

Lochiel Park residential development, undertaken by the South Australian Government, created a leading edge green village of more than 80 allotments as a demonstration project for sustainable development.

A heavy vehicle emissions test facility was commissioned at Regency Park in 2006 to conduct vehicle exhaust emissions testing and pollutant level evaluation. Emissions testing services will encourage heavy vehicle fleet owners to reduce vehicle emissions and monitor fuel economy. This will become increasingly important with projected growth in the freight task and the likely air quality impacts associated with it.

Wind generation contributed around 90% of the state's renewable electricity generation in 2006–07 and further wind projects are likely to come online in the next two years. Geothermal exploration projects underway could potentially provide low emission base load power for much of the state.

In light of water restrictions and with the support of state and local government rebates, the community has taken up alternative water supply options such as rainwater tanks and greywater re-use systems. South Australia's household water consumption per capita is third lowest of all states and territories.

Greater volumes of wastewater and stormwater are being recycled and re-used in South Australia than anywhere else in urban Australia. For example, at Mawson Lakes a recycled water system delivers a combination of recycled and stormwater to the entire suburb for use in gardens and toilet cisterns, and is estimated to save about 800 ML of potable water each year. Several other projects in the City of Salisbury re-use stormwater to irrigate sporting fields and parklands.

The South Australian Government established a new legislative framework, the South Australia's Waste Strategy 2005–2010, to enable state and local government, industry and the community to work together to drive waste avoidance and reduction, waste re-use and recycling, and better waste disposal.

South Australia has experienced significant improvement in recycling activity for recyclables and green waste collected at the kerbside, and for building and demolition materials such as concrete, steel, timber and fly ash.

Recommendations for Action

- R6.1 Include complementary indicators to those already in the SASP to assess the interactions between targets and progress across economic, social and environmental targets, for example environmental impacts in measuring growth, by 2012.
- R6.2 Reduce transport related greenhouse gas and other emissions through land use planning policies, stricter emission standards for vehicles, investment in public transit options, and registration and stamp duty concessions for lower emission vehicles.
- R6.3 Increase energy efficiency and renewable energy requirements for all economic sectors
- R6.4 Include all government enterprises within South Australia's Strategic Plan Government energy efficiency targets
- R6.5 Increase thermal performance minimum standard from 5 stars to 7.5 stars in the short term.
- R6.6 Introduce a domestic scale gross (currently nett) feed-in tariff and extend feed-in tariffs to all renewable energy sources (not just solar)
- R6.7 Move to a user pays system that reflects the true cost of water and provides an incentive for reduced demand
- R6.8 Expand use of existing waste and recycling infrastructure to enable collection of a broader range of waste types eg 'e-waste' and improve access to collection facilities for hazardous wastes.
- R6.9 Improve information systems for better management of different waste types.
- R6.10 Adjust SASP Target 3.8—Zero waste, applying a target for reduced waste generated per capita by, say, 25% by 2018.
- R6.11 Make state government support for major events contingent upon a waste management plan based on the waste hierarchy.
- R6.12 Improve enforcement of litter legislation.

Greater efforts need to be made to reduce the impacts of transport on greenhouse gas emissions and air pollution. Car ownership is continuing to increase and policies are needed to reduce private vehicle use and complement transit-oriented planning.

Further information

Australian Bureau of Statistics (ABS), Australian Demographic Statistics www.abs.gov.au/ausstats/abs@.nsf/ mf/3101.0

Department of Transport, Energy and Infrastructure

www.dtei.sa.gov.au

Planning SA (including Planning and Development Review)

www.planning.sa.gov.au

SA Water

www.sawater.sa.gov.au/sawater

South Australia's Waste Strategy www.zerowaste.sa.gov.au/waste_ strategy.php

Trends

- South Australia's population growth rate is INCREASING.
- Passenger-kilometres by road passenger vehicle transport are INCREASING.
- Road freight task (tonne-km) is INCREASING.
- Proportion of the State's electricity sourced from renewable resources is INCREASING.
- Re-use of treated wastewater is INCREASING.
- Materials consumption as demonstrated by per capita waste generation is INCREASING.
- Amount of solid waste sent to landfill is DECREASING.

Moving forward

The tension between targets in South Australia's Strategic Plan (SASP) for population growth and reducing the ecological footprint requires greater integration of policies and coordinated implementation of targets. For example, the target to reduce the state's ecological footprint by 30% would, with a population of two million people, require a per capita reduction in ecological footprint of approximately 54%. Similarly, expansion of mining in South Australia will place significant pressure on targets to reduce energy use and emissions.

Effective zoning policies must continue to balance the demands for residential development with the need to maintain adequate and proximate agricultural land, and protection of areas of biodiversity significance.