



Salisbury, Sustaining Our Environment

Contents



Foreword	page 4
Introduction	page 5
Planning Framework	page 6
Integration	page 10
Our Commitment	page 14
Objectives	page 18
Policy and Planning Stream 1: Sustainable Energy Goals and Priority Actions	page 20
Policy and Planning Stream 2: Waste Reduction Goals and Priority Actions	page 22
Policy and Planning Stream 3: Urban Development & Transport Goals and Priority Actions	page 24
Policy and Planning Stream 4: Biodiversity and Open Space Goals and Priority Actions	page 26
Policy and Planning Stream 5: Natural Resource Management Goals and Priority Actions	page 28
Targets and Indicators	page 31
References	page 34

Published September 2008

Foreword



Sustainability is Our Responsibility.
There is universal agreement that urgent action
needs to be taken if we are to save the planet.

The importance of practicing and embracing the philosophies of sustainability is becoming a greater priority for communities due to the impacts of climate change.

Salisbury, Sustaining Our Environment is a local response to the very real challenges that we face. This is arguably one of the most important documents prepared by the City of Salisbury Council.

It acknowledges the threats to our community if we do nothing and sets out what strategies and actions need to be taken if we are to preserve our current lifestyle and maintain ongoing prosperity.

One continuous thread ties together all parts of the document – the belief and commitment of the City of Salisbury to achieve economic, environmental and social sustainability in all that it does.

The City already leads in many ways in the areas of water conservation, waste management and preservation of open space.

However, what is already being done are only modest steps to more demanding and comprehensive environmental actions.

Salisbury, Sustaining Our Environment is a practical and pragmatic local response to the serious challenges we face as a community, as a State and a nation.

It's our contribution to the principle that by meeting the challenges in our own backyard we can make a difference.

Introduction



It is important to remember that sustainability is a direction and not a destination, requiring a commitment to continually seek ways to improve our environmental, social and economic performance.

Sustainability has been broadly defined in the Brundtland Report, Our Common Future (1987) as “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Ecologically Sustainable Development (ESD) takes the concept of sustainability a step further and is defined as meeting the needs of both current and future generations through simultaneous environmental, social and economic improvement.

The concept of ESD requires changes in how we currently view the nature of development, production and consumption so that we can better satisfy human needs whilst using fewer raw materials and producing less waste. This is commonly referred to as the Triple Bottom Line.

Sustainability recognises the relationship between all three dimensions of the Triple Bottom Line. ESD acknowledges that whatever we do within the economy and society is ultimately bounded or limited by the capacity of the environment to sustain these activities.

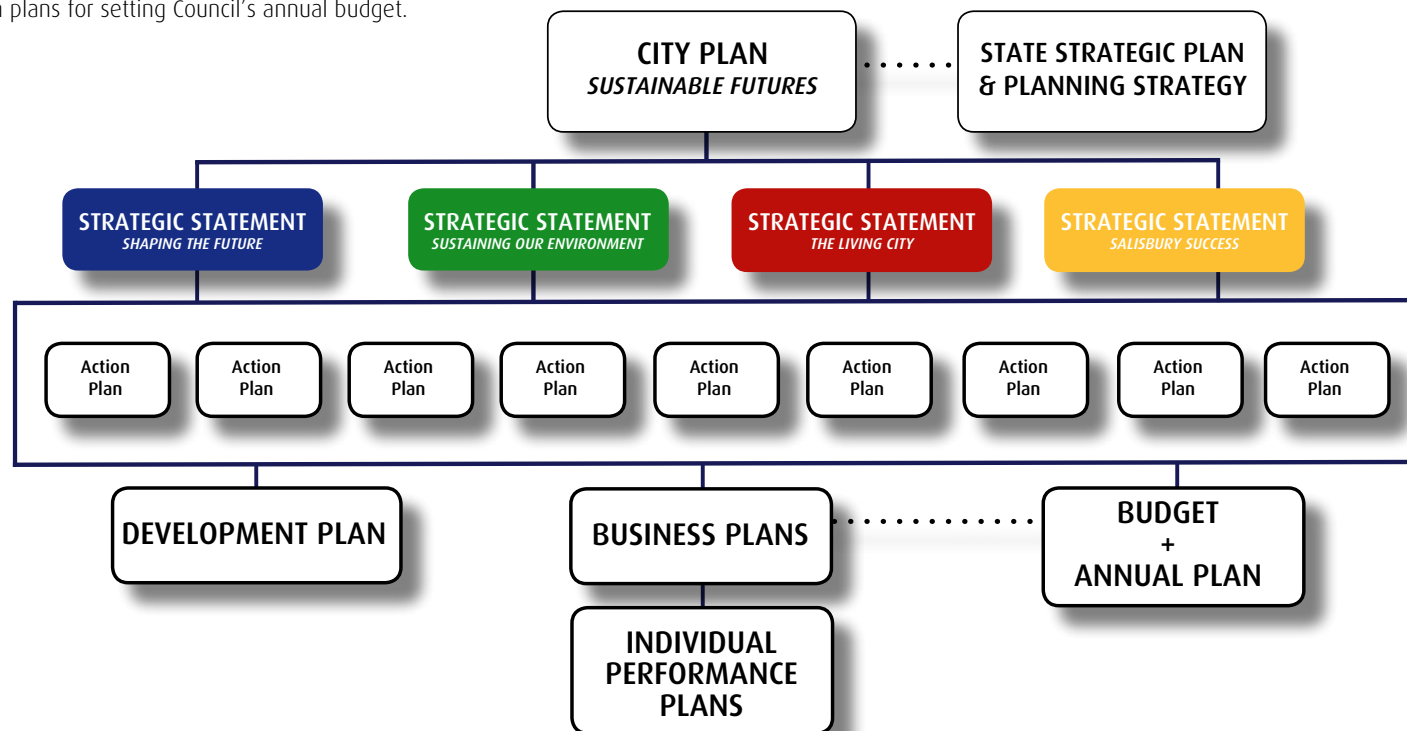


The Triple Bottom Line

Planning Framework

City of Salisbury - Planning Framework

The City of Salisbury has structured its planning process around the four Key Directions presented within the City Plan. This chart illustrates the relationship of the high level strategic directions with the State Strategic Plan and Planning Strategy and the supporting action plans for setting Council's annual budget.



Importance of Sustainability



The importance of practicing and embracing the philosophies of sustainability is becoming a greater priority for communities due to: declining water supply and species biodiversity; the impacts of climate change; and our ecological footprint, which in 2002 was estimated to exceed the Earth's biological capacity by over 20 per cent.

Climate Change

It is now widely accepted that the global climate is changing. We can no longer rely on past assumptions that the climate will be more or less the same as it was during the past 50 or 100 years.

We can expect to live and operate in a climate that is warmer, has different patterns of rainfall, less available moisture retained in the soil and more severe storms and extreme weather events.

These climatic changes are further contributed to by human activities that enhance the greenhouse effect which is a process whereby certain gases in the atmosphere have the ability to trap solar energy as it reflects off the Earth's surface. Over the past 200 years there has been an exponential increase in greenhouse gases in the atmosphere as a result of human activities such as the burning of fossil fuels which release vast amounts of carbon into the atmosphere and indirectly through land clearing which diminishes the ability of the planet to re-absorb the atmospheric carbon.

The possible implications for South Australia which have been predicted by the Australian Greenhouse Office in conjunction with the CSIRO:

Temperature: SA is likely to become warmer (between +0.4 to +0.9 degrees) with more hot days and fewer cold nights. For example the number of days above 35 degrees could average 19-29 in Adelaide (now 17) and there will be less cold days.

Rainfall: A decline in annual rainfall (-3% to -11%) with higher evaporative demand will lead to less run-off in rivers, with droughts becoming more frequent and severe. Less winter rain events and less rain per event as well as more intense summer rain events.

Extreme Events: Increases in extreme weather events are likely to lead to flash flooding, strains on sewerage and drainage systems, heat waves and greater insurance losses, possible black-outs, more fires and challenges for emergency services.

Sea Level Rise: Estimated between 30mm to 170mm per annum which accumulates onto current policy allowing for storm surge, 3.4 AHD (Australian Height Datum).

Source: CSIRO (2006) Climate Change Scenarios for Initial Assessment of Risk in accordance with Risk Management Guidance. Australian Greenhouse Office.

Importance of Sustainability

Ecological Footprint and Resource Use

The ecological footprint is defined as a measurement of the space required to produce and supply all resources needed to support our lifestyles and the waste we generate, compared to the land actually available to us. (www.aisr.adelaide.edu.au)

A provisional figure for Adelaide's footprint is approximately 7.0 global hectares (gha) per person, which is slightly under the Australian average of 7.7 gha per person. The Earth's sustainable footprint is approximately 1.8 hectares per person, meaning nearly four Earths would be required to support South Australia's current resource consumption rate.

This is a clear indicator that we are overstressing the Earth's capacity to support us and highlights the importance of acting locally to make a difference globally.

The impact of this long-term ecological overshoot in demand for resources ultimately results in the declining wellbeing of people. Livelihoods disappear, resource conflicts emerge, land becomes unproductive and resources become increasingly costly or unavailable. This depletion is exacerbated by the growth in human population as well as by changing lifestyles that are placing more demand on natural resources.

In order to minimise the City of Salisbury's ecological footprint, we must use the amount of land we have in a more sustainable manner. This includes weighing up and balancing the different uses and values of land in the city and investigating ways that they can potentially work together, if possible, to achieve greater sustainability outcomes for the city.

These values and land uses can be described as follows:

- Urban development such as industrial, residential, open space and transport uses.
- Population trends, community profiles and the social and cultural values and wellbeing of the city.

- Rural and defence related land uses such as agriculture, horticulture, airfields and other defence related activities.
- Conservation lands and issues such as biodiversity, flood prone land, scenic and landscape values, coastal and estuarine ecology.

This strategy realises that all these competing land use values are interrelated and cannot be looked at in isolation, but rather require a coordinated approach that considers the natural, economic and social environments in which we live.

Importance of Sustainability



Water Supply

South Australia has two main water sources - the Mount Lofty Ranges and the River Murray.

More than two thirds of the State's population, including primary producers, various industries, local communities and metropolitan Adelaide, depend on water from the Mount Lofty Ranges. This region is the major water catchment for Adelaide's water supply and in an average year, 60 per cent of Adelaide's domestic water supply comes from streams in the Mount Lofty Ranges.

Water from the River Murray plays a critical role in the life and economy of much of South Australia. On average, 52 per cent of all water used in the State comes from the Murray. It is the main source of water for Adelaide, supplied by the Mannum-Adelaide (67 km) and Murray Bridge-Onkaparinga (48 km) pipelines. On average, metropolitan Adelaide receives some 42 per cent of its water from the Murray and up to 90 per cent in drought years. (www.watercare.net.au)

In the driest State, in the driest continent, water supply is a critical issue for the future survival of our natural environments, communities and economy. Australia has been experiencing drought over the last five years and the impacts of this decreasing rainfall and consequent reduced water supply are now evident.

The Murray River system is under stress. This is likely to continue into the future with predicted average rainfall for the southern regions of South Australia continuing to decrease.

Therefore it is necessary to look at alternative sources of water supply including recycling and more efficient and responsible urban water use in order to reduce the stress on the natural environment as well as being able to supply adequate water to the community and industry.

This strategy shows how work undertaken by the City of Salisbury in integrated water management and aquifer storage and recovery can be further built upon to provide alternative water supply options to the community and the region.

Biodiversity and Natural Resource Management

The State Natural Resource Management Plan (2006) delivers an assessment on the state and condition of SA's natural resources, the majority of which falls into the categories of either 'proceed with caution' or 'cause for concern'. Given the inter-relationships with natural resources, adverse trends in one area can compound or exacerbate the condition of another related resource or natural system.

The report outlines the following five major risk areas:

- Adverse impacts of climate change.
- Using or altering natural resources beyond ecologically sustainable limits.

- Disintegrated or fragmented effort.
- Under-utilisation of and insufficient community capacity.
- Impacts of pests and overabundant native species.

These risks need to be managed to improve current trends in the condition of South Australia's natural resources as they provide numerous ecological, economic and social benefits to the community.

The City of Salisbury is committed to integrated natural resource management and recognises the importance of both conservation and rehabilitation of our natural ecosystems and the flora and fauna habitats they provide.

This strategy recognises the importance of the wetland systems at St Kilda, Barker Inlet, the Little Para River and Dry Creek corridors and seeks to further enhance and recognise the importance of these areas and other open spaces to the city.

Integration



The 'National Strategy for Ecological Sustainable Development' has the following core goals and objectives and guiding principles:

Federal: National Strategy for Ecological Sustainable Development

Goal: Development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.

Core Objectives:

1. To enhance individual and community wellbeing and welfare by following a path of economic development that safeguards the welfare of future generations.
2. To provide for equity within and between generations.
3. To protect biological diversity and maintain essential ecological processes and life-support systems.

Guiding Principles:

1. Decision making processes should effectively integrate both long and short-term economic, environmental, social and equity considerations.
2. Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
3. The global dimension of environmental impacts of actions and policies should be recognised and considered.
4. The need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised.
5. The need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised.
6. Cost effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms.
7. Decisions and actions should provide for broad community involvement on issues which affect them.

These guiding principles and core objectives need to be considered as a package. No single objective or principle should predominate over the others. A balanced approach that takes into account all of these objectives and principles to pursue the goal of Ecological Sustainable Development (ESD) is required. (www.environment.gov.au)

Building upon the National Strategy for Ecological Sustainable Development, there are a number of Federal Government initiatives and strategies which either directly involve or relate to the City of Salisbury. These include:

- Solar Cities.
- The National Water Initiative – Waterproofing Northern Adelaide.
- The National Plan for Water Security.
- Australia's Climate Change Policy – Our Economy, Our Environment, Our Future.
- Task Group on Emissions Trading.
- Energy White Paper – Securing Australia's Energy Future.
- National Strategy for the Conservation of Australia's Biological Diversity.

Integration



State: South Australian Strategic Plan

The South Australian Strategic Plan (2007) endorses a vision that: "South Australia must be world renowned for being clean, green and sustainable. This will boost community wellbeing, safeguard future generations and contribute to our State's prosperity. The focus will be on protecting our biodiversity, securing sustainable water and energy supplies and minimising waste."

The Plan identifies six key objectives that State and Local Government, the private sector and the community can collaboratively work towards:

1. Growing Prosperity
2. Improving Wellbeing
3. Attaining Sustainability
4. Fostering Creativity
5. Building Communities
6. Expanding Opportunity

The City of Salisbury's *Sustaining Our Environment* Strategy contributes to the success of South Australia's Strategic Plan by addressing priority actions identified within the objectives 'Improving Wellbeing', 'Attaining Sustainability', 'Growing Prosperity' and 'Building Communities'.

The State Government has released a number of strategies and plans in response to the actions and targets detailed in the State Strategic Plan. These include:

- Greenhouse Strategy - Tackling Climate Change 2007-2020.
- Biodiversity Strategy for SA - No Species Loss.
- State Natural Resource Management Plan 2006.
- South Australian Waste Strategy.

Planning Strategy for Metropolitan Adelaide

The Planning Strategy for metropolitan Adelaide is the spatial representation of the South Australian Strategic Plan, incorporating the physical development aspects of Government planning in relation to housing, infrastructure and natural resource management.

The plans set out a number of policies to assist in the strategic planning of both the State and Local Government. Policies include:

- Water resources.
- Biodiversity.
- Open space and recreation.
- Land use and transport integration.
- Energy efficiency.
- Integrated water management.
- Coastal, estuarine and marine environment.

Given the above, it is important to recognise the State directions and initiatives when considering future strategic planning for the City.

This will ensure consistency with the SA State Strategic Plan and demonstrate how Salisbury will contribute to a more sustainable South Australia.

Integration



Local: Salisbury City Plan - Sustainable Futures

The City of Salisbury's City Plan - *Sustainable Futures* is a local response to current and future needs of the Salisbury community. It seeks to address the unique challenges of Salisbury by developing and benefiting from a range of opportunities and partnerships.

Sustainability is integral to achieving a better future. *Sustainable Futures* has been developed using a model of sustainability, based on the interconnections between the Social, Economic and Environmental aspects of living.

The City of Salisbury recognises that economic growth and society are ultimately bound and limited by the capacity of the environment to sustain these activities. The focus of *Sustainable Futures* is to build on our strengths and work together in shaping a sustainable future with "excellence in building a community of opportunity and spirit in a quality environment."

Sustainable Futures is a unique plan which integrates our organisation's corporate planning processes with the community strategic framework.

Sustainable Futures lists the following key directions which provide the core strategic directions for the City:

Key Direction 1: Shaping Our Future

Develop our City as prosperous and progressive by attracting and sustaining increased business investment and by providing accessible learning opportunities to grow and support a skilled workforce.

Key Direction 2: Sustaining Our Environment

Become a sustainable City in which its residents and businesses embrace sustainability best practices as part of their day-to-day lives and activities.

Key Direction 3: The Living City

Maintain a strong and vibrant community by providing safe and supportive environments that promote opportunity, healthy and creative lifestyles.

Key Direction 4: Salisbury Success

Remain a high performing and innovative organisation that strives to achieve excellence in every area.

This strategy focuses on Key Direction 2 - Sustaining Our Environment.

Integration



City Wide Strategies

In conjunction with the *Salisbury, Sustaining Our Environment* strategy there are a number of city-wide strategies currently being developed, or have recently been completed that shape the future direction of the City.

Although these strategies represent a diverse range of issues, they are not developed in isolation, but rather all take into consideration the economic, environmental and social wellbeing of the City.

These strategies and plans will provide the guidance and direction for larger projects across the City in an integrated way to advance the overall sustainability of the Salisbury area.

Population and Urban

Regeneration: Provides guidance to the impacts of future population growth of the City specifically in relation to urban development, land use, transport and infrastructure.

Salisbury Shaping the Future

Strategic Economic Plan: Provides an integrated framework to achieve regional prosperity via the principles of innovation, entrepreneurship and collaboration, sustainable business growth, enhanced workforce and building enabling infrastructure.

City Landscape Plan: Provides a clear set of guidelines to strengthen the unique physical characteristics of Salisbury, all underpinned by the key principles of promoting biodiversity, water sensitive urban design and crime prevention through environmental design.

The Game Plan - Open Space & Recreation: Provides a framework for Council to balance the provision of built and natural settings for physical activity as an essential element of a sustainable community.

Our Commitment



Sustainability and responding to the issues of climate change should not be a stand alone policy, but rather an overriding strategy that impacts on all actions and responsibilities of Council. This should include the way we maintain our roads, collect and recycle waste, through to urban development and transport and even the way we, as individual employees, behave in performing our everyday roles.

Sustainability and responding to climate change is about behavioural change in terms of reinforcing sustainability and continuing to look at ways of doing things better and smarter.

Council plays three distinct roles in promoting sustainability and raising awareness in climate change issues to the community and these are:

Council as a leader:

By focusing on its own operations and incorporating the principles of sustainability through its own practices and policies and responding to the needs and values of the community.

Council as a change-agent:

Encouraging, promoting and facilitating change and awareness in the community where possible through education, regulation and supporting sustainability initiatives in the local community.

Council as a regulatory entity:

Ensuring that the community is aware and protected via the implementation of regulatory requirements and responsibilities set out under legislation to ensure the continuing wellbeing, amenity and conservation of the community and the environment.

It is important to recognise that there will be areas of both the Council's and the community's sustainability vision that the Council is simply unable to influence, implement or be responsible for.

In these circumstances Council will endeavour to facilitate and encourage high levels of communication and information exchange to develop meaningful relationships and linkages to further promote sustainability and raise awareness in climate change issues (Sustainable Futures Australia 2005).

Our Commitment



Sustainability Principles

Taking into consideration the potential opportunities for future sustainability directions for the City of Salisbury, which includes responding to climate change, the following principles have been adopted by Council to provide guidance and form the basis of the *Salisbury, Sustaining Our Environment* Strategy:

1. Integration of the Triple Bottom Line. Ensuring that the way we govern is driving the transition to a sustainable future by integrating social, environmental and economic factors in decision making processes.
2. Recognising Council plays an important part in solving the global challenges of sustainability by taking a 'whole of Council' approach to ensure there is a common focus towards sustainability in both strategic policy and planning and day-to-day operational activities.
3. Value and protect our environment and ensure the sustainable management and use of natural resources. Recognise that all life has intrinsic value and that ecological processes and biological diversity are part of the irreplaceable life support system upon which a sustainable future depends.
4. Plan and provide urban development that reduces our ecological footprint and enhances quality of life by reducing waste, energy and non-renewable resource consumption while simultaneously improving community wellbeing.
5. Support communities to fully participate in achieving a sustainable future. Provide for broad community participation, encourage collaboration and partnering between individuals, the community, business and all levels of Government.
6. Assist businesses to benefit from and contribute to sustainability. Recognising that a strong and productive economy builds upon and is supported by a healthy environment and society.
7. Ensure intergenerational equity by taking into account all the long-term benefits and costs of our actions, or lack of actions on the community, environment and economy.

Our Commitment



Framework for the Strategy

The *Salisbury, Sustaining Our Environment* Strategy has been developed to ensure integration across a broad range of independent strategies, policies and projects currently being developed for the City as well as any new future projects or strategic work undertaken.

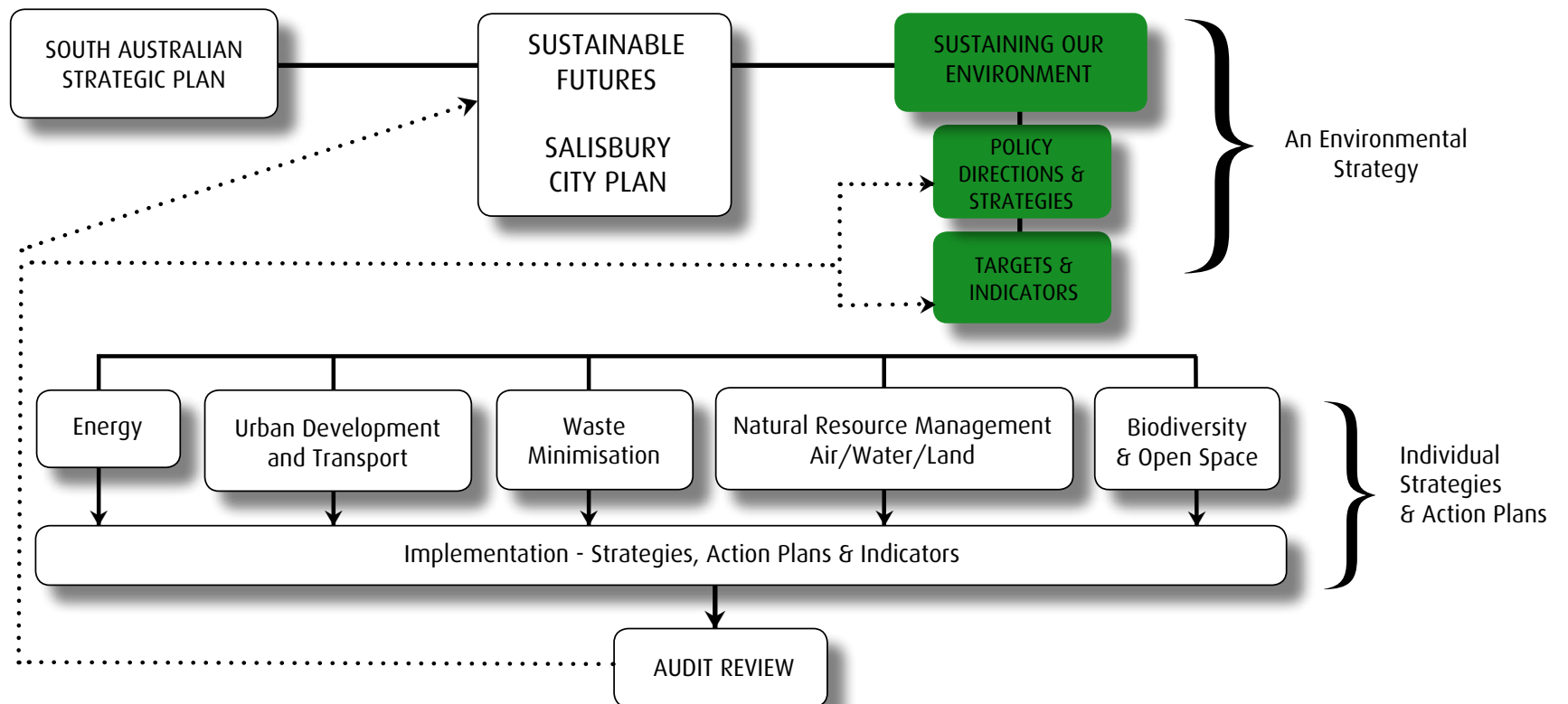
The purpose of this strategy is to both focus within the Council on integrated sustainability initiatives and outcomes, but also to have clear linkages and provide direction to the wider community and key stakeholders in the Local Government area.

The *Salisbury, Sustaining Our Environment* Strategy is the overarching strategy document that provides the strategic context and framework of the strategy, policy and planning streams, targets and indicators for the City. This document will be reviewed in-line with the Council's City Plan – *Sustainable Futures*.

This strategy will be supported by more detailed policy responses, strategies, action plans and indicators for each of the environmental objectives.

These will be reviewed and updated more frequently as actions are undertaken and new actions are proposed. It will also incorporate the measurement and evaluation of the relative indicators.

Corporate Framework



OVERALL DIRECTIONAL STATEMENT “To become a sustainable City in which its residents and businesses embrace sustainability best practices as part of their day-to-day lives and activities.”

OBJECTIVES:

1. Conserve and promote biodiversity, natural habitats and open spaces.
2. Minimise waste generation and effectively manage the collection, recycling and disposal of public waste.
3. Develop opportunities for the sustainable use of resources.
4. Reduce greenhouse gas emissions.
5. Facilitate and encourage development that incorporates sustainability principles.
6. Enhance the amenity of the City through street and open space urban design and landscaping.



POLICY & PLANNING STREAMS:

Policy & Planning Stream 1 Sustainable Energy

Based on the premise that community plays a vital role in reducing greenhouse gas emissions, encouraging renewable energy sources through education and increased awareness and incorporating sustainable energy design techniques within buildings.

Policy & Planning Stream 2 Waste Reduction

Based on the premise that further opportunities to improve waste management services, waste generation and disposal methods and the development of innovative approaches in resource use, recycling and waste management.

Policy & Planning Stream 3 Urban Development & Transport

Based on the premise that increasing urban density around existing public transport nodes will reduce private car use, implementing healthy design principles will encourage pedestrian and non-motorised modes of transport and the development of inter-modal terminals will provide for improved fuel efficiencies in road-rail transport.

Policy & Planning Stream 4 Biodiversity & Open Space

Based on the premise that through our natural environment we can create both economic and community interaction, while incorporating issues such as sustainable water use, maintenance and species selection, conserving remnant vegetation corridors and biodiversity areas, the rationalisation of open space and recreation areas and opportunities for community and Government partnerships.

Policy & Planning Stream 5 Natural Resource Management

Based on the premise that sustainable natural resource management includes education, the use of recycled water for irrigating reserves, reducing overall water consumption through mulching, species selection and alternative turf treatments, ensuring recycled water is available in new urban areas, commerce and industry and minimising waterway pollution, the control of dust generation and remediation of contaminated land.

Policy & Planning Stream 1

Sustainable Energy



Goal 1.1 - To reduce overall energy consumption and increase energy efficiency.

Goal 1.2 - To optimise the use of renewable energy.

Priority Actions

- **Council to lead by example in energy efficiency practice and adopting renewable energy technologies.**

These actions are about Council as an organisation actively contributing to reducing its energy use as well as looking at other alternatives for renewable energy sources in its day-to-day operations as well as in its future strategic planning.

- **Investigate opportunities via planning and building controls for further energy efficiency and renewable energy technologies in urban development.**

In order to further improve housing stock within the City and provide clear guidance to potential developers and the community, it will be necessary to incorporate more specific and detailed design techniques or performance criteria for solar orientation and solar passive building design in the City of Salisbury Development Plan. This may also encourage builders and developers to go beyond the minimum energy star rating required in the Building Code of Australia.

- **Develop relationships with Government energy agencies and private enterprise to form partnerships to increase economic opportunities for energy efficiency and encourage renewable energy sources.**

These actions focus on the importance of building networks and relationships with relevant stakeholders, both private and public, in order to increase information exchange and awareness of future viable economic opportunities and solutions for both renewable energy and reducing greenhouse gas emissions.

- **Encourage and educate the community to minimise energy use in order to reduce greenhouse gas emissions and promote sustainable renewable energy options.**

The role that community plays is vital in reducing greenhouse gas emissions and encouraging renewable energy sources. Having an educated, well informed and aware community that actively participates in reducing our consumption of carbon based fuels and increasing the use of renewable technologies and resources is a significant asset and contributor to sustaining our environment.



Current Major Projects for Sustainable Energy

Cities for Climate Protection

The Cities for Climate Protection (CCP) Program is an international campaign established by the International Council of Local Environmental Initiatives (ICLEI). In Australia, the CCP Program is supported by the Federal Government through the Australian Greenhouse Office with the primary aim to mitigate greenhouse gas emissions. The City of Salisbury undertook an innovative regional approach with four other northern Adelaide Councils to prepare Corporate and Community Action Plans to address greenhouse gas emissions.

The CCP Program stipulates five milestones:

1. Establish a greenhouse gas emissions inventory (profile) and forecast anticipated emissions growth.
2. Set an emissions reduction goal.
3. Develop and adopt a greenhouse gas reduction strategy.
4. Develop an implementation plan for the reduction strategies.
5. Monitor and report on greenhouse gas emissions and actions.

Solar Cities Program

Solar Cities is an innovative program which is designed to demonstrate how solar power, smart meters, energy efficiency and new approaches to electricity pricing can combine to provide a sustainable energy future in urban locations throughout Australia.

It is a partnership approach that involves all levels of Government, the private sector and the local community. The program will run from 2007 to 2013 and the program is led by Origin Energy and includes BP Australia, ANZ, Delfin Lend Lease, Big Switch and the City of Salisbury.

The key elements of the program include:

1. Seven 'iconic' installations of Australian manufactured solar photovoltaic cells; the largest roll-out of smart meters in Australia.
2. A community engagement strategy, developed in consultation with the local Councils, which aims to create a unique environment where the community is engaged and excited about their ability to make a difference.

Green Power

The Council has made a substantial commitment to purchase 20 per cent accredited Green Power and in doing so has positioned itself as a leading and responsible corporate citizen. Accredited Green Power suppliers buy renewable energy generated from approved renewable energy generators and feed it into the national grid. Green Power is sourced from solar and wind energy. It is also taken from hydro electricity, but only where this is produced from existing dams and weirs and does not interfere with natural water courses.

Purchasing Green Power sends a clear message to the community of Council's continuing commitment to the environment and addressing climate change issues; striving towards a sustainable Salisbury. The reductions in greenhouse gas emissions are substantial, in excess of 11,000 tonnes over three years which is equivalent to removing 880 passenger vehicles off the road annually.

Policy & Planning Stream 2

Waste Reduction



Goal 2.1 - To reduce overall waste generation and waste going to landfill.

Goal 2.2 - Encourage resource recovery, reuse and recycling opportunities.

Priority Actions

- **Council to lead by example in reducing overall waste production, increase recycling opportunities and reduce amount of waste going to landfill.**

This action focuses on investigating further opportunities for Council to improve the waste management services provided to the community, as well as focusing on its own waste generation and disposal methods to make disposal more economically, environmentally and socially viable for Council and the community.

- **Investigate opportunities for further waste reduction and increased recycling opportunities and responsible waste disposal in residential, commercial and industrial development.**

One person's waste is another person's resource. This action investigates the potential opportunities for realising the connections between what is considered waste or resource. In addition it promotes actions that assist in mitigating irresponsible waste disposal.

- **Develop partnerships with business and Government agencies to develop and promote innovative ways to assist companies in reducing resource use and waste as well as promoting recycling.**

Building upon existing, and forming new relationships with Government and business stakeholders will allow greater information exchange that will enable the development of innovative approaches in resource use, recycling and waste management that achieve environmental, social and economic benefits to businesses.



- **Encourage and educate the community to make informed choices to minimise overall waste generation, increase recycling and reduce waste going to landfill.**

In a survey conducted by Zero Waste SA in April 2005, the average level of concern among Salisbury residents about recycling as much as possible, was higher than the Metropolitan average, and 51 per cent of residents consider that waste avoidance means recycling. These figures show that overall the community is conscious of the importance of recycling. Increased education and awareness of waste avoidance would assist in minimising overall waste generation.

Current Major Projects for Waste Reduction

Waste Reduction and Recycling

The City of Salisbury has made progress towards more sustainable waste management via its membership of the Northern Adelaide Waste Management Authority (NAWMA), which included the establishment of a new landfill site at Uleybury. This incorporates initiatives such as kerbside recycling, baling of commercial and domestic waste, waste transfer stations and garden waste collection.

Council also offers a waste transfer station which provides for green waste and residential hard waste including small electrical items and e-waste at Pooraka. This is further complemented by a new hard waste pick up service which will also cater for residential hard waste.

The longer term plan for the landfill site at Uleybury is to extract methane gas with volumes that could potentially power up to 1,000 homes.

Since 1995, the amount of waste NAWMA has diverted from landfill has increased from 10 per cent to 40 per cent. NAWMA conducts a comprehensive series of education and community awareness programs to help people make informed decisions about waste management.

Policy & Planning Stream 3

Urban Development & Transport



Goal 3.1 - Apply innovative planning policies and strategies to optimise ecologically sustainable urban development within the City.

Goal 3.2 - Encourage and facilitate integrated transport networks, and reduce reliance on fossil fuel motorised forms of transport.

Priority Actions

- **Council to lead by example, incorporating Green Star Energy ratings into new buildings and providing sustainable transport options.**

This action focuses on ensuring that all Council development is done in an ecologically sustainable manner, promoting principles of energy efficiency, water conservation, waste avoidance and recycling. Additionally, Council will provide and promote sustainable forms of transport for staff.

- **Promote integrated land use and transport planning in all new urban development and regeneration areas as well as promoting non-motorised forms of transport.**

This action relates not only to increasing urban density around existing public transport nodes to reduce private car use, but also incorporates implementing Healthy by Design principles to encourage pedestrian and non-motorised modes of transport.

- **Encourage partnerships with relevant Government bodies to facilitate major transport, and freight route infrastructure in appropriate locations to improve efficiencies in transport movement.**

The location of the Northern Expressway coupled with the proposed inter-modal terminal and the Greater Edinburgh Parks industrial area will allow for improved fuel efficiencies in road-rail transport via separation from residential and suburban traffic routes. These networks also contribute to creating employment opportunities within the City for residents, leading to reduced work commute travel time.

- **Facilitate opportunities to increase public awareness and choice in non-motorised modes of transport and more sustainable urban development choices.**

This action focuses on supporting initiatives such as Travel Smart, the walking school bus, ride and/or walk to work days to encourage the community to choose more sustainable forms of travel. It also includes promoting more sustainable choices when undertaking residential and commercial development.



Current Major Projects for Urban Development

Urban Development

Salisbury's commitment to sustainability has nurtured a healthy and cohesive community. For example, Mawson Lakes is a community developed in partnership with Government and private enterprise incorporating solar passive and energy efficient subdivision and housing designs, access to recycled water and opportunities for water sensitive urban design.

This has provided certainty for businesses that have invested in the region, via collaborative approaches that seek operational solutions that are both environmentally responsible and cost efficient.

For example, Edinburgh Parks, developed by the Land Management Corporation, is unique because stormwater generated on site by large individual users is recycled through the Aquifer Storage and Recovery system (ASR) and pumped through a separate non-potable water system for reuse by commercial clients.

Sustainable 1000

The City of Salisbury and Salisbury Business and Export Centre (SBEC) in conjunction with the Department of Premier and Cabinet, Zero Waste SA, Department of Trade and Economic Development, Environmental Protection Authority, the City of Playford and the Innovation and Economic Opportunities Group (a Delfin - City of Salisbury initiative) are piloting an innovative sustainability project, 'the Sustainable 1000', involving 100 small to medium enterprises (SMEs) within the Salisbury area over a 12 month period.

Participating enterprises will undertake a sustainability management audit and receive metric analysis, remedial advice, education and training, and support to improve organisational performance, stimulate growth and reduce the SME's footprint on the planet.

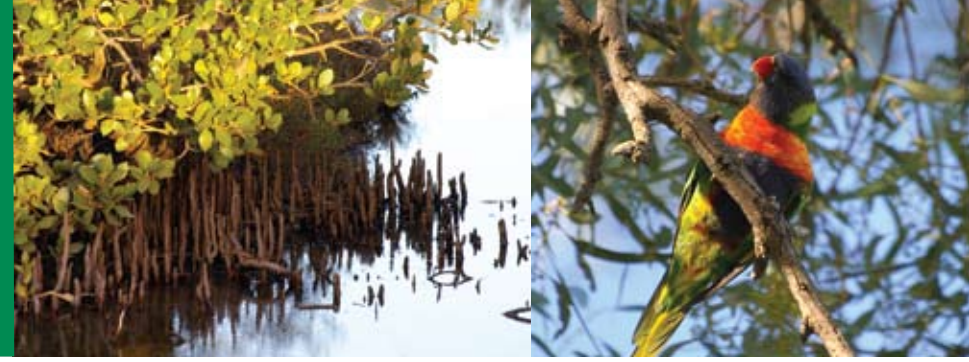
Based on previous experience, the model delivers a guaranteed minimum waste reduction of 15 per cent, minimum 20 per cent water reduction and minimum 10 per cent energy use reduction, aggregating to significant cost savings and a 'greener' SME.

From this pilot it is envisaged the project will be expanded to become a State-wide initiative, targeting a further 900 businesses to undertake the audit and participate in the program.

The purpose of this policy is to provide a unified, coordinated and consistent direction and framework that will guide the progression and understanding of sustainability in Salisbury.

Policy & Planning Stream 4

Biodiversity & Open Space



Goal 4.1 - Conserve and promote biodiversity, natural habitat and open space.

Goal 4.2 - Provide sustainable open space and recreation facilities.

Priority Actions

- **Council to implement best practice in provision and sustainable management of landscapes, open space and recreation areas.**

These actions include the completion and application of the City Landscape Plan and Game Plan which incorporate issues such as species selection, sustainable water use and maintenance, conserving remnant vegetation corridors and biodiversity areas as well as rationalisation of open space and recreation areas.

- **Investigate opportunities to increase biodiversity and access to open space and recreation areas via land use planning controls and guidelines.**

These strategies incorporate strengthening landscaping provisions of residential, commercial and industrial lands as well as providing guidance about plant selections and retention of significant trees. In addition these strategies consider providing functional open space and recreational opportunities in appropriate locations to encourage use and participation.

- **Develop and foster partnerships with relevant stakeholders and Government authorities to encourage eco-tourism to promote habitats of high biodiversity value and recreational opportunities.**

By promoting our natural environment we can create both economic and community opportunities as well as investing in the image of the City. Such activities include promotion of the Watershed and wetland trails as well as our linear trails along rivers and creeks.

- **Continue to promote community awareness and education about the benefits of conserving and participating in biodiversity projects throughout the City.**

Through both active participation and providing support to programs such as the Urban Forest Biodiversity Program and Million Trees, Council can act in partnership with not only the community, but also other levels of Government to increase and link biodiversity corridors over private and public lands.



Current Major Projects for Biodiversity and Open Space

Urban Forest Biodiversity Program (UFBP)

The UFBP aims to redress the loss of biodiversity in metropolitan Adelaide, thereby enhancing environmental sustainability, amenity and quality of life. Applying biodiversity planning to urban areas is a new approach to achieving the goal of a sustainable future that conserves the region's unique biodiversity - our natural heritage.

Although a series of wildlife reserves are already established around the City of Salisbury, there remains a major challenge to improve and extend these natural areas by including private land, creeklines, Council reserves and other open space to become viable biodiversity corridors. The UFBP helps coordinate cooperation between local, State, national and international environmental initiatives and strategies. Their goal is to involve all levels of Government and the community in cooperating for biodiversity conservation, and to incorporate these considerations into planning and land management in the metropolitan area.

(www.urbanforest.on.net)

Parks and Landscapes

The urbanisation of Salisbury developed rapidly during the post war years with little regard for urban amenities or facilities. The original low woodland native vegetation had almost been totally cleared with only pockets of remnant vegetation surviving in the hills and gullies and other areas unsuitable for agriculture or urban development.

Over the past two decades we have progressively transformed the landscape of the city through creating parklands, tree-lined streets and roads, linear parks and reserves, ponds and wetlands and a network of outdoor recreational facilities. Natural landscape features have been enhanced, extensive afforestation carried out, and stormwater has been harvested in a system of swales, natural waterways and wetlands.

The Council has recently adopted two key policy directions in regard to this area. These are 'The Game Plan' – Council's approach to the provision and management of open space and recreation and the city-wide 'Landscape Plan'.

The city-wide Landscape Plan is a comprehensive document that provides a direction for existing and future development of the Council's landscapes.

These action plans provide a clear set of guidelines to strengthen the unique physical characteristics of Salisbury underpinned by the key principles of promoting biodiversity, water sensitive urban design, and crime prevention through environmental design as well as taking into consideration future climate change.

Policy & Planning Stream 5

Natural Resource Management



Goal 5.1 -To promote integrated water management via the harvesting, recycling and reuse of stormwater.

Goal 5.2 - To encourage and promote sustainable land management practices including soils, rivers, coastal and marine ecosystems.

Priority Actions

- **Council to continue to develop the Aquifer Storage and Recovery (ASR) and wetland programs. Promote the use of recycled water in Council operations wherever viable and apply best practice in reducing overall water demand in the maintenance of landscapes and reserves.**

Actions include using recycled water in the irrigation of reserves in conjunction with measures to reduce overall water consumption such as mulching, species selection and alternative treatments to turf.

- **Promote the benefits of best practice water and natural resource management in all forms of urban development both during construction and over the life of the development.**

Make recycled water available to all residents in new urban areas as well as commerce and industry. Incorporate Water Sensitive Urban Design and stormwater catchment management principles to mitigate soil erosion and sedimentation pollution in waterways, control dust generation and remediation of contaminated land.

- **Encourage partnerships with Government and private sector to promote the use of recycled water, more efficient water usage as well as reducing the environmental impacts of businesses on natural systems.**

These actions include encouraging environmentally sustainable business opportunities that utilise recycled water in conjunction with minimising air and water pollution, contamination and soil degradation. This also includes the continued support and part funding of Stormwater Protection Officers in conjunction with the EPA and working closely with the Adelaide Mount Lofty and the Natural Resource Management Board to assist where possible in NRM projects and programs.

- **Continue to support and encourage programs that raise awareness about recycled water and best practice natural resource management.**

The Watershed Sustainability Centre will not only house the Waterwatch program, but will also provide educational interpretive displays in conjunction with South Australian Museum. There are also a number of volunteer programs which assist in the remediation and restoration of natural systems.



Current Major Projects for Natural Resource Management

Integrated Water Management Plan and Aquifer Storage and Recovery

The City of Salisbury is looking to implement Australia's first totally integrated water management plan to efficiently harvest and manage systems for rainwater, stormwater, ground water, recycled waste water and potable water. This plan is an integral part of the Waterproofing Northern Adelaide project which received significant funding from the Federal Government in 2006.

Water flow from the foothills of the Mount Lofty Ranges is harnessed and regulated in a series of flood control dams constructed in the upper reaches of the catchment. The dams throttle down the flow of water into a series of pipes and open channels planted with reedbeds to filter and cleanse the water of nutrients and heavy metals.

These pipes and channels are the arteries for the flow of stormwater into a network of 20 harvesting sites, or wetlands, strategically developed by the City. Stormwater is further cleansed in wetlands and grassed swales, which act as a self-sustaining filtration and water treatment system. This treated stormwater is then pumped directly to industrial and commercial users.

The Waterproofing Northern Adelaide project also has a sustained focus on broadening community awareness and action about conserving water and innovative ways to utilise this natural resource.

The Watershed building, located at Greenfields Wetlands, is a dedicated interpretive centre for sustainability and will showcase the innovative water management that is occurring in the region. It will also be the base of the 'Waterwatch' program, a nationwide environmental monitoring program involving schools and the local community.

Aquifer Storage and Recovery (ASR) is the process of injecting cleansed stormwater from wetlands into a suitable underground aquifer for storage and extraction when required.

The combination of dedicated stormwater capture and treatment with ASR is an integrated approach that enables urban stormwater to be harvested for year-round use for irrigation of parks and gardens and high water dependent industries.



Targets & Indicators



The following targets and indicators have been developed to align, where possible, with corresponding targets represented in the South Australian Strategic Plan, thereby highlighting the City of Salisbury's commitment to the State Strategic Plan, as well as providing some consistency between the State and local targets.

These targets provide a direction for the City to strive towards and identify where we want to be in the future.

It is important to note that some of the State targets listed in the SA Strategic Plan are not relevant or applicable from a Local Government perspective and therefore only those that we can influence and contribute to have been listed.

The majority of Council's city-wide strategic plans and policies will have targets and indicators that parallel targets set in the City Plan - *Sustainable Futures*. These targets will provide guidance as to the overall economic, social and environmental sustainability of the City.

Given the integrated relationship between greenhouse gas emissions and sustainable energy use, for alignment purposes within this strategy *Salisbury, Sustaining Our Environment*, they have been grouped together.

However it is acknowledged that a strong relationship also exists between energy use and the city's strategy of 'Sustainable Use of Resources'.

Targets & Indicators



CITY DIRECTION 2: SUSTAINING OUR ENVIRONMENT

Overall Directional Statement: "To become a sustainable City in which its residents and businesses embrace sustainability best practice as part of their day-to-day lives and activities."

City Indicators	Baseline Data	City Target	State Targets
BIODIVERSITY			
Native species biodiversity in the city.	Baseline data being developed.	No net reduction in native species (extent or condition). Measure: Established as part of biodiversity Strategy. Source: Area of native vegetation under active management or alternatively vegetation survey as part of biodiversity study.	T3.2 Land Biodiversity: By 2010 have 5 well established biodiversity corridors aimed at maximising ecological outcomes particularly in the face of climate change. T3.1 Lose no species: Lose no known native species as a result of human impact.
RESOURCE USE/WASTE			
Ecological Footprint of the city.	Baseline data being developed.	To reduce the ecological footprint of the city by 30% by 2050. Measure: Establish current Ecological Footprint. Source: UniSA.	T3.7 Ecological Footprint: Reduce SA ecological footprint by 30% by 2050.
Percentage diversion of waste from landfill.	In 2007/08, 47% of waste was diverted from landfill.	Percentage waste diversion from landfill to be a minimum of 50% by 2010. Measure: Annually. Source: NAWMA.	T3.8 To reduce waste to landfill by 25% by 2014.

Targets & Indicators



City Indicators	Baseline Data	City Target	State Targets
CLIMATE CHANGE			
Level of Co2 emissions for the City.	1994/95 CO2 emission level for the City was some estimated 1.29 million tonnes.	To achieve zero greenhouse gas emissions growth on the 1994/95 levels for the City. Measure: ICLEI and City of Salisbury. Source: Cities for Climate Protection Program.	T3.5 Greenhouse Gas Emission reduction: Achieve the Kyoto target by limiting the State's greenhouse gas emissions to 108% of 1990 levels during 2008-2012, as a first step towards reducing emissions by 60% (or 40% of 1990 levels) by 2050.
Level of Corporate GHG emissions.	During the 2001/02, corporate GHG emission was estimated at 8,900 CO2 equivalent tonnes.	Reduce Corporate GHG emissions by 20% from 1997/98 levels (7,300 CO2 equivalent tonnes) by 2010 and move towards carbon neutrality as soon as practicable. Measure: ICLEI and City of Salisbury. Source: Cities for Climate Change Protection Program.	T3.5 Greenhouse Gas Emission reduction: Achieve the Kyoto target by limiting the States greenhouse gas emissions to 108% of 1990 levels during 2008-2012, as a first step towards reducing emissions by 60% (or 40% of 1990 levels) by 2050.
WATER			
Volume of recycled water produced and utilised in the City.	In 2007/08 6.66 GL of recycled water was produced in the City.	Increase volume of recycled water to 8 GL per annum by 2010. Measure: Annually. Source: Water Unit CoS.	T3.9 Sustainable Water Supply: SA's water resources are managed within sustainable limits by 2018.

References

REFERENCES

Department of Water Land and Biodiversity (2006) State Natural Resources Management Plan
Sustainable Futures Australia (2005) Sustainability Health Check Discussion Paper
Zero Waste SA (2005) Final Report City of Salisbury - Working with the Community

Online References

www.environment.gov.au
www.greenhouse.vi.gov.au
www.sustainableliving.sa.gov.au
www.urbanforest.on.net
www.watercare.net.au

National Strategy for Ecologically Sustainable Development (1992)
Victorian Greenhouse Policy Unit
South Australia's Ecological Footprint
SA Urban Forest Biodiversity Program
Water - Learning and Living

CREDITS:

Salisbury Environmental and Climate Change Strategy: *Sustaining Our Environment* is a production of the City of Salisbury.

Edition

Published September 2008

Contact

City of Salisbury
City Manager
12 James Street,
Salisbury SA 5108

Telephone: 08 8406 8222
Email: city@salisbury.sa.gov.au

Graphic Design

Nicole Aspinall (Freelance Design)
Soup Creative

Photography

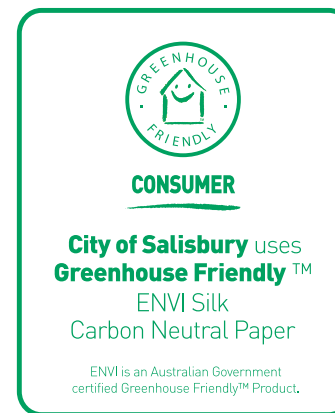
Michael & Nicole Aspinall
Blue Razoo

Download

www.salisbury.sa.gov.au

Printing

 **Finsbury Green**
printed carbon neutral



Pages 3-34 of this publication are printed on ENVI Coated Silk Paper. ENVI Coated Silk Paper is manufactured in Australia by Australian Paper and is certified Greenhouse Friendly™ by the Australian Government under the Department of Climate Change Greenhouse Friendly™ Initiative. ENVI Coated Silk Paper is Carbon Neutral.

Cover printed on Zanders Mega Silk 50% recycled post consumer FSC(CoC) and ISO14001 certified.

Contact

12 James Street Salisbury South Australia 5108
PO Box 8 Salisbury South Australia 5108
Telephone: 08 8406 8222
TTY: 08 8406 8596 (for people with a hearing impairment)
Facsimile: 08 8281 5466
Email: city@salisbury.sa.gov.au
www.salisbury.sa.gov.au

