



**Holroyd City**  
*Built Around People*

# **Greenhouse Reduction Local Action Plan**

**Adopted by Council at its meeting of  
5 July 2005**

## **CONTENTS**

---

<b>1.0 BACKGROUND</b>	<b>2</b>
<b>2.0 COUNCIL PROFILE</b>	<b>2</b>
<b>3.0 CLIMATE CHANGE</b>	<b>3</b>
3.1 Natural Greenhouse Effect	3
3.2 Enhanced Greenhouse Effect	3
3.3 Potential Impacts of Climate Change	4
3.4 International Response to Climate Change	4
3.5 Australia's Response to Climate Change	5
3.6 A Local Response: Cities for Climate Protection Program	6
<b>4.0 INVENTORY OF GREENHOUSE GAS EMISSIONS</b>	<b>7</b>
4.1 Corporate Emissions	7
4.2 Community Emissions	8
<b>5.0 GREENHOUSE EMISSIONS REDUCTION GOAL</b>	<b>9</b>
<b>6.0 ACHIEVING THE GREENHOUSE REDUCTION GOALS</b>	<b>11</b>
6.1 Existing Actions and Policies	11
6.2 Proposed Actions and Policies	11
<b>7.0 FUNDING THE LOCAL ACTION PLAN</b>	<b>20</b>
<b>8.0 MONITORING AND REVIEW</b>	<b>20</b>
<b>9.0 REFERENCES</b>	<b>20</b>

## 1.0 Background

The Cities for Climate Protection (CCP) Program is an international program aimed at assisting local government address greenhouse gas issues at the local level. The CCP Program was developed by the International Council for Local Government Initiatives (ICLEI).

Holroyd City Council has recognised the important role local government has in reducing greenhouse gas emissions in resolving to participate in the CCP Program on 1 July 2003 and committing to undertake work to achieve the following 5 milestones:

- Milestone 1: Conduct an inventory and forecast for Corporate and Community greenhouse gas emissions;
- Milestone 2: Establish an emissions reduction goal;
- Milestone 3: Develop and adopt a Local Action Plan;
- Milestone 4: Implement the Local Action Plan;
- Milestone 5: Monitor and report on achievements.

Participating in, and completing the milestones of the CCP Program is an action in Council's Local Agenda 21 program, *Living Holroyd: A Sustainable Future*.

This strategy serves to assist Council in implementing effective and practical greenhouse abatement actions in order to achieve its emission reduction. The proposed corporate and community reduction measures outlined within this strategy have been evaluated in terms of their cost and their emissions reduction effectiveness. To obtain the greatest economic, social and environmental benefits of this program, this strategy should be seen as a 'living document', and as such, the Local Action Plan does not cover all possible actions that will be undertaken, as it is envisaged that further review of this document will occur throughout the implementation, monitoring and evaluation of the strategy.

## 2.0 Council Profile

Holroyd is located approximately 25 kilometres from the CBD of Sydney. It covers an area of 39.25 square kilometres and at the time of the 2001 ABS Census 85,760 people were recorded as living within the City, an increase of 6.9% from the 1996 Census.

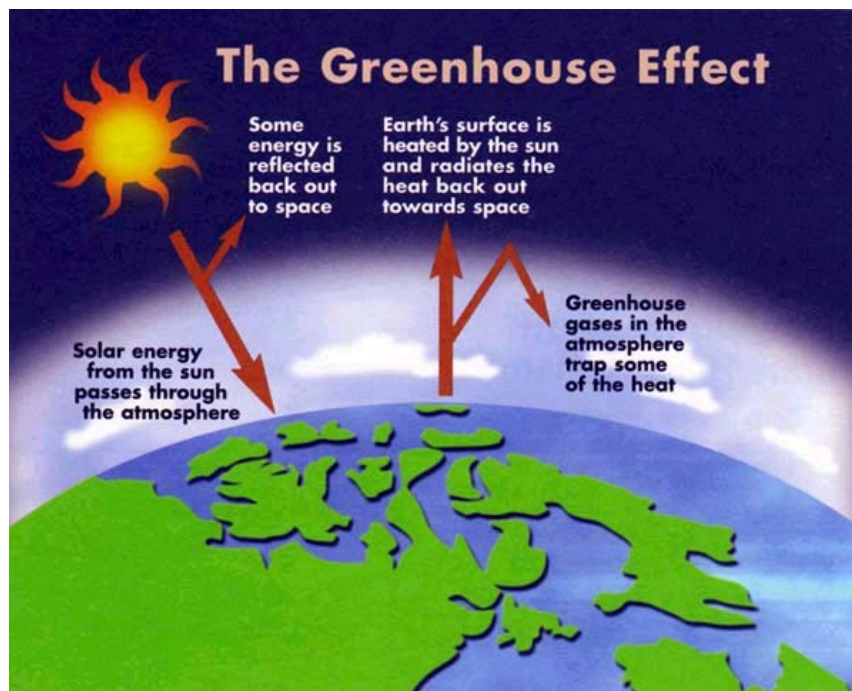
The Holroyd City Council area is a developed urban area with a stable population, however localised population changes are occurring due to the urban consolidation process. Approximately sixty percent (60%) of Holroyd is zoned residential, most of this being residential flats, medium density housing and detached housing. Three percent (3%) of the City is zoned commercial, and thirty percent (30%) of land zoned as industrial.

### 3.0 Climate Change

Most of the world's scientists agree that the Earth is warming up and that human activities are adding greenhouse gases to the atmosphere in ways that affect our climate, both now and into the future.

#### 3.1 Natural Greenhouse Effect

The Greenhouse Effect is a natural phenomenon that maintains the Earth's surface temperature at a level necessary to support life. Radiant energy emitted by the sun hits the Earth's surface and is re-radiated into the atmosphere. However, as shown in Figure 1 below, greenhouse gases (water vapour, carbon dioxide, methane, nitrous oxide and some halocarbons) which surround the earth trap some of this energy. This process maintains an average temperature on the Earth's surface of 15<sup>0</sup>C instead of -18<sup>0</sup>C (AGO 2005).



*Figure 1: The Greenhouse Effect*

#### 3.2 Enhanced Greenhouse Effect

The concentration of greenhouse gases in the atmosphere has remained relatively stable for thousands of years. Since the industrial revolution however, the concentration of these gases, most notable CO<sub>2</sub>, have been rapidly increasing. This causes an increase in density of the layer of greenhouse gases that surround the Earth and reduce the amount of radiant energy that is re-radiated into the atmosphere. Instead, the greenhouse gases trap the radiant energy, which results in an increased temperature at the Earth's surface. (EPA 2003)

The increase in greenhouse gases has been attributed to human activities that release gases into the atmosphere. The burning of fossil fuel (coal, oil and natural gas) to create energy is the main activity generating greenhouse gases. In addition, the clearing of large areas of vegetation have reduced nature's ability to remove carbon from the atmosphere and store it in the soil as biomass. (EPA 2003)

### **3.3 Potential Impacts of Climate Change**

Assessments of climate models by the Intergovernmental Panel on Climate Change (IPCC) suggest that if greenhouse emissions continue unchecked, global mean temperatures could increase by between 1<sup>0</sup>C and 3.5<sup>0</sup>C by 2100 with a sea level rise between 300 and 950mm. It is believed that such increases would represent the fastest sustained global rate of temperature rise seen for the last ten thousand years that could within a century take to the earth to temperatures not experienced for over one hundred thousand years (EPA 2003).

Theories of increased severe weather patterns including droughts and floods, movement of climatic zones, deforestation and species loss, have been presented as possible results of an enhanced greenhouse effect.

Climate change will also have social and economic impacts. Industries such as agriculture, marine fisheries and tourism will have to adapt to the altered climate and ocean circulations (IPCC 2003).

Higher temperatures could also bring health problems relating to heat stress and increased incidence of vector-borne diseases such as malaria (AGO 2005).

### **3.4 International Response to Climate Change**

- 1988 Recognizing the problem of potential global climate change, the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) established the Intergovernmental Panel on Climate Change (IPCC) to review existing information and assess the greenhouse situation.
- 1990 The IPCC released the first Assessment Report in 1990 which formed the basis of the 1992 United Nations Framework Convention on Climate Change.
- 1992 The United Nations Framework Convention on Climate Change was held with the aim of stabilising global emissions of greenhouse gases at a level that would prevent dangerous human-induced interference with the climate system.
- 1994 The United Nations Framework Convention on Climate Change took effect.
- 1995 Governments had begun negotiations on a protocol -- an international agreement linked to the existing treaty, but standing on its own.

- 1997 The Kyoto Protocol was adopted unanimously, becoming the first legally binding commitment for countries to reduce greenhouse gas emissions and address the threat of climate change. The outcome of the Kyoto Protocol was that OECD countries, as a whole would strive to reduce their greenhouse gas emissions from 1990 levels by at least 5% by 2010. In recognition of the fact that developed countries have different economic circumstances and differing capacities and costs in making emission reductions, each developed country has specific, differentiated target.
- 2005 The Kyoto Protocol came into force without Australia or the United States supporting it

### **3.5 Australia's Response to Climate Change**

While Australia only contributes 1% of the global greenhouse gas emissions, it has one of the highest emissions per capita, second only to the USA. On current projections there is likely to be substantial growth in Australian emissions over the next decade. If no further specific actions were taken to reduce greenhouse gas emissions, Australia's emissions were expected to grow around 28% from 1990 to 2010 (excluding the effects of land-use change). Recent work shows that emissions rose almost 17% between 1990 and 1998 (excluding emissions from land clearing).

Australia's emissions are a reflection of the country's economy and lifestyle. Fossil fuels supply most of our energy needs; our industries are energy intensive and we are a major exporter of energy intensive products; our population growth is relatively high; and with our widely separated and decentralised cities, transport use is high.

- 1992 Australian Governments agreed to a National Greenhouse Response Strategy as a basis for working together on greenhouse issues and in particular, meeting Australia's international obligations under the Framework Convention on Climate Change. They also agreed to an interim planning target to reduce Australian greenhouse gas emissions by 20% by 2005, based on 1988 levels. However, this target has been superseded by the negotiations with the FCCC and the Kyoto Protocol.
- 1995 Commonwealth government announced additional greenhouse measures in a statement called '*Greenhouse 21C*'. A major new initiative was the establishment of the Greenhouse Challenge program to encourage businesses to voluntarily commit to reducing their greenhouse gas emissions.
- 1996 A review of the National Greenhouse Response Strategy was completed and work commenced on the National Greenhouse Strategy.
- 1997 The Prime Minister released a Statement on '*Australia's Response to Climate Change*'. This included the provision of \$180 million over 5 years for a package

of new greenhouse measures and the setting up of the Australian Greenhouse Office.

1998 The National Greenhouse Strategy, launched in November 1998, builds on the National Greenhouse Response Strategy to provide a more focused and comprehensive approach to reducing Australia's emissions to meet Australia's target under the Kyoto Protocol. It also incorporated the measures announced by the Prime Minister in 1997.

2002 – present

Australia enters into several climate change partnerships with other countries, including China, Japan, New Zealand, the European Union and the United States. The partnerships are focused on developing practical joint activities to address climate change

### **3.6 A Local Response: Cities for Climate Protection Program**

The Cities for Climate Protection (CCP) program is an international campaign initiated by the International Council for Local Environmental Initiatives (ICLEI) in 1993 in response to the widespread scientific agreement that the global climate is changing as a result of human-induced greenhouse emissions. The campaign is aimed at collectively encouraging local governments to adopt practices and policies that limit greenhouse gases emitted within the local government area.

In Australia, CCP is delivered in collaboration between the Australian Government, through the Australian Greenhouse Office, and ICLEI – Australia/New Zealand. As of 31 December 2004, 205 local governments in Australia are participating in the program, representing 78% of the Australian population.

There are five milestones for each participant council to complete for the Cities for Climate Protection Campaign. These are:

- |   |
|---|
| <p><b>Milestone 1: Conduct an inventory and forecast for Corporate and Community greenhouse gas emissions;</b></p> <p><b>Milestone 2: Establish an emissions reduction goal;</b></p> <p><b>Milestone 3: Develop and adopt a Local Action Plan;</b></p> <p><b>Milestone 4: Implement the Local Action Plan;</b></p> <p><b>Milestone 5: Monitor and report on achievements.</b></p> |
|---|

Holroyd City Council resolved to participate in the CCP program on 1 July 2003 recognising the important role local government has in reducing greenhouse gas emissions. Council has completed Milestone 1 and 2 of the program, and the preparation and adoption of this Local Action Plan will satisfy the requirements for Milestone 3.

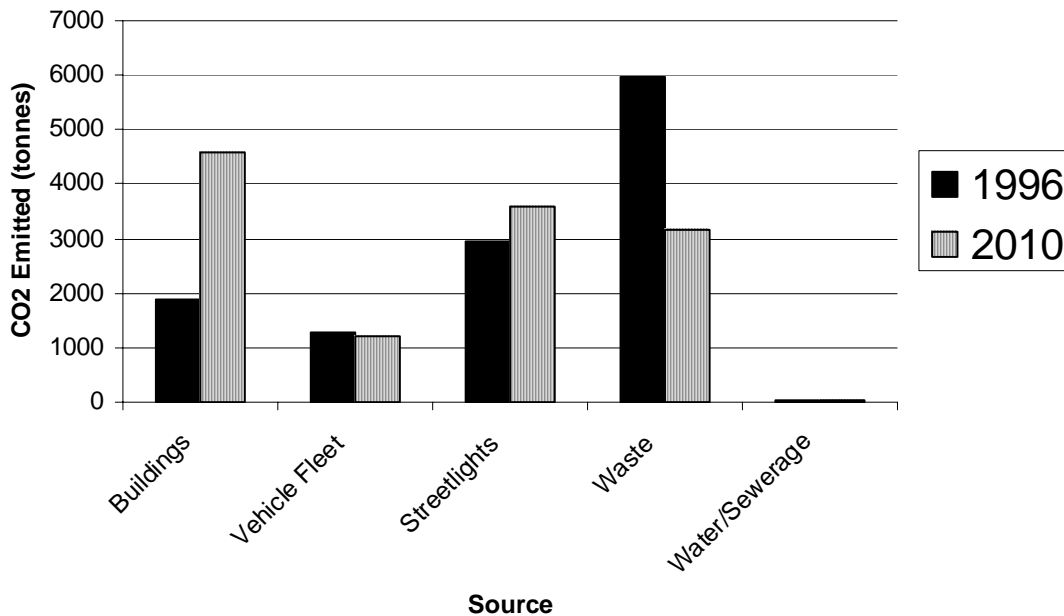
## 4.0 Inventory of Greenhouse Gas Emissions

Holroyd City Council has compiled an inventory of Council’s corporate and community greenhouse gas emissions for the base year of 1996 and the predictions of the emissions for the forecast year of 2010. The greenhouse gas emissions forecast is an aid in understanding the future impacts of current activities. The forecasted levels for 2010 are based on a ‘business-as-usual’ scenario, that is, if no additional actions are taken to reduce greenhouse gas emissions.

A forecast of corporate and community emissions for the year 2010 was developed, utilising factors such as anticipated population growth and considering the future use of Council facilities.

### 4.1 Corporate Emissions

Corporate emissions were recorded for the sectors of Building, Vehicle Fleet, Street Lighting, Waste Disposal and Water/Sewerage Pumping. The corporate emissions inventory showed that in 1996 Council’s activities resulted in the emissions of 12,117 tonnes of greenhouse gas emissions per annum. Based on a business-as-usual scenario, the forecasted level for 2010 is 12,585 tonnes of greenhouse gas emissions per annum. A comparison of the corporate greenhouse gas emissions by source for the 1996 base year and 2010 business-as-usual forecast is shown in Figure 2 below



*Figure 2: Comparison of Corporate Greenhouse Gas Emissions by source*

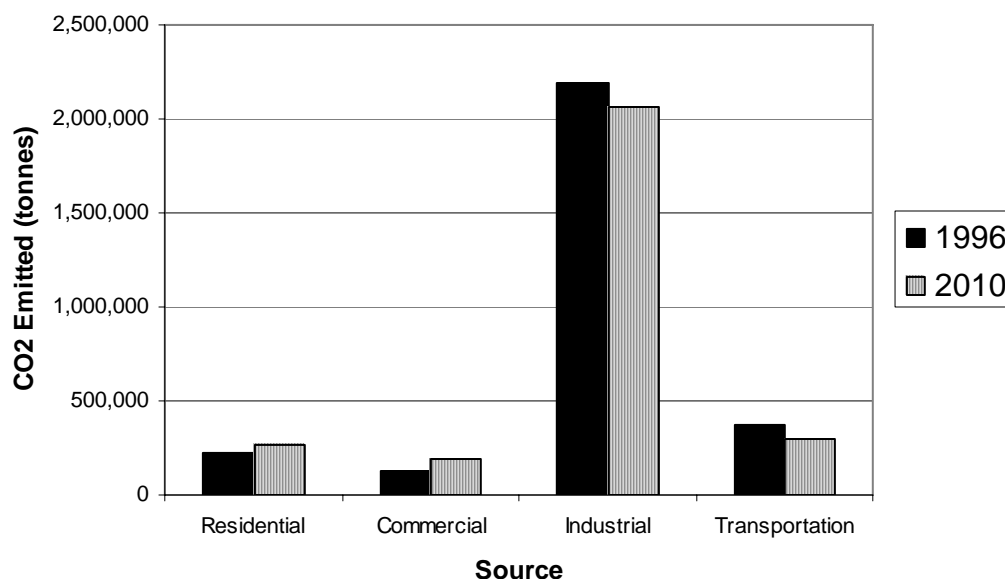
The sector that contributed the highest amount of emissions was the waste sector, followed by streetlights and buildings. The business-as-usual forecast shows that there is likely to be a slight increase in greenhouse gas emissions for the streetlights sector and a significant increase in the building sector. However, due to actions being implemented since the 1996 base year, it is anticipated that emissions from the vehicle will decrease slightly and emissions from the waste sector will decrease substantially using the business-as-usual scenario. This is due to Council implementing actions such as converting to LPG for passenger vehicles and introducing recycling since the base year.

#### **4.2 Community Emissions**

Community emissions were recorded for the sectors of Residential, Commercial, Industrial and Transportation. The box below provides a description of sources of greenhouse gas emissions from these sources.

<b>Residential sector</b>	Households contribute to emissions by using energy for water heating, room heating and cooling, swimming pool pumps, cooking, lighting and various electrical appliances. Significant savings can be easily made with minimal lifestyle changes.
<b>Commercial Sector</b>	Emissions from this sector come predominantly from room/space heating, water heating, air-conditioning, lighting, refrigeration, cooking and running a wide variety of other equipment. This sector includes a wide range of businesses such as restaurants, smash repairers, retailers and dry cleaners.
<b>Industrial sector</b>	Energy is used for industrial processes like plant and machinery operation, lighting, refrigeration, and manufacturing of chemicals.
<b>Transport Sector</b>	This sector includes private vehicles, taxis, buses, trains, freight, aeroplanes, and recreational vehicles like boats. Reducing emissions from transport has multiple benefits, including reduced traffic congestion, traffic noise and air pollution.

The Community emissions inventory showed that in 1996 community activities resulted in the emission of 2,911,664 tonnes of greenhouse gas emissions per annum. This is forecast to decrease to 2,825,498 tonnes per annum by 2010 due to a decrease in emissions in the industrial and transportation sectors.



*Figure 3: Comparison of Community Greenhouse Gas Emissions by source*

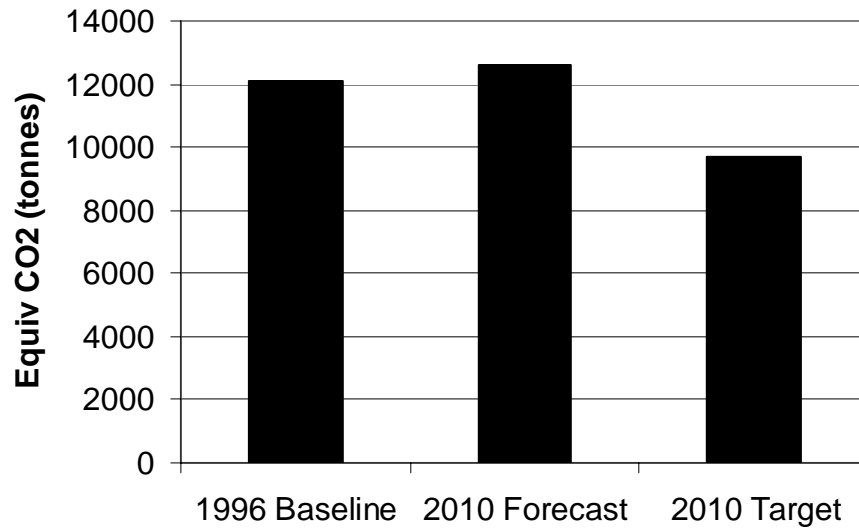
The main source of greenhouse gas emissions from the community activities is from the industrial sector. A decrease in greenhouse gas emissions is expected due to the replacement of old industrial technology with new more efficient technology. It is also anticipated that there will be a decrease in transportation emissions as vehicles are made more fuel efficient. However there will be slight increases in the greenhouse gas emissions for the residential and commercial sectors.

## 5.0 Greenhouse Emissions Reduction Goal

Milestone 2 of the CCP program is the adoption of a Reduction Goal for corporate and community emissions. The Reduction Goal is a quantitative objective for this Local Action Plan. It demonstrates a strong commitment from Council, and will raise community awareness about greenhouse issues. There are also economic benefits for Council through ensuring energy efficient energy management and reducing corporate costs. The following are Council's Greenhouse Emission Reduction Goals:

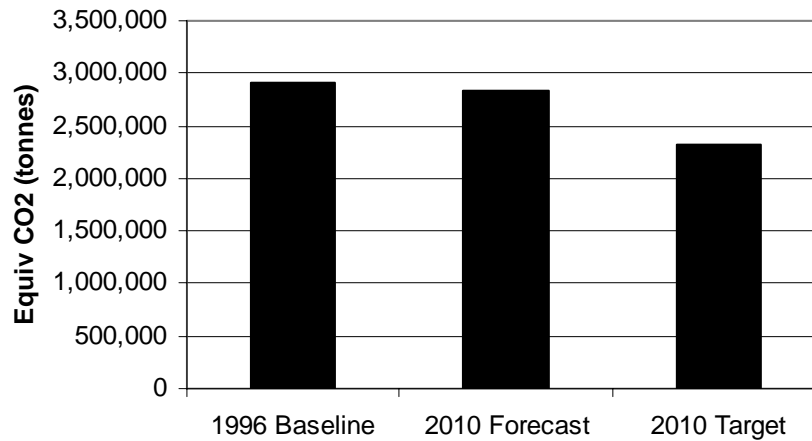
- **By 2010 Council will reduce its corporate greenhouse emissions to 20% below 1996 levels.**
- **By 2010 Council and its community will reduce the community's greenhouse gas emissions to 20% below 1996 levels.**

The 2010 target for total corporate emissions is almost 9,700 tonnes per annum and is shown in comparison to the 1996 base year and 2010 forecast in Figure 4 below.



***Figure 4: Comparison of Corporate Greenhouse Gas Emissions***

The 2010 target for total community emissions is 2,329,330 tonnes per annum and is shown in comparison to the 1996 base year and 2010 forecast in Figure 5 below.



***Figure 5: Comparison of Community Greenhouse Gas Emissions***

Holroyd City Council has identified the following benefits that greenhouse gas reduction strategies can have socially, economically and environmentally for Holroyd including:

1. Saving money and energy through energy efficiency and retrofitting;
2. Improving public relations through leadership and innovation;
3. Changing behaviour and raising awareness;

4. Reducing maintenance and operational costs of community facilities to the ratepayer; potentially allowing these savings to be directed into a revolving environment fund for further greenhouse actions;
5. Improvement of local air quality through less fossil fuels and other pollutants;
6. Making Holroyd attractive as a 'green city'; and
7. Lowering energy bills for residents and businesses.

## **6.0 Achieving the Greenhouse Reduction Goals**

There is considerable opportunity to reduce energy use through promoting energy efficiency both within Council and the community and through the use of more energy efficient devices and practices. This will enable council to significantly reduce its greenhouse gas emissions and overall expenditure on energy.

### ***6.1 Existing Actions and Policies***

Holroyd City Council has already implemented a number of actions and policies that would have achieved direct and indirect greenhouse gas emission reductions in both the corporate and community sectors since the 1996 baseline year. A summary of these actions and policies is contained in Table 1.

### ***6.2 Proposed Actions and Policies***

Tables 2 and 3 detail proposed corporate and community (respectively) actions that will be undertaken to reach the nominated greenhouse gas emission targets by 2010, and identifies the benefits, priorities, and responsible departments for each action.

The priorities are defined as:

HIGH	Actions to be implemented within 12 months
MEDIUM	Actions to be implemented between 12 months - 2 years
LOW	Actions to be implemented >2 years

**Table 1: Existing Actions and Policies to Reduce Greenhouse Gas Emissions**

<b>Description</b>	<b>Benefit</b>	<b>Initiated</b>	<b>Implemented By</b>	<b>Comments</b>
<b>Buildings</b>				
Lighting retrofit	Energy savings	2005	Parks & Buildings	As existing lights need replacing they are being replaced with triphosphorus lights.
Installing timers on floodlights	Energy savings	2000	Parks & Buildings	All floodlights in parks & sporting fields have had timers installed to ensure that users do not leave them on overnight.
Installing light sensors on external lights for Administration Building	Energy savings	1999	Parks & Buildings	Light sensors were installed as part of the construction of the Administration Building in 2000.
Solar Power for lighting in Council's Park	Energy savings	2004	Parks & Buildings	Sandra Street Park Woodpark.
Retrofit water efficient shower heads in Council Pools	Energy & water savings	2005	Works/Parks & Buildings	Currently being undertaken on replacement upon damage basis.
Installing hot water timers and isolation switches in parks amenities	Energy savings	2003	Parks & Buildings	Being undertaken on an as construction basis.
Reduction of timed showers at Council Pools	Energy & water savings	2005	Works	Reduced from 4 minutes to 3 minutes
Utilisation of pool blankets for Council pools	Energy & water savings	2004	Works	Installed on Merrylands Pool in 2004 and recently on Wentworthville Pool when heating was installed
Utilising alarm system to	Energy savings	2001	Parks & Buildings	Being undertaken on an as

control air-conditioning in Community Meeting Rooms				constructed/refurbished basis
<b>Vehicle Fleet</b>				
Introduction of regular maintenance regime for, and turnover of, waste trucks	Maintenance savings; reduced greenhouse gas emissions	Ongoing	Environmental Health Unit/Works – Mechanics	Trucks are turned over regularly
Conversion of passenger vehicle fleet to LPG	Reduced greenhouse gas emissions; fuel savings	2002	Financial Services (with assistance from Works)	Technical problems have been experienced with LPG vehicles and conversion of fleet is currently suspended.
<b>Streetlights</b>				
WSROC Streetlighting Project	Energy savings; reduced greenhouse gas emissions	2005	Corporate & Financial Services	WSROC project based on SSROC model
<b>Waste</b>				
Introduction of recycling program	Diversion of waste from landfill	1996	Environmental Health Unit	Paper and co-mingled recycling was introduced
<b>Community</b>				
Energy Smart Provisions in Development Control Plans	Energy & water savings	2003	Strategic Planning	Energy Smart provisions were included in the DCP for single dwellings and dual occupancies (Note: these provisions have been overridden by BASIX).
Precinct Plans for SEPP 59 Lands	Energy & water savings; waste reduction	2002	Strategic Planning	Provisions were included in the Precinct Plan to ensure that the new development reduced energy, water and waste. (Note: these provisions have been overridden by BASIX)
Displays at Council, Council	Energy & water savings;	Ongoing	Environmental Health Unit	Energy & water efficient

events etc	waste reduction			appliances and energy, water and waste minimisation are promoted at Council events.
Earthworks Course	Waste reduction	2003	Environmental Health Unit	Worm farming & Compost courses are run 2/yr and as requested by a group.

**Table 2: Proposed Actions and Policies to Reduce Corporate Greenhouse Gas Emissions**

<b>Action</b>	<b>Description</b>	<b>Priority</b>	<b>Responsibility</b>	<b>Comments</b>
<b>Buildings</b>				
B1	Energy Star software enabled, installed and used on all Council computers	HIGH	Information Technology	
B2	Develop a Purchasing Policy – addressing both energy efficiency while operating (star rating etc) as well as lifecycle analysis considerations	MED	Financial Services/ Environmental Health Unit	
B3	Install photovoltaic systems to provide energy for Council buildings in highly visible locations	LOW	Parks & Buildings	
B4	Fit timers to all meeting rooms, toilets and fans	HIGH	Parks & Buildings	
B5	Fit light sensors to all eastern facing office/rooms which have good solar access	HIGH	Parks & Buildings	
B6	Fit timers to instant hot water machines	HIGH	Parks & Buildings	
B7	Commit to purchasing 10% Green Power for all Council Buildings	HIGH	Environmental Health Unit/ Financial Services	
B8	Investigate participating in the Energy Smart Business Program	MED	Environmental Health/ Parks & Buildings	
B9	Develop and implement a Staff Education Program	MED	Environmental Health Unit	
B10	Install solar hot water systems or similar alternative to Council Buildings as hot water systems require replacing	Ongoing	Parks & Buildings	
B11	Replace incandescent lamps with triphosphorus lights as they need replacing in all Council buildings	Ongoing	Parks & Buildings	
<b>Vehicle Fleet</b>				
VF1	Investigate greenhouse friendly fuel alternatives for Council-owned diesel trucks	HIGH	Environmental Health Unit/ Works	
VF2	Offer the choice of public transport ticket and/or additional salary instead of leaseback	MED	Human Resources	

	vehicle			
VF3	Investigate reducing Council's fleet engine capacities to <2.5 litres	MED	Financial Services/Works	
VF4	Investigate opportunities for Council's recycling contractors to provide greenhouse friendly fuel vehicles	MED	Environmental Health Unit	
<b>Streetlights</b>				
S1	Purchase 10% Green Power for Public Lighting	HIGH	Traffic & Development/ Financial Services	
S2	Commence a streetlighting retrofit	MED	Traffic & Development	
S3	Trial Diolights	LOW	Traffic & Development	
S4	Develop a Light Pollution Reduction Goal and Management Plan	LOW	Traffic & Development	
<b>Waste</b>				
W1	Develop and implement a Waste Management & Minimisation Policy	HIGH	Environmental Health Unit	
W2	Provide staff education on double-sided photocopying and printing, electronic document management and other waste reduction opportunities	HIGH	Environmental Health Unit/ Information Technology	
W3	Compost food waste at the Holroyd Centre	MED	Holroyd Centre/ Environmental Health Unit	
W4	Compost food waste at Council's Childcare Centres (where space is available)	MED	Children's Services/ Environmental Health Unit	
<b>Other</b>				
O1	Develop a Green Tender Policy	MED	Environmental Health Unit/ Works/Parks & Buildings	
O2	Develop a Green Lease Agreement for Council owned buildings	MED	Environmental Health Unit/Parks & Buildings	
O3	Investigate an Energy Performance Contract	MED	Environmental Health Unit/ Parks & Buildings/ Financial Services	

O4	Prepare and implement a Capital Works Green Guide to ensure new assets incorporate energy efficient principles	MED	Environmental Health Unit/ Works/Parks & Buildings	
O5	Establish a revolving energy fund to reinvest savings into future projects	HIGH	Financial Services/ Environmental Health Unit	

**Table 3: Proposed Actions and Policies to Reduce Community Greenhouse Gas Emissions**

<b>Action</b>	<b>Description</b>	<b>Priority</b>	<b>Responsibility</b>	<b>Comments</b>
<b>Residential</b>				
R1	Promote energy smart products such as AAA-rated showerheads and compact fluorescent lamps at Council, Council events and via Council's website.	Ongoing	Environmental Health Unit	
R2	Inform residents of easy things they can do to decrease greenhouse gas emissions through ordinary Council communications (newsletters, website, letterhead, back of envelope messages, displays at fairs etc)	Ongoing	Environmental Health Unit/ Public Relations	
R3	Promote financial incentives to the community to assist in the retrofitting of existing buildings	Ongoing	Environmental Health Unit	
R4	Develop and undertake initiatives aimed at reducing the generation of waste by the community.	Ongoing	Environmental Health Unit	
R5	Undertake and encourage tree planting, bush regeneration and restoration activities and actively support, encourage and expand the activities of community groups involved in these activities.	Ongoing	Works	

<b>Industrial &amp; Commercial</b>				
IC1	Promote to local industries involvement in programs such as the Greenhouse Challenge and Greenhouse Allies Program provided by the Australian Greenhouse Office to assist them in reducing greenhouse gas emissions.	MED	Environmental Health Unit	
IC2	Investigate incorporating energy efficiency requirements for industrial and commercial developments.	LOW	Strategic Planning	
IC3	Develop and implement an energy efficiency program targeted at small business owners and operators.	LOW	Environmental Health Unit	
<b>Transportation</b>				
T1	Conduct education campaigns to encourage residents to use public transport more frequently	MED	Traffic & Development/ Environmental Health Unit	
T2	Lobby State Government to improve public transport infrastructure	Ongoing	Traffic & Development	

## 7.0 Funding the Local Action Plan

To achieve the Greenhouse Reduction Goals adopted by Council, significant resources and funding will be required. Council has limited budgets and new projects do not always achieve high priority. Therefore, some alternative funding will need to be sought. The Australian Greenhouse Office, Environs Australia and the Department of Energy, Utilities and Sustainability at times, have some limited funding programs for councils to ensure that the commitment to greenhouse abatement is achievable.

Council will investigate the establishment of a revolving energy fund to reinvest savings generated from the Local Action Plan into funding future greenhouse projects. The very nature of reduced energy use resulting in monetary savings would allow Council's Greenhouse Reduction Local Action Plan to become more financially self-sustainable.

## 8.0 Monitoring and Review

This Local Action Plan is a dynamic document, taking into consideration changes in attitudes, technology, awareness and means for achieving greenhouse gas reduction.

Review of the Greenhouse Action Plan will occur on an annual basis. A report will be provided on the progress of actions and their effectiveness in the annual State of Environment Report. This process will identify areas requiring additional action or successful means for achieving greenhouse gas reduction as well as accommodate for changes in priorities for achieving greenhouse gas reduction.

## 9.0 References

Australian Greenhouse Office (AGO) (2004) *Australian Greenhouse Office Annual Report 2003-2004*, Australian Greenhouse Office, Canberra

Australian Greenhouse Office (AGO) (2002) *Understanding Greenhouse Science*, Australian Greenhouse Office, Canberra

Intergovernmental Panel on Climate Change (2001). *Summary for Policymakers*

International Council for Local Environmental Initiatives (ICLEI), [www.iclei.org.au/ccp](http://www.iclei.org.au/ccp)

NSW EPA (2003) *NSW State of the Environment 2003*