact the NAGA Coordinator directly via a contact form on the website. NAGA's website (www.naga.org.au) is regularly updated with links to project partners' and stakeholders' web sites, and has been providing an effective gateway for enquiries about NAGA's projects (particularly via the web-based contact form). NAGA developed and printed a logo, letterhead and business card to contribute to building a recognisable 'brand' for the Alliance, and the website is designed around this branding.

Municipal data management

NAGA established a Data Management Working Group to research barriers and issues to effective utilities' data management (both Councils' and communities') and to develop proposals to begin to address these. Data management was identified in NAGA's Strategic Plan as a key priority in addressing NAGA members' capacity needs to deliver on mission and strategy.

All NAGA member Councils have been surveyed to collect information on which software tools are used by Councils to collect, report and analyse utilities' data; and what needs to be improved. All councils reported that they were planning to change their data management systems (irrespective of which they were currently using) within the next 2 years to achieve improvements, particularly in:

- streamlining/automating data entry, and
- improved reporting capabilities.

NAGA's Data Management Working Group will continue to work to identify the objectives for improved data management; areas where there is potential to streamline and / or rationalise utility data management, and to determine if there is the potential for data management methodologies to be shared amongst Councils, and between Greenhouse Alliances.

Regional Alliances

Regional Coordinators' Quarterly meetings

NAGA's Coordinator (or a substitute) has attended all of the quarterly Regional Coordinators' meetings and has played a strong role in encouraging involvement and resourcing from state-level agencies (SV, MAV and ICLEI), as well as facilitating scheduling, and organisation of meetings. The meetings have been an invaluable forum for sharing knowledge and experience in building alliances, maintaining partnership relationships, project selection and implementation.

DSE Review of Regional Alliances

NAGA actively participated in the DSE Review of the Regional Partnerships Program, with DSE's consultant Simon McGuinness attending a NAGA meeting to present findings to date and discuss issues and recommendations. NAGA members also completed survey forms and met one on one with the consultant.

Strategic Planning Day

NAGA took an active role in coordinating the organisation of the Regional Alliances' Strategic Planning Day held on 9th October 06. The day was proposed by Terry White, CVGA's Coordinator, to review the Alliances' progress to date and to discuss future plans and the establishment of leadership targets. NAGA liaised with other regional alliances, DSE and with ICLEI, MAV and SV to confirm provision of funding for a facilitator for the day, agenda, attendees, venue and catering, etc. The day was well attended, with representatives from DSE, ICLEI, MAV and SV, as well as the coordinator and 2 members from each of the 5 greenhouse alliances. The major topic of discussion was the alliances' leadership role in setting greenhouse gas emission reduction targets, with Terry White advocating Zero Net Emission targets for 2020. (NAGA's Strategic Plan has identified the garnering of support from its member councils for the establishment of 'ambitious zero net emissions targets' for the NAGA region as one of its priorities.)

MAV Policy Forum

NAGA's Coordinator was invited to speak to the MAV Climate Change Policy Forum on 5 October 2006, on behalf of the greenhouse alliances, on the topic of 'Victorian Greenhouse Alliances – Strategic Partnerships with Local Government'. The forum was part of the MAV's annual environment policy forum series. The Policy Forum was attended by 130 delegates (councillors, CEOs, senior managers and officers) from at least 57 councils.

Details of new funding

NAGA has sourced significant levels of funding from various sources to supplement DSE funding and enable implementation of the four NAGA projects. The external funding for project implementation is listed below. Details of the four NAGA projects initiated over the course of this report are included in the following sections.

project	funding body	amount of funding	duration of funding	comments
Green Electricians	Australian Greenhouse Office Community Abatement Assistance Grant	\$25,000	October 05 - May 06	small pilot-scale funding contributed to the establishment of project partnerships that are now involved in a nation-wide pilot.
	NAGA members	in-kind support		
Sustainability Street	Department of Victorian Communities Community Support Fund	\$500,000	January 06-December 08	funding from a source outside the direct environmental/ sustainability pool
	NAGA members participating in project	\$5,000 each in-kind support		
Vic 1000	Sustainability Fund Round 1 (grant recipient – Village Green)	\$180,000 per region (total grant \$900,000)	January 07 – Dec 07 northern region (project duration January 06 – Dec 08)	NAGA regional grouping promoted participation in a state-wide project
	matching sponsorship – smart car Australia, Yarra Valley Water	\$145,000		
	NAGA members participating in project	\$3,500 each (per 20 businesses) in-kind support		
Public Lighting Action Program	Sustainability Accord	\$143,000	October 06 – June 09	NAGA regional project with linkages to other regional alliances, allowing state-wide delivery of some aspects of the project
	NAGA members participating in project	in-kind contributions		

Quantification

Of the four projects NAGA has initiated over the course of this funding period (July 05 – January 07), only one project, **Energy Services Sector Development – Green Electricians**, has been completed. Quantification of greenhouse gas emission reductions as a result of this project are listed within the project report (see below). Results from other projects will be reported as projects are completed.

NAGA Projects and Funding

Project 1: Energy Services Sector Development – Green Electricians

Funding: Australian Greenhouse Office Community Abatement Assistance Grant

	\$25,000
NAGA project costs contribution	\$5,000
Councils' in-kind contribution	\$30,000
TOTAL	\$60,000

Project duration: November 2005 – May 2006

Partners: Moreland Energy Foundation, Moreland City Council, Hume City Council, Darebin City Council, other NAGA members, liaising with Sustainability Victoria, RMIT, Swinburne, National Electrical and Communications Association, Electrical Trades Union, Energy Safe Victoria, Clipsal, the Energy Doctor, the Environment Shop, other electrical manufacturers and wholesalers.

Objectives and outcomes: The project delivered information seminars to electrical contractors in the NAGA region. The sessions provided participants with background about greenhouse issues and built their capacity to integrate energy efficiency advice into their services. Free energy efficiency packs of electrical appliance/equipment were distributed to participants of the seminars. Following the seminars, participants were offered a free place in the RMIT *Energy Smart Electricians* 2 day course (places funded by the project grant).

The first of the introductory seminars targeted electrical contractors that carry out work for the NAGA councils. The second and third seminars were publicised to electricians throughout the NAGA region. The fourth seminar will be delivered to the Women's Network of the National Electrical and Communications Association. As part of this project, places were provided in the 2 day RMIT course. There were more applications than places available, even with the course being delivered twice.

The project has provided a practical case study to advance development of training modules and accreditation for electrical tradespeople, and to assess potential to develop trade association structures similar to the 'Green Plumbers' initiative. Further formal evaluation of the project, and of participants' involvement will be undertaken by the National Framework for Energy Efficiency and Sustainability Victoria.

Performance indicators:

Greenhouse Gas Emissions Abatement

Direct Abatement Outcomes

The project allocated \$15,000 towards energy efficient lighting products that were distributed to seminar participants. The installation of this equipment (see table below) resulted in:

Energy Saving	79347.84kWh p.a.
CO ₂ Abatement	116 T CO₂ –e (coeff 1.467)

Long Term Abatement Outcomes

The project has the capacity to significantly enhance long term greenhouse abatement by directly engaging the electricians who are interfacing on energy decisions with their customers in both the residential and commercial sectors. Electricians who have participated in the seminars and the training course have an increased understanding of the range of opportunities for achieving improved energy efficiencies and reductions in electricity use, leading to reductions in greenhouse gas emissions. In addition, they have had the opportunity of installing energy efficient products provided at the seminars and therefore have a higher level of awareness of the function and long-term operation of some of the energy efficient products now available.

Give away energy efficiency packs

product	units supplied	Power per unit (W) ¹	Power - replaced unit (W) ²	power savings (W) ³	emission reductions (kWh)
Philips Décor Compact Fluorescent Lamps	120	20	100	80	19968
Philips Masterline ES (energy saver) 35 watt dichroic halogen lamps	620	35	50	15	19344
Osram T8 Electronic Starter					0
Nelson twin T5 linear fluorescent reflector batten	60	56	72	2080	1996.8
Megaman PAR 38 Compact Fluorescent floodlight	60	20	120	2080	12480
energy controller 3.8	2	2016	2880	2080	3594.24
energy controller 4.8	2	2520	3600	2080	4492.8
Nelson CFL	140	15	75	2080	17472
				TOTAL	79347.84

Notes

Annual Hours of Operation based on 8hr x 5 days x 52 weeks

¹ Power consumption of the energy efficient unit supplied

² Power consumption of the conventional unit that the energy efficient unit is replacing

³ Power savings (based on power consumption of conventional unit less power consumption of supplied energy efficient unit)

Seminar and training participation

	target audience	speakers	attendance/notes
seminar 1 1/2/06 Brunswick Town Hall	Councils' electrical contractors – invitation by letter to contacts supplied by Councils	Sustainability Victoria (Katrina Woolfe) The Energy Doctor (Bruce Rowse) Melbourne Electrical Specialists (Joe Saitta)	10 electricians <i>others:</i> <i>Pilar de la Torre (RMIT)</i> <i>Petah Rhynehart (AGO)</i> <i>Deborah Gonsalvez (SV)</i>
seminar 2 1/3/06 Clipsal Training Room	general invitation: <ul style="list-style-type: none"> fliers to electrical wholesalers, fliers mailed to electricians listed in the Yellow Pages locality guide, fliers distributed to students of Swinburne's renewable energy course articles in NECA newsletters, ATA newsletter 	Sustainability Victoria (Katrina Woolfe) National Electrical and Communications Association (Rod Lovett) The Energy Doctor (Bruce Rowse) Clipsal Integrated Systems (Rob Shenstone)	19 electricians <i>others:</i> <i>Herb Weber (RMIT)</i> <i>Deborah Gonsalvez (SV)</i> <i>Michael Grubert (Energy Safe)</i>
seminar 3 8/3/06 Clipsal Training Room	as for seminar 2	as for seminar 2	25 electricians <i>others:</i> <i>Herb Weber (RMIT)</i> <i>Deborah Gonsalvez (SV)</i> <i>Allan Driver, Michael Grubert (Energy Safe)</i>
training course 1 3/3/06, 10/3/06	seminar 1 attendees	RMIT – Pilar de la Torre The Energy Doctor (Bruce Rowse) The Environment Shop (Mick Harris)	17 applications/12 places confirmed
training course 2 31/3/06, 7/4/06	seminar 2 & 3 attendees	as for training course 1	20 applications/14 places confirmed

Further work following completion of funded project

The National Framework for Energy Efficiency (NFEE) has undertaken an evaluation and review by independent consultants of the RMIT short course that was delivered to the NAGA project's course participants. The review involved interviewing course participants and is part of a larger project developing training and accreditation for electricians¹.

NAGA's project has provided an invaluable opportunity to test and review electricians' training needs, and responses to existing courses, as well as scoping other issues including marketing skills development, etc.

As well as reviewing NAGA's project participants, NFEE has been holding a number of workshops with electrical services industry representatives, including the National Electrical & Communications Association (NECA), training providers, etc, several of whom were involved in NAGA's project as well. The June workshop included a presentation from Gary Workman, National Manager, Green Plumbers Association, the Green Plumbers potentially providing a model for development of an energy efficient electricians association. The NAGA Coordinator and MEFL staff also attended the workshops.

Sustainability Victoria, as part of the National Framework for Energy Efficiency (NFEE) professional development project, has appointed National Electrical and Communications Association (NECA) to undertake the pilot project to develop and deliver training and accreditation in energy efficiency and energy management for practicing electricians. The pilot project will be delivered in Melbourne and Sydney and will include at least four separate training modules, the content of which is currently being prepared. The pilot project is due for completion in June 07.

NAGA is continuing to work closely with NECA in the implementation of the pilot. NAGA is a member of the project's Steering Committee. NECA is keen to have NAGA's involvement and input as it considers that NAGA members could provide critical demand for the services of *EcoSmart Electricians*.

¹ The National Framework for Energy Efficiency (www.nfee.gov.au), an intergovernmental framework, aims to achieve a major enhancement of Australia's energy efficiency performance, reducing energy demand and lowering greenhouse gas emissions, by focusing on demand-side energy efficiency, primarily in the residential, commercial and industrial sectors. The Trade and Professional Training Implementation Committee has been investigating Professional development for practicing trades people, including electricians. The NAGA project has been delivered in consultation with NFEE, and outcomes and evaluation of the NAGA project, undertaken by consultants Straun Research for Sustainability Victoria, have informed NFEE policy development for the training and accreditation of electricians.

Project 2: Strengthening Communities – Sustainability Street Northern Metropolitan Melbourne Community Greenhouse Action.

Funding: DVC funding Community Support Grant	\$500,000
Councils' Sustainability St Licences	\$30,000
In-kind contributions	\$1,063,000
<i>(NAGA Coordinator, NAGA Councils, local communities, Yarra Valley Water)</i>	
TOTAL	\$1,593,000

Project Duration: January 06 – December 08

Partners: NAGA, Vox Bandicoot, Victoria University of Technology, Yarra Valley Water.

The project will be delivered by Vox Bandicoot in partnership with NAGA, within the municipalities of Darebin, Melbourne, Moreland and Whittlesea. Evaluation of the project as a whole and of greenhouse emissions abatements specifically will be planned by NAGA in partnership with Vox Bandicoot and Victoria University of Technology.

Project description: Delivery of a thriving network of Sustainability Street “Beacon” community groups throughout the Northern Metropolitan Melbourne region over a three year period, to engage and build sustainable living and community strengthening capacity within 18 newly formed “Beacon” community groups. The program will target households in 12 local areas or streets within the NAGA region in the first 18 months of the project, with a further 6 communities recruited in the final 18 months of the project. The project is scheduled for completion in December 08.

Project delivery will encompass four key elements:

1. Production of Sustainability Street Kits:

Vox Bandicoot will consolidate Sustainability Street community building and strengthening tools and content into an easy-to-use Sustainability Street Kit

2. Coordinator Employment & Capacity Building:

A Sustainability Street Coordinator will be employed by NAGA; the Sustainability Street *Train the Mentor* Program will be delivered by Vox Bandicoot to the Sustainability Street Coordinator, the NAGA Coordinator, all NAGA Council Officers involved in the project and the existing Sustainability Street groups in Moreland

3. Community Capacity Building and Strengthening

Sustainability Street Coordinator (with support from Vox Bandicoot) will facilitate the establishment of 12 Sustainability Street “Beacon” community groups across the NAGA region during the first community training phase of the project. Vox Bandicoot will train volunteer Sustainability Street Mentors during the second training phase of the project, to assist with mentoring new groups. Six new Beacon groups will be established across the NAGA region in the second community training phase of the project. These groups will be co-mentored by communities engaged in the first phase and by the Sustainability Street Coordinator. The Coordinator will facilitate a Sustainability Smorgasbord celebration event to encourage regional networking and sharing of ideas and experiences.

4. Evaluation of Community Strengthening & Sustainability Outcomes

Victoria University will design and implement evaluation methodology in collaboration with Vox Bandicoot and NAGA.

Project outcomes:

- To achieve quantifiable greenhouse abatement
- To consolidate Sustainability Street community strengthening and sustainable living tools and content into an easy-to-use Street Sustainability Kit of appropriate production quality.
- To train and graduate a Regional Coordinator as an accredited Sustainability Street Approach Mentor to assist communities in planning their own sustainable future.
- To create sustainable community groups who are passionate about their community and ecological sustainability, and thinking more often about a clean, green sustainable future.
- Train the Mentor capacity building for council officers and community members.

- Stronger partnerships and collaboration between Councils, community groups, and service organisations focused around sustainability.
- To develop and integrate evaluation to measure the Sustainability Street Approach capacity to deliver community building and environmental sustainability outcomes at the individual, street and wider community level.

Progress to date:

The project implementation commenced in March 06, with the launch of the project by Minister Thwaites on 8th March 2006. The launch was attended by State MPs, Mayors, representatives from state and local government, water companies, local community members, and the media. The commencement stage of the project is the most intensive stage of the project as a whole, because it involves establishment of council partners and other stakeholders, employment of the Sustainability St Coordinator/Mentor (Jason Cox, who started on 27/3/06), development of the evaluation methodology and delivery of the Train the Mentor course to council staff and other stakeholders. It is also during this stage that community training and engagement materials are being developed.

The Train the Mentor course, a course for local council staff involved in delivery of the project, and working in the area of community environmental education and development, was delivered with more than 30 people participating in the 3 day course. The Train the Mentor Graduation Ceremony was held on 18th May presided over by DSE's Steve Malcolm.

A Sustainability St Working Group has been established to oversee the regional delivery of the project. Dr Colin Hocking (Victoria University) is undertaking a substantial evaluation process and has developed the methodology in consultation with project participants and the Sustainability St Working Group.

Twelve communities have been formed (see list below) in 4 municipalities. All communities meet monthly with workshops delivered on energy and water. In addition, some communities have organised a range of other activities and events, including:

- Sumner residents' website www.sumner-sustainability-street.org
- Sumner residents' *Meet your neighbours* BBQ
- East Preston Energy Workshop
- Westgarth Permablitz
- Union St water audits
- Walton St nature strip plantings
- Butler Grove open house for *Sustainable House Day Sunday 10th September*
- Shaftesbury Pde *Neighbourhood Environment Day* at the local Neighbourhood House
- Laurimar Estate planting day
- Carlton Community Blitz
- *Laurimar Estate* BBQ and passive solar design workshop
- *Carlton* Sustainability Showcase, held on Victorian election day, next to the Carlton Polling booth, showcasing local sustainability initiatives, community groups and services, and partnering with local traders
- *Sumner* residents organised additional workshops for their local residents on water, and Community Power (green electricity)
- *East Preston* group organised additional workshops for their local residents on water, and waste
- *Butler Grove* group carried out habitat plantings along Merri Creek
- *Union St* residents organised water audits for members' households and are now preparing to implement recommendations
- *Walton Ave* group have organised a 'produce swap' to deal with bumper harvests from vegie gardens
- some residents of *Shaftesbury Pde* group have installed rainwater tanks
- *Thames St* group held a Christmas Party at the local Johnson Park

The project has featured in a number of local newspaper articles, and regular newsletters are also prepared and distributed to project participants and partners.

The 12 existing Sustainability St groups are listed below:

municipality	Sustainability St community
Darebin	Sumner Estate Northcote Westgarth St Northcote Union St Northcote Thames St Northcote Shaftesbury Pde Thornbury Walton Ave, Preston East Preston Fulham Rd Alphington
Moreland	Butler Grove, East Coburg
Melbourne	Carlton Parkville
Whittlesea	Laurimar Estate, Doreen

Future directions:

There has been significant interest from other groups in forming Sustainability St communities, with communities in Moreland, Whittlesea and East Melbourne likely to join the program in early 2007, bringing forward the Stage 2 formation of additional communities (6 additional communities were scheduled to be formed in 2008). Planning for implementation of the project throughout 2007 has commenced and will be developed in consultation with Council partners and project participants.

This year the training and information sessions will include a greater emphasis on developing participants' skills in community engagement and project facilitation to allow them to take a bigger role in this aspect of project delivery.

Project 3: Vic1000 Sustainable Business Management Program

Partners: Village Green, NAGA, local traders groups

Project Duration: January – December 07

Funding: Sustainability Fund (per region)	\$180,000
matching sponsorship (per region)	\$145,000
Councils' contribution (\$3,500 for delivery to 20 businesses)	\$35,000
TOTAL (per region)	\$360,000

Project Description: Village Green has received funding from the EPA Sustainability Fund Round 1 for a 3 year project that will train 1000 small and medium sized enterprises across the state in environmentally sustainable management practices, focusing on waste, water, energy and transport. The program has a strong focus on building community capacity to sustainably manage their businesses and realise cost savings. The project is being delivered in 5 regions, with delivery in each region over a 12 month period.

The program will be delivered across the northern metropolitan region from January-December 2007. Eight of NAGA's nine member Councils will be involved in the project, as well as the City of Boroondara. Village Green originally planned and budgeted for 5 municipalities to be involved. As a result of the increased demand, Village Green will be investigating availability of additional funding to expand delivery across the region; at this stage, with existing funding, it is expected that on average, 20 businesses from each NAGA municipality will be involved (and 40 businesses being allocated to City of Boroondara).

Objectives and outcomes: quantified reductions in resource use; implementation of retrofits/energy efficient appliances; sustained behavioural change; increased local involvement

Performance indicators: number of participants; quantifiable reductions in resource use and emissions; ongoing involvement by participants

Progress to date: The project implementation began in January 07. NAGA has formed a VIC 1000 Working Group to oversee project implementation and facilitate a coordinated approach to project delivery in the NAGA region.

Village Green staff have begun meetings with Councils' environmental and economic development staff to identify areas in which to recruit businesses (see below), and relevant traders associations and other potential project partners.

VIC 1000 – Northern Region	no of businesses	streets/areas
Banyule City Council	20	Rosanna Village located on Plenty Road, Rosanna
Darebin City Council	20	Northcote
Hume City Council	40	Sunbury
Manningham City Council	45	Templestowe <i>Paid for extra 5 places as well as implementing the Get Green Program; connecting schools with businesses.</i>
Melbourne City Council	20	Flinders Quarter- Flinders Lane, Lt Bourke <i>TBC</i>
Moreland City Council	15	Coburg OR Sydney Rd <i>TBC</i>
Nillumbik Shire Council	20	Hurstbridge & Diamond Creek
Whittlesea City Council	20	Whittlesea township
Boroondara City Council	40	Maling Rd Canterbury

Project 4: NAGA 2006-9 Public Lighting Action Program

Funding: Sustainability Accord	\$143,000
Partner in-kind contributions	\$67,500
TOTAL	\$210,500

Project Duration: October 06 – June 09

Partners: Darebin City Council, other NAGA Councils, Ironbark Sustainability Consultant liaising with Sustainability Victoria, Department of Sustainability and Environment, ICLEI, MAV, Essential Services, Electricity Distributors, other Regional Partnerships

Project Description: Through the creation of Sustainable Public Lighting Action Plans for each NAGA member council: Banyule, Hume, Manningham, Melbourne, Nillumbik, Whittlesea, Moreland, Darebin and Yarra – this project will build capacity within local government to deliver large scale public lighting improvements in Melbourne's north.

Objectives and Outcomes:

1. Sustainable Public Lighting Action Plans (SPLAP) for 7-8 Councils & separately for region.
2. Displays & presentation of SPLAP to each Council.
3. Support work with Essential Services Commission (ESC), regional alliances & distributors around economic side of Sustainable Public Lighting.
4. Work closely with council engineers, planners & finance officers to build capacity internally to deliver large scale changeovers.
5. Work with outside bodies in Sustainability Victoria (SV), Department of Sustainability and Environment (DSE), ESC, distributors, regional alliances to make large scale changeovers possible.

Progress to date:

Project implementation was launched with the first regional workshop, held on Thursday 28th September 06. The workshop was attended by NAGA member Councils Greenhouse Officers, as well as some staff from Assets Management and Urban Design areas. Following the regional workshop, each Council completed a Planning Analysis Tool in preparation for separate meetings at each of the Councils to plan preparation of Sustainable Public Lighting Plans.

A streetlighting bus tour was held on 16th October of streets in Coburg where energy efficient public lighting trials have been undertaken. Fifteen people from NAGA, other regional partnerships and technical staff from Agility (who have been undertaking technical trials of the new lighting types) attended the tour. Energy efficient lighting types included twin 14W T5, the 42W compact fluorescent, the 50W high pressure sodium, allowing comparison of their performance to that of the predominant (and inefficient) 80W Mercury Vapour lights that can be observed directly adjacent to the trial areas.

As part of the project, NAGA, CVGA and NEGHA are jointly funding a consultant, Syneca Consulting, to assist with development of costings for OMR and bulk changeovers, the findings of the consultant's study to be fed into the VSPLAG process (see below).

Future directions:

The Victorian Sustainable Public Lighting Action Group (VSPLAG) was formed in mid 2006 to bring together the Victorian Greenhouse Alliances and their member councils, Sustainability Victoria, Essential Services Commission and the Electricity Distribution Businesses to facilitate the process for large-scale installation of energy efficient streetlighting. VSPLAG has achieved considerable progress to date, with agreement on the formation of the group (Terms of Reference have been finalised), and an associated Technical Subgroup, a substantial achievement in itself given the spread of stakeholders and the complexity of public lighting. The Group has also reached agreement on which luminaires to initially focus on (Pierlite T5 and Sylvania 42W compact fluorescents) and the associated cost build up model to use as a basis for calculation of maintenance charges for these new technologies.

IN 2007, results from Syneca Consulting's investigations into costings for OMR and bulk changeovers will be fed into the VSPLAG process.

Other NAGA Projects:

Community Power

The Cities of Darebin, Moreland, Melbourne, Yarra and Banyule, and Moreland Energy Foundation formed the Community Power program, a greenhouse gas reduction project which offered residents in the participating areas the opportunity to take up Green Power at prices lower than those available through standard Green Power energy plans. Unfortunately, the Community Power energy retailer AGL is no longer offering Community Power plans; the Community Power Steering Committee is currently assessing options for how Community Power can be delivered to northern region customers in future, either by working with another energy retailer or developing ways to promote the uptake of Green Power in the community.

Northern Metropolitan TravelSmart

The Northern Metro TravelSmart project aimed to increase the use of sustainable transport through the delivery of small scale travel behaviour change initiatives delivered by each of the 6 founding NAGA councils, with matching funding from Department of Sustainability and Environment, coordinated by Department of Infrastructure (DoI). The project outcomes include:

- Reduction in Vehicle Kilometres Travelled (VKT) and associated greenhouse gas emissions.
- Council capacity to deliver sustainable transport outcomes.

The 12 month projects were completed in December 06:

- | | |
|---------------------------|---|
| • Banyule City Council | TravelSmart for Austin Hospital |
| • Darebin City Council | Going Places - Darebin's Travel Rewards Scheme |
| • Hume City Council | Kangan Batman TAFE Broadmeadows |
| • Moreland City Council | Activity Centres for the future |
| • Nillumbik Shire Council | School Travel Plan for Eltham High School |
| • Whittlesea City Council | Establishing Sustainable Transport Behaviour in New Schools |

Darebin Business Breakfast Climate Change Everybody's Business

In a joint initiative with NAGA and NORTH Link/NIETL, Darebin City Council organised the '*Climate Change Everybody's Business*' business breakfast on Thursday 19th October. The event targeted small-medium businesses of the region and senior Council staff and Councillors, with more than 100 people attending. The event featured presentations from Dr Graeme Pearman (Honorary Research Fellow Monash University and member of the Climate Institute Advisory Council), John Andrews (Senior Research fellow, RMIT University and Project Leader, North Link NIETL Greenhouse Programs) and Martin Saunders (Engineering Manager, The Age Print Centre). Participants received a Climate Change Fact Sheet which included information on actions for individuals, as well as opportunities for businesses, and links to further information.

Funding: CCP™ Community Abatement Assistance Programme

Project duration: September 2005 – May 2006

Partners: Easy Being Green

Project Description The Middle Yarra Councils and Easy Being Green promoted sustainable home retrofits to residents within the region. The project attempted to address commonly perceived barriers to behaviour change including:

1. Lack of knowledge (both householders and trades people);
2. Amount of time invested to obtain quotes and assess trades people; and
3. Cost.

By partnering with Easy Being Green, barriers one and two above were addressed; and by offering subsidies, barrier three was addressed.

Key Project Elements and Outcomes

Promotion: The project commenced in September 05 and was widely promoted across all three municipalities reaching a potential audience of 270,000 people and over 100,000 households. Through local newspapers, council newsletters, and education programs, residents were informed of the 3 information seminars, the opportunity to have a Home Visit and availability of subsidies.

Information Seminars: The Information Seminars were run during October and November 2005, with about 90 people attending. The sessions covered the following:

- An overview of climate change;
- Hints on how to change behaviour to reduce energy use and emissions;
- A description of green power and its benefits;
- Information on low-cost energy saving products; and
- The benefits and costs of high-end sustainable home products such as Photo Voltaic Arrays and Solar Hot Water systems.

Show Bags: Show bags containing 5 compact fluorescent lights and 1 water efficient showerhead were distributed to information session attendees and through other sustainable living programs offered by each of the Councils. In all 200 show bags were distributed.

GreenPower through Community Power: Community Power offers discounted green electricity to residents of participating Councils. Banyule, as a member of Community Power elected to offer \$1600 worth of GreenPower to households participating in their Sustainable Homes program.

Home Visits: For a subsidised fee of \$50 (standard fee is \$185), households were offered an Easy Being Green home visit, with provision of tailored advice and a written report on how to save energy and reduce greenhouse emissions to suit various budgets –

- zero investment, e.g. tips on how to change behaviour;
- low investment, e.g. purchase of compact fluorescent lights, or flow regulators on taps; and
- substantial investment, e.g. solar hot water systems.

Thirty-three Home Visits were undertaken, much less than initially anticipated. The lower than expected demand for Home Visits was largely due to many households already knowing what they wanted, and really only wanting advice and a quote on the works required.

Quotes and Installations: Approximately 60 quotes were provided, of which 14 households proceeded to installation of sustainable home products investing a total of \$52,860 as follows:

	Total Investment	Number of Installations
Solar Hot Water Systems	\$18,490	4
Rainwater	\$22,783	7
Grey Water	\$9,673	2
Insulation and Other	\$1,915	1
Photo Voltaic Arrays	nil	nil
Totals	\$52,860.20	14

Celebration Evening – 10 May 2006: Show-casing the various installations, the celebration evening further promoted sustainability in the home and the use of sustainable home products. Interested people, participating households, along with friends and extended family, attended the evening and shared their experiences.

Greenhouse Gas Emissions Abatement

Item	Comments	eCO ₂
Show Bags	200 show bags each containing 5 x compact fluorescent lights & 1 x water efficient shower head – 0.75 eCO ₂ tonnes per show bag per annum	150 tonnes/yr
Green Power	\$1600 of subsidised green electricity through Community Power (based on average Community Power customer household consumption of 4200 kWh/yr)	85 tonnes/yr
Solar Hot Water Systems	4 x Solar Hot Water installations - equates to 1 car off the road that is approximately 4.3 tonnes of greenhouse reduction per solar hot water system.	17.2 tonnes/yr
Insulation, curtains & behaviour change	Not possible to quantify eCO ₂ savings	Not available
TOTALS		252.2 tonnes per year

Summary of Project Outcomes

Project Aim	Outcomes
Raise awareness of the impact of urban living upon climate systems, water cycles and natural systems in general.	<ul style="list-style-type: none"> Promotion to a potential audience of 270,000 residents and 100,000 over three municipalities. Delivery of three Information Seminars, attended by about 90 people
Inform householders of simple ways in which they can contribute by (i) changing their behaviour, (ii) purchasing more sustainable technology and services, and (iii) by undertaking a sustainable home retrofit.	<ul style="list-style-type: none"> Delivery of three Information Seminars, attended by about 90 people Home Visits and reports for 33 households
Contribute to both direct and indirect emissions abatement by distribution of energy efficient equipment and information.	<p>Indirect emissions abatement:</p> <ul style="list-style-type: none"> Delivery of three Information Seminars, attended by about 90 people Home Visits and reports for 33 households A further 20 households received advice and quotes, but chose not to proceed <p>Direct emissions abatement:</p> <ul style="list-style-type: none"> Installation of high-end sustainable products to 14 homes including 4 Solar Hot Water Systems Over 200 Show Bags distributed GreenPower subsidies to the value of \$1600 offered through Community Power
Promote market demand for sustainable home products and services.	<ul style="list-style-type: none"> Lowering of cost barriers by offering subsidies Lowering of knowledge and time barriers by partnering with Easy Being Green Promotion of the advantages of installing sustainable products in the home to over 270,000 people and 100,000 households across the Middle Yarra region.

Conclusion Preliminary findings suggest that even if knowledge, time & cost barriers are lowered, householders are still reluctant to make the necessary investment in sustainable home products. When choosing how to spend discretionary income other desires, more often than not, are fulfilled in preference to sustainability. These preliminary findings suggest that market-based instruments maybe required in order to shape consumer behaviour towards the purchase of energy efficient and carbon neutral products and services.

Sustainable Homes Project

Project Duration: Phase 1 – 2006 (Cities of Darebin and Banyule)
Phase 2 – 2007-2010 (Cities of Darebin, Banyule and Whittlesea)

Project Description: The Sustainable Homes Program works with, supports and inspires residents and staff to make their homes more sustainable. Through delivery of workshops and tours, and provision of support, motivation and incentives, the program aims to make it as easy as possible to take action by removing some of the key barriers to undertaking sustainability actions.

Objectives and Outcomes:

1. behavioural change: equipping people with the skills and knowledge they need to take action
2. building a community of support, helping to normalize sustainability behaviours and to build synergies between environmental issues and projects, people, organisations and businesses
3. low cost practical measures to achieve environmental outcomes
4. reductions in energy and water consumption, greenhouse gas emissions and waste, as well as improving biodiversity and increasing sustainable transport usage.

Progress to date: The first phase of implementation was undertaken by NAGA members Darebin and Banyule in 2006; a summarised report of results for Darebin is included below. The Sustainable Homes Program has effectively overcome the two most common barriers suffered by community sustainability programs: low levels of community participation (typically less than 20 people attending workshops and events) and low levels of environmental action.

The Sustainable Homes Program engaged 293 Darebin residents and staff, 242 Darebin households and had 489 attendances at workshops/events. The average number of attendees at workshops/events was 61 people, with a maximum of 85 – exceptional figures for this type of program. Most people attended two or more workshops/events and nearly half the households made formalized commitments to undertake at least three sustainability actions in their homes within three months of the workshop date. Evaluation of the program has shown that 70% of these sustainability actions were successfully undertaken. Actions ranged from signing up to Green Power, setting up a vegetable garden, to installing rainwater tanks and solar hot water. Over 230 sustainability kits were distributed as part of this program. Most of the items included in the kits were used or installed by participants and received a high satisfaction rating.

Further evaluation of the program also found that nearly 100% of participants took some sustainability action in their home whilst, or after participating. The behaviour change that achieved the highest uptake by participants, and also delivering the most environmental savings of all possible actions, was the purchase of Green Power, with 70% of participants either purchasing Green Power for the first time or increasing their percentage. This action alone has led to a reduction of greenhouse gas emissions by 403 tonnes.

More than 20% of participants took on at least 11 sustainability actions or behaviours in their home whilst participating in the program. 28 participants indicated that they would be willing to be case studied as sustainability leaders. To date three participating households have had their stories published on the internet, www.darebin.vic.gov.au/sustainablehomes, in Sustainability News and Darebin News, a bi-annual publication which goes to all Darebin residents.

The feedback from participants was also overwhelmingly positive. Nearly all participants enjoyed the workshops and found them informative and inspiring. Most participants felt that “they now had the confidence and knowledge to implement sustainability changes in their own home”. The project also has a strong partnership component not only with participants, but with organisations, businesses and schools who helped deliver program elements. Other innovative components of the program include engaging social marketing, personalized stories and experiences (sustainability case studies), practical how-to workshops (rather than theory based), the development of a supportive and helpful website, the linking of kits to commitments, and incentives to action.

Future directions: The program’s success and replicability has been demonstrated through its expansion in 2007, with a 3 year program funded by Sustainability Fund that will include Darebin, Banyule and Whittlesea, as well as a workplace extension component.

Carbon Neutral Communities: Making the Transition

NAGA has been invited to participate as a project partner in a research project being undertaken by RMIT's Centre for Design, investigating household and community responses to energy use information and the effectiveness of capacity building measures. A funding application was prepared in May 06 to which NAGA submitted a letter of support and indication of intention to partner and provide in-kind support for the project. The project has received funding from the Australian Research Council and will commence in January 07. (As well as NAGA's involvement, 3 of NAGA's members are also project partners.)

Project partners: RMIT, University of South Australia, NAGA, Manningham City Council, Darebin City Council, Moreland Energy Foundation, City of Playford (the location of S.A.'s Solar City), ICLEI, Consumer Affairs Victoria

Project Description: The project will address current non-technical barriers in reducing the climate change impacts of communities across Australia. The partnership between research institutions, governments and community groups will allow parallel studies of four communities across two Australian states. It will specifically research and develop solutions to current institutional, planning, community, social and economic barriers to achieving carbon-neutrality. The studies will provide nationally transferable outcomes to accelerate the efficient transition to a carbon neutral future across urban Australia, contributing substantially towards achieving national greenhouse reduction targets.

The funding will allow establishment of two PhD projects one based at RMIT and the second at University of South Australia. The project consists of three interrelated key research areas:

1. Household responses to differential electricity supply products.

Key research question: How can pricing and energy product differentiation be made more effective in delivering carbon reductions from changed patterns of household energy use?

2. Community responses to carbon reduction opportunities.

Key research question: Which community capacity building mechanisms provide optimal leverage in delivering carbon reduction from changing domestic energy consumption patterns?

3. Carbon neutral spatial assessment and planning processes.

Key research question: How can standardised assessments of carbon outcomes be undertaken to assist in assessment and evaluation of carbon neutral community initiatives?