

Environmental Sustainability Strategy – 2009/2010 Action Plan

This Action Plan has been developed to deliver on the *Environmental Sustainability Strategy 2009-2012*. It outlines the projects, which Council will implement in 2009/10, against strategies from the *Environmental Sustainability Strategy 2009-2012* and displays the budget allocation and lead Council Business Units responsible for each project.

Key 2009/10 Projects

The following projects support strategies of the *Environmental Sustainability Strategy 2009-2012* and Key Projects of *Creating our Future*, the City of Adelaide's Strategic Plan 2008-2012.

- **Carbon Neutral Council Action Plan** – Implementation of \$1.3million of initiatives to reduce Council's own emissions by 60% by 2012 including; energy efficient lighting, increased use and generation of renewable energy and other efficiency measures.
- **Major Solar Panels Installation** – Finalisation of installation of solar panels on Rundle Lantern and a new iconic solar panel installation on the Central Market.
- **Climate Change Risk Response Plans** - Development of action plans to ensure public spaces, the Park Lands, Council buildings and projects consider the impacts of climate change.
- **Adelaide Sustainable City Incentives Program** – A \$50k incentive scheme for residents, community organisations and Park Lands Sporting Clubs for the installation of rainwater tanks, solar panels and solar hot water systems; and grants to community organisations for native vegetation management.
- **Glenelg to Adelaide Park Lands Pipeline** – Collaborate in the delivery of the Glenelg to Adelaide Park Lands Pipeline that will supply up to 1.3GL of recycled water to the Park Lands each year.
- **Integrated Movement Strategy** – Development of a strategy to address move to, from and within the City for private vehicles, public transport, cyclists and pedestrians.
- **Bicycle Action Plan 2008-11** – Completion of the primary on-road cycle network (14 km of bike lane); Stage 5 of the Park Lands Trail, on-street bike racks; Free City Bikes scheme; continuation of the Park Lands Trail; and cycling advocacy, promotion and education including a free Bike Day Event and City Cycling Challenge.
- **Torrens Lake water quality improvements** – Further investigations into a Torrens Lake Biological Filtration System; establishment of aquatic plants; carp reduction and a multistage revegetation project.
- **South Park Lands Aquifer Storage and Recovery** – Detailed design of Aquifer Storage and Recovery and environmental sustainable initiatives associated with future flood storages in the south Park Lands.
- **3 Bin System** – Continued implementation of the new bin system for residents and small businesses that maximises recycling and reduces waste to landfill by 60%.
- **Greening the Central Market** - Continuation of a comprehensive recycling system, implementing recommendations of an energy and carbon emissions and a tenant engagement program; and installing solar panels on the Market roof.
- **Greening of commercial buildings** – Strengthen sustainability provisions in the Development Plan; and the implementation of commercial support programs **S1K and City Switch**, the latter of which will result in the avoidance of \$1.1 million in energy costs and 10000 tonnes of carbon emissions per year.
- **Public Realm Recycling** – Development of public realm recycling guidelines and new recycling bins in public spaces.
- **Residential Hazardous Waste Collection** - Introduce and implement a residential hazardous waste collection program.

Strategy	Description of 2009/2010 Action	2009/10 \$'000 (gross)	Responsibility
OUTCOME 1 – A Climate Responsive City			
1.1 Increase the number of people in the City to a sustainable limit	Model growth scenarios using the 3D City Model, undertake the Sustainability Development Plan Amendment, progress affordable housing projects and assist City-based student accommodation developments.	General Operating	City and Park Lands Planning
1.2 Promote the environmental benefits of living, working and studying in the City including reduced energy and water use and improved sustainable transport options	Ongoing promotion of the environmental benefits of City living, working and studying via various mediums.	General Operating	Marketing
1.3 Implement a strategy that will ensure Council's buildings and operations create zero net carbon emissions by 2020 through energy efficiency and the purchase and local generation of renewable energy	<p>Carbon Neutral Council Action Plan</p> <p>This Action Plan focuses on reducing Council's own emissions. Promotion of Council's Action Plan to other City businesses is a first step towards a Carbon Neutral Strategy for the City.</p> <p>Includes the following projects in 2009/10:</p> <ul style="list-style-type: none"> – Central Market solar panels – Adelaide Aquatic Centre co-generation (CHP) plant – Energy efficient U-Parks – Energy Efficient Central Market – 50% Greenpower purchase – Energy Efficient Public Lighting – Marketing and Promotion 	1.3	Sustainability
	<p>Solar Panel Installations</p> <p>Finalisation of installation of solar panels on Rundle Lantern and a new 50kw solar photovoltaic installation on the Central Market including roof and installation works and launch and promotion</p>	425	Sustainability
1.4 Collaborate with the State Government and other organisations to increase the profile of Adelaide as a sustainable city	<p>Green City Accord</p> <p>Establish an agreement with the State Government to progress the City of Adelaide's profile as a sustainable City through a variety of projects</p>	General Operating	Sustainability

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1.5 Encourage energy efficiency and local renewable energy generation in new development through Development Plan provisions, strategic property projects, and supporting national rating systems	Sustainability Development Plan Amendment Optimise green building standards, support sustainable transport modes and ensure support for pedestrian movement	10	City and Park Lands Planning
1.6 Reduce carbon emissions and pollution by supporting public transport, improving cycling and walking infrastructure and information, and investigating renewable energy electric vehicle charging stations	Bicycle Action Plan Completion of the primary on-road bicycle network (14km bike lanes); Stage 5 of the Park Lands Trail, installation of new bike racks; cycling advocacy and promotion	925	Capital Works
	Integrated Movement Strategy review Development of a strategy to address move to, from and within the City for private vehicles, public transport, cyclists and pedestrians	General Operating	Sustainability
	Free City Bike Scheme Provision of 100 bikes that operate at set times within a number of nodes to assist visitors to travel around the City. Includes establishment of a fifth node in the heart of the CBD.	160	Sustainability
	City Bike Day Event	50	Sustainability
	City-Wide Parking Study Address current supply and occupancy of off and on street parking provision in the context of new developments and the capacity of public transport	30	Sustainability
	Adelaide Workplace Cycling Challenge A City competition to encourage cycling to work	65	Sustainability
	Footpath and road renewals \$4.6 million to the City's transportation systems completed aimed at improving safety for pedestrians, cyclists and road users	\$4.6million	Capital Works
	Public transport for events Encourage event organisers and patrons to use public transport to minimise parking on the Park Lands and encourage sustainable transport options such as cycling and walking	General Operating	Events
	Facilitating provision of green transport options	General Operating	Sustainability

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	Working with the State Government to achieve integrated transport services in the City	General Operating	Sustainability
	Providing support for sustainable transport promotions such as Ride to Work Day and Walk to Work Day	General Operating	Sustainability
	Park Lands Trail Complete Stage 5 of the Trail including a bridge over the Torrens	600	Capital Works
	Bonython Park Cycleway Construction of a cycleway in Bonython Park in conjunction with the tramline extension	150	Capital Works
	Connector Bus Service (Tindo) operation	450	Citywide services
1.7 Encourage energy efficiency and local renewable energy generation in the community by providing education materials, business efficiency programs and incentives for solar systems to households, sporting clubs and community organisations	Adelaide Sustainable City Incentives Program Provides incentives to residents, community organisations and Park Lands Sporting Clubs for the installation of solar panels and solar hot water systems.	50	Sustainability
	Environmental Sustainability Initiative – Green CBDs - City Switch and S1K Programs Program to support commercial tenants to reduce greenhouse gas emissions through the adoption of environmentally sustainable business practices.	95	Sustainability
	Earth Hour Participate in the World Wildlife Fun program which encourages cities around the world to turn off their lights for one hour on March 28 2010	10	Events
1.8 Support local responses to climate change by establishing or encouraging community gardens in the public realm or Council properties or private property	Community Garden Establish and in-ground community garden, which will most likely be located in Veale Gardens	60	Social Development
1.9 Ensure public spaces, the Park Lands, Council buildings and projects consider the impacts of climate change by preparing a risk assessment and adaptation plan and responding to its recommendations	Environmental Sustainability Initiative – Climate Change Risk Mitigation Action Plans Development of action plans to address priority risk areas identified through the Local Government Association and Mutual Liability Scheme Climate Change Adaptation Risk Management Program	20	Sustainability

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1.10 Cool the City and address water shortage by increasing climatically appropriate plantings and water sensitive urban design in streetscapes and major public realm upgrades and by encouraging green roofs and green walls in the City	Planting Programs Park Lands Planting and Street Tree replacement programs, streetscape and landscape upgrades incorporating planting, naturestrip program and planter box program.	360	Asset Management
1.11 Integrate energy efficiency into Council processes including through the development of sustainable procurement and capital works design guidelines	Review and update of Council's Urban Design Standards and Guidelines Review to consider environmental sustainability	General Operating	City Design
1.12 Prepare for and respond to the Australian Government's Carbon Pollution Reduction Scheme	Ongoing review of emerging policy directions and assessment of implications for Council. Implementation of the Energy Enterprise Management System which will enable detailed analysis of energy use and carbon emissions.	General Operating	Sustainability
OUTCOME 2 – A water wise City			
2.1 Increase the use of alternative water supplies including through the use of recycled water from the Glenelg to Adelaide Park Lands Pipeline in targeted areas of the Park Lands and City buildings, stormwater capture and re-use, and investigating aquifer storage and recovery	Glenelg to Adelaide Park Lands Pipeline Prepare and implement irrigation plans and upgrades required for use of recycled waste water on the Park Lands including monitoring as required.	300	Asset Management
	Park 16 and Park 17 ASR & Environmental Sustainable Initiatives Detailed design of Aquifer Storage and Recovery and environmental sustainable initiatives associated with future flood storages in Park 16 and Park 17	40	Asset Management
	Brown Hill & Keswick Creeks Park Flood Management Master Plan Flood mitigation works throughout the Brown Hill & Keswick Creeks catchments including temporary flood storages in the south Park Lands.	279	Asset Management
	North Terrace Upgrade Upgrade of North Terrace Landscape incorporates Water Sensitive Urban Design	1,750	Capital Works
	Street Tree Watering Program To investigate and implement feasible opportunities for utilising stormwater in the kerb and waterable for the watering of street trees	50	City Design
2.2 Collaborate with other spheres of Government and organisations to achieve and demonstrate water use efficiency, re-use and alternative water solutions	Glenelg to Adelaide Park Lands Pipeline Prepare and implement irrigation plans and upgrades required for use of recycled waste water on the Park Lands including monitoring as required.	300	Asset Management

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	Brown Hill & Keswick Creeks Park Flood Management Master Plan Flood mitigation works throughout the Brown Hill & Keswick Creeks catchments including temporary flood storages in the south Park Lands.	279	Asset Management
2.3 Encourage greater water use efficiency, water capture and re-use, and the use of other alternative water supplies in development, including through Development Plan provisions, strategic projects and supporting national rating systems	Sustainability Development Plan Amendment Optimise green building standards, support sustainable transport modes and ensure support for pedestrian movement	10	City and Park Lands Planning
2.4 Encourage water use efficiency and water re-use in the community by supporting business efficiency programs, and providing incentives for rainwater tanks to households, sporting clubs and community organisations	Adelaide Sustainable City Incentives Program Provides incentives to residents, community organisations and Park Lands Sporting Clubs for the installation of rainwater tanks	50	Sustainability
2.5 Increase water use efficiency and re-use in Council buildings, businesses and operations including through projects at the Central Market and recycling backwash water from the Adelaide Aquatic Centre	Aquatic Centre – Roof Refurbishment Project to include energy efficiency and water saving initiatives if possible	1250	Asset Management
	London Road Depot – Wash down bay Installation of a water saving wash down bay	80	Citywide Services
	Town Hall – Bathroom Refurbishment Works will include the incorporation of water efficient devices (dual-flush cisterns etc)	150	Asset Management
	Water Saving Opportunities Annual allocation to pursue water saving opportunities in Council occupied facilities (dual flush toilets, water efficient taps etc)	95	Asset Management
2.6 Increase water use efficiency and re-use in the public realm including through establishing climatically appropriate plants, investigating wetland and aquifer storage and recovery projects, and stormwater capture and re-use projects	Park 16 and Park 17 ASR & Environmental Sustainable Initiatives Detailed design of Aquifer Storage and Recovery and environmental sustainable initiatives associated with future flood storages in Park 16 and Park 17	40	Asset Management
	Brown Hill & Keswick Creeks Park Flood Management Master Plan Flood mitigation works throughout the Brown Hill & Keswick Creeks catchments including temporary flood storages in the south Park Lands.	279	Asset Management

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	North Terrace Upgrade Upgrade of North Terrace Landscape incorporates Water Sensitive Urban Design	1,750	Capital Works
	Golf course – irrigation system – Upgrade Progressive roll out of new infrastructure and computer integration to operate irrigation system remotely resulting in increased efficiency	100	Citywide services
	Irrigations systems – Upgrade to Maxicom systems Various locations	50	Citywide services
	Street Tree Watering Program To investigate and implement feasible opportunities for utilising stormwater in the kerb and watertable for the watering of street trees	50	City Design
2.7 Integrate sustainable water management into Council processes including through the development of sustainable procurement, capital works and water sensitive urban design guidelines	Review and update of Council's Urban Design Standards and Guidelines Review to consider incorporation of water sensitive urban design	General Operating	City Design
OUTCOME 3 – An ecologically sustainable City			
3.1 Collaborate to improve the environment of the River Torrens by preventing the flow of pollutants, re-establishing riparian and aquatic habitats, controlling pest plants and animals and reducing erosion	Torrens Management – Torrens Water Quality Further investigations into a possible Torrens Lake filtration system (to remove nutrients and manage blue green algae) or other initiatives identified in conjunction with the Torrens Taskforce. of a 3 year program to design and install biological filtration infrastructure in Torrens Lake	100	Asset Management
	Torrens Management – Torrens Lake Initiatives A program of initiatives to improve water quality and biodiversity in Torrens Lake through establishment of Curly Pond Weed, reduction of carp, monitoring of nutrient and chemical loads and management of bird feeders.	50	Asset Management
	Water Quality Management On-going analysis of nutrients and chemicals in the Torrens Lake to test effectiveness of management initiatives	40	Asset Management

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	Tainmundilla Riparian Revegetation Stage 2 of a 4 year program to restore local native vegetation, control erosion and pest plants along the River Torrens. (\$40K ACC, \$60k external)	100	Capital Works
3.2 Work to improve environmental flows in the River Torrens in collaboration with the South Australian Government and the Adelaide and Mt Lofty Ranges Natural Resources Management Board	On-going discussions On-going communication with the Department for Water Land and Biodiversity Conservation and the Adelaide and Mt Lofty Ranges Natural Resources Management Board	50	Asset Management
3.3 Plan and collaborate to implement an ecological network that protects remnant biodiversity and restores local native vegetation and aquatic habitats and is cognisant of social and recreational uses	Local native vegetation and habitat restoration programs Delivery of revegetation programs including commencement of a multi-stage revegetation program along the River Torrens, community vegetation sites, Park Lands tree planting and on-going enhancement of existing sites.	150 + general operating	Asset Management Citywide Services
	Park Lands Landscape Master Plan Develop a landscape master plan showing its unification and defining landscape including river setting, open grasslands, mature trees, formal gardens and biodiversity areas	30	City and Park Lands Policy
3.4 Increase understanding and interaction with nature by providing and supporting volunteer programs for corporate and community groups, providing grants, supporting events, and installing interpretive signage in the Park Lands	Community participation in biodiversity projects Engagement of volunteers at 6 native vegetation sites in the Park Lands through the Bush For Life, Our Patch, Waterwatch and Adelaide City Council Wirranendi Bush Restoration programs. National Tree Day event run in the Park Lands.	General Operating	Asset Management
	Wirranendi Wetland and Trail Wirranendi (Park 23) develop an environmental education trail, enhance wetland areas and improve community amenities.	Cont. of 08/09 project	City Design
	Adelaide Sustainable City Incentives Includes Native Vegetation Grants for community organisations in the Park Lands	50	Sustainability
3.5 Conserve native biodiversity and reduce water use by utilising local native plants in Council landscaping projects and by providing and promoting sustainable gardening education materials to the community	Adelaide Sustainable City Incentives Includes provision of education materials on local native and sustainable gardening practices and the provision of free local native plants in winter.	50	Sustainability

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	Nature Strips and Verges Redevelopment Program Sustainability guidelines developed for the nature strip program to ensure that nature strips as requested by residents are environmentally friendly	60	Citywide Services
3.6 Protect biodiversity by controlling environmental pest plants and animals in the City and Park Lands and preventing the use of invasive plants in landscaping projects	Pest Control Programs On going control of invasive plants and animals a part of horticulture programs	General Operating	Citywide Services
3.7 Improve the management of biodiversity including through the establishment of guidelines, the development of staff skills and monitoring of ecological trends	Biodiversity Team The Biodiversity Team provides specialised native vegetation/biodiversity management in the Park Lands	General Operating	Citywide Services
	Bird Monitoring On-going capture of bird data collected for the Adelaide Park Lands	General Operating	Sustainability
3.8 Improve the quality of stormwater and reduce erosion by laying back and revegetating creek banks and creating wetlands	Creek Rehabilitation Ongoing program to undertake rehabilitation works to all creeks and watercourses in the City of Adelaide	50	Asset Management
	Victoria Park Wetland Incorporation of a wetland into the Victoria Park Masterplan for biodiversity conservation, water capture, treatment, storage and re-use	General Operating	City Design
3.9 Prevent the flow of pollutants into waterways including through infrastructure and management processes	Torrens Management – Gross Pollutant Traps Program Installation of gross pollutant traps on Council drains to improve the quality of receiving waters	150	Asset Management
OUTCOME 4 – A Zero Waste City			
4.1 Maximise resource recovery from residents and small businesses, by implementing a bin system which separates general rubbish, recycling, kitchen waste and green waste, and by educating the community about its operation and reviewing service outcomes	3 Bin system Implementation and education about the 3-bin system and rev Review and improve waste and recycling services	General Operating	Citywide Services
4.2 Improve waste and resource recovery in multistorey and medium to high density buildings through collaboration with Zero Waste SA, identification of waste management solutions, Development Plan provisions and guidelines for developers, property and business owners	Sustainability Development Plan Amendment Optimise green building standards, support sustainable transport modes and ensure support for pedestrian movement	10	City and Park Lands Planning

Strategy	Description of 2009/2010 Action	2009/10 \$'000 (gross)	Responsibility
4.3 Increase resource recovery from City events by developing and implementing guidelines and encouraging appropriate infrastructure	Reducing waste from events Supporting and encouraging events to be environmentally conscious of through encouraging responsible waste management practices	General Operating	Events
4.4 Collaborate and investigate ways to increase resource recovery from retail, hospitality and small business uses including through a review of cardboard recycling services	Review of the cardboard collection program	General Operating	Citywide Services
4.5 Facilitate the safe and responsible disposal of electronic and hazardous waste from the community	Residential Hazardous Waste Collection	65	Citywide Services
4.6 Increase waste recovery from the public realm by providing permanent recycling facilities in public places	Review and update of Council's Urban Design Standards and Guidelines Review to consider environmental sustainability	General Operating	City Design
	Sustainability Cleansing and Recycling Initiatives Including Provision of 'butt out' and recycling bins in targeted areas to sort and reduce waste	100	Citywide Services
	Environmental Sustainability Strategy Public realm and medium-high density waste management guidelines (subject to further scoping)	50	Sustainability
4.7 Reduce waste to landfill and improve waste recovery from Council business, administration, facilities and operations including by providing recycling facilities, reducing paper consumption and through cleaning and waste contracts	Office Recycling Recycling services provided as part of 3-bin system and through corporate paper recycling services.	General Operating	Property
	Less Paper Working Group Implementation of the outcomes of a working group which identified options for reducing paper consumption by the Corporation	General Operating	Information Management
4.8 Reduce pollution and maintain a clean City by supporting and advocating for community led litter reduction programs	"Clean Up Australia Day" Activities Participation ion the National event to engage the community in litter reduction	6	Social Development