

Attachment

10.2.1

CITY OF SOUTH PERTH
CLIMATE CHANGE STRATEGY 2010 - 2015

(Compiled August 2010)

Climate Change is one of the greatest threats to Western Australia's natural environment (excerpt from the WA Greenhouse Strategy)

sustainable south perth



leading the way to a sustainable future

City of
SouthPerth



Executive Summary

The world's climate system has such long response times that experts now agree that climate change can no longer be halted completely. Hence the adverse experiences with weather extremes – floods, storms, extreme heat and drought – are a clear sign of the severe impacts of climate change. Even if we were to stop all green house gas emissions today, we would still feel the impacts of climate change for decades to come. If we do not stop increasing the amount of carbon dioxide in the atmosphere we run the risk of changing the climate in unforeseen ways that we will be unable to adapt to (Climate Alliance, European Secretariat, Amica)

One of the most significant findings of the AR4 (Fourth Assessment Report of the IPCC (Intergovernmental Panel on Climate Change)) was conveyed by two simple but profound statements: “Warming of the climate system is unequivocal as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global sea level”; and “most of the observed increase in temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic [human induced] GHG concentrations”.

Societies must now respond to climate change by adapting to its impacts and reducing GHG (greenhouse gas) emissions..There are viable adaptation options that can be implemented in several sectors at low cost and/or with high benefit-cost ratios. Also, empirical research suggests that higher benefit-cost ratios can be achieved by implementing some adaptation measures at an early stage compared to long-lived infrastructure at a later date. Based on this reality this conference must put in place measures for financing adaptation projects in some of the most vulnerable regions in the world (Welcoming speech to the COP 15 Conference in Copenhagen December 2009, by the Chairman of the Intergovernmental Panel on Climate Change, Dr. Rajendra Pachauri).

Addressing climate change and its effects presents a twofold challenge: firstly, “mitigation”, that is limiting further climate change by reducing the production of greenhouse gases and secondly “adaptation”, which means preparing for the impacts of inevitable climate change. The City also recognizes the importance of ‘leadership’ in addressing this issue.

It is essential that climate change be tackled in an integrated and strategic way. This Climate Change Strategy sets out such an approach to climate change over the next five year period, in pursuit of the following goals:

1. **ADAPTATION:** To ensure the City of South Perth is prepared for and resilient to climate change.
2. **LEADERSHIP:** To provide leadership and build capacity within the City and community, and through partnering with other Local Governments, to manage climate change risk and opportunity.
3. **MITIGATION:** To reduce the City's greenhouse gas emissions and carbon footprint.

Contents

EXECUTIVE SUMMARY	2
CONTENTS	3
INTRODUCTION	4
PURPOSE	4
STRATEGIC THEMES AND OBJECTIVES	4
SCIENCE OF CLIMATE CHANGE	5
CONTEXT	5
<i>National & International Perspectives</i>	6
LOCAL DRIVING FORCES	6
DRIVING FORCES AT THE CITY OF SOUTH PERTH	7
<i>Sustainable Communities - Visioning</i>	7
<i>Strategic Directions 2010-2015</i>	7
<i>Sustainability Strategy</i>	7
<i>Sustainability Policies</i>	8
<i>Cities for Climate Protection®</i>	8
<i>Sustainable Purchasing</i>	9
<i>Vehicle Management Practice</i>	9
<i>Data Management - Planet Footprint</i>	10
<i>NaturalPower™</i>	10
<i>Switch your thinking!</i>	10
<i>Rivers Regional Council</i>	11
CITY OF SOUTH PERTH'S GREENHOUSE EMISSIONS & ENERGY CONSUMPTION.....	11
<i>City's Progress Towards Reducing Greenhouse Emissions</i>	11
<i>The City's Climate Change Vision</i>	13
<i>Cost & Benefits</i>	14
MANAGEMENT OF THIS STRATEGY.....	15
HISTORY OF ACHIEVEMENTS	14
CLIMATE CHANGE RISK MANAGEMENT & ADAPTATION	16
CLIMATE CHANGE LEADERSHIP & EDUCATION.....	18
<i>Residential</i>	18
<i>City Staff and Councillors</i>	19
<i>Business/Education Sector</i>	19
<i>Partnerships</i>	19
CLIMATE CHANGE MITIGATION.....	20
STRATEGY MANAGEMENT	20
ENERGY CONSERVATION	21
WASTE.....	21
SUSTAINABLE PROCUREMENT.....	21
SUSTAINABLE DESIGN.....	22
TRANSPORT.....	22
WATER (AQUA)	22
GLOSSARY	23
REFERENCES	24
APPENDIX ONE.....	25
Figure 1: National Waste Report 2010 - page 32	11
Figure 2: Indicative Corporate GHG & Energy Sustainability Objectives and Targets.....	12
Figure 3: Corporate Average (estimated) Greenhouse Gas Emissions	13
Table 1: City (organisation) Greenhouse Gas Emissions (CO2 equivalent) in tonnes	10
Table 2: City (organisational) Greenhouse Gas Emissions - targets for reduction	12
Table 3: Annual Abatements of Greenhouse Gas Emissions.....	13

Introduction

Purpose

The City of South Perth has committed to pursuing sustainability outcomes at both community and corporate levels. The City's Sustainability Strategy enunciates the aims and obligations that the City has committed to for the coming years. The Climate Change Strategy is a component of that obligation and aims to assimilate all of the City's related plans, policies and strategies relating to energy and climate change. The Strategy not only sets out to demonstrate the work achieved by the City to date but lays the groundwork for action.

This document sets out a strategic approach to climate change over the next five year period, in pursuit of the following goals and targets:

1. ADAPTATION:

To ensure the City of South Perth is prepared for and resilient to the impacts of climate change - refer to [page 16](#).

Target: (1) Conduct a comprehensive vulnerability assessment by 2013 and,
(2) Endorse a climate change adaptation plan by 2011 - 2012.

Measurement: Making publicly available the Climate Change Risk Assessment Reports.

2. LEADERSHIP:

To provide leadership and build capacity within the City and community, and through partnering with other Local Governments, to manage climate change risk and opportunity - refer to [page 18](#).

Target: Increasing community understanding and activity in relation to climate change impacts and response by 2015.

Measurement: Survey the community on their attitudes and perceptions of the City's efforts in regard to demonstrating leadership and building capacity within the community to understand, adapt and mitigate (reduce) the impacts of climate change.

3. MITIGATION:

To reduce the City's (corporate) greenhouse gas emissions, carbon footprint and energy consumption - refer to [page 20](#).

Target: (1) 4% reduction per year to 2015, in greenhouse emission from 2007-2008
(2) 5% reduction per year to 2015, in energy consumption from 2007-2008.

Strategic Themes and Objectives

Following from above, strategic themes and objectives of the three goal areas provide context and direction for the Strategy, in particular, the commitment over the long term as goals and targets change over time. An Action Plan for the three areas is tabled under each relevant section in this document (refer pages 16-22).

ADAPTATION - to climate change impacts:

- Undertake a risk assessment for adaptation to climate change impacts (City)

- Implement the adaptation risk assessment - develop an Adaptation Strategy
- Forward plan and budget for adaptation activities
- Education and awareness (City and Community)
- Collaborate and partner with neighbouring Councils.

LEADERSHIP - build capacity within the City and the Community and partner with other Local governments, to manage climate change risk and opportunity:

- Commit to the purpose and intended outcomes (requirements) of this Strategy
- Active participation and commitment by all City staff and elected members
- Allocate resources to ensure the Strategy is managed across the City and Community
- Active participation by City staff and elected members across the local government sector, State, Federal and other agencies
- Research and innovation - finding future solutions, develop a process to capture changing science, conditions, legislation, regulations etc
- Engage directly with the Community.

MITIGATION - reduction of greenhouse gas emissions and carbon footprint:

- Develop a reduction target
- Develop and implement a Mitigation Action Plan (City and Community)
- Develop and implement education and awareness (City and Community)
- Develop, manage and monitor data management (City and Community)
- Evaluate, review, and report outcomes of above (City and Community).

Science of Climate Change

Greenhouse gases are a natural part of the atmosphere. They absorb and re-radiate the Sun's warmth, and maintain the Earth's surface temperature at a level necessary to support life. The problem we now face is that human actions - particularly burning fossil fuels (coal, oil and natural gas), agriculture and land clearing - are increasing the concentrations of the gases that trap heat. This is the enhanced greenhouse effect, which is contributing to a warming of the Earth's surface.

Water vapour is the most abundant greenhouse gas. Its concentration is highly variable and human activities have little direct impact on its amount in the atmosphere. Humans have most impact on increasing the levels of carbon dioxide, methane and nitrous oxide. Various artificial chemicals such as halocarbons also make a small contribution to the enhanced greenhouse effect.

Context

The 'enhanced greenhouse effect' is an alteration of the world's climate system caused by increasing levels of certain gases in the Earth's atmosphere. Scientists believe the enhanced greenhouse effect is already causing higher average air temperatures in the lower atmosphere, changed rainfall patterns and rising sea levels resulting from warmer oceans and ice melting from glaciers and Arctic and

Antarctic ice sheets. Climate change due to the enhanced greenhouse effect is often referred to as 'global climate change' or 'global warming'.

The broader scientific community now accepts that climate change¹, due to increased greenhouse emissions, has the potential to adversely impact the environment. The impacts of global climate change are difficult to predict, however, international global climate models suggest that as atmospheric greenhouse gas concentrations continue to rise, Western Australia will become warmer and rainfall patterns will change. The release of a CSIRO & Bureau of Meteorology report in early 2010, provides a snapshot of observations and analysis of Australia's climate and influencing factors.

These changes to the State's climate could directly affect agriculture, forestry, health, biodiversity, water resources, energy demand and tourism. There could be indirect but significant impacts on fisheries and industrial development.

National & International Perspectives

International agreements aim to limit atmospheric greenhouse gas concentrations to levels below those at which unacceptable impacts would occur. The United Nations Framework Convention on Climate Change (UNFCCC) **Kyoto Protocol** sets emissions targets for developed countries, including Australia, over the period 2008-2012. Under the UNFCCC negotiation track, there is work being done to ensure that developing countries and the United States (which is not a party to the Kyoto Protocol) agree to comparable 'measurable, reportable and verifiable' actions to reduce greenhouse gas emissions for the period post 2012.

Many countries have introduced **emissions trading schemes** (ETS) as a way to meet emissions targets. The most established is the European Union's 27-member scheme, introduced in 2005. Twenty-three US states and four Canadian provinces currently participate in regional trading schemes. Australia is yet to introduce an ETS or other emissions reduction mechanism.

Australia generates only 1.5 per cent of global greenhouse gas emissions, so its actions alone cannot avert the worst consequences of climate change. However, **Australia is the world's biggest polluter on a per capita basis** (at 20.58 tonnes of CO₂-e compared to China ranked at 44 with 4.58 tonnes CO₂-e per capita²), so it is important we do our bit as part of the global effort. Australia is actively involved in international negotiations to develop a framework for action to continue to address climate change after the first Kyoto Protocol commitment period ends in 2012.

The **Garnaut Climate Change Review** presented its Final Report in September 2008³. The Review was an independent study commissioned by Australia's commonwealth, state and territory governments in 2007. The Review examines the impacts of climate change on the Australian economy and the costs of adaptation and mitigation (emissions reduction). It analyses the elements of an appropriate international policy response, and the challenges that face Australia in playing its proportionate part in that response.

The Government's Climate Change approach aims to:

- reduce greenhouse pollution in Australia in the short and long term (mitigation)
- work with the international community to develop a global response that is effective and fair (partnering)
- prepare for the climate change that we cannot avoid (adaptation).

Local Driving Forces

The Western Australian State Sustainability Strategy was released in 2003. It sought to give sustainability meaning for Western Australia: its regions, its issues, its projects and its communities.

¹ IPCC

² Maplecroft Climate Change Risk Report 2009/2010

³ <http://www.garnautreview.org.au/index.htm>

The State Sustainability Strategy committed the Government to undertaking a number of Greenhouse related initiatives, the most significant of which was the Greenhouse Strategy. **The WA Greenhouse Strategy** released in 2004 aimed to reduce greenhouse gas emissions and take advantage of the opportunities generated by action on climate change.

The existing State Government enunciated an election commitment to develop a Strategy to address climate change. This is currently being developed as a Climate Change Adaptation Management Strategy and is likely to be released in 2011.

The Western Australian Local Government Authority (WALGA) has recently endorsed a Climate Change Policy Statement and a Declaration with targets for emissions reduction. WALGA has also established a Climate Change Consultancy Panel and developed a Climate Change Adaptation Website Toolkit. It is anticipated that the City will take advantage of these instruments to further its progress in the commitments and intentions that are outlined in this Strategy.

The State Waste Strategy for Western Australia has been released in draft (October 2009). One of the strategic objectives of this document is reducing greenhouse gas emissions through a focus on resource efficiency and improved management of emissions from landfills. This Strategy is managed by the WA Waste Authority.

Driving Forces at the City of South Perth

The following section outlines the activities that have been undertaken and continue to drive the City's organisational pursuit of reducing corporate and community emissions.

Sustainable Communities - Visioning

The City conducted a visioning process in 2009 to elucidate an outline of the community's perspective on the City's future direction. This process encouraged feedback on environmental, and particularly greenhouse/energy issues. The feedback generally demonstrated that residents are not only interested in the issue of climate change but are actively looking for the City to lead in this area. The Visioning document (at page 10) outlines these concerns in the section 'Reducing Environmental Impacts'.

Strategic Plan 2010-2015

The City's Strategic Plan identifies (at 2.5) with respect to climate change the need to build capacity within the City and community including partnering with stakeholders, to manage climate change risk and opportunity, through leadership, adaptation and mitigation (emissions reduction). Associated elements of the Strategic Plan are:

- 2.3 - review and integrate sustainable water management strategies to improve community and City practices
- 2.4 - review and establish contemporary sustainable building, land use and environmental design standards
- 2.6 - encourage the community to embrace sustainable lifestyles.

The Corporate Plan 2010-2011 provides the detail on how to achieve the key success factor identified in the Strategic Plan. This includes development and implementation of a Climate Change Strategy. To complement this process, the Strategic Financial Plan 2007-2008 to 2011-2012 is being updated to align with the Strategic Plan 2010-2015. The Strategic Financial Plan is a key document in forward planning, and the allocation of funds to actions and outcomes of the Climate Change Strategy.

Sustainability Strategy

The City has recognised that actively pursuing sustainability leads to enhancing the quality of life and the prosperity of the community. This is achieved through a process of careful planning and decision-making that aims to prevent any harmful local and global effects of its actions.

The City's Strategic Plan 2004-2008 identified the need for a Sustainability Strategy to ensure that City services and activities were managed and conducted in a sustainable way. The City's Sustainability Strategy was developed in 2006 to provide an overarching strategic and coordinated approach to integrating the City's future direction in a sustainable manner. The Sustainability Strategy also enables the City to effectively deliver superior services and achieve set targets, in an economically affordable, environmentally benign and socially acceptable manner.

The City's Sustainability Strategy is currently under review, but recognises that;
..... "The City *must* (sic) contribute to the solution of global sustainability issues particularly climate change threats to biodiversity and oil vulnerability".

Sustainability Policies

The Sustainability Policy (P320) was endorsed by Council in March 2008. Not only was the Policy designed to compliment and support the Sustainability Strategy, it was also a significant step in implementing the City's draft sustainability/integrated management system. The Policy sets out the City's key guiding sustainability principles.

The City's Energy Conservation Policy (P302) cites the City's commitment to the reduction of greenhouse gases through its participation in the 'Cities for Climate Protection' campaign. The policy indicates the City has resolved to set a target to reduce corporate and community emissions by 20 percent based on 1998 baseline data. The policy also states that the City will actively encourage and promote energy efficient practices in:

- building design;
- lighting;
- heating and cooling;
- refrigeration;
- vehicles, and
- equipment and appliances.

Although the City still needs to do much in the way of making its buildings, and the local housing stock more energy efficient and environmentally sound, the existing Ecologically Sustainable Development (ESD) & Building Design policies do provide some basis for improving the energy and environmental performance of City & residential buildings.

The City's governance procedure requires that policies are reviewed (and updated when required) on a regular basis.

ICLEI Cities for Climate Protection®

The Cities for Climate Protection® (CCP) program is a global initiative that assists local government to reduce energy use and greenhouse emissions from their own operations and the community.

The program is based on the achievement of five strategic milestones:

- Milestone One: Conduct an inventory and forecast for community and Council greenhouse gas emissions**
- Milestone Two: Establish an emissions reduction goal**
- Milestone Three: Develop and adopt a Local Action Plan**
- Milestone Four: Implement the Local Action Plan**
- Milestone Five: Monitor and report on achievements.**

The City joined the CCP program in March, 2001 and was awarded Milestone Five in May 2005. The City subsequently completed the advanced CCP Plus Program in October 2008 and the report was verified by the International Council for Local Environmental Initiatives - Local Governments for Sustainability (ICLEI) in May 2009.

The aspirational goal in terms of emissions reduction adopted at Milestone Two, was a 20% reduction in emissions by 2010 on a baseline of 1998 data, for both community and Council emissions.

The ICLEI Cities for Climate Protection Program® was de-funded by the Federal Government in June 2009.

In addition to the completion of the CCP program, the City is undertaking another important ICLEI initiative, the Water Campaign.

ICLEI Water Campaign™

The Water Campaign™ is an international freshwater management program that builds the capacity of local government to reduce water consumption and improve local water quality.

The variability of water supply across Australia makes it critical for Local Governments to properly manage this precious resource. Whether through direct water conservation across council's facilities or effective water efficiency across public open space, the ICLEI Water Campaign provides direct assistance to identify, manage and report on the management and Local Governments interaction through the total water cycle (ICLEI Oceania).

The City joined the Water Campaign™ in August 2004. The Program is based on the ICLEI five Milestone model. Council endorsed the Water Action Plan (Milestone Three) in June 2009, and the City is currently implementing the Action Plan as Milestone Four.

Sustainable Purchasing

The City has recently embarked on the development of a Sustainable Purchasing Plan (2009), also initiated from the ICLEI Cities for Climate Protection Program®. The plan provides systems and tools for the City of South Perth to minimise social, environmental and economic impact. It incorporates activities that aim to lessen negative impacts on the local and global environment through a preference for products or services that reduce greenhouse gas emissions, contain recycled content, are used or recycled at end of life, are non toxic, are made or recycled locally, minimise unnecessary packaging, minimise unnecessary purchasing and provide long-term value for money. In particular, selected actions from within the Plan will assist the City to accelerate greenhouse gas abatement and progression towards its greenhouse gas reduction goals through the strategic purchasing of greenhouse preferable goods and services.

The City has a number of policies and procedures that relate to sustainable purchasing activities. The existing policies enunciate that it is important that purchases of goods or services deliver the best possible outcome for the City as assessed using 'Triple Bottom Line' principles. Officers should responsibly balance Financial (value for money), Environmental & Social issues. A higher priced conforming offer may be recommended should there be clear and demonstrable benefits over and above the lowest priced conforming offer. It is intended that the establishment of appropriately weighted selection criteria will assist the City's decision-making in this regard.

Vehicle Management Practice

The City has recently amended its fleet vehicle management practice to improve sustainability considerations. Prior to this, the City committed to reducing most of its vehicle fleet from 6 cylinders to 4, in an attempt to reduce fuel consumption and greenhouse emissions. When acquiring and disposing of light vehicles, the City will apply a structured test, based on four key sustainability principles. All of the principles carry equal weighting or as determined by the Chief Executive Officer on an as needs basis, they include:

- **Economic** – Whole of life costs will be estimated from the best available data and the highest preference will be given to those vehicles with the lowest optimised whole of life cycle cost
- **Functional** (tool of trade vehicle test) – Highest preference will be given to the vehicle that best fits the functional requirements of the position for which the vehicle is being acquired

- **Environmental** – Highest preference will be given to those vehicles that cause the least amount of environmental damage with greenhouse emissions, air pollution and fuel efficiency being the primary performance indicators
- **Social** – Highest preference will be given to those vehicles that confirm a responsible and accountable image compatible with the City’s corporate objectives.

Data Management - Planet Footprint

In October 2007, the City subscribed to the Planet Footprint programme. Planet Footprint is a data collection, monitoring and reporting tool which details the City’s resource consumption (energy, water, fuel) and waste generation, from an organisational perspective. Energy and water data are transferred from the respective utilities to the Planet Footprint datalogger. Fuel usage and waste is collected by the City and reported to Planet Footprint. This data is prepared quarterly and is available via the Planet Footprint website for download. The Planet Footprint reports allow the City to calculate and report its greenhouse gas emissions quarterly.

The table below outlines the City’s corporate emissions using the most currently available data. As identification and quantification methods improve across the organisation, the data may change in future periods, affecting trends.

Table 1: City (organisation) Greenhouse Gas Emissions (CO₂ equivalent) in tonnes

Sector	Base Year 1998	2005- 2006	2006- 2007	2007- 2008	2008 - 2009
Energy	2534	2501	2375	2414	2065
Street lighting	2032	1894	1789	1950	1875
Fleet	650	605	556	579	558
Waste	28	630	628	640	640
Total	5244	5630	5348	5583	5138

NB: The above emissions from corporate waste are possibly underestimated due to non-identification and monitoring of some waste sources, volumes and weights.

NaturalPower™

NaturalPower™ is a brand name given to electricity generated from renewable energy and available via energy retail organisations. NaturalPower™ is independently accredited with the national GreenPower Program and accreditation is the guarantee that electricity from renewable sources is being delivered to the power grid.

The City has subscribed to GreenPower since September 2001 (CCP Milestone Three). In past years the City has consumed in the order of 3.1 GWh per year, of electricity and currently commits to take 25% of the total power consumed on “eligible” buildings and reserves at the surcharge rate for NaturalPower™.

Carbon Neutral™

The City joined the Carbon Neutral™ program in 2007 and provides a donation equivalent to the offset of the City’s vehicle fleet. Annual average fleet greenhouse gas emissions are approximately 600 tonnes. This annual donation allows the Carbon Neutral™ organisation to purchase and plant tree seedlings to sequester carbon.

Switch your thinking!

The City participated in the *switch your thinking!* (syt!) in June 2008-June 2010. The Program is a Local Government participatory program, and is aimed at community education encompassing schools, residents and business. Energy and water efficiency, including waste management and passive solar design are the key environmentally sustainable themes. Participation to *switch your*

thinking! is reviewed annually by the City Sustainability Coordinator in conjunction with other relevant Officers to ascertain suitability for City requirements.

Rivers Regional Council

The City is a member council of the Rivers Regional Council, which is planning to build a facility in the southern region of metropolitan Perth. Currently, the City’s municipal waste is collected by Cleanaway and disposed at:

- Municipal solid waste - WA Landfill Services
- Municipal recyclable waste - Cleanaway Bayswater Facility
- Collier Park Transfer Station - WA Landfill Services

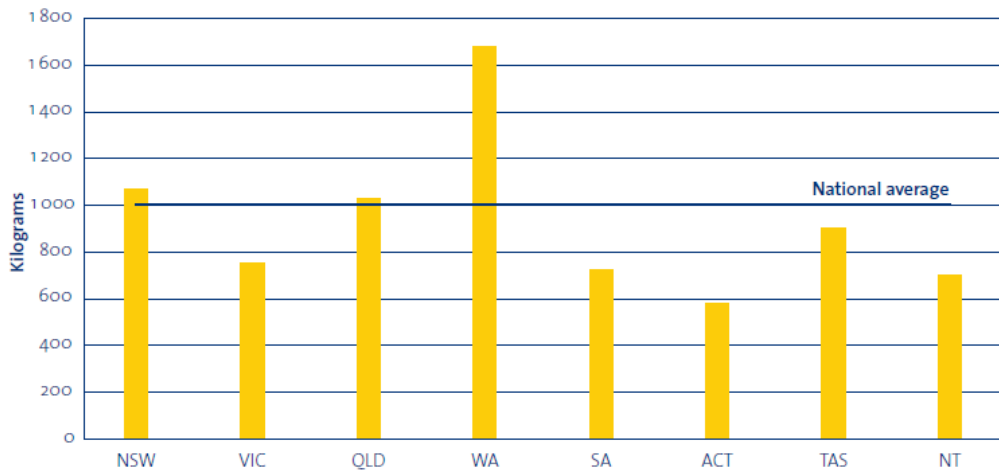
Emissions from waste contribute a significant component of local government greenhouse gases. The City’s municipal solid waste sent to landfill is approximately 13,000 tonnes per year (300 kgs/capita, CoSP population of 43,776), which equates to the emission of 13,000 tonnes of greenhouse gases.

Across Western Australia and including all waste landfilled, Western Australia is the highest amongst the States, at 1600 kgs per person, according to the National Waste Report 2010 using 2006-2007 data.

The City’s (Climate Change) Strategy, at this stage, is focussed on the operations of the City in an organisational context, and a key task will be the identification of all sources of waste generation across the organisation. This includes greenwaste from landscaping and reserve management operations, catering waste from events, and the generation of waste from the City Administration offices.

Figure 1: National Waste Report 2010 - page 32

Figure 2.13: Kilograms of waste landfilled per person, 2006–07



City of South Perth’s Greenhouse Emissions & Energy Consumption

City’s Progress Towards Reducing Greenhouse Emissions

In 2002 Council committed to reducing its corporate and community greenhouse gas emissions by 20% by the year 2010 through the Cities for Climate Protection (CCP) program. In 2005, the City of South Perth’s emissions were 1.1 % lower than in 1998 (CCP baseline).

The table below highlights the City’s recent performance in relation to the targets (page 4 of this document) against a baseline year of 2007-2008.

Table 2: City (organisational) Greenhouse Gas Emissions - targets for reduction

Greenhouse gas emissions - targets for reduction							
	2007-2008	2008-2009	target	actual	2009-2010	target	actual
tonnes	5585	5138	2%	8% decrease	5416*	4%	3% decrease
Energy (gigajoules) - targets for reduction							
	2007-2008	2008-2009	target	actual	2009-2010	target	actual
Electricity GJ	11615	9781			11855		
Streetlighting GJ#	7197	6919			6829		
Gas GJ	491	618			513		
	19303	16700	2%	10% decrease	18684	5%	.05% decrease

*Greenhouse gas data is best estimate

Streetlighting is fixed consumption

2007-2008 is new data baseline year (from CCP)

(Table from S:\Sustainability\Governance\Reporting\Planet Footprint OnePagers\Data for reports1.xls)

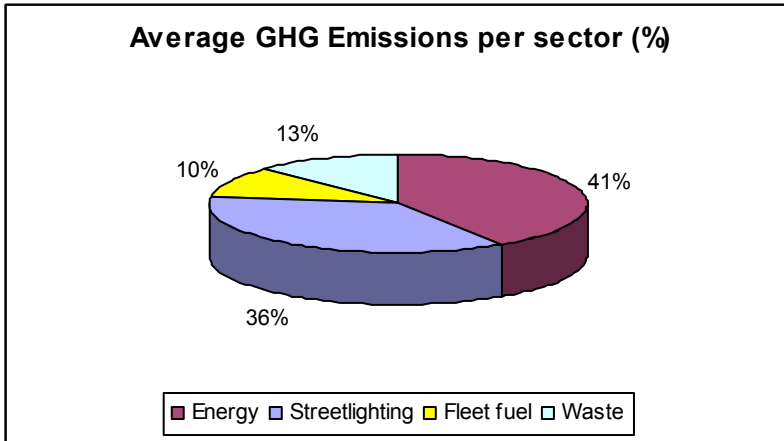
The City is now required to review its reduction targets originally committed to as a result of the CCP program. Indicative targets for energy and greenhouse gas emissions reductions were developed out to 2015 (Figure 2 below). The indicative targets for 2009/2010 have been adopted as the mitigation (emissions reduction) targets for this (Climate Change) Strategy.

Figure 2: Indicative Corporate GHG & Energy Sustainability Objectives and Targets

SUSTAINABILITY ASPECT	OVERALL CORPORATE OBJECTIVE (long term)	5 YEAR OBJECTIVE	2008-2009 TARGET		2009-2010 TGT	2010-2011 TGT	2011-2012 TGT	2012-2013 TGT
			Half 1	Half 2				
Greenhouse Gas Emission	Achieve zero net greenhouse gas emissions from corporate operations	Achieve a reduction in corporate greenhouse gas emissions of 10% from 07-08 emissions by 2013-14	Stabilise corporate greenhouse gas emissions at 07-08 levels	Achieve 2% reduction in corporate ghg emissions from 07-08	Achieve 4% reduction in corporate ghg emissions from 07-08	Achieve 6% reduction in corporate ghg emissions from 07-08	Achieve 8% reduction in corporate ghg emissions from 07-08	Achieve 10% reduction in corporate ghg emissions from 07-08
Energy	Achieve zero net energy consumption from corporate operations	Achieve a reduction in corporate energy consumption of 20% from 07-08 levels by 2013-14	Stabilise corporate energy consumption at 07-08 levels	Achieve 2% reduction in corporate energy consumption from 07-08	Achieve 5% reduction in corporate energy consumption from 07-08	Achieve 10% reduction in corporate energy consumption from 07-08	Achieve 15% reduction in corporate energy consumption from 07-08	Achieve 20% reduction in corporate energy consumption from 07-08

The below graph represents the City’s estimated average (over time) emissions per sector, based on previous CCP greenhouse gas inventories and the Planet Footprint data.

Figure 3: Corporate Average (estimated) Greenhouse Gas Emissions



Efforts to identify greenhouse gas emission sources from corporate waste generation will be a focus, in order to determine a more accurate representation of City emissions. Currently, emissions from some sources are estimated.

Abatement of emissions: During the CCP program, the City not only reduced greenhouse gas emissions (reduced), but also abated emissions. Abatement is defined as those greenhouse gas emissions, the release of which into the atmosphere was avoided, or which was removed from the atmosphere by the activity in respect of which it was created⁴.

The acknowledgement of greenhouse gas abatement efforts is verified formally by an accredited process. In this case, ICLEI conducted this verification for Councils participating in the CCP program. Below is a summary of annual abatements for both the organisation and community, verified by ICLEI. The last verification was the 2007-2008 data, as the ICLEI CCP program was then de-funded in June 2009. The City has not formally verified its greenhouse gas abatements since, and an action addressing this is listed at S4 in the Strategy Management section actions for Mitigation (page 20).

Table 3: Annual Abatements of Greenhouse Gas Emissions

Sum of Tonnes CO2e								
	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	Grand Total
Corporate		1,155	1,195	605	1,100	1,277	1,362	6,695
Community	0	0	6	14	108	3,587	2,948	6,663
Grand Total	0	1,155	1,201	619	1,208	4,864	4,311	13,358

In addition, the Sustainable Purchasing Action Plan (2009) encourages actions that minimise the social and environmental impacts of purchasing at the City of South Perth, including the greenhouse gas emissions associated with the City’s procurement of goods and services.

The City’s Climate Change Vision

During 2008 and 2009, the City undertook a comprehensive community consultation and visioning exercise, ‘Our Vision Ahead’. Key themes from the visioning were community, environment, housing, place and transport. All of these aspects will be impacted by climate change as we move into the

⁴ NSW Greenhouse Reduction Scheme

future. In response to the visioning survey, the community ranked climate change and living sustainably as the second most important issue to be faced in the future.

As a result of the visioning exercise, the City has developed its Strategic Plan 2010-2015 to guide efforts identified by the community. In relation to this Climate Change Strategy, the City of South Perth commits to:

Build capacity within the City and community, including partnering with key stakeholders to manage climate change risk and opportunity, through leadership, adaptation and mitigation (Strategic Plan 2010-2015).

Along with the detail from the community visioning process, the City's Sustainability Policy and Strategy, other policies, and Strategic Plan have been also been utilised in the development of the City's Climate Change Vision.

Cost & Benefits

Potential legislative requirements to report Local Government greenhouse gas emissions are being monitored by the Climate Change Officer at WALGA. The National Greenhouse and Energy Reporting Scheme (NGERS) and its associated Act, is yet to determine the extent of Local Government requirements to report. It is not yet clear if WA Local Government as an aggregated sector, will fall within the current reportable threshold of 25 kilo-tonnes of carbon dioxide equivalent. The City is guided by WALGA on this matter and will continue to monitor.

There may be future requirements to officially report City greenhouse gas emissions, and to also report the emissions for the whole of the City of South Perth community. There will be a cost in collecting and reporting data on this scale. Benefits consist of a far greater understanding of where and how City greenhouse gas emissions are generated, and will result in enhanced practices and management. This also translates to more effective requests and applications for funding assistance and partnering with agencies, to address the reduction of emissions. Future and ongoing cost implications will need to be considered in the Strategic Financial Planning process.

History of Achievements

The following list provides some indication of the breadth of activities that have so far been undertaken by the City in a move to address emission reductions.

The City's achievements so far:

- Completed all CCP milestones
- Developed and in the process of implementing activities in the Sustainable Purchasing Plan
- Improved emissions efficiency of vehicle fleet and implementation of a detailed Fleet Vehicle Policy
- Developed a basic Ecological Sustainable Development (ESD) Building Design Policy
- Developed a Sustainable Design Policy (P350.1) in the Residential Design Policy Manual
- Committed to 25% premium for Greenpower
- Annual abatements - previously verified by ICLEI
- Undertaken reporting for energy and water via Planet Footprint data program
- Subscribed to Carbon Neutral™ to offset fleet emissions
- Undertaken a building energy audit in 2007/08
- Building asset refurbishments undertaken with ESD principles
- Conducted various Community information sessions on energy efficiency
- Undertaken household audits (200 households) 2007/08
- Participated in the Switch Your Thinking campaigns 2008 - 2010
- Recycled paper – business cards and some publications
- Re-used waste products such as mulch composted from tree prunings
- Staff volunteer tree planting at New Norcia for National Tree Planting Day - last two years

- ICLEI water campaign - Achievement of Milestone Three (an Action Plan)
- Pilot Council for the State's Travelsmart Program

Appendix One lists a 'snapshot' of activities previously committed to via City business plans and sustainability strategies, which provide some context in regard to the planned actions undertaken to reduce City carbon emissions. Some of these actions are ongoing.

Management of this Strategy

In committing to the undertakings endorsed in this Strategy, it is recommended that the City acquire a resource to coordinate the actions. An action has been identified under the Leadership section of this Strategy, to acknowledge this requirement.

A governance framework for the management of this strategy will need to be developed, which will integrate with the proposed City Integrated Management System and Reporting Framework. This item is also identified as an action in the Leadership section of this Strategy.

Elements to be developed include:

- Authority
- Resources and funding
- Decision making
- Consultation
- Communications
- Implementation
- Reviews and setting of targets
- Measurement and performance reporting.

Climate Change Risk Management & Adaptation

This component of the Strategy sets out the City's Adaptation goal, which is, to ensure the City of South Perth is prepared for and resilient to climate change.

Definition - Adaptation:

Actions in response to actual or projected climate change and impacts, that lead to a reduction in risks or a realisation of benefits. A distinction can be made between a planned or anticipatory approach to adaptation (ie. risk treatments) and an approach that relies on unplanned or reactive adjustments (Australian Government, 2006).

WALGA has developed a comprehensive Climate Change Toolkit website for the sector which includes a panel of experts across the spectrum of legal, science and practitioner consultancies. Part of this process provides a checklist and consultancy brief for climate change adaptation planning, to guide the adaptation framework.

The objective of this Climate Change Strategy is to increase the City's understanding of its risks, vulnerabilities and opportunities, with a target of:

- (1) Conducting a comprehensive vulnerability assessment by 2013 and,**
- (2) Endorsing a climate change adaptation plan by 2011-2012**

This will involve the following activities:

1. Undertake a vulnerability assessment of the City in relation to the potential impacts of climate change by 2011. The City is undertaking a preliminary risk assessment as a trial project, during June and July 2010. The City will utilise the Australian Standard ISO 31000:2009 Risk Management - Principles and guidelines.
2. Development of a Climate Change Adaptation Plan by 2011 that adequately covers all city assets. Plan to incorporate aspects such as funding, resourcing, priorities for action etc. Implementation to be planned over the period of this Strategy and beyond.
3. Development and implementation of a Foreshore and Drainage Mitigation and Adaptation Plan.

The Swan River Trust (the Trust) document "Potential impacts of Climate Change on the Swan and Canning rivers" details the key adaptation strategies for the Swan Canning river system as the following:

- Assessment of the vulnerability of foreshore areas to provide a sound basis for determining future planning setbacks, managing foreshore vegetation and erosion, and designing erosion control measures.
- Development and adoption of innovative technologies to improve water quality through oxygenation, trapping nutrient and ensuring adequate flows.
- Using monitoring and modelling to predict future changes by expanding monitoring into upstream areas where climate changes are most likely to occur.
- Improving our understanding of how fishes and their supporting ecosystems respond to changes and how these changes impact biodiversity, recreational and commercial values.
- Protecting infrastructure by incorporating sea level rises of 0.1 to 0.3 metres into the design, maintenance or replacement of roads, river jetties, boat pens and ramps, sea walls and groynes (page 9).

It should be noted that the above information was published by the Trust in December 2007. Given the changing nature of predications in regard to what this level might be, the general

predictions for sea level rises and how that translates to a predicted river level rise on the South Perth foreshore will require regular monitoring.

The Swan River Trust has released (April 2010) a methodology to enable local government to assess the vulnerability of foreshore areas to sea level rise (Climate Change Risk Assessment Project).

4. Integration with the City's Local Emergency Management Plan including risk identification. The outcomes of this section of the Climate Change Strategy are to be integrated into the City's Risk Management System.

Local Governments need to prepare for increased emergency management requirements, typically:

- rising temperatures – increased bushfires and drought
- rainfall decline in the South West land division – increased bushfire
- land use planning – sea level rise (coastal)
- cyclone activity – increased and more severe storm surge
- storm activity – increased structural damage to housing and critical infrastructure
- flooding – increased issues of isolation and access to health care.

In addition there are various associated risks to the community in climate change vulnerable areas such as health, disability services etc, which will require emergency management research. The City's Infrastructure Services Directorate is managing the emergency response on behalf of the organisation.

Climate Change impact risk management and adaptation will require a City - wide approach with all sectors of the organisation being involved in the development and deployment of a plan resulting from recommendations of the Climate Change Risk Assessment process. To that end, it is recommended that the the climate change vulnerability/risk assessments be incorporated into the City's existing Risk Management process for implementation.

Climate Change Leadership & Education

This component of the Strategy sets out the City's Climate Change Leadership & Education goal, to provide leadership and build capacity within the City and community, and through partnering with other Local Governments, to manage climate change risk and opportunity.

There is a significant wealth of climate change research and information available to Local Government through a variety of groups and agencies. In order to achieve 'best practice' climate change management within Local Government it is imperative to engage in appropriate partnerships. These partnerships may be with colleagues, other Local Governments, State and Federal Government, research and academic institutions, industries, business, non-government organisations.

The objective for this strategy is to encourage and facilitate the reduction of greenhouse emissions throughout the community, via partnering mechanisms with other Local Governments/entities, with a **target of increasing community understanding and activity in relation to climate change impacts and response by 2015.**

This will involve the following activities:

Strategy Management

ID	Activity	Due Date	Reference Document	Responsible Person	Expected Budget/ comments
SM 1	Employ a resource 0.5 FTE to manage this Strategy and coordinate/undertake the activities outlined in it	2010-2015	New Addition	CSC	\$25000.00 per annum - base rate
SM 2	Establish a Governance Framework to manage this Strategy	2011	New	CSC/MGA	Staff resources

Residential

ID	Activity	Due Date	Reference Document	Responsible Person	Expected Budget/ comments
R1	Develop and implement a community "climate change" education program	2011-2012	New Addition	CSC	Link with Sust. Living
R2	Conduct regular public forums about current and topical sustainability issues	ongoing	Sustainability Strategy – Community	CSC	Link with Sust. Living
R3	Develop community page on website to show energy usage and reporting / rewarding mechanisms	Dec 2011	Sustainability website	CSC	\$2500.00
R4	Support the introduction of a network of local community gardens, home gardening and aqua ponics to reduce food miles	2012-2013	New Addition	MCE/CEC	TBD & Link with Sust. Living

City Staff and Councillors

ID	Activity	Due Date	Reference Document	Responsible Person	Expected Budget/ comments
C1	Develop and progressively implement a climate change education program to support the work of city officers, management & councillors	2011-2012	New Addition	CSC	\$2500.00
C2	Councillor workshop as per C1	2011-2012		CSC	Incorporate in C1
C3	Implement behaviour change projects and actions as per City Strategies (Purchasing, Waste, Water etc)	2012-2013	Sustainability Strategy	CSC	\$5000.00
C4	Analyse the projects undertaken thus far (History of Achievements p13) to derive a snapshot and presentation of achievement	2012-2013	New Addition	CSC	Staff resources

Business/Education Sector

ID	Activity	Due Date	Reference Document	Responsible Person	Expected Budget/ comments
B1	Develop and implement a local business "climate change" education program	2012-2013	New Addition	CSC	\$5000.00 & Link with Sust. Living
B2	Work with Local Chamber of Commerce to assist businesses with information and education on a variety of issues such as energy efficiency, waste reduction and resource minimisation, transport and parking	2012-2015	Sustainability Strategy – Business	CSC	TBD & Link with Sust. Living

Partnerships

ID	Activity	Date	Reference Document	Responsible Person	Expected Budget/ comments
G1	Investigate the potential to participate in a regional/partnership project aimed at the establishment of a decentralised renewable energy plant, utilising funding from Infrastructure Australia (ex RLCIP)	2011 - 2015	New Addition	Infrastructure Directorate	TBD
G2	Investigate the potential for an information sharing network with other local government authorities to exchange purchasing experiences, products and supplier lists.	2011 - 2015	Sustainable Purchasing Action Plan	CSC	TBD
G3	Support and partner the efforts of local community and other organisations	2011-2015	Sustainability Strategy	CSC	Sust. Living Strategy

Climate Change Mitigation

This component of the Strategy sets out the City's Climate Change Mitigation goal, which is; to reduce the City's greenhouse gas emissions and carbon footprint.

Definition - Mitigation:

Response measures that reduce the emission of greenhouse gases into the atmosphere or enhance their sinks, aimed at reducing their atmospheric concentrations and therefore the probability of reaching a given level of climate change (Australian Government, 2006).

The objective for this strategy is to reduce the City's operational emissions with a **target of:**

(1) Achieving a 4% reduction per year in corporate greenhouse emission reductions from 2007-2008

(2) Achieving a 5% reduction per year in corporate energy consumption from 2007-2008

The actions below relate to organisational operations and activity and, will involve the following activities:

Strategy Management

ID	Activity	Due Date	Reference Document	Responsible Person	Expected Budget/ comments
S1	Determine and seek from Council the adoption of the City's corporate greenhouse emissions reduction targets	2010 - 2011	Sustainability Strategy	CSC	N/A
S2	Enhance, implement and communicate data management process	2011 - 2012	Sustainability Strategy	CSC	Link to Reporting F/work - in develop
S3	Develop a methodology for reporting the progress of actions and outcomes achieved by this Strategy including abatement measures	2011 - 2013	Sustainability Strategy	CSC	Link to Reporting F/work - in develop
S4	Acquire a suitable abatement verification process including biosequestration.	2011 - 2012	New Addition	CSC	\$4000.00
S5	Commit to carbon neutrality through design of a program which focuses primarily on emission reductions and then only where necessary utilising emission reduction offsets	2012 - 2015	New Addition	CSC	\$10,000.00
S6	Develop a low carbon future fund to support operational carbon reduction activities (levy - suggestions)	2013 - 2015	New Addition	DFIS/CSC	N/A
S7	Register to the reporting system and framework OSCAR, and the National Greenhouse and Energy Reporting Scheme (NGERS) in readiness for a Carbon Pollution Reduction Scheme.	2012 - 2013	New Addition	CSC	\$5000.00
S8	Review all City policies for relevance to climate change	2012	New Addition	CSC	N/A
S9	Develop a process to review Collier Park Golf Course and Collier Park Village, etc. in terms of mitigation assessment and activities	2012 - 2013	New Addition	MCE/CPV & CSC	\$5000.00
S10	Determine the community's greenhouse gas emissions, and energy consumption - aggregate data, and determine appropriate targets for reduction	2013 - 2014	New Addition	CSC	TBD & Link with Sust. Living

Energy Conservation

ID	Activity	Due Date	Reference Document	Responsible Person	Expected Budget/ comments
E1	Partner with agencies to negotiate the StreetVision contract with Western Power	2011 - 2015	SP Action Plan	MEI/CSC	N/A
E2	Review street lighting in non underground power areas as to efficiency and complete a position paper for consideration in 2013/2014 Budget	2012-2013	Engineering Infrastructure Department Business Plan 2009/2010	MEI	TBD
E3	Develop and implement an energy efficiency evaluation tool for major events	2011 - 2012	CCR Business Plan 2009/2010	MCCR	TBD
E4	Investigate renewable energy options including all miscellaneous energy such as flagpole lighting etc. Include generic application, policy development, investigation of alternatives	2011-2015	Sustainability Strategy	MCE/MEI	TBD
E5	Develop and implement a civic building sustainability scorecard (revisit ESD policy/rating....) - EcoStar®	2011 - 2013	Sustainability Strategy	Building Coordinator	TBD
E6	Ensure energy efficiency is considered in purchasing sustainable criteria for all appliances and services. Develop an Appliance Register to monitor energy efficiency - ensure energy star rating must be considered at purchase. Adopt cost/benefit and life cycle analysis	2011 - 2015	SP Action Plan	CSC	TBD
E7	Investigate the energy efficiency from Engineering and City Environment Operations. Develop a report of findings and solutions	2012 - 2013	Infrastructure Directorate	DIS	TBD

Waste

ID	Activity	Due Date	Reference Document	Responsible Person	Expected Budget/ comments
W1	Develop and implement a Waste Management Plan which includes the investigation and identification of all organisational waste generation	2011 - 2013	Rivers Regional Council – Strategic Waste Management Plan	CSC/DIS	\$10,000.00

Sustainable Procurement

ID	Activity	Due Date	Reference Document	Responsible Person	Expected Budget/ comments
P1	Implement actions from the Sustainable Purchasing Action Plan (WALGA Bulk Energy Tender etc)	2011 - 2015	SP Action Plan	CSC	TBD

Sustainable Design

ID	Activity	Due Date	Reference Document	Responsible Person	Expected Budget/ comments
D1	Incorporate sustainable strategic planning principles and sustainable urban and building design principles into the City's draft (yet to be developed) Housing Strategy	2011 - 2012	Corporate Plan 2010 - 2011	DDCS/CSC	TBD
D2	Incorporate sustainable strategic planning principles and sustainable urban and building design principles into the City's draft (yet to be developed) Planning Strategy	2011 - 2012	DPI Local Planning Manual March 2010	DDCS/CSC	TBD
D3	Develop a package to increase community awareness regarding sustainable urban and building design, including health regulations etc	2011 - 2013	Sustainability Strategy	DDCS/CSC	\$5000.00 & Link with Sust. Living
D4	Review and update P350.1 Sustainable Design Policy (in P350 Residential Design Manual)	2011 - 2012	Council Policy	DDCS/CSC	TBD

Transport

ID	Activity	Due Date	Reference Document	Responsible Person	Expected Budget/ comments
T1	Review and progress actions and initiatives from the Integrated Transport Plan.	2011 - 2015	Engineering Infrastructure Department Business Plan 2009/2010	Infrastructure Services	TBD
T2	Annual review of the greenhouse gas emissions from the City vehicle fleet	2011 - 2015	SP Action Plan	Tender & Contracts Officer	TBD

Water (aqua)

ID	Activity	Due Date	Reference Document	Responsible Person	Expected Budget/ comments
A1	Implement relevant actions from the Water Campaign Action Plan	2011 - 2015	Water Campaign Action Plan	CEC	TBD

To support the management and implementation of these actions (Adaptation, Leadership, Mitigation) a prioritised list has been developed and is available from the Sustainability office.

Glossary

Mitigation: A human intervention to reduce the sources or enhance the sinks of greenhouse gases

Adaptation: adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Offset: greenhouse gas removal or reduction by a discrete activity that is then used to counterbalance or 'offset' emissions elsewhere in the economy (such as a power station).

Enhanced Greenhouse Effect: is an alteration of the world's climate system caused by increasing levels of certain gases in the Earth's atmosphere.

Emissions Trading Scheme (ETS): is an administrative approach used to control pollution by providing economic incentives for achieving reductions in the emissions of pollutants.

Carbon Pollution Reduction Scheme (CPRS): is a form of ETS that involves a cap-and-trade system of emissions trading for anthropogenic greenhouse gases.

Responsible Person Glossary:

DDCS	Director of Development and Community Services
DIS	Director of Infrastructure Services
DFIS	Director of Financial and Information Services
MCE	Manager City Environment
MEI	Manager Engineering Infrastructure
MCCR	Manager Community Culture and Recreation
MGA	Manager Governance and Administration
CSC	City Sustainability Coordinator
CEC	City Environment Coordinator
CPV	Collier Park Village

References

- Welcoming Ceremony to the COP 15 of the IPCC Conference, Copenhagen Dec 2009
- Maplecroft Climate Change Risk Report, 2009-2010
- The Western Australian Greenhouse Strategy 2004
- Tim Flannery Now or Never 2009
- ICLEI Carbon Neutrality Framework 2009
- ICLEI Water Campaign™ website
- The Garnaut Review (September 2008)
- The Carbon Pollution Reduction Scheme Green Paper (August 2008)
- The Premier's Climate Change Action Statement (May 2007)
- The Western Australian Greenhouse Strategy (September 2004)
- Western Australian State Sustainability Strategy (2003)
- Swan River Trust Climate Change Risk Assessment Project (April 2010)
- Potential Impacts of Climate Change on the Swan and Canning Rivers, Swan River Trust, December 2007
- The Potential impacts of Climate Change on the Swan and Canning rivers (December 2007)
- AS/NZS ISO 31000:2009 Risk management - Principles and guidelines
- State of the Climate - CSIRO and Bureau of Meteorology 2010
- Tracking to Kyoto and 2020 (Australian Government, August 2009)
- WALGA Climate Change Policy
- [WALGA Climate Change Adaptation Toolkit](#) website
- NSW Greenhouse Reduction Scheme - <http://www.greenhousegas.nsw.gov.au/>
- Climate Change Impacts & Risk Management: A Guide, Australian Government, 2006
- Climate Change Adaptation Actions for Local Government, Australian Government, 2007
- National Waste Management Report 2010, Australian Government, March 2010
- City of South Perth Sustainability Strategy 2006 - 2008
- City of South Perth 'Our Vision Ahead' 2009
- City of South Perth Strategic Plan 2010 - 2015
- City of South Perth Corporate Plan 2010 - 2011
- City of South Perth Strategic Financial Plan 2004/2005 - 2008/2009
- City of South Perth Cities for Climate Protection Plus Report 2008
- City of South Perth Cities for Climate Protection Milestone Three Report - March 2003
- City of South Perth Sustainable Purchasing Strategy 2009

APPENDIX ONE

List of actions already committed in City strategies and departmental business plans with comments in blue as at March 2010:

Continue to implement heating, ventilation and air-conditioning (HVAC) system improvements to increase energy efficiency	Sustainable Purchasing Action Plan Building Management	Buildings Coordinator
Continue to actively support and encourage waste reduction, recycling and reuse. Seek opportunities to implement sustainable secondary waste treatment processes to significantly reduce the amount of waste going to land fill sites. COMMUNITY - Municipal waste Rivers Regional Council (RRC) is in the process of securing a location for its Alternative Waste Treatment Plant and progressing with calling tenders for appropriate technologies for its member Councils. COSP continues to support	Strategic Plan	Sustainability Coordinator Infrastructure Services
Continue to review the waste contract for sustainability content MGT/ORG - current waste collection and disposal contracts expires 30/06/2012	Sustainable Purchasing Action Plan	Sustainability Coordinator Infrastructure Services
Continue to purchase energy-efficient and energy star capable photocopiers and multi-function devices	Sustainable Purchasing Action Plan	IT Coordinator
Continue to purchase recycled organics and sand (where possible) for use as topdressing on City ovals	Sustainable Purchasing Action Plan	Parks Operations Coordinator
Continue to investigate and purchase an appropriate abatement product to offset the City's greenhouse gas emissions	Sustainable Purchasing Action Plan	Sustainability Coordinator
Continue to review toxic and hazardous materials used by the City and contractors and recommend alternative products or processes EH - purchase products for vector control - transferred from temaphos chemical to vectabac - biological bti (growth regulator).	Sustainable Purchasing Action Plan	Coord. Env Hlth Services Environment Coordinator
Ensure lighting upgrades in established areas/buildings uses energy efficient luminaries	Sustainable Purchasing Action Plan Building Management	Buildings Coordinator
Continue to investigate cleaning products and consider non-toxic options	Sustainable Purchasing Action Plan	Building Coordinator
Continue to change the City's vehicle fleet mix to vehicles that use less fuel and produce fewer emissions	Sustainable Purchasing Action Plan	Manager, Engineering

Continue to encourage the use of paid travel for staff utilising public transport for work related business	Sustainable Purchasing Action Plan	
10.3 Continue to promote the practicalities of energy-efficiency in housing, in conjunction with the Office of Energy eg. Nationwide Housing Energy Rating Scheme (NATHERS) and solar heating	Sustainability Strategy - Settlements	
Continue to use innovative technologies in the design and construction of new buildings to reduce energy consumption and on-going maintenance costs	Sustainable Purchasing Action Plan	
Continue to investigate purchasing recycled content construction materials	Sustainable Purchasing Action Plan	
Continue to Investigate the purchase of recycled content outdoor furniture	Sustainable Purchasing Action Plan	
4.3 Continue to encourage behavioural changes in favour of public transport and other initiatives	Sustainability Strategy – Global Contribution	
Continue to replace current irrigation control system with moisture sensor controllers and continue to use a moisture retention agent to reduce water use in reserves and parks within the City	Sustainable Purchasing Action Plan	Parks Operations Coordinator
Continue to investigate the purchase of waterless urinals for buildings (new & retrofit)	Sustainable Purchasing Action Plan	Building Coordinator
Continue to replace existing electricity boosted hot water systems on City owned buildings with solar hot water systems or alternative energy efficient systems	Sustainable Purchasing Action Plan	Building Coordinator
Continue to look for ways to incorporate the use of Photovoltaic cells in Park Amenities	Sustainable Purchasing Action Plan	
Progress TravelSmart Initiatives with local schools and the wider community.	Engineering Infrastructure Department Business Plan 2009/2010	infrastructure Directorate
Continue to implement relevant actions from the City's Water Action Plan	Water Action Plan	City Environment