## Write it up!

Case studies of sustainability education projects from around NSW

## Sustainability Street® in Willoughby

The Sustainability Street<sup>®</sup> program, developed by Vox Bandicoot Pty Ltd, has allowed Willoughby residents the opportunity to undertake their own inspirational sustainability projects, with support from Council who introduced the program in 2005. Three years on, this case study describes the challenges, outcomes and lessons learned by Willoughby City Council to the benefit of environmental educators everywhere.











By Erika Van Schellebeck, Willoughby City Council, 2008.











## Sustainability education characteristics demonstrated by the Sustainability Street® program

**Participatory decision-making**: learners participate in decisions on how they are to learn.

Participatory decision-making is the main strength of the Sustainability Street program. Residents form a Sustainability Street group of their own initiative and decide on where and when they will meet and which sustainability topics they wish to learn about first. (Council provides a list of topics for the first year of meetings: saving water and energy, reducing waste, bush-friendly backyards and streets to creeks, and strongly encourage groups to cover these sustainability topics, as they form the building blocks of sustainability learning).

Interdisciplinary and holistic: education for sustainability is embedded in your whole program, not dealt with as a separate subject or issue.

Education for sustainability is embedded in the whole Sustainability Street program. The premise of the program is that residents form groups to learn more about sustainable living, and as such each meeting focuses on a specific sustainability issue. Groups can then develop community projects that address a sustainability issue and are supported by their Council Environmental Officer 'mentor' to undertake these projects.

**Values-driven**: the shared values and principles that underpin sustainability are made explicit so they can be examined, debated, tested and applied.

In the first year of meetings, Sustainability Street groups spend 5-10 minutes discussing the eight principles and seven sustainability beacons of the program. These include: protect and restore biological diversity; protect and restore the soil, the air and the water; break the waste habit; kick the energy addiction; the population explosion; culture; local place and community.

**Critical thinking and problem solving:** is encouraged, leading to confidence in addressing the dilemmas and challenges of sustainable development.

A major element of the Sustainability Street program are the community projects that groups undertake to address a local sustainability problem. When a group begins developing ideas for a community project, their Council mentor/liaison facilitates this process to encourage critical thinking and problem solving.

**Multi-method:** a range of different pedagogies (teaching strategies) and learning models are employed, e.g. word, art, drama, debate and direct experience.

The Sustainability Street program in Willoughby has used a range of different pedagogies to help residents learn more about sustainable living. These include meetings (word), painting a sustainability mural (art) and direct experiences such as bushwalks and workshops in backyards getting their hands dirty and learning about no-dig gardening.

**Locally relevant:** local as well as global issues are addressed, using the language(s) which learners most commonly use.

The program is locally relevant by its very nature, as residents form their own local Sustainability Street group and run meetings and conduct workshops themselves, insuring the language used is locally relevant.

#### Introduction

When attempting to engage with more residents on stormwater pollution, Willoughby City Council developed an unexpected, yet very welcome relationship with residents passionate about sustainability. Like the symbiotic relationship between a bee and a flower, Council has benefitted as much as the community itself.

The Sustainability Street® program has allowed Willoughby residents the opportunity to undertake their own inspirational sustainability projects with support from Council. Council's own sustainability programs have been enhanced by working in partnership with the community and the community projects they support now have long-lasting outcomes because they are community-owned.

These outcomes and lessons learned highlight that the Sustainability Street program is a powerful tool for Councils undertaking sustainability education within their community.

### Tony and Sally: Sustainability Street residents

Tony and Sally formed the Willoughby Sustainability Street group in 2006 with 12 of their neighbours.

Their reasonable sustainability knowledge base was greatly enhanced by the

program and the in-depth information and hands-on knowledge gained enabled them to make significant changes in their home.

Since participating in the program, Tony and Sally have installed photovoltaic cells and a solar hot water heater, built a no-dig vegetable garden and by switching to 100% GreenPower and becoming more energy efficient at home, have reduced their carbon footprint by at least 11 tonnes of carbon dioxide a year.



Their commitment to sustainability extends beyond their own lives and the group.

In 2008, using Tony's skills as an architect, they developed a proposal to Willoughby Council for a "Sustainable Building Display House". This would be open to the community for tours and hands-on workshops by Council staff, to teach residents how to do sustainable retrofits, renovations and house design.

"This is also only a beginning, but it has inspired us to see what else we can do to bring a deeper understanding of the challenges facing us all, by consolidating the lessons learnt and sharing our new-found understanding."

#### **Aims**

The purpose of this case study is to share the outcomes and lessons learned from the Sustainability Street program in the Willoughby Local Government Area (LGA).

### **Background**

Sustainability Street is a community program for residents, who form groups with neighbours to learn about sustainable living and create community projects. The program was developed by the Australian environmental education company Vox Bandicoot Pty Ltd in 2001 and has been run in over 200 communities in Victoria, New South Wales, Adelaide and Perth.

Willoughby LGA is located in Sydney's northern suburbs and is a residential area with a population of over 65,000. It has substantial industrial and commercial areas, as well as significant bushland areas located along the Lane Cove River and on the foreshore of Middle Harbour.

Table 1: Demographics of the Willoughby LGA, Census of Population and Housing (2006).

Demographic	Willoughby LGA residents
Born overseas	39%
From non-English speaking background	30%
Reside in separate house	46%
Employed as professionals and managers	57%
Household earnings over \$107,000/ year	40%

Demographically, residents in Sustainability Street groups in Willoughby range from thirty to eighty years of age, live in houses, are well-educated professionals and are predominantly from English speaking backgrounds.

The program commenced in the Willoughby LGA in November 2005, when one hundred residents attended two Community Information Sessions. Subsequently six Sustainability Street groups formed in 2006, with each group assigned a Council Environmental Officer 'mentor', to organise the sustainability training sessions for their monthly meetings and provide support for their community projects.

As at November 2008 there were five groups with an average of six active residents per group. The groups more than two years old meet less regularly than new groups and operate more independently of Council, with their Council Officer only attending special meetings and providing most of the ongoing support via phone and email.

As Co-ordinator of the Willoughby Sustainability Street program, I have witnessed the impacts resulting from the program since its introduction in 2005. This case study has been developed from a range of sources including: journals, anecdotes, records and reports, resident and staff surveys, assessments of residents energy and water use, and personal accounts by the author and colleagues.

#### The challenge

In 2005 as part of its stormwater education program, Council wanted to engage with more residents to increase the number of community pollution prevention projects undertaken in the LGA.

The Lane Cove River and Middle Harbour bound Willoughby LGA west to east, and either creeks or river/harbour foreshores physically dominate all of its bushland reserves. Stormwater from the residential areas of the LGA is often polluted by sediment, chemicals, oil and litter, which decrease the biodiversity of Willoughby's bushland reserves and waterways.

Research by Council staff discovered that Vox Bandicoot had developed a stormwater education program that encouraged residents to actively participate in preventing stormwater pollution. Discussions with Vox Bandicoot revealed they had also developed a broader sustainability education program for residents called 'Sustainability Street', which was being run in 50 communities while their stormwater education program was being run in a few communities. This greater community uptake of the Sustainability Street program indicated that conducting a community program specifically about waterways and stormwater pollution would have far less appeal than a broader sustainability program.

Council decided to commence the Sustainability Street program, with the aim of engaging with more residents to increase the number of community stormwater pollution prevention projects in the LGA. The secondary aim was that Sustainability Street would increase participation in Council's environmental workshops and talks, by reaching residents who had never been involved in Council's environmental programs.

#### **Outcomes**

The aim of engaging with more residents on the issue of stormwater pollution was achieved through the Sustainability Street program. Stormwater education training sessions were carried out with five Sustainability Street groups. One group pledged to sweep the leaves and sediment out of their street gutters and encouraged their neighbours to prevent stormwater pollution, whilst another organised an annual clean-up of rubbish from their local creek. However, engagement did not lead to an increase in community stormwater pollution prevention projects.

The secondary aim of reaching new residents to participate in Council's environmental workshops and talks was successfully achieved. This is evidenced by Council's Sustainability Street email distribution list of 120 residents (who previously had not been involved in Council's environmental programs) used to promote these activities, as well as an increase in residents actively participating in these activities.

However the most significant outcomes of the Sustainability Street program were those that were unrelated to these original aims, and include: community capacity building; new community partnerships; improvements in resident's sustainability behaviours; tonnes of carbon dioxide saved; enhancing the sense of community belonging and organisational benefits for Council.

These highlight that the Sustainability Street program is a powerful tool for Councils undertaking sustainability education within their community.

#### Building community capacity and finding sustainability champions

The following Sustainability Street community projects demonstrate that the program has increased the Willoughby community's capacity to educate others about sustainability. By building the capacity of the Sustainability Street residents, the program has also uncovered a dozen sustainability champions within the Willoughby LGA.

#### **Community-run workshops**

In the second year of the program, Sustainability Street residents began running their own sustainability workshops in their own homes or backyards.

Workshop topics have included no-dig gardening, keeping chooks, solar power, solar hot water, rainwater tanks and carbon trading.

Photo: The 'No-dig Gardening' workshop run by resident Andrea Burns in her own backyard (2007).

#### Regular columns in community newsletters

The Artarmon Sustainability Street group came up with the great idea of having a regular column in their suburb's progress association newsletter, in lieu of producing their own newsletter.

Since 2006, the group has had an article printed in every edition of the quarterly Artarmon Gazette, which has a distribution to over 2,000 households and businesses.

Right: This front-page article was co-written by the convenor of the Artarmon Sustainability Street group.



Car Sharing comes to Artarmon by Stud



#### **Sustainable Street parties**

The Tulloh Street Sustainability Street group introduced the idea of waste-reduction to their street's Christmas parties and since 2007 have held a competition for the present wrapped in the most sustainable way.

In 2008 this group also held a 'Spring Gathering'. Neighbours gathered over a BBQ and swapped sustainable garden produce, including plants, compost, herbs and chicken eggs, and received free mulch from Council.

Photo: The Tulloh Street Sustainability Street group's Spring gathering (2008).



#### **Sustainability Street stalls**

Sustainability Street groups have held six stalls at community fairs and events. These stalls have raised funds for initiatives including the Sustainable Living Library Collection and have held competitions with prizes including compost bins, home made crafts from recycled materials, sustainability books and tours.

#### **New community partnerships**

The following Sustainability Street community projects are examples of community partnerships that have developed from the program.

#### **Sustainable Living Collection in Artarmon library**

This innovative collection in a Council branch library includes over 200 books (including fiction for children), magazines and DVDs to inspire residents towards a more sustainable lifestyle.

It was developed by the Artarmon and Tulloh Street Sustainability Street groups and is funded by a \$9,000 NSW Government Environmental Trust grant to these groups.

The launch of the collection in October 2007 was well attended by 70 local residents, the Mayor, Councillors and the local Member of Parliament. The collection was celebrated over champagne and food including egg sandwiches made from a resident's backyard chickens.

Council has also created a promotional bookmark listing sustainable living websites, which is a useful sustainability education resource (see Organisational benefits for Council).

Prior to the collection, Council had plans to rebuild the library. Lobbying by the Sustainability Street groups has led to Council's commitment to this being done using sustainable design principles. Council is also considering a similar collection being added to its new main library and five local/branch libraries.

Photo: The launch of the Sustainable Living Collection (2007). Note the banner at the top of the photo, painted by students from Artarmon Public School, which sits above the collection of books, magazines and DVDs.



#### Feral cat control

Neighbours who were having problems with feral cats entering their homes approached the Tulloh Street Sustainability Street group. The group investigated the problem and discovered that feral cats were living and breeding in their back lane. They then approached Council to set traps, which the group checked each morning, contacting Council if a cat had been trapped. This partnership between Council and the Sustainability Street group successfully eradicated the feral cats from Tulloh Street.

#### Improvements in resident's sustainability behaviours

Surveys and assessments of sixteen<sup>1</sup> Sustainability Street households were carried out at the start of the program and in 2008, to evaluate changes in resident's behaviour attributable to the Sustainability Street program. Home energy and water ratings were calculated in resident's homes, using the National Australian Built Environment Rating System (NABERS)<sup>2</sup> slide ruler and the resident's yearly energy and water bills.

Table 2: A selection of household sustainability measures evaluated by Council.

Sustainability measures	Before participating in Sustainability Street	After participating in Sustainability Street
Household has a good*- very good NABERS energy efficiency rating	31%	69%
Household has a good - very good NABERS water efficiency rating	77%	92%
Home powered by 100% GreenPower	12%	35%

<sup>\*</sup> A home with a good NABERS energy efficiency rating is more efficient than the average NSW home.

These assessments found that 50% of households<sup>3</sup> became more energy efficient after joining a Sustainability Street group.<sup>4</sup>

Another significant finding is that the majority of Sustainability Street households were not energy efficient (69%) and did not purchase GreenPower (78%) <u>before</u> participating in the program. This finding challenges the misconception that environmental education programs like Sustainability Street just preach to the converted, i.e. Only appeal to residents who are already model sustainability citizens, and do not reach those who are able to make changes to live more sustainably.

#### Think global, act local: Tonnes of CO<sub>2</sub> saved

Using both this data and that from the energy assessments, it is calculated that 40 Sustainability Street households save a minimum of 187.8 tonnes of carbon dioxide ( $CO_2$ ) each year.<sup>5</sup> This significant reduction in the amount of greenhouse gases produced by Sustainability Street residents is the equivalent of taking 41 cars off the road each year<sup>6</sup>.

<sup>&</sup>lt;sup>1</sup> This sub-sample is a valid representation (40%) of the 40 households who attended Sustainability Street training sessions in 2006 (in terms of age, household composition and dwelling type).

<sup>&</sup>lt;sup>2</sup> NABERS is a national initiative managed by the NSW Government's Department of Environment and Climate Change.

<sup>&</sup>lt;sup>3</sup> Of the remaining 50% of households that didn't improve, 60% of these households already had good -very good energy efficiency.

<sup>&</sup>lt;sup>4</sup> Changes in energy efficiency can be directly attributed to the Sustainability St program, as during the evaluation period there were no major energy reduction education campaigns carried out in Willoughby LGA or NSW.

 $<sup>^{5}</sup>$  Over one year, 16 households saved a total of 75.122 tonnes of  $CO_2$  (50.5 tonnes of  $CO_2$  were saved through switching to GreenPower and 24.622 tonnes of  $CO_2$  were saved through energy efficiency measures). These calculations were made using data from the NABERS program. This calculates to an average saving per household/ per year of 4.695 tonnes of  $CO_2$ .

 $<sup>^6</sup>$  This calculation is based on the figure that the average car produces 4.5 tonnes of  $CO_2$  per year. (Source: the Australian Conservation Foundation).

#### Enhancing the sense of community belonging

Sustainability Street groups and their community projects help to create or enhance the sense of community in the Willoughby LGA. When residents were asked "What does it mean to you to be part of Sustainability Street?", this enhanced sense of community was most frequently mentioned.

The following projects that physically improved streetscapes became a focal point for pride within the community.

"I just loved Sustainability Street, as for the first time since 1981 when I moved into this home, I have started to know more of my neighbours."

Hannele, Tulloh Street Sustainability Street Group (2008).

#### Planting native species in streetscapes

Sustainability Street groups have planted native species (provided by Council) within nature strips. These include:

- Red bloodwood trees planted on the Sugarloaf group's nature strip,
- Native shrubs and grasses planted on the traffic calming devices of the Tulloh Street group, and
- Native groundcovers, climbers and lilies planted on the Northbridge group's nature strip.

"The Sustainability Street group has made me feel more connected to the community, actually I think its helped to create a sense of community.

I have enjoyed the tree plantings and when I walk I look at the plants to check that they're growing, so its giving me a real sense of being responsible for the environment in which I live."

Louise, Tulloh Street Sustainability Street Group (2008).

#### Willoughby's Water-wise Garden

This garden was created by the Willoughby Sustainability Street group on a degraded nature strip (that was being illegally parked on) next to the Post Office and local shops. A Council community grant for \$3,000 enabled the group to install a Sustainability Street community noticeboard, which educates residents about how to create a water-wise garden using native plants, as well informing them of local sustainability events, initiatives and news.

At a group meeting in 2006 just after the garden had been planted, residents recounted stories of community pride received from persons not involved directly with the group and garden.

Photo inset: Before (2006) - a degraded nature strip. Photo large: After (2008) Willoughby's Water-wise Garden.



#### Sustainable no-dig garden and sustainability mural

This small garden of fruit trees, vegetables, herbs and medicinal plants was created by the Artarmon Sustainability Street group in 2007, in front of the local library that houses the Sustainable Living Collection. It demonstrates the growing of food in small urban spaces using the principle of no-dig gardening.

A large mural on the wall behind the garden educates residents about permaculture, seed-saving, composting and food miles. The mural design was created by local artist Wendy Bishop and was painted on recycled election placards by 40 local children as part of Council's school holiday bushwalk activities.

The garden is maintained, admired and enjoyed by the group and the local community. It provides an opportunity for the group to educate local residents about the garden, as residents always stop and chat to the group during working bees. A park seat has been placed in the garden and this has created a valued community space.

Right: News article about the garden (by Stuart Sexton, Artarmon Gazette, May 2008).

Photo: A local resident enjoying the garden (2007).

#### **Organisational benefits for Council**

#### Staff professional development

Involvement in the program has improved staff community facilitation and engagement skills. This was a result of the Sustainability Street community mentor training and the practical experience that five staff had of being mentors for the groups themselves.

#### **Cross-divisional capacity building**

Twelve Council staff from three divisions attended the Sustainability Street community mentor training sessions run by Ian McBurney and Frank Fitzgerald-Ryan from Vox Bandicoot. Additional staff from two

Sustainability St Garden: This picture was taken in the Artarmon Sustainability Street garden on a sunny morning, Sunday April 13. Mother and daughter, Fran and Clare, who live in a flat in Elizabeth Street, were spied having breakfast there. "We often come here for breakfast. It's a beautiful place to sit and enjoy the herbs, the plants, how they grow and change, and even to watch the lizards scurry about".

# SUSTAÎNABÎLÎTY ST.



"Through using the Sustainability Street model and the skills from the training sessions, I helped to effectively support and facilitate a Sustainability Street group to a point where they were able to feed off their own successes and become relatively independent."

Kelly, Willoughby City Council Officer (2008).

divisions also presented workshops at the Sustainability Street meetings on a range of sustainability topics.

This cross-divisional capacity building in the first year of the program has been ongoing and has helped Council's two environmental divisions better integrate their projects and work more effectively as a team.

#### **Community partnerships enhance Council programs**

The Sustainability Street community projects of the Sustainable Living Library Collection, Willoughby Water-wise Garden, Sustainable no-dig garden and sustainability mural are all fantastic community-owned resources for Council staff undertaking sustainability education. The community are more receptive and trusting of the sustainability ideas promoted by these projects, as they have come from residents like themselves rather than a governing body such as Council.

Additionally, the significant time and skills that Sustainability Street residents have brought to the projects would not have been available to Council if the projects were undertaken solely by Council, without community involvement.

A dozen of these residents are now recognised by Council staff as community sustainability champions, and by consulting with these residents Council is able to ensure that new sustainability programs are more relevant to the community.

#### Improved community relations

By helping residents to form Sustainability Street groups and supporting their community projects, Council has improved its relationship with residents. "Gradually Council has been seen to be reaching out into the community through the Sustainability Street program.

Engagement with Council is now more often seen as a positive and constructive experience, where previously the only engagement may have been by way of a complaint to Council ... or when there was money to pay."

Tony, Willoughby Sustainability Street Group (2008).

#### **Lessons learned**

#### The importance of a committed group initiator

Out of the six groups that formed in 2006, two groups disbanded within 6 months to a year<sup>7</sup>. The common element of these two groups was that the resident/s who initiated the group were unable to continue attending meetings within the first six months. This demonstrates the importance of commitment from group initiators to ensure the longevity of a group.

When a resident enquiries about forming a Sustainability Street group, Council now emphasises commitment and drive as a critical factor of longevity for the group. This extends to asking the resident if they have plans to sell their house, if they will be taking on new commitments in the coming year or if they feel they are already heavily committed to other activities.

<sup>&</sup>lt;sup>7</sup> After consistent poor attendance at meetings, i.e. 2-3 different people per meeting, or a long period of inactivity by group members, Council asked the groups if they wished to continue or merge with another group. At this stage a Council Environmental Officer was mentoring these groups, i.e. organising and attending the evening or weekend meetings, and with all Council programs the cost-effectiveness of community activities with poor attendance must be assessed. These groups decided to merge with other nearby groups, but as none of these members attended subsequent meetings of their new 'merged' group, it is more factual to say in hindsight that these two groups disbanded.

#### Size doesn't matter

In the first year of the program, the attendance numbers of each Sustainability Street meeting were closely monitored and were either a cause for celebration or concern for Council staff and residents. A key learning since then is that size doesn't matter, and the size of a Sustainability Street group bears no relation to its future achievements nor its long-term success. For example, one of the smallest groups in the Willoughby LGA (consisting of five active households) struggled with both consistent and low attendance in their first year, but has since undertaken outstanding community sustainability projects.

Although it is recognised that size doesn't matter, Council does now insist that new groups consist of at least six households. It is hoped that this will allow for one or two residents to be periodically absent from meetings, without making the meetings so small as to demoralise the group or question the cost-effectiveness of the attendance of Council staff. It is also hoped that this will better insure against the impact of the group initiator no longer attending meetings.

#### Every community is different - the need for participatory action research

Negative feedback from Sustainability Street residents about the program was never universal. For example, while some residents enjoyed attending working bees more than the meetings in rooms with guest speakers, other groups enjoyed this style of meeting and asked Council to provide guest speakers for their second year of meetings.

This demonstrates the philosophy of Ian McBurney from Vox Bandicoot, "Every community is different, what works for one community might not work for another." This philosophy is one of the keys to working with community groups and reflects the importance of participatory action research, where feedback from the participants of a program should be used to charter the future course of that program.

#### Successful community projects are initiated by the community, not Council

The community engagement on stormwater pollution that was achieved by the Sustainability Street program did <u>not</u> lead to the community pollution prevention projects that Council had hoped for. It did however lead to a large number of inspirational community sustainability projects that were initiated by residents and undertaken by them with Council's support.

This demonstrates that community consultation by Local Government delivers the best outcomes to support residents in undertaking community led initiatives that support Council objectives.

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