

2019 Sustainability Report



Lincoln University

Sustainability Report for Lincoln University 2019

Written by the Sustainability Action Group for the Environment (SAGE)

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Introduction

As New Zealand's specialist land-based university, our mission "for the world" and "live well" is always with the aspiration to "protect the future".

Lincoln University recognises that healthy ecosystems and environments are necessary to the survival of humans and other organisms and that the economy is a subsystem of society within the bio-physical environment. There are limits within which human economies and societies must operate if we are to function in a sustainable way. These limitations are the constraints placed by the natural systems of our planet.

Background

In 1990 the student run group Lincoln Environmental Organisation (LEO) was established. Three years later the University Council adopted an Environmental Charter. This quickly led to the adoption of an Environmental Policy in 1993 (a first among New Zealand tertiary institutions). In 1999 the University agreed to establish an Environmental Task Force with the aim of implementing the Environmental Policy. The University now has a Sustainability Policy which has been rewritten and updated (2017) and a Sustainability Action Group for our Environment (SAGE). SAGE is an active group with staff and student members who promote sustainability campus wide. SAGE reconvened in 2017 after a hiatus of a few years.

The 2017 policy states Lincoln University's commitment to be an international and the national leader in promoting and achieving ecologically, socially and economically sustainable development. This commitment is aligned with Lincoln's strategic direction and will be implemented by the whole University community, in all aspects of the university's activities: research, curricula, extension, building design, facilities management and operational practices, including all university properties and farms. This policy is now under further review to expand its focus and definition.

Integration of Sustainability action into Business as Usual

The main focus for SAGE in 2019 has been to integrate the ideas generated from students and staff into business as usual so that it becomes ingrained in university practice. SAGE has played an active part in this and from this committee, several subcommittees have been working on projects throughout the year. They have worked to integrate the project outcomes work into business as usual through working collaboratively to improve sustainability outcomes and have instigated and facilitated initiatives to promote and improve sustainability at the university.

The following Subcommittees of SAGE have been active in the following areas:

1. Website/ Promotions



The SAGE website and promotions subcommittee have helped bring sustainability thinking to the fore to staff on campus and continue to work with students on ongoing sustainability initiatives. The external facing Sustainability webpage was developed further in October with a lot more information than was previously held on the university website. We are looking forward to the development of an upgraded website to bring further focus through metrics and badges. The SAGE “Sustainability News” newsletter has now been running for a year with a new edition produced quarterly.

Achievements made in 2019

1. Regular reporting on activities and focus on sustainable issues, and tips of the week has been made through the internal website hub, MyDay, LEARN and monitors around campus
2. Regular Sustainability Seminars organised and held on site – including a total of 7 SAGE seminars were organised throughout 2019
3. James Renwick Seminar in Climate Action week
4. New logo developed and implemented – transitioned from temporary logo to formal one
5. Sustainability section included in 2020 Prospectus (produced mid 2019)
6. Promotion of SAGE through hand-out stickers on Open Day
7. Quarterly Sustainability magazine now in circulation
8. External website update – providing more information targeting our future students and relevant readers.

Ongoing projects for longer term

1. Campus map which would mark out areas on campus with a sustainability focus.

2. Native Biodiversity



Lincoln University has shown their commitment to ensuring our land is designed to demonstrate an aesthetic that encourages sustainable land use while supporting Lincoln’s natural heritage through creating a biodiversity trail on the old Hilgendorf site. This was set up by the Campus Development team and Facilities Management will now work with SAGE and staff to extend biodiversity signage across the rest of the campus. The biodiversity subcommittee kicked off an arboretum fencing project early this year to create another green space on campus for the benefits of students and staff, and also implemented an app;

iNaturalist to promote interest and knowledge in biodiversity. The Campus Development team continue to seek to incorporate ecological values, especially indigenous biodiversity, on campus and all university properties.



Achievements made in 2019

1. Development of the concept towards an Arboretum Fencing Project
2. Using a biodiversity monitoring App called *iNaturalist NZ* to record and promote interest in native biodiversity around campus
3. Ran a workshop on how to use *iNaturalist NZ*
4. Set up a display in the library about biodiversity monitoring on campus
5. Through the ECOL293 course; students have worked on biodiversity specifically on campus, such as:
 - produced ecological restoration plans for campus
 - monitored native regeneration
 - monitored fauna, using various entomological methods including weta motels, wooden discs that will be installed in larger native areas on campus
 - conducted five minute bird counts, lizard, insect surveys and pest monitoring.
6. Advice provided on which native plants to use to enhance pollinators in the space between Forbes and Burns buildings in conjunction with students - this has resulted in the biodiversity trail in this area
7. Education articles written for the Hub such as “Wilderness or wildlife refuge” about biodiversity living in undisturbed grassy areas around the Hilgendorf site
8. Planting on Calder Drive next to House 61.

Ongoing projects for longer term

1. Working towards Predator Free NZ 2050 – which means removing at least rats, possums & stoats (but should include hedgehogs, cats, mice, ferrets & stoats). Important to include education to our campus community.
2. Expanding biodiversity to the periphery of our campus and onto the Lincoln Dairy Farm.

3. Sustainable Transport



The SAGE sustainable transport sub-committee has developed a 3-year Transport Strategy Plan to reduce the use of carparks through reducing car use through carpooling, increasing bus usage, and increasing active transport (see

Appendix 1). This Plan will be used in developing the overarching Lincoln University Sustainability Plan.

The beginning stages of reducing car use through carpooling has started through a period of promotion and encouragement whilst surveying the numbers of single-use vehicles that come onto campus, and installing signage designating part of the Orchard carpark for car-poolers.

Facilities Management already have an electric cart fleet and have added to it, a couple of 'man-powered' bicycles to get around campus, and an electric van. They have also set up more EV charging points, now totalling 8, and provided a covered e-bike charging area in the Burns building for staff and students to use.



The faculty of Environment, Society and Design has started asking applicants for conference leave to calculate the potential carbon footprint of their planned travel, and asks them to consider whether there are alternative ways in which they could be present.

Achievements made in 2019

1. Development of the Transport Strategy Plan
2. Advocating and promoting electric bikes – Open Day held on 8th May
3. Promoting the use of EV's through increasing charging stations on campus
4. Promotion of carpooling through education, surveying and signage
5. Promoting and increasing the use of electric bikes through providing a covered site for all bikes including charging points, in the Burns building
6. Presenting a seminar on Sustainable Transport to staff and students in November.

Ongoing projects for longer term

1. Promote carbon offsetting by staff and students when travelling by car and air by encouraging planting trees and regeneration of native bush as a way to mitigate climate change
2. Work with Environment Canterbury (ECAN) regarding improved bus services and explore possibilities such as subsidising student/staff fares (using funds generated from parking fees)
3. Support a Zero Emission Vehicle policy on campus through writing a plan and supporting a procurement project for future fleet cars to be zero emission vehicles.
4. Consider how the introduction of paid parking on campus might be used both as a catalyst to encourage the greater use of some of the more environmentally friendly, cheaper, healthier and more sociable alternatives, and in using the revenue from this to support other sustainable initiatives.

5. Energy and Resource Use



The Lincoln University Sustainability Policy sets out our commitment to ensure Lincoln University achieves carbon neutrality by 2030 through phasing out use of fossil fuels, improve energy performance, minimise risk and

ensure adequate resilience and. The Campus Development team will include green building and smart building practices as much as they can in their new buildings and renovations including sustainable energy sourcing including LED lighting and sensory technology to reduce energy consumption. They have also commissioned an Energy Review which will provide direction and a plan to be able to move off the coal burner by 2023.

Facilities Management have started work on a strategy that will include increasing energy efficiency and reducing existing loads. In 2019 the implementation of the LED lighting project started with replacing lights in the Library with LED lights and extending through to the upper levels of this building. This has generated energy efficiencies which will continue on as other areas change over.

Achievements made in 2019

1. The refit of the Library with more sustainable LED light fittings
2. The project installation of solar energy PV array on Te Kete Ika in partnership with Meridian Energy
3. The initiation of an Energy Review and provision of a pathway for achievement

4. The purchase of our first EV Van for the Facilities Management Team
5. Installed 4 additional EV chargers
6. Hired an energy graduate in December 2019 with the project goal to reduce energy usage by 5% (2 gigawatts per annum) over a two year period.



Ongoing projects for longer term

1. Implement the outcome of the Energy Review and Strategy, which will include eliminating reliance on the coal burner by 2023
2. Update all buildings to more efficient and sustainable LED lighting
3. Installation of more EV charging points
4. Installation of solar energy PV array on RFH building in partnership with Meridian Energy
5. Installation of further PV array on LU land and/or buildings
6. Conversion of LU boilers to sustainable energy source
7. Diversification of LU energy sources
8. Further purchase of additional EV's when due for replacement and subject to technology availability.

6. Waste Reduction



The Catering department achieved huge inroads into reducing the amount of plastic that goes to landfill from the kitchen, through removing individual spread packets and making their own yoghurt. They are investigating

alternatives for milk supply also, to further reduce the plastic coming into the kitchen, but in the meantime are returning milk bottles to Fonterra to be made into fence posts.

Facilities Management have started working with the SAGE Waste Subcommittee to review waste reduction, especially through education to staff and students.

Achievements made in 2019

1. Waste Awareness exercise for students at Fresher Day
2. Waste audit of the halls of residence completed by ESD students
3. Initial planning with Waste Management around increasing recycling and reducing waste
4. Selwyn Responsible Business Gold Award to the Sport and Rec Centre
5. Selwyn Responsible Business Platinum Awards to Lincworks, LU Childcare Centre and the overall Lincoln winner to Kitchen and Catering for their reduction of single use plastic

Ongoing projects for longer term

1. Education amongst the halls of residence, students and staff on best recycling practices
2. Campus Life and Facilities Management working together on collecting HDPE plastic (milk bottles) for recycling (with Comspec)
3. Develop a Waste Reduction strategy

7. Campus Development



The Campus Development Programme is about developing a more modern, vibrant and safe campus, providing a positive campus experience for our students and staff, and growing our future as a world-class research and teaching precinct. This development is being planned in three phases over a ten-year period and the first phase is well underway. The guiding principles of the Campus Development team includes a sustainability statement covering energy, transport and climate change, water, land use and biodiversity, and procurement and purchasing. All building projects should answer the 16 questions developed out of the Sustainability Policy as part of the built project approval process.

Achievements made in 2019

1. Student Social Spaces – George Forbes

2. Recreation Centre – design an initial build phase
3. Union Demolition – prepping for demolition over the Christmas period end 2019.
4. Science South – Implementation Business Case
5. Science North – Implementation Business Case
6. Accommodation review
7. Landscaping masterplan which demonstrates sustainability features and draws on the expertise from across the university eg. Biodiversity, history, environment, safety, cultural, and landscape design.

Ongoing projects for longer term

1. NABERSNZ or 5-Star Rating for Campus buildings.

8. Sustainability Awards

In October the Selwyn Responsible Business Awards presented Lincoln University Catering Department the top award for sustainable practice through greatly reducing the amount of plastic going to landfill. The Lincoln University Early Childhood Centre also received a platinum award, and the Recreation Centre and Facilities Management received gold.

SAGE also introduced the new Sustainability Awards for students and staff. The award recipients and runners up in each category were:

Student club	LU Climate Action Group Runner up Agroecology club – Christiana Berneheim
Student	Chelsea Yeoman Runner up - Hafiz Ilyas
Staff member	Dr Catherine Elliot Runners up - Dominik Merkert and Mohini Vidwans
Special Awards	Dr Sue Jarvis, Dr Sally Price and Prof. Ian Spellerberg



LU Climate Action Group Student Club winners
Greg Fleming, Chelsea Yeoman, Max Reisinger,
Natalie Blackstock, Gu Hengyu, Agus Fatim

9. Sustainable Development Goals (SDG's)

Lincoln University contributed to the sector submission to MFAT on New Zealand's first Voluntary National Review (VNR) which is a report on progress towards the implementation of the United Nations Sustainable Development Goals (SDGs) and the 2030 Agenda for Sustainable Development. Lincoln provided examples of where the university delivers outcomes on the 17 SDG's.

The 2nd SDG Summit was held at Auckland University with the theme of "Accelerated action, together". Staff and management representatives attended this and Lincoln University will be co-hosting with the University of Canterbury the 3rd SDG Summit in April 2021. Early planning for this Summit is now underway.

Lincoln University has also been working on a submission to the Times Higher Education Impact Rankings. The inaugural year of this impact ranking came about at the end of 2018, but as not all of the SDG's were ready to be ranked, Lincoln didn't put in a submission to be ranked. In 2019 all of the SDG's are available and our submission, due in December will cover:



10. Student Projects

Herb Garden Living Lab



A group of students who had been awarded the Global Challenge scholarship for 2019 grouped together on a project that would have lasting impact and that enhances and complements the action proposed by Anabel Langbein. This project established a herb garden available for the kitchen staff to use.

Future Leaders help restore stream



The Future Leader scholars planted nearly 800 trees in Lincoln along the banks of the Liffey Stream as part of the "Lend a Hand" aspect of their programme at the University. The Future Leaders partnered with the Selwyn District Council to run a tree planting day as a part of the Council's efforts to facilitate restorative planting in the hope to restore the Liffey stream through the reintroduction of native plants and the protection of native instream biodiversity.

School Strike 4 Climate



In September during Action Climate week, the Lincoln University Climate Change Action Group organised a 22km march from Lincoln University to Cathedral Square. There was a large turnout from Lincoln University with the Acting Vice-Chancellor supporting the students in their march, allowing staff to also take time from their work to attend the march. A number of students walked the full 22km, and other staff and students biked. The Climate Action Group also prepared a compelling Constitution setting out their Vision and their Mission (*“to work together with students, staff and decision makers to make LU a role model regarding climate action and sustainability for other universities and citizens”*) and their demands to the University.



Climate Action Plan



Students from SOCI314 worked together on writing a Lincoln University Climate Action Plan. They provided this to the Vice Chancellor with a call to set up a VC Taskforce for Sustainability. A Taskforce has been set up, made of Senior Management members tasked with prepping the Lincoln University Sustainability Plan.

11. Sustainability Taskforce

In response to the students proposed Climate Action Plan, the Vice-Chancellor has formed a senior management Sustainability Taskforce to use this plan as a base document and to plan a fuller, wider Sustainability Plan. This Plan will incorporate 6 key focus areas; Finance, Green Infrastructure, Mobility, Waste, Water, Farms, Research and Education. The Plan is expected to be completed with metrics and measures by April 2020.