

CAMPUSES AND RESOURCES

Three main new buildings completed

Library retrieval system completed with capacity for 900,000 items

More than 95% landfill diversion achieved

Campus developments

Since its inception in 2008, the Campus Master Plan has delivered 10 projects in eight locations across the university.

The redevelopment of the campus represents more than buildings — it facilitates the reinvention of education, and promotes future-focused, collaborative, technology-enabled learning and research at UTS.

The custom-designed new buildings and spaces reflect the way students learn, and support a student-centred learning model that prepares graduates for a fast-changing global workplace.

These new buildings and facilities support the reshaping of education at UTS, while giving our partners in industry, government and the community access to world-leading facilities and capabilities within Sydney's burgeoning education, science and creative digital hub.

The three main new buildings — the Engineering and IT Building (previously known as the Broadway Building), the Dr Chau Chak Wing Building, and the Science and Graduate School of Health Building with the library retrieval system below (previously known as the Thomas Street project) — were completed this year on time and within budget.

The first and largest of the new buildings, the Engineering and IT Building, was officially opened in June. Representing a \$240 million investment in the future of learning and research, its classrooms, research facilities and public spaces accommodate up to 5000 students and staff.

Designed by Denton Corker Marshall, the building is defined by an aluminium 'binary code screen', so named because the façade is patterned with 1s and 0s; the digits that underpin computer programming language.

The building's design is as striking on the inside as it is on the outside. A crevasse-like atrium with stairs between floors runs through the heart of the building, with teaching, learning, research and social spaces clustered around the atrium.

In addition to collaborative theatres and classrooms, the building is home to the UTS Data Arena: a 360-degree interactive data visualisation facility. Six 3D-stereo video projectors blend images for a seamless three-dimensional panorama; creating an immersive virtual reality environment that brings data to life. Another feature of the facility is the use of open source software, which enables users to take the fundamentals of the existing source code and tailor it to their own purposes.

The data arena will give researchers an opportunity to bring their data to life. It presents the opportunity for UTS to enhance its own research capabilities, as well as that of its industry and government partners, across a broad range of disciplines — from mapping the path of parasitic bacteria to transport planning to fashion design.

The building opened for teaching in Spring semester 2014.

The Frank Gehry-designed Dr Chau Chak Wing Building reached practical completion in November. Staff and higher degree by research students moved in shortly after, with general classes to commence at the start of Autumn semester 2015.

With its focus on collaborative learning and contemporary technology, the Dr Chau Chak Wing Building reflects and reinforces the creative thinking that underpins the teaching and research undertaken by the UTS Business School and, more broadly, the university.

It was in 2010 that the design for the building was revealed: the only Australian building designed by Frank Gehry, one of the world's most celebrated architects. Its unique exterior of undulating brickwork and glass is combined with its thoughtful interior with its focus on collaborative and creative learning.

The Science and Graduate School of Health Building was completed and staff began to move in at the beginning of November. General access to the building will commence at the start of Autumn semester 2015.

The building incorporates a 200-seat auditorium, a number of specialist labs, and a range of collaborative teaching spaces. There are also a number of public areas for the UTS community.

Occupying an entire floor length, the building's state-of-the-art Super Lab is a vast open laboratory: by far the largest at UTS and one of only two in Australia. The 26 workbenches each seat eight students and are fitted with touchscreen monitors and microphones.

This technology allows multiple classes across different disciplines to work concurrently. Every second bench features a demonstration station to enable teachers to work closely with their students.

Appropriate for a building that houses the School of the Environment, the building has strong green credentials. It achieved a 5 Star Green Star rating, and its sustainability features include a roof garden, a 27,000-litre rainwater tank and a façade comprising mainly recycled material.

In November, the 'Green' of the new Alumni Green was completed; marking the last piece of the development of this site (after the completion of the 'Heart' and the 'Garden' earlier). The new-look Alumni Green provides an important central meeting place for the UTS community, filled with student-focused social spaces.

The library retrieval system (LRS), the second of its kind in Australia, was completed in June after 18 months of construction. With a capacity for approximately 900,000 of the library's older and less-frequently borrowed items, it stretches five stories underground.

The LRS will ensure that there is room for the library's print collection to grow well into the future. It also allows for a significant repurposing of space in the current City campus library; from a place dominated by books to a place centred on students, academics and researchers engaged in a range of learning and research activities.

A number of enhancements were made to library services to ensure the smooth transition to the LRS, including a seamless one-click request option from the library website for items stored in the LRS, regular two-hour deliveries of requested items, and electronic delivery of requested journal articles from print journals stored in the LRS.

Sustainability

With the Campus Master Plan well underway UTS Green continued to ensure that sustainability principles were integrated into the planning, design and construction phases of the buildings and associated infrastructure that is critical to efficient operational performance.

The sustainability of our new buildings was recognised this year through the awarding by the Green Building Council of Australia of a certified 5 Star Green Star rating to the Engineering and IT Building and the Science and Graduate School of Health Building. This is in addition to the certified 5 Star Green Star rating awarded to the Dr Chau Chak Wing Building in 2013.

The Engineering and IT Building's sustainable features include rooftop solar and wind energy, recycled rainwater, a green wall and Australia's first urine diversion phosphorus recovery technology. The building functions as a 'living lab' with innovative technologies and data from approximately 2000 meters and sensors accessible for teaching, learning and research purposes.

The Engineering and IT Building was also highly commended at the NSW Government Green Globe Awards in the Built Environment Sustainability — Commercial and Residential Properties category, and won an Australian Institute of Refrigeration, Airconditioning and Heating award for its innovative use of solar energy. As part of World Green Building Week in September UTS Green ran public tours of the new building. These proved so popular that sustainable building tours are now offered on a monthly basis.

Other projects completed in 2014 included the Haberfield Rowing Club that features rainwater recycling, natural ventilation and recycled timber, and Alumni Green, which incorporates certified sustainable timber, drought tolerant planting and recycled stormwater for irrigation.

UTS continued to publicly report its greenhouse gas emissions under the National Greenhouse and Energy Reporting scheme. The graph on page 58 outlines the university's energy and water consumption from 1999 to 2014 against changes in floor area and equivalent full-time student load (EFTSL).

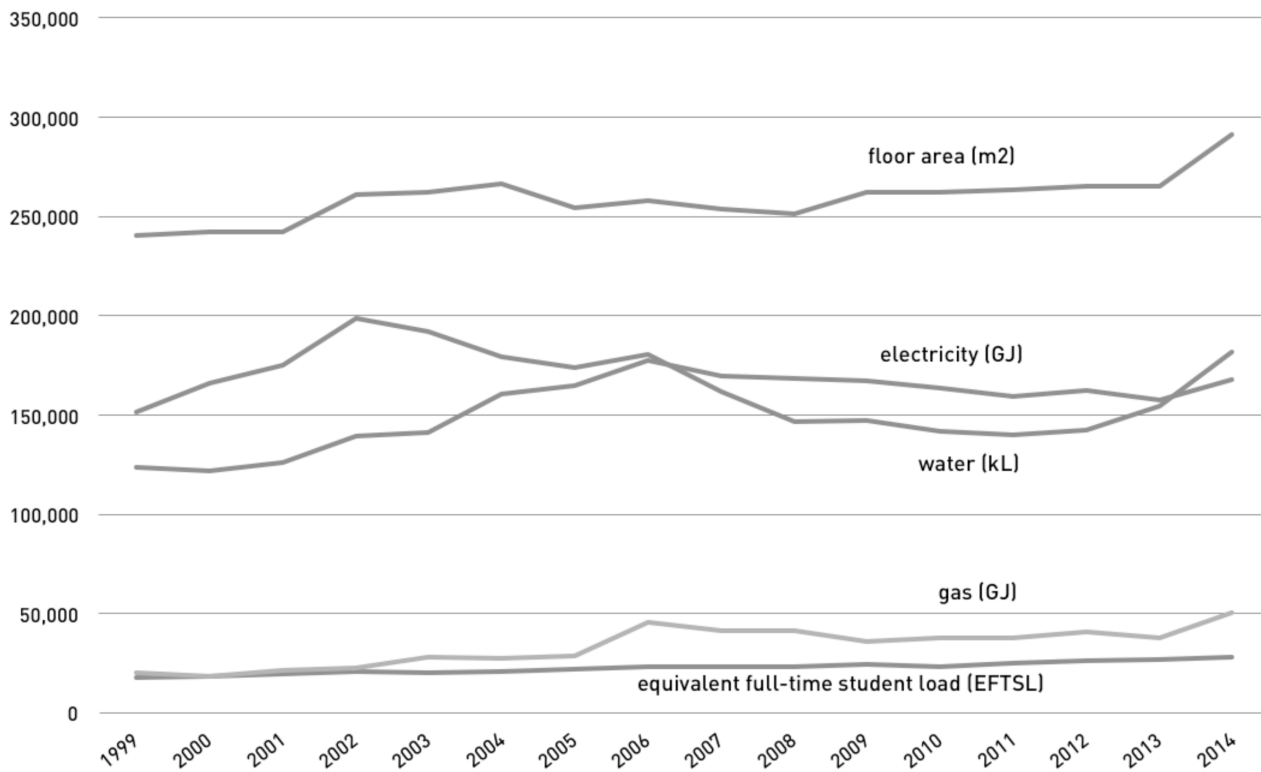
2014 saw an increase in the university's floor area (10 per cent), which was reflected in an increase in energy, water and gas consumption from 2013. UTS achieved a one per cent reduction in electricity use in 2014 compared to the 2007 baseline, however gas and water consumption increased by 21 per cent and 12 per cent respectively. UTS has made a commitment to achieve a 30 per cent reduction in greenhouse gas emissions based on 2007 levels by 2020–21 and continues to investigate the installation of additional renewable energy and low carbon gas-fired trigeneration technology.

Campus waste recycling was augmented with the purchase of two 'hungry giant' polystyrene compactors. The UTS Cleans Up initiative, which introduced mini-bins to office desks and food waste recycling in office kitchens, was a finalist in the Australasian Campuses Towards Sustainability Green Gown Awards.

Construction material recycling on all CMP sites was monitored throughout the year with builders achieving more than 95 per cent diversion from landfill.

The UTS Sustainability Policy, comprising principles for integrating sustainability across the four key areas of research, teaching and learning, campus operations and community engagement, was approved by UTS Council in November.

Utilities consumption 1999–2014



Sustainable community

In 2014 UTS Green continued its focus on coordinating sustainability initiatives across the university and promoting sustainable practices and engagement with the UTS community. UTS Green worked with groups on campus, including ActivateUTS, the UTS Library, the Students' Association and the Student Environment Collective, to run or support a number of events throughout the year, including Earth Hour competitions, O-week and Ride to UTS Day. The Green Staff Network, established in 2013 for staff who have a keen interest in helping drive sustainability, continued to expand.

Green Week, delivered in collaboration with neighbours the Australian Broadcasting Corporation and TAFE NSW Ultimo, took place in June with events including a green debate, film screenings, electric wheels expo, photography competition and exhibition, and Green Week dinner. Deputy Vice-Chancellor and Vice-President (Resources) Patrick Woods hosted a World Environment Day morning tea to recognise and celebrate the work of committed UTS staff and students.

2014 Green Hero award winners were staff member Laurence Stonard, student Jack Fisher, UTS Housing facilities manager Frank Ruggiero and PhD candidate Dale Radford.

Ongoing improvements were made to the UTS Green website to improve access to sustainability information, news and activities, including new videos exploring sustainability within each of the university's faculties. Other communications included the UTS Green monthly e-newsletter and regular updates on the UTS Green Facebook page.

UTS continues to participate in the City of Sydney's Better Buildings Partnership, promoting sustainable practice among city property owners. The partnership won the Banksia Foundation's Innovator of the Year in 2014 and was also highly commended at the Green Globe Awards.

UTS Green and the Institute for Sustainable Futures collaborated with the City of Sydney and not-for-profit re-use centre The Bower to deliver a 'fix-it' workshop series for the community. The workshops taught cheap and easy ways to repair everyday household items using readily available materials and tools.

Promoting sustainability research, UTS and the Institute for Sustainable Futures are involved in the CRC for Low Carbon Living urban precinct project studying the retrofitting of precincts to facilitate more efficient resource use and carbon reductions.

2015 will see continued sustainability initiatives such as digital screens displaying sustainability performance.

Kuring-gai campus

The UTS building on the Kuring-gai campus will be handed over to the New South Wales Department of Education and Communities next year.

All teaching and learning activities will move from the Kuring-gai campus to the City campus in time for the new academic year in 2016.