

Review of operations

Environmental sustainability

Goal: to continue to lead, by example, in the areas of campus planning and development, sub-tropical architecture and all operations that have environmental impact

Identify and implement additional means by which the University can exemplify sustainable and environmentally responsible campus development

Awards

USC achieved an Environmentally Sustainable Development (ESD) result of 80/100 in the annual Australasian Tertiary Education Facilities Management Association (TEFMA) Benchmark survey, conducted in 2007 and published in 2008. ESD relates to master planning for enhancing ecological values, construction and rehabilitation projects incorporating principles of 'green buildings', space usage, energy use, water, waste and natural environmental components.

Building C (home to the Chancellery) was completed according to ESD principles for \$13 million in 2007. This year it won the:

- Public Architecture Award;
- Harry S. Marks Award for Sustainable Architecture; and
- Colorbond Award for Steel Architecture.

Campus development

Building projects this year included completion of the \$13.8 million Health and Sport Centre featuring large expanses of glass for natural lighting and an energy-efficient air conditioning system. Federal Treasurer Wayne Swan officially opened the building in July.

Stage One of the Compensatory Habitat, an environmental project in partnership with development company Stockland, finished in May. One of the largest such initiatives attempted in Australia, it involves translocating 12.2 hectares of rare and threatened native vegetation from Bundilla to a new 15ha site at the University. The initiative fits seamlessly with USC's commitment to sustainability and regional partnerships, and will provide a living laboratory for teaching and research as well as a place to relax in natural surrounds.

The Queensland Minister for Regional Development and Industry, The Hon Desley Boyle, officially opened the Business Accelerator at the Innovation Centre. The facility integrates office space, fast speed fibre access, business services, and executive coaching and strategic business planning for established technology and knowledge-based businesses and professional service firms.

The Business Water Efficiency Program funded 50 percent of the cost of a submersible pump for recycling water from the University lakes for uses such as cooling tower air conditioning. A return line gives the option of returning all used water to the lake system at any selected point.

The Bus Interchange, funded by Queensland Transport and including the Greenlink to Scholars Way, was due for completion this year but has been delayed to commence in January 2009.



2003 science graduate Kate Hoad, now a restoration ecologist with Arborcare Queensland, checks a rare Boronia plant transplanted to the University as part of the Compensatory Habitat project. Her job includes arranging plants according to their specific hydrological and topographical needs; and she'll be working on site for the next three years alongside USC researchers keen to monitor the Habitat's health and record changes in the biodiversity of its flora and fauna.

Environmental sustainability

Identify and implement cost-effective measures to maintain the security and environmental integrity of the Sippy Downs campus as the surrounding urban fabric becomes more dense

Campus security

Capital Programs and Operations (CPO) sections, including Security, was reunified in a new building adjacent to the Arts and Social Sciences Building and this central office was designated a Critical Incident Response Centre for use in emergencies.

The first megapixel camera was installed as a trial to boost security along the University–UniCentral pathway; and the Closed Circuit Television (CCTV) network continued to expand:

- within buildings, main concourses, computer laboratories and high-risk areas; and
- in new open-space areas associated with building construction.

Extra fencing (including perimeter fencing) also improved security and vehicle control.

Traffic and parking

Opening of the Dixon Road interchange alleviated peak-hour traffic congestion at the entrance to the University, and traffic counts conducted around week six of each semester contributed to a longitudinal study monitoring vehicle movements to and from campus.

The University continues to suffer from overflow parking and attendant issues; and this year two temporary overflow parking areas were stabilised with road base to accommodate some of these vehicles.

Energy consumption/expenditure

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Annual consumption in gigajoules (GJ)	8,956	10,597	12,048	13,027	14,596	19,867	22,200	21,976	23,664
Energy consumption per EFTSL (GJ/EFTSL)	4.3	4.4	4.6	4.8	4.9	6.1	5.9	5.3	5.2

Cleaning and Waste Management Services

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total cost cleaning (\$/EFTSL)	109	118	132	132	127	110	99	136	137

Security

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total cost of security (\$/EFTSL)	N/A	N/A	152	193	182	158	151	148	154



Workmen unload some of the 30,000 squares of habitat relocated to the USC campus.

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Promote and initiate projects and other activities that aid in protecting and sustaining the green campus corridor linking the Sippy Downs campus with Mooloolah National Park

Continuing low-key protective measures included maintaining limits on activities such as bird watching, animal monitoring and bushwalking along management trails. Bigger initiatives included completion of Stage One of the Compensatory Habitat and the following World Environment Day activities:

- University academics and students helped 200 Year 8 students from Chancellor State College plant more than 400 swamp mahogany and pink bloodwood seedlings in College grounds. These will enhance

the wildlife corridor for native animals and birds and so encourage children to care for the environment; and they will complement a revegetation program in the Mooloolah River catchment area, likely to boost water quality in the river.

- Thousands of people attended *Small footprints, big steps—our region's future*, a huge festival on campus co-hosted by USC, Sunshine Coast Environment Council, Sunshine Coast Regional Council and SEQ Catchments. The event addressed ways to deal with future rapid population growth and development, and included displays by green technologies and businesses, live music, activities for children, forums and workshops. A highlight was the Mayor's Forum discussing how the Sunshine Coast might become the most sustainable region in Australia.

Plan and undertake actions to increase the University's and broader community's awareness of, and respect for, the campus as an environmental sanctuary for all native wildlife

The Compensatory Habitat preserves an entire slice of the environment for the benefit of local and wider communities, now and in the future. On a smaller scale, continuing moves aimed at sustainability included:

- support for the Faculty of Science, Health and Education to monitor animals movements;
- maintenance of fencing and wildlife sanctuary signage; and
- continuing prohibition of domestic animals on campus.

Key performance indicators

Proportion of operating expenditure allocated to environmental sustainability

Twenty-eight percent of the \$13.8 million spent on building the new Health and Sport Centre related to sustainable initiatives. Building features taken into account included:

- a naturally-ventilated foyer;
- an airconditioning system designed for part-floor use as required; and
- capacity for using either natural ventilation or airconditioning to cool the gymnasium.

Energy consumption

Power usage per Gross Floor Area (GFA) was 0.4735 GJ/m² – below annual target of 0.55 GJ/m².

Carbon emissions per GFA were 120.28 kg of CO₂/m² – below annual target of 135kg of CO₂/m².

Water consumption

Total water consumption per kL was 4.6/EFTSL – below annual target of 5kL per EFTSL per year.

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total water consumption (kL)	9995	8731	10,375	13,605	15,960	17,154	20,652	20,483	20,939
Water consumption per EFTSL (kL/EFTSL)	4.8	3.7	3.9	5.0	5.4	5.3	5.5	5.0	4.6



The year 2009

- The Bus Interchange, funded by Queensland Transport, will be completed following delays in 2008.
- Stage II of the Compensatory Habitat is to be completed.
- Design of the Building H extension for science laboratories will be undertaken.
- Photovoltaic systems will be designed and constructed at Dilli Village.