

BUTS UNIVERSITY OF TECHNOLOGY, SYDNEY

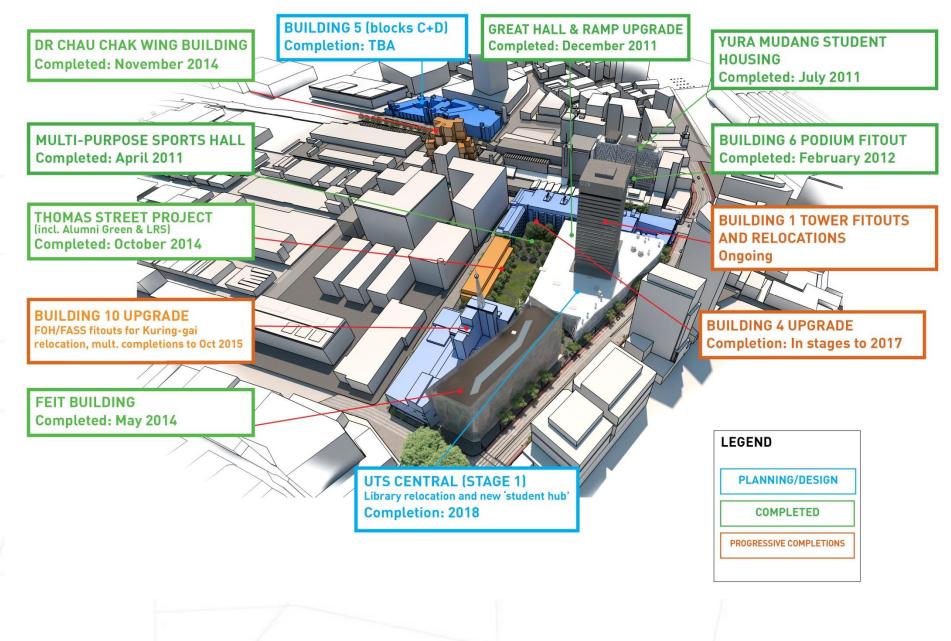
Power to the people !

ACTS Conference Geelong 21st – 23rd October 2015

Danielle McCartney

Manager, Sustainability University of Technology, Sydney

UTS CITY CAMPUS MASTER PLAN BREAKDOWN BY PROJECT TO 2018













UTS: InProgress

NIVERSITY OF

MASTER PLAN REVIEW: BUILDING

THE BIG VISION

Curious about how the Master Plan has tracked in

Watch the year in review and

hear from the project teams

Have your say

that are on the ground.

Watch the video here

2012?

an't read this email? View it in your web browser.

UTS: InProgress December 2012

LATEST NEWS



Looking Forward to the "Big Three"!

While 2011 was when the first new projects opened, 2012 has been defined by the rapid progress of the three largest projects proposed under the City Campus Master Plan.

The Dr Chau Chak Wing Building, Broadway Building and Thomas Street Project have all made remarkable progress. Take a brief look at the year that was ...

Read more

PROJECTS IN PROGRESS



BROADWAY BUILDING The collapse of the tower crane on the Broadway Building site was a dramatic way to end 2012. But

work on site is underway once again.



DR CHAU CHAK WING BUILDING UTS has appointed Lend Lease's project Dr Chau Chak Wing Building.

Read more



With 2012 at an end, the Stage 1 upgrade of Building 1's troublesome lifts remains on track for completion in February 2013.

Read more



biggest hole but work resumes in 2013 on a project that will redefine the heart of UTS. Read more



UTS held a staff/student information session to management and construction business to build the provide an update on the upgrade program, and address concerns about recent poor performance.

Read more

POINTS OF INTEREST



new green space



Master Plan Survey winners announced



Want to find out more?

UTS is creating one of the most vibrant, cutting-edge campuses in Australia. See exclusive content on the campus of the future and have your say by joining the City Campus Master Plan facebook page.

Visit our website

f Have your say



Christmas 2012 will be a quiet time for UTS's





Project Updates

rom: Kiera Leggereit

Subject: Broadway Building Update 15 June 2012

Morning all;

As noted in last week's update this has been a quiet week following the long weekend, industry RDO and the workers planned march to the raily against proposed state gove R.I.P flag flying from cranes throughout the CBD (including ours), which was a mark of respect for people who have died in the construction industry.

Staff Forum

A staff forum presentation and morning tea will be held on Thursday 21st June from 10:30am to 12:00pm in CB02.03.17 a formal invite will be issued under separate cover shon Marshall and Lend Lease on the updated design and construction phase of the project including important updates on upcoming noise and disruption to occupants of CB10.

A general update follows below:



GENERAL DISRUPTIVE WORKS

Activity	Level	Area	Impact	Duration
1) LL Crane Crew continue material handling to all areas of Site general crane noise	84, B3, B2, B1	ALL	Medium	7am to 5pm
 Continue install form work to areas 1&2 B1 and L00 Medium Noise using power tools/general hammering etc 	B1 & L00	1	Medium	7am to 5pm
3) Pour concrete to B1 Area 1 & 2 Thursday	81	2	Medium	7am to 3pm
4) General Site deliveries, and concrete deliveries medium noise	Jones Street	Jones Street	Medium	7am to 5pm
5) Pour concrete to columns and walls Wednesday areas 3&4 B4	B4	3&4	Medium	7am to 5pm

THE WEEK AHEAD

- The two remaining 13 tonne excavators will be lifted out of site via a mobile crane on the weekend leaving only a smaller 5 tonne excavator to complete the remain then the rock hammering should be largely completed.
- Formwork and reinforcement installation will continue as per above table.
- Any remaining excavated material will be put into bins and lifted out using the crane.
- As per above table formwork and reinforcement including anchors for post tensioning should be complete in Area 1 by mid week to allow pouring the first portion

Some photos below of progress this week for your information!

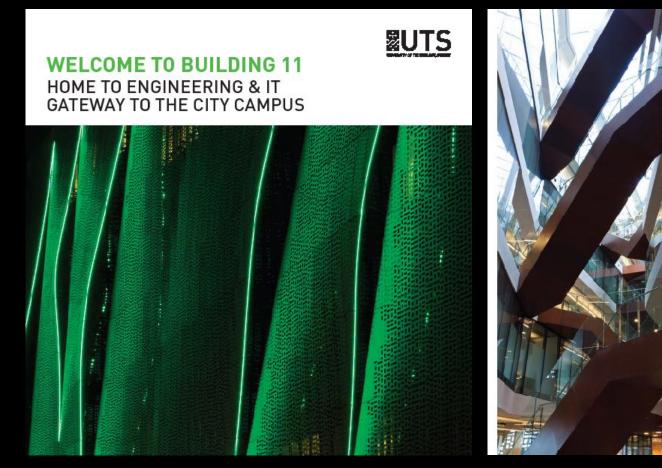
Formworkers installing B3 formwork (Left), installed formwork for B3 (right)



View from Western scaffold (left), delivery of formwork via crane and new eastern scaffold stair (right)



Staff welcome packs



YOUR NEW BUILDING

Building 11, also known as the Engineering & IT Building, is the single-largest facility to be constructed under UTS's City Campus Master Plan.

It accommodates the Faculty of Engineering and IT, along with the majority of its specialist facilities, for the first time in the faculty's history.

Rising 13 storeys above the ground, the building, designed by Melbourne-based architects Denton Corker Marshall, is the dramatic new gateway to downtown Sydney and UTSS City Campus. The building's soaring "binary screen", named for the pattern of 1s and 0s, make it a local landmark.

On the inside, a range of state-of-the-art teaching and learning spaces feature the latest technology and facilitate collaboration and practice-based learning. The future of research is also at hand, with leading-edge research facilities, like the Disruptive Design Lab and Data Arena, the most advanced 3D data visualisation centre in Australia.

The building is targeting a S-Star Green-Star rating. A root-mounted wind turbine, solar panels and solar concentrating troughs feed into the building's 'micro-grid' to generate power for various laboratories and classrooms. Internal sensors placed throughout the building, internally and within the concrete, monitor air quality, sound, vibration, concrete ion erosion and movement of the structure. This Tiwing lab" data will be used for teaching and research.

Staff welcome packs

YOUR NEW WORK ENVIRONMENT

1. GETTING ACCESS TO A ROOM OR OFFICE

Rooms in Building 11, including backof-house office areas and most teaching spaces, are now accessed using the new UTS Staff Cards. To access a room, simply swipe your card across the card reader located next to the door. Cards have been pre-programmed to ensure you can access relevant areas. You should contact Security on ext. 1192 if you have any difficulties. Detailed information on the new staff cards is available on Staff Connect.

2. ADJUSTING YOUR WORKSTATION AND CHAIR

All desks in Building 11, including those in offices, are adjustable, using a mechanical lever. Likewise, chairs can be adjusted to meet your particular requirements.

You should set up your workstation and chair using the guidelines on the Building 11 Staff Connect page. It really will make a difference to your comfort levels.

3. COMMON AREAS AND KITCHENS

There is one staff-only and one shared kitchen per floor on levels 6-12. The FEIT staff common area is on level 9. Smaller student kitchenettes can be found adjacent to selected informal learning spaces.

4. WORKING IN AN OPEN-PLAN ENVIRONMENT

Open-plan work areas are industry-standard and a key part of all major new buildings and fitouts at UTS. They promote collaboration and are also a better use of limited space. However, they can be noisier and you should schedule meetings or long phone calls in meeting rooms or informal lounge areas. Please be respectful of colleagues and keep an eye out for workplace guidelines.

5. MEETING ROOMS

Bookable meeting rooms are available on each floor from levels 6–12. These are complemented by informal lounges for meeting students or quick discussions. To find out how to book a meeting room, visit the Building 11 Staff Connect site.

UTS:000 Cleans Up

UTS Cleans Up is a new initiative to reduce waste, increase recycling and save money. Under-desk bins have been removed and replaced by central bins. Cleaners will empty all central red bins on a daily basis and green bins on a twice-daily basis.

You will need to take your garbage and food waste to the central bins. This is easy to do when you are next making a tea or taking a break. Food waste goes in the green bin and general waste goes in the red bin. Paper recycling goes in dark-green/blue-lid bins. Staff will have the option of using a "desktop

litterbox", provided by UTS. Green waste is converted to bio fuel and

composted. General waste is sorted off site, with over 80% of materials recycled.

FIXING COMMON ISSUES

UTS has worked closely with consultants and contractors to ensure that Building 11 is a great place to work and study. However, constructing, moving into and operating a new building is a highly complex task. Things can go wrong, especially just after occupants have moved in. Here are some common issues and the best way to fix them.

If you note any defects with the building, such as broken lights or leaks, you should log a maintenance request on Ext. 7476 as it is probably an issue that the builder will need to address as part of their contractual obligations.

COMPUTER, TELEPHONE OR PRINTER ISSUES

Contact IT on ext. 7922 for assistance.

2. AIR-CONDITIONING

All air-conditioning is efficiently supplied via an under-floor system. Air-conditioning can be adjusted in most individual offices and open-plan workspaces via dedicated airconditioning consoles on the wall. You should read the detailed instructions on the Building 11 site.

For major air-conditioning faults, contact Ext. 7476 or 7477. Please bear in mind that getting the temperature right is always a challenge in new buildings as it can take some time to fine tune the systems. The builder has an obligation for the first 12 months following the building's completion to fix and fine tune the air conditioning las well as other building issues].

3. REDUCING GLARE

The building is mainly south-facing, which minimises the amount of direct sunlight it receives. The building's "Binary Screen" also acts as a shade screen, reducing glare.

Manual roller blinds have been installed on spaces along the north and west facades.

REPORT & HAZARD, ACCIDENT OR INCIDENT

If an accident or incident (including a near miss) occurs at UTS it must be reported. At UTS, the hazard, accident and incident reporting process is facilitated using the HIRO (Hazard and Incident Reporting Online) system.

If immediate first aid is required, you should call UTS Security on Ext. 6 or 1800 249 559 or locate the closest first aid officer.





Building User Guides (BUGs)

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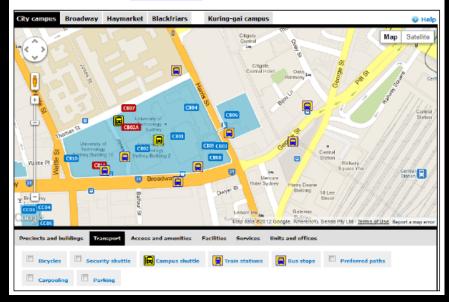
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9.3 Public Transport

Buses & Trains – The UTS Thomas Street building is located within the City campus of UTS, and it is less than 500 metres from Central Railway Station.

The City campus is located close to bus, rail and light rail services, including the major Central train station and the Railway Square Bus interchange. (Please refer to the below map).

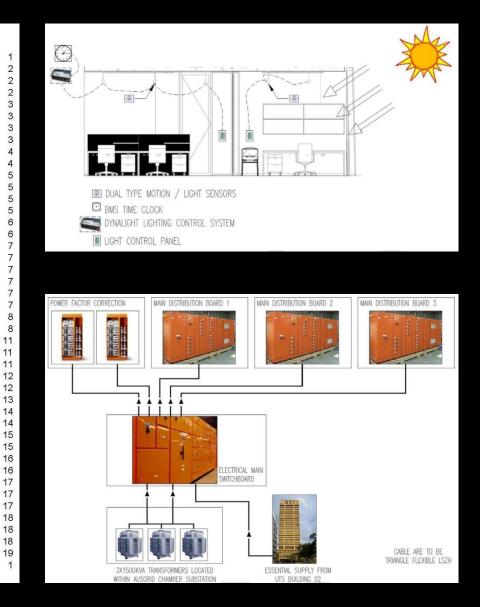
Timetables can be accessed from www.131500.com.au



Building Maintenance Guides (BMGs)

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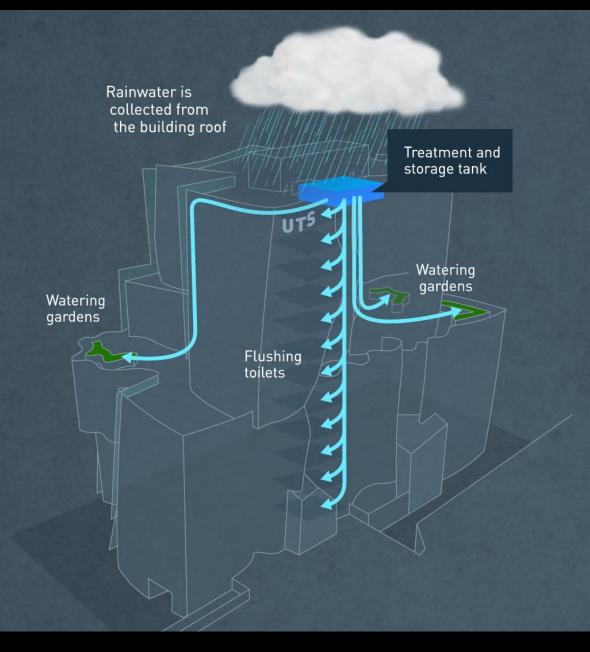
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Sustainability information screens







Collecting Rainwater

Cooled air reduces heat from equipment keeping operating temperatures constant

ALUMNI GREEN

Fresh air intake

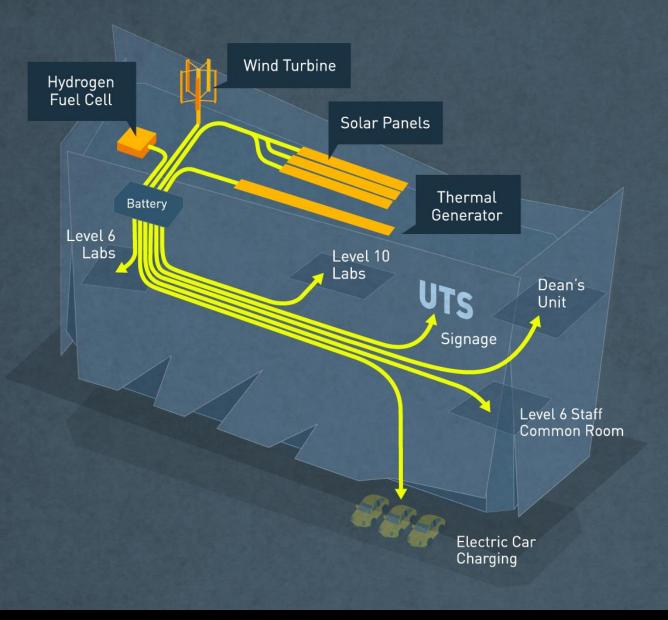
Underground Library Retrieval System (LRS)

Underground thermal labyrinth surrounds the LRS

Thermal Labyrinth

The 'thermal labyrinth' is a chamber below Alumni Green that makes use of the natural temperature difference below ground to cool fresh air for use in the building's basement plant room, reducing running costs.





Sustainable Energy

The energy currently being used on this floor of the building is equal to

37 Tour de France cyclists



This is a demonstration using sample data. Actual data will be used when the building is fully operational and occupied

56kWh

15th lap

If all the renewable energy generated in this building was powering a single electric car, it would currently be one quarter into its 15th lap around Australia.

Current total energy input: 23kWh





Car speed: 66 km/h



Sustainable building tours



Sydney Open 2015



SUNDAY 1 NOV 2015

ABOUT 2015 BUILDINGS F

DINGS PLAN YOUR DAY BUY TICKETS



JUMP TO MAP 🔸



THE GREAT SYNAGOGUE 166 Castlereagh Street, Sydney THE MINT 10 Macquarie Street, Sydney



1 Kensington Street, Chippendale

UNLOCK THE CITY

Buy your Sydney Open City Pass by 16 October for the chance to <u>win a Golden Ticket</u>.

BUY NOW



THE STEPS CENTRAL PARK 6 Central Park Avenue, Chippendale



UTS DR CHAU CHAK WING BUILDING, UTS BUSINESS SCHOOL

Building 8, level 2, 14–28 Ultimo Road, Ultimo



UTS FACULTY OF ENGINEERING AND IT BUILDING Building 11, 81 Broadway, Ultimo



UTS FACULTY OF SCIENCE AND GRADUATE SCHOOL OF HEALTH BUILDING Building 7, 638 Jones Street, Ultimo



UTS TOWER Building 1, 15 Broadway, Ultimo

Sustainable building fact sheets

器UTS

Faculty of Science and Graduate School of Health Building (CB07)





UTS:GREEN

think green do.

SUSTAINABLE DESIGN FEATURES

- Awarded a 6 Star Green Star Design rating Certified by the Green Building Council of Australia.
- Natural daylighting provided via innovative architectural solutions e.g. portholes, skylights, oculus, light well.
- High performance glazing; insulated double glazing with low emissivity coating to reduce heat transfer.
- Adjustable blinds minimise glare.
- Building cladding made from over 75% recycled glass.
- Energy efficient building services; air handling units & fan coil units with Carbon Dioxide & Volatile Organic Compound (VOC) sensors, timers & individual controls. Efficient floor displacement ventilation in the lecture theatre.
- Thermal labyrinth around Library Retrieval System cools fresh air for supply to basement plant room, reducing running costs.
- Heated & chilled water supplied from CB01 **Central Thermal Plant.**
- Roof-top solar hot water technology.
- Energy efficient LED & T5 lighting, zoning & controls.
- Highly visible internal staircases function as "bump space" to connect people, reduce lift energy use & improve health & wellbeing.
- Energy & water sub-meters connected to campus-wide Energy Management System.
- The building is a "living lab"; students are able to access data from meters & sensors monitoring indoor air guality & part of the Level 8 roof is dedicated to tree research.
- Real-time sustainability performance data linked to digital screens in public areas.
- Water bottle refill stations & drinking fountains on every floor.
- Water efficient fixtures e.g. toilets, hand basin taps, waterless urinals.

.uts.edu.au

www.



PROJECT TEAM

OWNER University of Technology, Sydney

PROJECT MANAGERS

Savills + University of Technology, Sydney ARCHITECT Bligh Voller Nield /

Durbach Block Jaggers ESD / GREEN STAR + MECHANICAL +

ELECTRICAL Steensen Varming

CONTRACTOR

Richard Crookes Constructions





SUSTAINABLE DESIGN FEATURES

- Green roof provides recreational space, insulates the building, improves air quality, provides habitat for plants & animals, & absorbs, filters & cleans stormwater run-off.
- · Rainwater capture, treatment & re-use to supply the building's toilets, green roof & landscaping.
- · Capture, treatment & re-use of fire system test & maintenance drain-down water.
- Improved Indoor Environment Quality through selection of materials, furniture, flooring, paints, adhesives & sealants & carpet with zero or low VOCs & use of composite wood products with zero or low formaldehyde content.
- Low environmental impact flooring, joinery & loose furniture.
- Timber re-used, recycled or from certified sustainable sources.
- Steel sourced from environmentally responsible steel manufacturers.
- Green concrete; a proportion of cement substituted with flyash (a waste product from power stations).
- Polyvinyl Chloride (PVC) products avoided where possible.
- Zero Ozone Depleting Potential refrigerants & insulants.
- 98% of construction waste recycled.

FAST FACTS SIZE

Project cost

Gross Floor Area 13.800m² Useable Floor Area 8 levels

8 900m3 3 basement + 5 floors + plant + roof

> \$154M (includes Alumni Green + Library Retrieval System)

- December 2007 October 2012 October 2014 27th April 2015
- DATES Start date (demolition) Early works completion Main works completion Official opening



Sustainable building videos



green.uts.edu.au

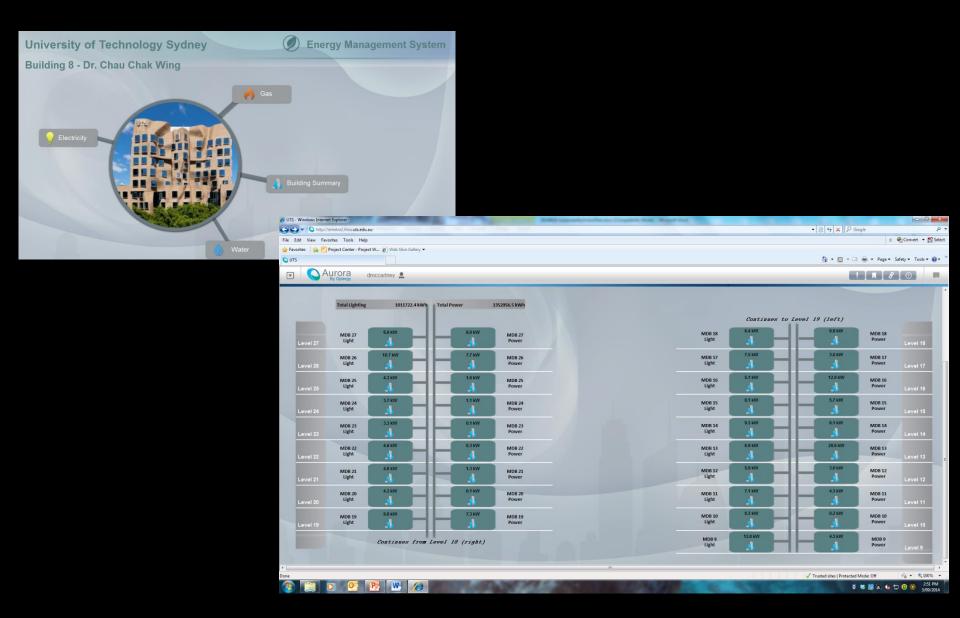
Buildings and campus are "living labs"







Campus Energy Management System



Earth Hour

BUTS

EARTH HOUR

Enter and win! Register your floor and spread the word. Save energy at UTS during the week of 23- 29 March and win great prizes.

COMETITION

CATEGORIES:

- 1st The floor that reduces power consumption by the biggest percentage - ie. your floor's Earth Hour week compared to your average.
- 2nd The floor saving the most overall kwh of electricity.
- 3th The floor with the most people participating.
- EARTH HOUR

Prizes:

- 1st \$500 donation to a cause/charity/uni club of your choice.
- 2nd \$250 donation to a cause/charity/uni club of your choice.
- 3rd Hamper of Fair Trade chocolates and treats.

Register:

Register your building's floor and UTS Green will record that floors electricity consumption over the week. We'll also provide free tips and resources throughout the week (and maybe a few incentives) on how to save energy at UTS. All you have to do is spread the word to colleagues and peers and start flicking stuff off - lights, computers, electrical equipment, shavers, curling tongs, can openers, heaters, whatever.....

For more information or to register email Seb.crawford@uts.edu.au

For more information:

www.green.uts.edu.au





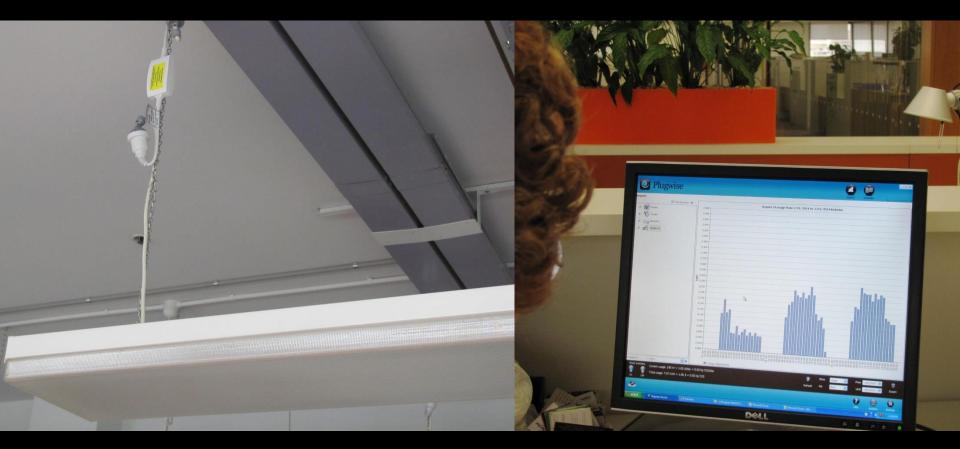
2015 Sustainability Stakes the race to reduce your use

TRACK CONDITIONS: GOOD FAVOURITE: BROADWAY LAST YEAR'S WINNER: BON MARCHE Time Remaining 05:17:26



UTS CRICOS PROVIDER CODE: 00099F UTS:MCU / JOB 191 E2 / DECEMBER 2014 IMAGES SUPPLIED BY THE CONGO APPEAL INC.

Plugwise



Flick me off !







Flick me off.



Do your bit Flick the switch

More information UTS Green (02) 9514 9087 green.uts.edu.au It's an old myth that leaving the lights on uses less energy than switching off and on again.

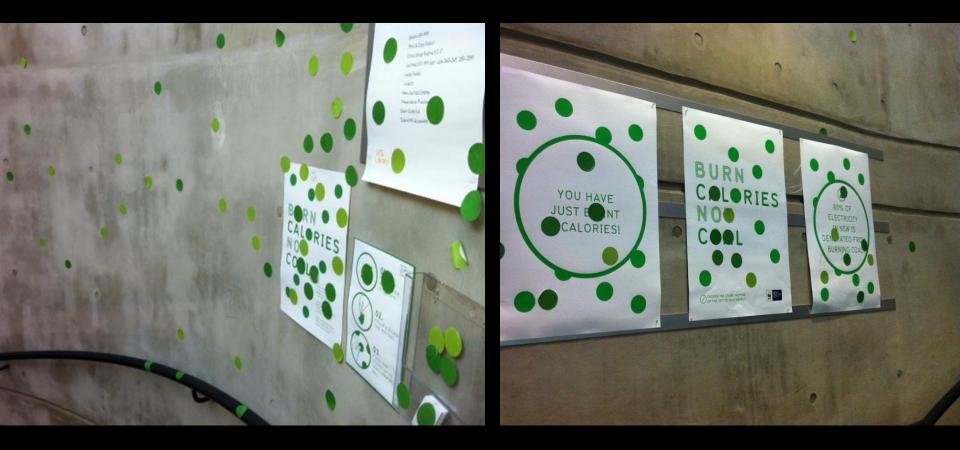
- Today's technology uses the equivalent of only a few seconds power. If a room is empty for more than 5 minutes, switch off.
- UTS has an ambitious target to cut greenhouse gas pollution by 30% by 2021. Do your bit, flick the switch.
- Encourage friends and colleagues to do
 the same.

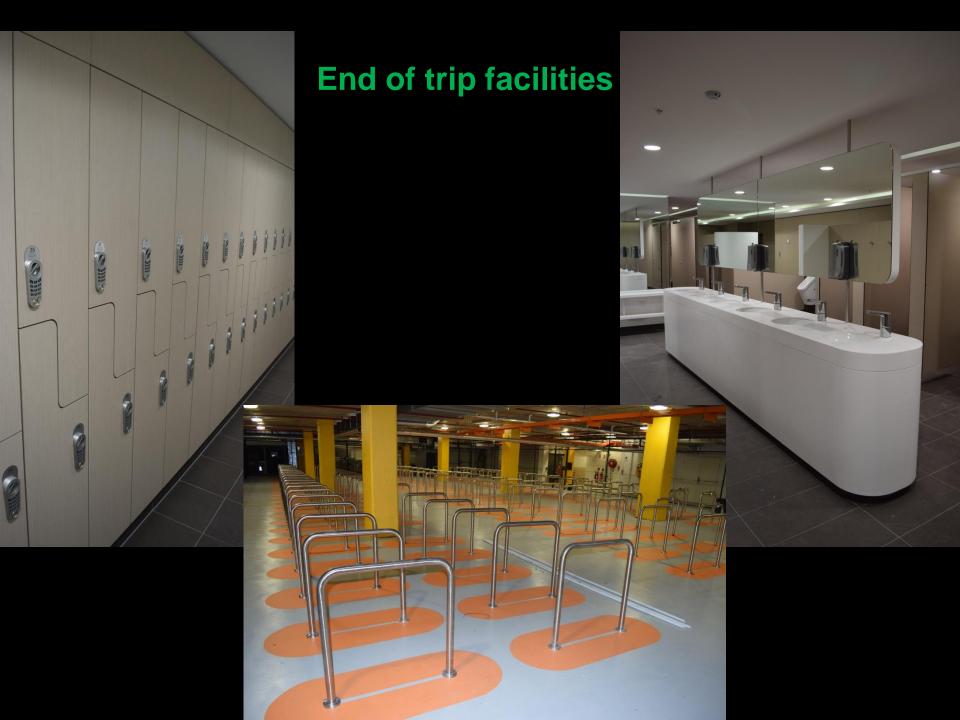


Visible stairs



Burn calories not coal !















UTS Cleans Up









WHAT GOES IN EACH BIN?



FOOD WASTE

✓ Coffee grounds

Vegetable and fruit

Indoor plant leaves

NO food containers

NO plastic bags

NO packaging NO coffee cups

If you can't eat it then

don't put it in the food

bin.

NO tissues or wet paper towels.

Tea bags

Meat

Rice

Cheese

Flowers



GENERAL WASTE

General waste and recyclable containers in this bin, to be sorted for

- Plastic, metal and glass containers and
- ✓ Milk cartons and
- wrapping
- pens, ring binders or CDs
- Tissues and paper

- PAPER RECYCLING
 - ✓ Plain and coloured paper

 - Gloss paper Shredded paper

 - Envelopes Paper folders Dividers and document wallets Cardbpard boxes Magazines

 - Newspapers Books
 - ✓ Cardsboard and paper bags

 - X NO coffee cups X NO dirty food wrappings X NO tissues or wet
 - paper towels NO pizza boxes.

There are separate bins for specialist items such as batteries, e-waste, Styrofoam, cartridges and construction waste around the University. Visit www.utscleansup.uts.edu.au for more information.

- - bottles
 - poppers
 - Coffee cups and lids
 - Packaging, such as chip packets or food
 - Stationery, such as
 - Wet or soiled paper

 - Pizza boxes.

Bubblers and drinking fountains



Refill It !



Get creative and win \$1000!

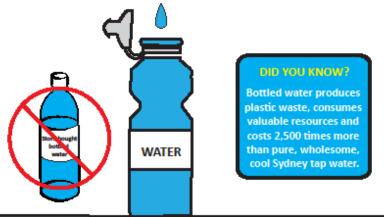
Help UTS kick the bottled water habit

Design a mechanism or campaign to encourage students and staff to refill. Maybe a funky bottle, a game or an app, or a business idea!

Competition open to all UTS students (including those graduating in 2013). 1st prize \$1000 voucher 2nd prize \$500 voucher And up to 10 commended prizes of \$200 voucher's each.

Competition closes: Tuesday April 2, 2013

TO ENTER: Read the competition guidelines at www.doiop.com/uts-refill-it







Think.Drink.Do









Questions?



