UC Sustainability Report 2017

UC Sustainability Office Report 2017

Contents

1. Introduction

This report is undertaken annually by the UC Sustainability Office.

Sustainability planning at the University of Canterbury until now has been based since 2012 on the draft 'Sustainability Strategy 2012-2022', which breaks sustainability planning into short, medium and long term objectives. Annual planning for sustainability at UC is handled by the Sustainability Office and the operational elements of this are encapsulated in the Engineering Services Operational Plan.

However, in early 2018 the University adopted a new Sustainability Framework and, given the timing we have decided to use this framework as a way of structuring this report. This Framework assumes that responsibility for sustainability at UC will be spread across the institution. Staffing in the Sustainability Office changed significantly during 2017. At the end of the year there were two (down from three) key staff members: the Sustainability Advisor and Sustainability Engagement Coordinator, both part time roles. A Community Garden Coordinator was being sought to replace the outgoing coordinator.

Learning in Future Environments (LiFE)

Last year this report was framed around Learning in Future Environments (LiFE). This was developed in Australasia by Australasian Campuses Towards Sustainability (ACTS) as a sustainability reporting and strategy framework for tertiary education institutions, and UC was one of the original participants in the beta testing phase. It is very flexible and free for ACTS members to use (UC is an ACTS member). It has been created in partnership with ACTS' equivalent in the UK. LiFE can also be used as a benchmarking tool, although we are not exploring that possibility at this stage.

LiFE is divided into four categories which cover the following areas:

- Leadership and Governance
- Partnerships and Engagement
- Facilities and Operations
- Learning, Teaching and Research

These four priority frameworks align well with UC's new Sustainability Framework, and work is underway to harmonise these with the United Nations' Sustainable Development Goals.

Further information on LiFE can be found here.

2. Leadership and Governance

LiFE recommends a clearly articulated Sustainability Strategy be adopted by the Senior Management Team.

In 2017, the Executive Director of Learning Resources developed a Sustainability Framework, which was accepted by Senior Management Team in late 2017 and adopted early 2018. This Framework states that the "University seeks to ensure that our research, teaching and learning, community engagement and operational plans align with New Zealand's national greenhouse gas emissions commitment, to reduce our ecological footprint."

It focuses on the following four areas:

- Research for Sustainability
- Teaching and Learning for Sustainability
- Sustainable Operating Practises
- Partnerships for Sustainability

The table below shows how the UC Framework aligns with LiFE, the Sustainable Development Goals and other tools we use such as Certified Emissions Management and Reduction Scheme (CEMARS), Tertiary Education Facilities Management Association (TEFMA), our Building Management System and a new tool we adopted in 2017, the newly launched Green Star Performance tool. A piece of work was underway during 2017 to develop a waterways monitoring framework, and some of the results of this exercise are contained in this year's report. The areas in blue represent opportunities for further development at UC.

UC Sustainability Framework	LiFE Framework	UN Sustainable Development Goals	Other Tools
Research for Sustainability	Learning, Teaching and Research	Yes	
Teaching and Learning for Sust	Learning, Teaching and Research	Yes	
Sustainable Operating Practises	Facilities and Operations	Yes	CEMARS, TEFMA, BMS, Green Star Performance, Waterways Monitoring Framework.
Partnerships for Sustainability	Partnerships and Engagement	Yes	ISO 20400 Sustainable Procurement
	Leadership and Governance	Yes	

3. Facilities and Operations

3.1 Biodiversity

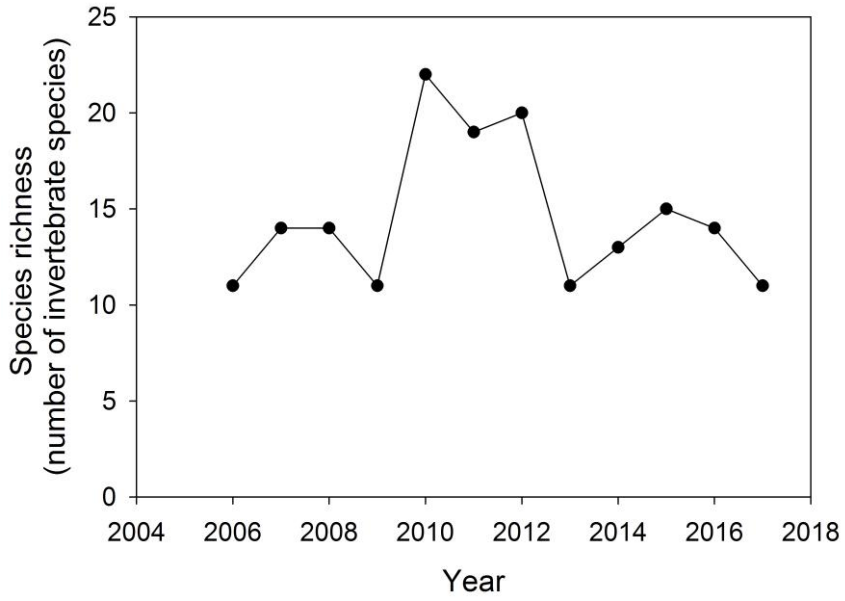
Biodiversity reporting at UC is still dependant on academics conducting class experiments and offering their results to the Sustainability Office. In 2016 we reported a positive outcome in terms of native bird counts on campus, when a Biology class repeated a field observation conducted 20 years earlier. However, we also noted a decline in the health of the Okeover Stream. This is the third year we have included a comment from Professor Jon Harding summarising this.

Enhancing mahinga kai values is a core principle in the Landscape Concept and the Waterways Issues and Options document. These fed into the high level Landscape Masterplan which was endorsed by SMT early in 2017.

During 2017 the Waterways Group began work on developing a monitoring and reporting framework for the campus streams. Preliminary work revealed that a range of data is collected at a range of sites. Sometimes this is regular, and sometimes more ad hoc. The draft framework aimed to highlight areas where the most useful data was collected most regularly and at the most useful sites. The Waterways Centre continued this work with a summer scholarship project.

A highlight for 2017 was the construction of a stormwater research station coming off the new Ernest Rutherford building and discharging into Okeover Stream. This facility will enable researchers to test a range of filtration media, the results of which will ultimately feed into the larger Christchurch rebuild efforts. The senior project manager for Ernest Rutherford, Mark Homewood, won a silver Sustainability Award in 2017 for bringing this piece of work together successfully.

Whilst all contractors responsible for sites adjacent to the two streams on campus are required to develop and manage Environmental Management Plans, there were a number of incidents during 2017 which saw limited discharges into these streams. The reduction in major projects along the streams will reduce these unintended events in future years.



Okeover Stream
Professor Jon Harding, School of Biological Sciences

The ecological health of Okeover Stream has been monitored annually since 2000 by staff and students from the Freshwater Ecology Research Group in the School of Biological Sciences at four sites along the stream on campus. In 2017 the diversity of stream invertebrate species was the lowest it has been since 2013. The ecological health of the stream is disappointingly low according to several different metrics of stream health. In 2016 the most downstream site near the University Glasshouses had 14 species (in 2012 it had 20 species), however in 2017 only 11 species were collected at this site. The MCI (a measure of stream health) indicates the stream is moderately polluted. On-going construction in the upper reaches, continued untreated contaminated stormwater inputs and sediment from construction are all likely causes for this poor ecosystem health.

The changing diversity of birds on campus
Prof. James Briskie, School of Biological Sciences

In 2016, students in the New Zealand Biodiversity and Biosecurity (BIOL273) course undertook a systematic survey of birds on the main University of Canterbury campus. It was the first time the birds had been surveyed since a study in 1990. A comparison of the 2 surveys revealed some quite dramatic changes had occurred in the intervening years, including an encouraging increase in a number of native species and a decrease in some of the introduced species (see UC Sustainability Report 2016). However, such single year surveys can provide only a brief snap-shot

of patterns of biodiversity. To determine the health of bird populations over the long-term, and any effects of ongoing changes to the campus environment, repeated surveys over a number of years are needed. With the long-term view now in mind, the BIOL273 class repeated a survey of bird diversity of campus in the spring of 2017. The same techniques were used as in 1990 and 2016, which will allow comparisons to be made between years over the long-term.

Perhaps not surprisingly, the findings of the 2017 survey were generally similar to that observed in 2016. Among the native species, both fantails and grey warblers maintained comparable numbers in both surveys. Bellbirds, which only recently colonised campus (they were not observed in 1990), increased from 4 individuals in 2016 to 8 or 9 individuals in 2017. On the other hand, the number of silvereyes dropped in half, but as this species is still flocking in the early spring, their movements can make it difficult to pin down the exact breeding population on campus. They were still the most common native bird. For the first time, our surveys recorded paradise shelducks on campus. A total of 9 individuals of this endemic duck were observed (probably 2 family groups). This species was not recorded in either 1990 or 2016, indicating that further native species may yet recolonise campus if suitable habitat is available. For all native species, almost all individuals were located in areas of native plantings, especially near the streams that pass through campus, highlighting the critical nature of this habitat for maintaining native bird populations.

Among the introduced bird species on campus, the three most common species observed in 2016 (rock dove, house sparrow and blackbird) were again the most frequently observed in 2017. Unfortunately, a pair of Australian magpies was also observed in the 2017 survey, an introduced species that was recorded in 1990 but had seemingly disappeared as it was not seen in 2016. Most introduced species were observed in the open areas on campus and in plantings of exotic trees.

The surveys will be repeated in 2018, allowing any further changes in the bird fauna of campus to be monitored as well as providing BIOL273 students with the opportunity to develop their skills as researchers.

Plant Biodiversity
Dr Pieter Pelser, School of Biological Sciences

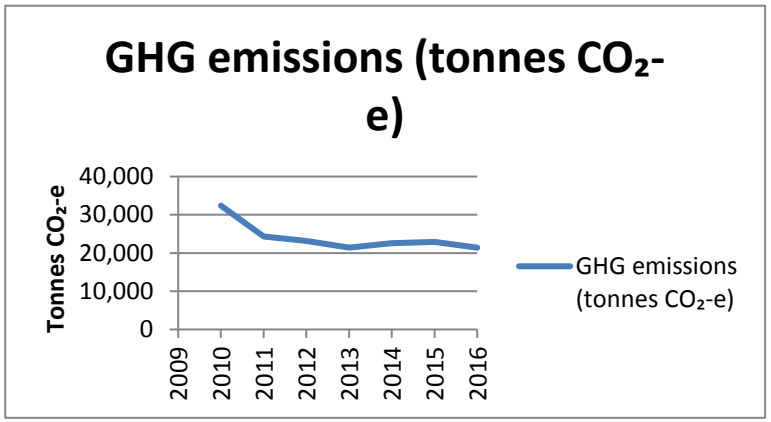
The general conclusion of the BIOL273 native woody-plant survey on Ilam campus was that many of the species present in Riccarton Bush are also found on campus, but that most species are only present in low numbers. There is a handful of species, particularly Cordyline australis, Pachystegia insignis, Podocarpus sp. and Pseudopanax crassifolius, that are very common on campus. The students found that the areas on campus with highest species diversity and most individuals of native woody plants are around the Arts Buildings, Forestry, Te Ao Marama, and areas around University Drive. The general advice of the students was to ensure that more individuals are planted of the species that are currently only present in low numbers.

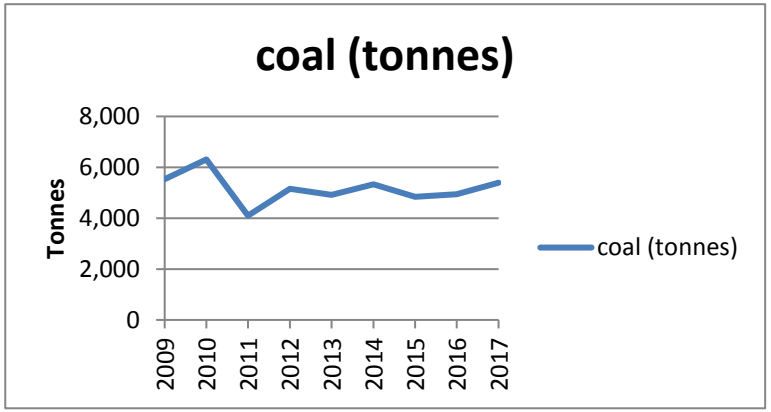
BIODIVERSITY FRAMEWORK

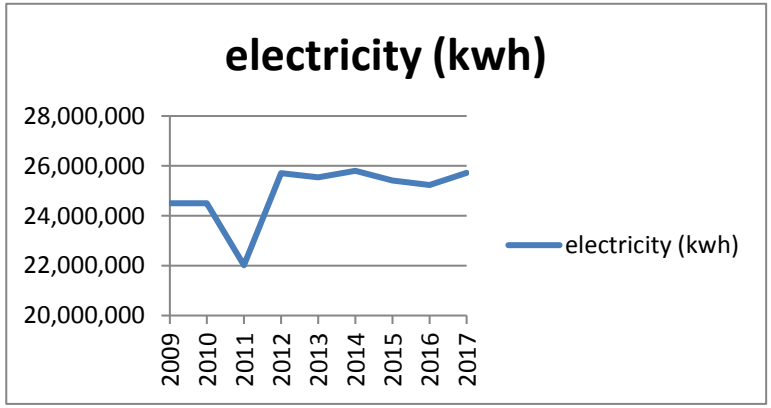
Policy and Strategy	Action-Planning	Stakeholder Engagement	Measurement
Landscape Master Plan	Landscape Concept (2014-2022) Waterways Issues and Options Waterways Monitoring Framework		Biodiversity Surveys Waterways Monitoring Framework (under development)

Communication			**Training and Support**	**Implementation**	**Links to the Curriculum**
Information about bird counts publicised through UC staff comms. Streams Website		Landscaping between new Ernest Rutherford building and Natural Resources Engineering reflects LMP intent.	Bird Counts Native Plant Counts compared with Landscape Master Plan Waterways monitoring		

CEMARS certificate presentation (see next page). From left to right: Ashish Kundalkar (Enviro-Mark Senior Marketing and Communications), Stewart McKenzie (Enviro-Mark Senior Advisor), Darryn Russell (UC Assistant Vice-Chancellor Māori and Acting Director, Learning Resources), Dr. Ann Smith (Enviro-Mark, Chief Executive), Tony Sellin (UC Energy Manager) and Chloe Wium (UC Sustainability Engagement Coordinator).







3.2 Energy

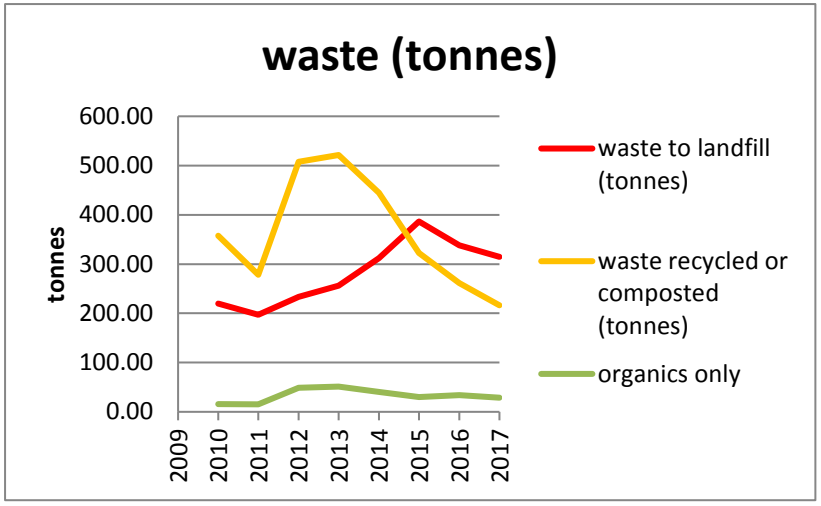
In 2017 UC continued with its CEMARS commitments, and noted that since 2010 there had been a 34% reduction in CO2 equivalent emissions. This was celebrated at an Enviro-mark awards ceremony at the Auckland War Memorial Museum, and the Engineering Services department was recognised with a gold UC Sustainability Award for its many efforts to make the campus more energy efficient, less reliant on coal and to generate fewer greenhouse gas emissions. After a small rise in GHG emissions between 2013 and 2015, the final figures for 2016 showed a decrease again.

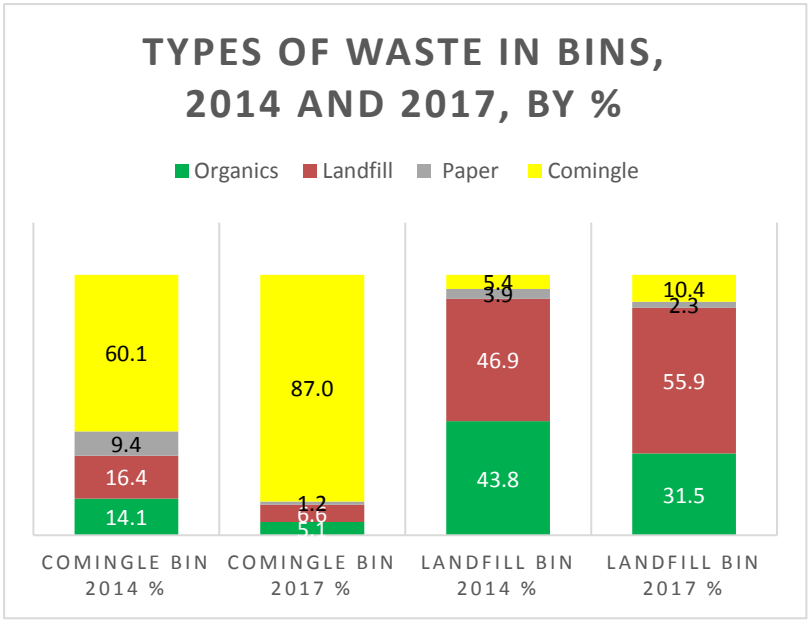
Some will note that in the same period UC burned slightly more coal than in the previous year, while GHG emissions nevertheless fell. The reason for this discrepancy is two-fold: the government formula used to calculate CO2 equivalent emissions for coal changed slightly in this period, while at the same time (and more importantly), emissions from a range of other sources dropped in 2016. Use of diesel, petrol, domestic air travel, taxis, electricity, refrigerants and CO2 all fell as compared to 2015. The drop in fuel use reflects a significant upgrade of the campus vehicle fleet over the last two years.

ENERGY FRAMEWORK

Policy and Strategy	**Action-Planning**	**Stakeholder Engagement**	**Measurement**
Energy-*Low Carbon Energy Scheme*. Carbon-*Emissions Management Reduction Plan.*	Engineering Services Operations Plan	EECA Collaboration Agreement. Meridian & Orion-partnered energy provision, EV's; PV and battery storage & Lighting.	CEMARS Campus Electricity & HVAC-web based Power metering/monitoring &BMS TEFMA benchmark reporting
Communication	**Training and Support**	**Implementation**	**Links to the Curriculum**
Electric vehicle charger comms plan Media campaign around GHG reduction Energy Website		Building by building and project by project	Guest lectures in Mechanical Engineering, Civil and Natural Resources Engineering and Chemical and Process Engineering by Energy Manager Tony Sellin

Rob Oudshoorn (left) receiving the Gold Sustainability Award from Darryn Russell (right), AVC Māori and Acting Director, Learning Resources



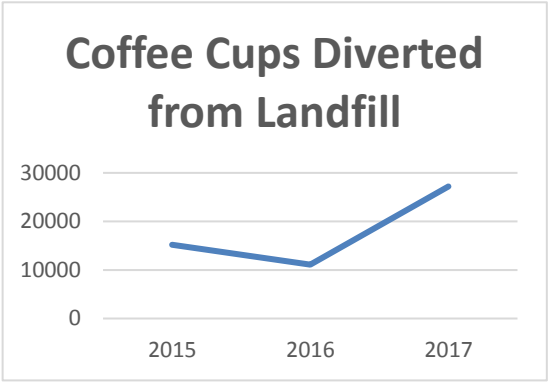


3.3 Resource Efficiency and Waste

UC has carefully monitored its waste since 2010. It is pleasing to see yet another drop in waste tonnages for the 2017 year, as the effects of the Canterbury Earthquakes begin to subside and disposal patterns start to return to normal on campus.

The first detailed waste audit since 2014 was conducted at UC in 2017 (using the same methodology), which showed an overall improvement in contamination rates in both comingle recycling bins and in landfill bins, a significant achievement. As a result of this audit, the Sustainability Office noted that the area to make the biggest impact was in reducing organics contamination of landfill, which, though markedly improved since 2014, is still high at 31.5%. Food is being placed in disposable service ware and placed in landfill bins rather than being separated out. A communications plan has therefore been developed to press home the importance of sorting this waste. At the same time, discussions continued in 2017 about introducing compostable service ware in cafes with a view to reducing the amount of landfill. While this will still need to be separated out, ultimately we believe that food tucked into compostable packaging will no longer be an issue, as the whole lot will be able to be composted.

The coffee cup diversion trial continued in 2017, with a further 27,000 cups diverted from landfill. An ideal back up system was still being developed in 2017, and it is hoped that this will be resolved during 2018.

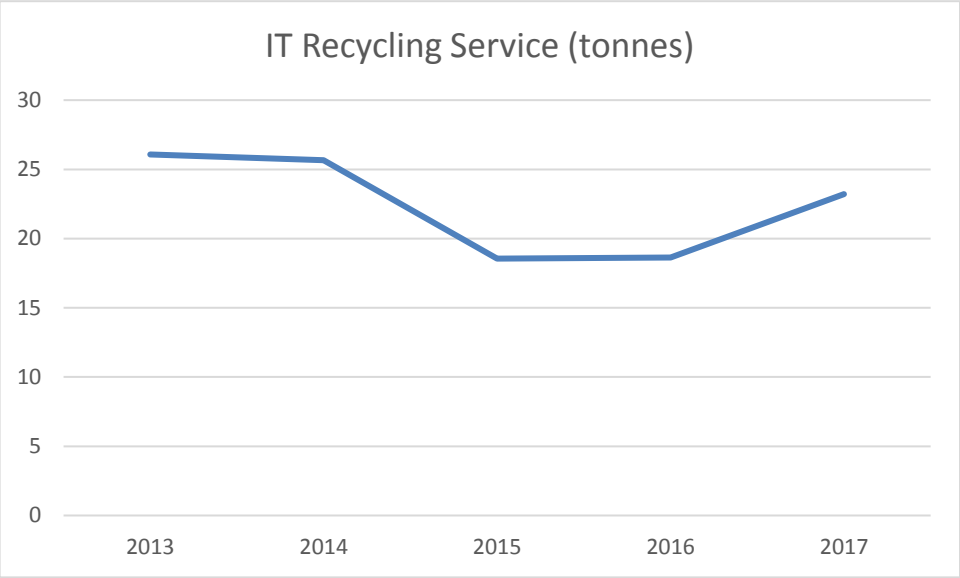


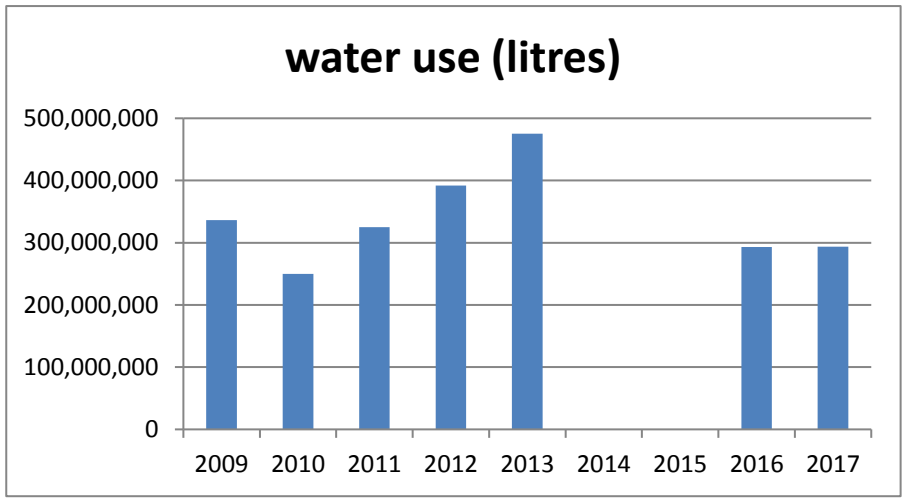
RESOURCE EFFICIENCY AND WASTE FRAMEWORK

Policy and Strategy	Action-Planning	Stakeholder Engagement	Measurement
	Waste Plan Engineering Services Op Plan	Waste Watchers	Three yearly audit Coffee cup sorting counts TEFMA reporting
Communication	**Training and Support**	**Implementation**	**Links to the Curriculum**
UC Sustainability social media Some coverage from UC internal comms Waste Minimisation Website			

3.4 IT Services

We are also pleased to be able to report on IT Recycling for the first time in this Sustainability Report, thanks to the efforts of the **CTS** (Client Technologies Support) team over the last several years. This data details the number of machines that have been processed by the **CTS** team and diverted from landfill – almost 113 tonnes since 2013.





3.5 Water

Water use has remained remarkably static at UC since the previous year. As mentioned in previous years, data collection for water use became problematic and was suspended for 2014-15.

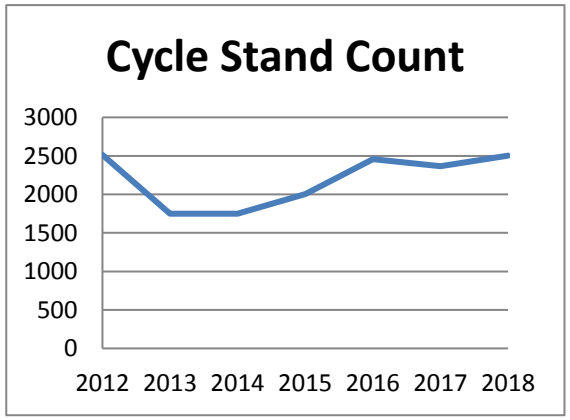
Partly in response to this, a project was initiated to install domestic cold water meters on all buildings. This project was approximately 98% completed by the end of 2017, and a handful of smaller buildings feeding off a main building do not have sub meters. The completion of this project will improve reporting on water use dramatically.

WATER FRAMEWORK

Policy and Strategy	**Action-Planning**	**Stakeholder Engagement**	**Measurement**
	Engineering Services Op Plan		Metering
Communication	**Training and Support**	**Implementation**	**Links to the Curriculum**
Water Website	Eco Office Programme	Design Guidelines Water Efficiency Labelling and Standards (WELS)	

3.6 Transport

The UC Transport Advisory Panel met several times during 2017. The Panel signed off on the final report of the 2016 UC Travel Survey, which included a demographic analysis to validate the survey findings and detailed mapping to help us understand more about travel movements by mode. The report also crystalised a work plan for the Panel for 2017-18. Of a wide range of projects across all travel modes, cycling received the most attention in 2017.



In particular, the University continued its commitment to increasing cycle parking on campus, even while space is constrained due to continued construction and remedial works. Cycle stand numbers appeared to decline slightly in 2017 due mostly to the closure of a large bike parking area between the Civil/Mechanical Engineering wings. However, with more purchases of bike stands throughout 2017, numbers had finally increased to pre-earthquake levels by the beginning of 2018. This programme will continue throughout 2018.

The UniCycle cycle path from the University to the central city was completed during 2017. With prioritised bike crossing at traffic signals, and off-road paths this route is expected to encourage more people to cycle to and from UC. The Sustainability Office continued to offer the Dr Bike mechanic service during 2017. They repaired 140 bikes, up from 113 in 2016 and 100 in 2014 and 2015. A bike day was offered during the University's Sustainapalooza festival in September, which included a bide ride along the UniCycle route, an e-bike demo, a travel clinic and a cycle cinema.

TRANSPORT FRAMEWORK

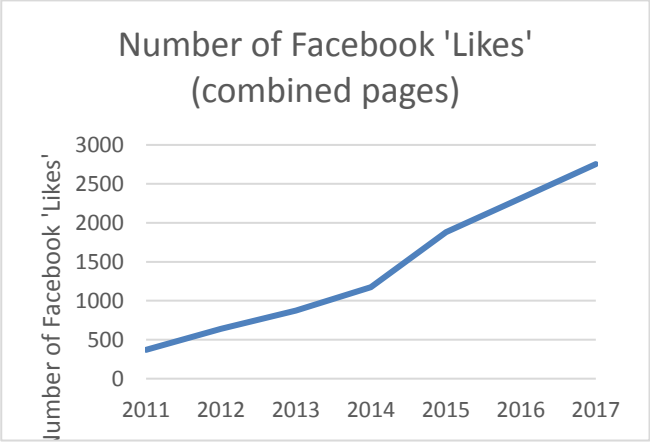
Policy and Strategy	**Action-Planning**	**Stakeholder Engagement**	**Measurement**
Integrated Parking and Transport Strategy	Recommendations from 4 yearly survey, and review from Transport Advisory Panel	Transport Advisory Panel Public Transport Advisory Group	UC Travel Survey Annual bike park audit Dr Bike attendance numbers
Communication	**Training and Support**	**Implementation**	**Links to the Curriculum**
Internal comms plan around carparking Maps of bike facilities (10,000 p/y distributed) Sustainable Transport Website			

Dr Bike Mechanics, 2017: Zac Porter and Olly Ng

4 Partnerships and Engagement

4.1 Social Media

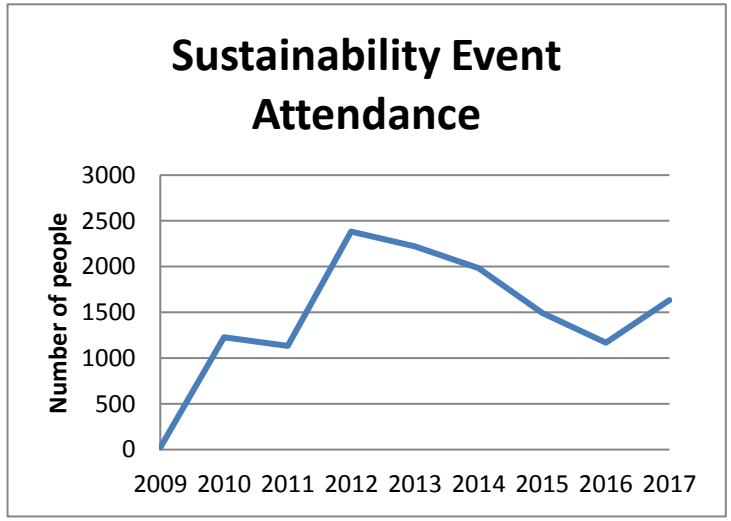
The Sustainability Office has continued to deliver sustainability content via a range of social media channels throughout 2017. In the third quarter our Sustainability Projects Coordinator was replaced by a Sustainability Engagement Coordinator. The combined fan count for both the UC Sustainability Community and UC Community Gardens Facebook pages continued steady growth, and total reach for the UC Sustainability Community grew from 76,880 in 2016 to 80,363 in 2017.



4.2 Engagement Events and Sustainapalooza

In 2017, the Sustainability Office refreshed the week of sustainability events that has been offered since 2010. Sustainapalooza featured a range of events including an Eco Market, a bike day, green building seminar and the Sustainability Awards. The Eco Market was very successful, with around 300 people attending. It was organised by the student club the UC Eco Club Network.

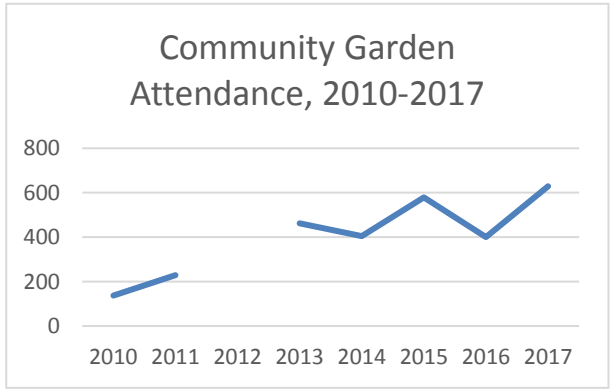
Overall, attendances at sustainability events throughout the year increased again for the first time since 2012, despite on-going staffing challenges within the Sustainability Office. A major contributor here was a dramatic growth in community garden working bee numbers, and a succession of visits from local schools.

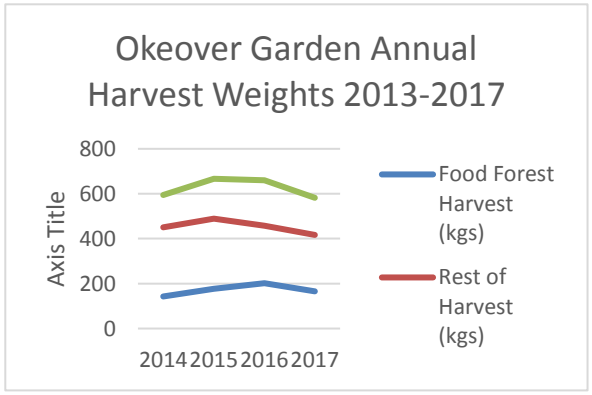


4.3 Community Gardens

Attendance at the Okeover Community Garden reached its highest ever levels in 2017, with 629 attendances. In addition, 71.4% of new attendees were international students – a huge increase since the last time this was examined, in 2010. Then, only 15.8% were international students.

On the other hand, the annual harvest was smaller than normal – mostly the result of a poor harvest of a normally prolific apple tree. In 2015, one third of the garden was reconceptualised as a food forest and, the apple tree aside, the harvests from this area have been increasing steadily while the annual gardening beds have experienced a decline in productivity. This reflects the efforts that were made to rebuild the original raised beds, which set production back temporarily.





4.4 Fair Trade

2017 was an important year for UC regarding Fair Trade. After years of preparation, UC was finally accredited a Fair Trade Campus. This was acknowledged with a launch event held during Fair Trade fortnight attended by 150 people.

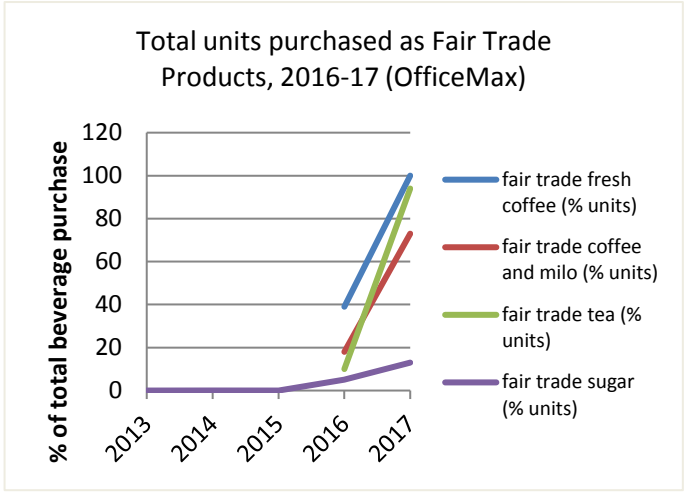
The Fair Trade Association requires annual reporting, initially to ensure we meet the minimum requirements, and thereafter that we are making progress against our goals.

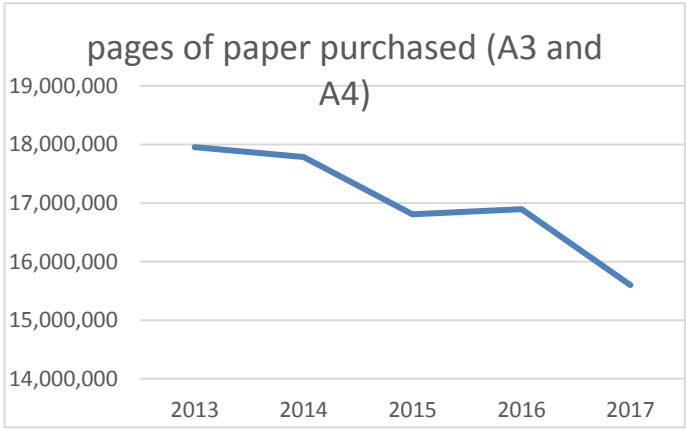
Minimum Requirements	Actions
MR3: Fair Trade products are made readily available at as many on campus retail outlets as possible (at least 30%).	Most cafes on campus offer Fairtrade certified coffee as the **only** option in their retail space (both UCSA and privately owned). Fairtrade certified hot chocolate is the **only** option at all campus cafes. Fairtrade certified chocolate available at **all** cafes on campus. A Fairtrade cola brand, Karma Cola, is being launched on campus late February 2018. An ethical, Fair Trade apparel company (Little Yellow Bird) has been added by procurement to the preferred supplier list for apparel at the university.
MR4: Fair Trade Tea/ Coffee are default options at UC and SU meetings, offices, kitchenettes and staff rooms.	Office Max is our preferred supplier of canteen consumables, which offers **only** Fairtrade certified tea and coffee. Fair Trade products are the *only* default options available through Office Max. We also purchase Hummingbird Coffee, which is Fairtrade certified, outside of the Office Max catalogue. The reason for the shortfall of 100% Fair Trade coffee and tea is when a Fair Trade option is not available on products through our supplier.
MR5a: Fair Trade is promoted within the University, including use of promotional resources	Launched posters and communications with "Our University is Fair Trade!" to our University community, increasing awareness of the University of Canterbury being acknowledged as a Fair Trade Accredited campus. Posters at all cafes on campus that promote the availability of Fair Trade tea and coffee on campus.
MR5b: Fair Trade is promoted within the University by holding at least one Fair Trade focussed event per year.	We launched our accreditation as a Fair Trade University Community and held a Fair Trade market during Fair Trade Fortnight 2017. This both increased student and staff awareness and involvement with Fair Trade, and connected our Fair Trade university community with that of the wider community in Christchurch. The Sustainability Office also hosted a presentation from a Fairtrade certified coffee producer from Papua New Guinea in September. Communications plans are in place for future Fair Trade promotions and events in 2018.

4.5 Sustainable Procurement

During 2017 the Sustainability Office and UC Procurement continued to meet regularly. This was primarily to review opportunities for more sustainable procurement, to keep a high level view on Fair Trade accreditation and reduce waste on campus. At the same time, the combined group started looking more strategically at sustainable procurement. The Procurement team built on its development in 2016 of a sustainable procurement webpage by adopting and reviewing ISO20400: Sustainable Procurement guidelines. The process for doing this was integrated into a wider discussion about sustainability reporting on campus to determine where procurement reporting would fit within the new UC Sustainability Framework, the United Nations Sustainable Development Goals and the Learning in Future Environments framework (LiFE). In particular, a quick review of the current status of procurement approaches using the LiFE procurement framework was undertaken towards the end of the year, which indicated good progress in Levels 1 (Foundation) and 2 (Embed), and moderate progress in Level 3 (Practice). During 2018 this will be used as a basis for identifying goals and tracking progress.

One measure of our sustainable procurement journey is attention to the amount of paper we are consuming as a campus community. The number of sheets of A3 and A4 paper we purchase has shrunk massively since 2013, from 18 million sheets to 15.6 million. This is the result of a concerted effort to direct more teaching and learning to online resources, digital submission of theses, more business units using electronic meeting agendas and on-line processes, and a change in printing protocol that requires users to scan their Canterbury cards at the printer in order to collect their copies.





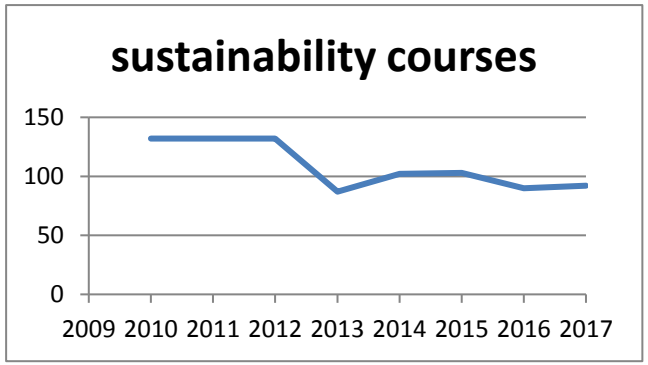
Additional new initiatives during 2017 included:

- purchase of recycled products for capital projects
- large quantities of existing furniture (including lecture theatre and flat floor teaching space chairs) refurbished and reused
- recycling of second hand furniture

PARTNERSHIPS AND ENGAGEMENT FRAMEWORK

Policy and Strategy	Action-Planning	Stakeholder Engagement	Measurement
Procurement Strategy Fair Trade Accreditation		Fair Trade Steering Group	Fair Trade Reporting
Communication	**Training and Support**	**Implementation**	**Links to the Curriculum**
Fair Trade Website Comms plan for Fair Trade. Community Gardens Website		Sustainability Awards Eco Volunteering	Co-Curricular Record opportunities

5 Learning, Teaching and Research



The annual count of sustainability-related courses for 2017 showed a slight improvement on 2016. There were 92 courses in the official calendar, up from 90. The overall picture is still poor compared to previous years.

Nevertheless, there is some excellent teaching for sustainability occurring at UC. For example, Glynne Mackey (Education), won the Supreme UC Sustainability Award in 2017 for her work in research and teaching to advance Education for Sustainability both at UC, throughout New Zealand, and internationally.

LEARNING, TEACHING AND RESEARCH FRAMEWORK

Policy and Strategy	Action-Planning	Stakeholder Engagement	Measurement
			Annual count of courses
Communication	**Training and Support**	**Implementation**	**Links to the Curriculum**

Report by Dr Matt Morris (Sustainability Advisor), with contributions from
Prof Jon Harding, Prof Jim Briskie, Dr Pieter Pelser
Tony Sellin
Chloe Wium
Reviewed by Rob Oudshoorn (Engineering Services Group Manager), Brian Phillips (Capital Works Programme Manager), Michael Oliver (Campus Services Manager) and Shelley Ransom (Strategic Procurement Advisor).

February 2018
UC Sustainability Office
Level 2, Engineering Services
PO Box 4800, University of Canterbury
CHRISTCHURCH 8140
http://www.sustain.canterbury.ac.nz/

Glynne Mackey (left) receiving the Supreme Sustainability Award from Prof. Wendy Lawson (right), PVC Science

Appendix 1: UC Sustainability Indicators

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
electricity (kwh)	24,497,911	24,497,911	22,016,328	25,712,319	25,543,040	25,803,113	25,414,231	25,229,741	25,719,367	
GHG emissions (tonnes CO_2-e)		32,392	24,318	23,145	21,419	22,590	22,870	21,436.53	n.d.	
coal (tonnes)	5,534	6,309	4,098	5,160	4,913	5,334	4,846	4,941	5,396.94	
water use (litres)	336,526,000	250,000,000	325,000,000	392,000,000	475,000,000			292,875,000	293,571,240	
waste to landfill (tonnes)		219.79	197.11	233.44	256.14	312	386.47	337.77	314.61	
waste recycled or composted (tonnes)		357.39	278.36	507.44	521.42	444.70	322.54	261.17	216.26	
organics only		15.52	15.21	49.1	51.24	40.6	30.24	33.67	28.41	
IT Recycling Service (tonnes)					26.07608	25.66912	18.5535	18.6285	23.20	
coffee cups diverted (est)							15200	11100	27200	
cycle stand count				2513	1749	1749	2004	2458	2364	2502
dr bike - bikes fixed						100	100	115	140	
pages of paper purchased (A3 and A4)					17,953,500	17,787,750	16,808,500	16,894,075	15,599,275	
fair trade fresh coffee (% units)								39	100	
fair trade coffee and milo (% units)								18	73	
fair trade tea (% units)								10	94	
fair trade sugar (% units)					5	3	5	5	13	
sustainability courses		132	132	132	87	102	103	90	92	
sustainability event attendance	23	1227	1135	2383	2221	1985	1495	1167	1634	
newsletter (total) - including mailchimp signups						416			519	
blog views							2,700	9160	7087	
facebook total reach								76880	80363	
Facebook (combined pages)			370	640	872	1172	1879	2317	2754	

Appendix 2: 2017 Sustainability Award Winners and Nominations

Supreme Award Winner	Glynne Mackey	Sustainability and Social Justice
Fairtrade Diamond Award	Selva Ganapathy and Joyce Chen	Fog Water Harvesting Project
Gold (Student)	Shell Eco Marathon Team	Shell Eco Marathon
Gold (Staff, Academic)	The CAREX Team	CAREX
Gold (Staff, General)	Rob Oudshoorn and Engineering Services	Energy Efficiency and Carbon Reduction Initiatives
Silver (Student)	Jackson White	The Solar Project
Silver (Staff – General)	Mark Homewood	RRSIC Stormwater Treatment
Nominations	Tom Meaclem	High Efficiency Fertilisers
	Fair Trade Steering Group	Fair Trade Campus Accreditation
	Ming Bai	Transport Planning
	Events and Partnership	Merchandise and Waste Minimisation
	MahMah Timoteo	Fossil Free UC