

2022 SAGE Annual Report

Lincoln University

Sustainability Action Group for the Environment (SAGE)

Introduction

Lincoln University was an early leader in recognising the need to give focus to the sustainability of its own teaching, research and operations. Over the thirty years since it adopted an Environmental Charter in 1993, there have been periods of significant progress, and others when progress was much slower. Given that this year marks several developments that herald a renewed focus, it seems timely to briefly review the history up to this point, and what we might learn from it, before summarising progress in 2022.

Sustainability at Lincoln 1990-2021¹

The Lincoln Environmental Organisation (LEO) was established in 1990 by a group of motivated students and staff. In 1992, LEO and LUSA developed a 29-point [Environmental Charter](#) which was adopted by the Lincoln University Council in February 1993, a first for a New Zealand university. The late Graeme Buchan, Neil Cherry and Bob Leonard from Soil Sciences played a leading role in these developments up until early 1994, when the mantle was passed to Ian Spellerberg who had newly arrived at Lincoln to take up the role of Director of the Centre for Resource Management. Graeme and Bob (and Ian) were also the main organisers for a short series of University Summer Enviroschools for 6th & 7th form students. The LU 1996 Annual Report notes that over 500 students from four schools had attended this programme since its launch in 1990, and Graeme and the other organizers were recognised for this initiative with a Green Ribbon Award from the Minister for the Environment in 1996. Graeme was also one of the coordinators of 'YES 2006', a five-day live-in Youth EnviroSchool event which drew 70 Year 12 and 13 students to Lincoln campus in April 2006.

In the decade from 1994 much progress was made in learning how to practically implement sustainability. Each department had an identified environmental contact, and significant progress was made in relation to resource use and procurement (e.g. copying machines set to automatically double-side), waste and recycling, transport, staff induction, and CO² emission reductions. An Environmental Policy Advisory Committee responsible for policy, oversight, monitoring and compliance related to environmental matters was established in 1997. Around 1999, this committee evolved into an environmental task force responsible for implementing the Charter, with the task force chairperson a member of the University Executive Management Team and reporting directly to it (Spellerberg, Buchan & Englefield, 2004)². In 2000 the Charter was revised to become the new Environmental Policy, and annual objective setting and reporting were introduced.

¹ The [Lincoln University Living Heritage](#) website has been a valuable resource in documenting this history, as were the publications noted in the next footnote. I am also much indebted to Emeritus Professor Ian Spellerberg who has been a key driver of sustainability action at Lincoln from when he arrived at Lincoln in 1994.

² The LU Annual Report 1999 (p71) refers to the "Establishment of an Environmental Management Group to review and enhance the University's environmental practice" - I am assuming this is the group Spellerberg, et al (2004) refer to as a taskforce, and that its name may have later changed to the Environmental Task Force, e.g. the LU Annual Report 2001 (p78) reports "Regular meetings of the Environmental Task Force. The chair of the Task Force reports regularly to senior

From 1997 to 2002 (the years Dr Frank Wood was the Vice-Chancellor), LU Annual Reports included a section reporting on the progress being made – beginning with a quarter of a page in the 1997 and 1998 reports, half a page in 1999 and 2000 reports, and a full page in the 2001 and 2002 reports. These reports were not just vague narratives, but bullet point summaries of key initiatives and achievements, including by 1999 achieving a targeted 28% reduction in CO² emissions, and the trialling in 1997 and implementation in 1998 of a “Ride Share” carpooling system, and in 2000 achieving “a 32.5% reduction in CO² emissions from its coal-fired boilers compared to 1990 levels, in compliance of the Government Voluntary Agreement”.

In the early 2000s, following wide consultation with staff, the taskforce was replaced by Environmental Sustainability Advisory Group (ESAG, later amended to SAGE) and an updated Policy adopted in 2003.

In the 2005 LU Report, one of the strategic objectives was “To promote sustainable environmental practices and to be an environmentally and socially responsible organisation”, which evolved in the 2006-2010 reports to “To act ethically and be an environmentally and socially responsible university”. Under this objective, the 2005-2010 reports included very brief summaries of a few relevant initiatives e.g. around transport, waste and energy.

During this period the focus on sustainability education also increased. An Education for Sustainability Committee led by Professor Ken Hughey, was established to review the sustainability content of Lincoln courses. In 2010, all examiners at Lincoln University were asked to complete a survey about the sustainability content of their courses, and the results are discussed and analysed in two LEAP reports Education for sustainability at Lincoln University, New Zealand (2011) and Postgraduate education for sustainability at Lincoln University, New Zealand (2012), both reports authored by Spicer, Bathelmeh, Montgomery & Spellerberg.³ Subsequently, as part of the qualifications reform, two university-wide courses were introduced in 2015: LINC 101, an introduction to global land-based issues, and LINC 201 Sustainable Futures, which required students to work effectively across their disciplinary field of study boundaries. For several years, both these were compulsory for all undergraduate degrees.

LU’s 2010 Annual Report notes that SAGE was reinvigorated that year, and the group’s Terms of Reference redrafted, affirming cross-University membership with the chair a member of the University’s Senior Management Group. “SAGE met quarterly and addressed a number of issues, including, but not limited to, the following: implementation of a new website; implementation of an email address for staff

management.” During this period, the Task Force was chaired by Ian Spellerberg, then Director of the Environmental Management and Design Division.

³ Other publications related to sustainability at Lincoln include:

Spellerberg, I. F., Buchan, G. D., & Englefield, R. (2004). Need a university adopt a formal environmental management system? Progress without an EMS at a small university. *International Journal of Sustainability in Higher Education*, 5(2), 125-132.

Buchan, G. D., Spellerberg, I. F., & Blum, W. E. (2007). Education for sustainability: Developing a postgraduate-level subject with an international perspective. *International Journal of Sustainability in Higher Education*, 8(1), 4-15.

Spellerberg, I. F., Loiskandl, W., & Buchan, G. (2007). A joint, international masters degree in sustainability: how a truly global programme was established. *International journal of environment and sustainable development*, 6(1), 67-80.

Piasentin, F. B., & Roberts, L. (2018). What elements in a sustainability course contribute to paradigm change and action competence? A study at Lincoln University, New Zealand. *Environmental Education Research*, 24(5), 694-715.

Obroh, O. (2020). *Lincoln University curriculum and the Sustainable Development Goals: A dissertation submitted in partial fulfilment of the requirements for the Masters in Environmental Policy and Management at Lincoln University*.

and students to notify issues and questions related to environmental sustainability; involvement in the 2010 Earth Hour events; implementation of sustainability statements in all Lincoln University publications; a review and re-prioritisation of previously identified environmental sustainability issues to be implemented from 2011; and regular updates to the Senior Management Group on all activities.” (LU Annual Report 2010).

The Environment Policy was also redrafted in 2010, with the Environmental Sustainability Advisory Group (ESAG) specified as the group to advise the Vice-Chancellor on the implementation of the Policy. The 2010 policy states that SAGE membership will be a Chair appointed by the Vice-Chancellor, two representatives from academic staff and two from general staff (all appointed by SMG), one Lincworks representative, one Farms representative, and one student representative (appointed by LUSA), with options of co-opting other persons (either internally or externally) as required. “Membership of the ESAG will be recognised as service to the University in salary and promotion review.”

In May 2011, a new LU SAGE website was launched, with an opening statement from the Vice-Chancellor Roger Field, and a summary of the history of sustainability action at Lincoln. “[SAGE] has staff and student representation and the Chair of that group [Greg Ryan] reports directly to the Vice-Chancellor.” 2011-2012 were reasonably active years for SAGE, with a focus on awareness raising, reducing resource consumption, transport and planting. A variety of posters about the purpose of SAGE and about some of the sustainable products being used (e.g. toilet paper, photocopy paper) were created and put up around the university, and a survey of all staff conducted to assess such things as awareness of SAGE and the Lincoln University Environment Policy; perceptions of the University’s commitment to sustainability; ideas around means of travel to the University and possible transport alternatives.

However from late 2012 until 2017, no meetings of SAGE were held. The focus on post-earthquake recovery was undoubtedly part of the reason for this gap, and how to improve campus sustainability was given consideration during the campus Master Plan discussions.

In 2017, a case for reinstating was put to the Senior Management Group, and in October the first meeting of a reformed SAGE was held, with Adjunct Senior Lecturer Sue Jarvis as Chair. Sue remained as Chair 2017-2020, and led a very active period for SAGE, including the development of a revised Sustainability Policy which established LU’s goal to be carbon neutral by 2030. Jorie Knook took over as Chair of SAGE in 2021 and we would like to take the opportunity to thank Jorie for steering SAGE through 2021 and for all her work for sustainability at Lincoln University. Lin Roberts was Chair for 2022, and was succeeded by Barbara Nicholson and Daphne Smithers as Co-Chairs in 2023.

Lessons: The periods where most progress has been made appear to have been those where the Vice-Chancellor and Senior Management were accepting direct responsibility for ensuring the University was continually improving its sustainability performance, both in operations and education. Sustainability was accepted as a University-wide priority, with a Task Force chaired by a member of the senior management team, and from 1997 to 2002 specific progress in the area was reported in the University’s Annual Report. However this approach provided little opportunity for staff and student engagement, and following extensive consultation, in the early 2000s the taskforce was replaced by Environmental Sustainability Advisory Group (ESAG, later amended to SAGE). Over the twenty years since, progress had been variable – sustainability seems to have had lower priority across the University, and the staff contributing in a volunteer capacity have been coping with a variety of other competing demands which their line managers may have considered more urgent or important. Indeed it could be argued that most

progress was made 2017-2020 when SAGE was chaired by an adjunct staff member, Sue Jarvis, who had no competing university responsibilities.

With the establishment of a high level Sustainability Task Force in late 2021, the development of a Sustainability Plan, the appointment of a Sustainability Officer (part time in 2022, and full time from early 2023), and the publication in November 2022 of a [LU SDG Report 2021](#), sustainability is again being accorded status within the University. However progress on sustainability requires more than high level decisions about capital investments (e.g. solar panels), policy (e.g. re air transport) and marketing (e.g. ranking systems) – it also requires engaging staff and students, raising awareness of both global, national and local challenges and how these might be addressed, drawing on the extensive knowledge and enthusiasm across the university, and providing opportunities to develop skills in implementing practical solutions. The coming year is an opportunity to develop SAGE as a vehicle for wider staff and student engagement with sustainability and to foster two-way communication between the Sustainability Task Force and staff and students.

Highlights of 2022

In 2022, a number of things that SAGE has been advocating for for many years have finally come to fruition, including the (re)establishment of a Sustainability Task Force and the appointment of a full time sustainability officer, Patryk Szczerba.

1. Sustainability Task Force

As of late 2021, the University has a Sustainability Taskforce (STF), chaired by the Vice-Chancellor, with representatives from LUSA, SAGE and other sectors across the University. Some of the highlights of the year include:

- The [Sustainability Policy](#) was revised in June 2022, and the [Sustainability Plan](#) developed the previous year is being used as a framework for actions and tracking progress – Patryk/ STF are developing a set of metrics to track progress.
- Steady progress is being made towards decommissioning the coal boiler in 2024, with the solar panels installed on Te Kete Ika and RFH contributing to renewable generation on site.
- The University's first carbon footprint – for the base (pre-covid) calendar year of 2019 – was completed in December 2021 and published on our sustainability website page. The audit for 2020 occurred on 5 April 2022, but the report is not yet on the website. The Carbon Audits for 2021 and 2022 are due to happen on 27th & 28th June 2023.

All NZ universities do their financial and carbon reports on a calendar year, but the Carbon Neutral Public Service programme (which universities have joined voluntarily) requires reporting on a 1 July - 30 June year (the financial year for government departments) so we will need to submit data for 1 July 2022 - 30 June 2023 by November 2023.

- Carbon footprint Audits to date have estimated commuter emissions based on SAGE's travel survey of 2018 – a new survey is planned for first semester 2023.
- Reporting on our farms is underway. An initial report was prepared by AgriMagic. Currently Lincoln is in the process of developing our GHG reduction targets, and working on communication of the audit itself and targets, once they are agreed on (for more information please contact Jim Morton or Carol Smith).

- A solar energy farm has been commissioned to be installed next year in the block north of the University. The solar farm builds on an idea Lin picked up when she represented SAGE & Lincoln at the ACTS (Australasian Campuses Towards Sustainability) conference in 2019 - the winner of the Green Gown award that year was University of Queensland which has constructed a 150 hectare 64 MW solar farm. Sheep graze in the shade between the rows of panels and the farm makes UQ the first major university in the world to offset 100 per cent of their electricity use with renewable power produced from their own assets - see 2 min video [here](#).
- An internal air travel tax policy was approved, with the aim of meeting staff research networking needs without the carbon footprint expanding back to pre-Covid levels.
- Sustainability webpage is being revamped
- Liz Martin and Patryk Szczerba prepared a [LU Sustainable Development Goals Report for 2021](#) which is published on the sustainability webpage (relevant to our submission to the Times Higher Education Sustainability ratings)
- Patryk Szczerba, who had been in the role on a part-time basis, was at the end of the year appointed to a full time position as LU's Sustainability Officer. SAGE has been raising the need for a full time staff role dedicated to sustainability for many years now so this is great news – we have great hope that this will help achieve greater continuity and implementation, but all need to be aware that one person can't do it all. Lin hopes that Patryk will be able to take over from Lin as Lincoln's representative on STENZ, the network of sustainability staff at NZ universities and polytechnics, which meets online once a month and is a valuable source of ideas and experience on tertiary sustainability initiatives, and on the Universities New Zealand SDG Expert Panel (see below).

While some excellent progress has been made, the University is still struggling to communicate what is happening or to engage staff and students – quite a lot is happening in the sustainability space, but achievements and aspirations are not being consistently communicated back to SAGE, staff or students, and there have been few opportunities for interested staff and students to contribute or provide input. Hopefully 2023 will see some progress in this area.

2. NZ Universities SDG Expert Panel and SDG Summits



The 2022 Chair of SAGE, Dr Lin Roberts, represented Lincoln University on the NZ Universities Sustainable Development Goals (SDGs) Expert Panel. The Panel was initially established to both contribute to New Zealand's first Voluntary National Review (VNR) on the SDGs to the United Nations in 2019 and support planning for the second and subsequent SDG Summits. Subsequently, its remit was expanded to more generally support the work of New Zealand's universities to further progress on the SDGs.

The 3rd Aotearoa SDG Summit Series was hosted by Te Whare Wānanga o Waitaha | University of Canterbury and Te Whare Wānaka o Aoraki | Lincoln University and held during 2020-2021. The organising team from UC, Lincoln, Ara, and CCC, was led by UC's Dr Matt Morris, with Lincoln's representatives including Lin Roberts, Kirsty Hurnen and Wim de Koning. The team drew together many sectors, organisations and individuals to envision and deliver three online hui before pivoting from a face-to-face summit to an online summit due to Covid-19 restrictions. The SGD Series featured 83 speakers from across Aotearoa New Zealand, with nearly 1000 people attending online and almost 1 million people reached through social media engagement.

In August 2022, ACTS - Australasian Campuses towards Sustainability – announced that UC and Lincoln were [finalists in the Green Gowns Awards Australasia](#) for their role in co-hosting the 3rd Aotearoa SDG Summit Series during 2020 – 2021. You can find the UC/LU case study [here](#) and read about the other finalists [here](#).



The very successful [Fourth Aotearoa SDG Summit Series](#), hosted by Waikato University, Waikato Tainui, the Waikato Wellbeing Project and Te Pūkenga, had a special focus on incorporating Māori, Indigenous and flax roots community perspectives when designing solutions to advance the SDG global goals. The Series began with three online webinar events in 2022, focused on Sustaining Te Taio, Sustaining He Tangata and Reimagining Economic Prosperity, and culminated in a two-day event on the University of Waikato Hamilton campus in February 2023.

Following advice from the Panel, in September 2022 UNZ became a member of the Aotearoa Collective for Public Transport Equity, and the VCs wrote to the then Minister of Education Chris Hipkins, urging the Government to act on the Collective's call to make public transport free to students and other New Zealanders on low incomes.

3. Sustainability Week

Sustainability Week is becoming a welcome fixture in the Lincoln calendar, and this year's week was packed with related activities. Many thanks to LUSA (especially Britney Cradock, the LUSA Events and Clubs Coordinator), Paul Dryden, Mark Oldham and SAGE who, together with many volunteers, pulled together a great range of activities.

On Monday, Tuesday and Wednesday morning, volunteers at both gates and the bus stop intercepted sustainable commuters arriving by bus, bike, carpool or on foot, giving them free breakfast tokens, and on Wednesday morning over 100 appreciative students and staff were served a scrummy breakfast of eggs, bacon, hash browns, chutney and burger buns. A disappointingly low number came on the busses (only 3-4 per bus) but those who did seemed to really enjoy it ('get half my assignments done, catch up on social media and reading!' etc) but a pleasantly surprising number had carpooled from their flats in Riccarton area, and said they did that most days. Once the boiler is shut down, our commuting footprint is one of our biggest emission sources, so we'll need more active education to get more students and staff thinking about their impact. This week's initiative was one small step towards that, and as one of the student volunteers emailed Lin afterwards "The reception from everyone was so good and I even had someone come up to me later in the day to say how much of a good initiative that was!"

Lincoln University, LUSA, SAGE and LESS present

SUSTAINABILITY WEEK

1-5 August 2022



SUSTAINABILITY EXPO

Find out more about sustainable transport and reducing your household waste. Featuring Metro, Hitch, LU Sustainability Plan, Facilities Management and more.
When: Monday 1 August, 11am - 1pm Where: Grounded, Forbes Building

OP SHOP SALE

Donate your old clothes and buy some new pre-loved threads. Donations collected at LUSA's office.
When: Tuesday 2 August, 12pm - 2pm Where: Grounded, Forbes Building

BUILDING ON FERTILE SOILS - AT THE NEXUS OF POPULATION/CLIMATE/FOOD (PANEL DISCUSSION)

Join SAGE for a panel discussion on the consequences of building on fertile soils.
When: Tuesday 2 August, 12pm - 1.15pm Where: Grounded Theatre, Forbes Building

SUSTAIN THE BRAIN BREAKFAST

Bike, bus, carpool or walk to campus this week and tuck into a delicious breakfast when you arrive.
When: Wednesday 3 August, 8am - 9.30am Where: Grounded, Forbes Building

PLANTING DAY

Join us for an afternoon of learning and planting! Bring gloves and gumboots if you have them.
When: Friday 5 Aug, 1.30pm - 3pm Where: Meet at Grounded to walk over to the Arboretum together.







Visit the Grounded Theatre for a selection of films showing throughout the week, or the Library to check out their display of sustainability-related resources.

outcomes was the different 'experts' hearing the perspectives of colleagues with different areas of expertise. Indeed when the discussion got to 'how do we solve this', several commented how in thinking about that, they'd realised the problem could not be solved from within their own discipline - so maybe a small blow for interdisciplinary thinking and research!

On Tuesday was the Sustainability Week Panel, this year of the topic issue of building on fertile soils. Housing in peri-urban areas is a stark example of where humans desire to expand comes up against finite supplies of key resources we need to survive.

Our panellists had an interesting discussion exploring a number of interrelated challenges - protection of fertile soils, food production and food security, land use planning, the need for housing (including potential need to rehouse people from coastal areas as sea levels rise with climate change), and the need to shift to low carbon living. Both the panellists and the audience appeared to enjoy it, with good questions and discussion. Potentially one of the most useful

SUSTAINABILITY WEEK

1-5 August 2022



BUILDING ON FERTILE SOILS - AT THE NEXUS OF POPULATION/CLIMATE/FOOD (PANEL DISCUSSION)

Join SAGE for a panel discussion on the consequences of building on fertile soils.

When: Tuesday 2 August, 12pm - 1.15pm
Where: Grounded Theatre, Forbes Building




Photo caption: from left, Lin Roberts (Chair), and panelists Peter Almond, Shannon Davies, Hamish Rennie, Suz Vallance and Sophie McInnes

Other events during the week included a Sustainability expo on Monday, with stalls by CCC, ECAN/ Metro, SAGE, LESS, and Paul Dryden from LincWorks and Mike Garth from Catering letting us know about all the different waste streams they are now recycling (more on that later), and an OpShop. The week concluded with a tour and planting afternoon at the Arboretum on Friday afternoon.

4. SAGE Sustainability Actions Grants

Sustainability Week in August saw the launch of SAGE's Sustainability Action Grants - up to \$2000 available for grassroots initiatives to promote sustainability on campus or with LU whānau. Three action grant applications were received and approved by the evaluation panel, totalling \$1,660. However, only one grant was paid out in 2022 (\$448 paid of \$500 grant) – to “Eating Hua and Huawhenua for Less” for planter boxers for international students and their families by a group of Future Scholars. A second grant ('food pantry') was not completed in 2022 due to time constraints on the staff member concerned. A third grant (for 'planting native plants' for \$460) was not accessed, due to plants being sourced elsewhere. Action grants awarded in 2022 if not used do not carry over to 2023.




Sustainability Action Grants


Have an idea for sustainability on campus?

SAGE is providing grants (up to \$2000) to support grassroots initiatives to promote sustainability on campus or with LU whānau.

Apply now at <https://tinyurl.com/SAGE-Action-Grants> or scan the QR code



Any enquiries: sage@lincoln.ac.nz



5. Biodiversity on campus

The SAGE Native Biodiversity Group has been very active over the last few years in enhancing biodiversity plantings on campus, and in 2021 helped establish, and largely merged into, a Lincoln University Arboretum Governance Group (AGG) to help manage and enhance this almost forgotten resource. The Lincoln Arboretum lies on the south side of Farm Road on the west side of Weedons Road, and is an area that includes a New Zealand native species section, a national collection of magnolias, and hazelnut and chestnut orchards.

The Arboretum is proving a thriving and dynamic resource for education, research and recreation, bringing Lincoln's unique ecology, heritage, culture, and community together. It is part of Lincoln University Living Labs programme, and Lincoln courses making use of the Arboretum this year include:

- LASC 216 Site Design (semester 2) – students developed designs for the native section of the Arboretum
- LASC 211 Planting design & management (semester 1) - outdoor class session and weeding
- ECOL 103 New Zealand and Conservation class (semester 2) - planting and weeding, demonstrating biodiversity restoration methods and ecological impacts
- ECOL 293 Field Ecology Methods (semester 2) - students were involved in monitoring pests, birds and invertebrates around campus, including close to the Arboretum.
- LINC 101 learning about links between biodiversity, soils and ecosystem services such as carbon sequestration

Other AGG activities in 2022:

- Weeding by AGG members (Dec 2021 and Jan 2022)
- Weeding by LU Student Volunteer Army (March 2022)
- As part of the Sustainability week, Mike Bowie, Wadia Kandula and Colin Meurk) co-ordinated a 'Native Tree Planting' at the LU Arboretum on Friday 5th Aug. LUSA advertised it widely and though there were only a few students, we managed to plant about 60 -70 plants.
- 21 September planting with volunteers
- Digger engaged to scraped out invasive weeds from the dam
- 28 September an online and face to face seminar "Lincoln University's hidden treasure – the Arboretum – a recording of the event can be see [here](#)
- Irrigation installation has been installed - it's above ground for now and we are testing it to see how to improve it.

Many thanks to the Arboretum Governance Group, which in 2022 included LU staff members Wadia Kandula, Mike Bowie, Marcus Robinson, Nada Touier, Jill Reader and Shane Timbrell, Katie Blows (Sustainability representative for LUSA), and Sue Jarvis representing the Lincoln Community/Envirotown. SAGE continues to support this group, by promoting planting and weeding events and providing funding for native plants and signage - in 2022, SAGE contributed \$1613 for plants from Southern Woods, and \$550 for plant signs from Citycare Property.



Native Tree Planting at the LU Arboretum on Friday 5th Aug.

Riparian planting by volunteers 21 September 2022



Wetland area before and after all the invasive weeds were scraped out by the digger (September 2022):



6. Sustainable Transport

Our structure in 2022 did not include a Sustainable Transport subcommittee (perhaps revisit this in 2023?), but SAGE still maintained a focus on enhancing the sustainability of Lincoln commuting. Many thanks to John Gould who has continued to drive many of the bus and carpooling initiatives, and to Mark Oldham who has coordinated the visits of the bike mechanic. SAGE activities complement university work extending the number of electric car charging points and the Sustainability Task Force focus on air travel.

Commuting Footprint: Once the coal boiler is closed down in 2024, staff and student commuting (usually in single occupancy vehicles) will be one of the most significant contributors to the University's campus footprint, particularly if air travel does not ramp up to previous high levels. To obtain data on how staff and students travelled to campus and what influenced their choices, SAGE conducted a transport survey in 2018 with over 500 responses. In their 2019 audit of LU's campus carbon emissions, Toitu recommended including commuting emissions, and for the 2020 and 2021 audits, SAGE's 2018 transport survey formed the basis of commuting data. Auditors have pointed out the need for more recent information for our carbon footprint audits, and there is also a need for more accurate information for ranking programmes such as [Green Metric](#) and [Times Higher Education SDG Impact Ranking](#), the former of which includes an item "total number of vehicles divided by total campus population". Lincoln participates in both these ranking systems, with THE also including questions about setting targets and taking actions to promote sustainable commuting, and Green Metrics about "Programs to limit or decrease the parking area on campus for the last three years" and "Number of initiatives to decrease private vehicles on campus" – for both ranking systems, Lincoln's comparatively good transport score in recent years has relied on SAGE's initiatives promoting carpooling, bussing and cycling. A university-wide transport survey is planned for first semester 2023, and SAGE has strongly recommended drawing on the experience of other NZ universities and ESD expertise in survey design to ensure it delivers accurate data that meets all our policy, reporting and communication needs. Achieving a significant shift in staff and student travel behaviour is likely to require introducing parking charges (Lincoln University remains the only university in NZ without these) and this in turn will require significant engagement and consultation with staff and students if a backlash is to be avoided, and the data from this survey will be an important resource in this process.

Sustain-a brain breakfast in Sustainability Week rewarded those who had biked, bussed, carpoled or walked to university that week (see above).

Biking: SAGE continues to encourage cycling to campus. Initiatives this year included:

- **Free bike servicing on campus:** Ten approximately monthly free basic bicycle service and safety checks were provided to support sustainable commuting, including one session which coincided with the free Sustain-the-brain breakfast for sustainable commuters. The service was provided by Yaz of Nomadic Cycles (www.nomadiccycles.co.nz/), courtesy of SAGE, and includes brakes and gears tune/check, chain, bolt and tyre checks. Replacement parts are not included in the free service – if needed, these can be paid for separately after approval by the bike owner. This year the service location was in the car park on west of Grounded, but work continued through the year to locate a place that was less weather dependent. Good signage will be essential.
- **Discounted e-bikes:** Nomadic Cycles offers a 5% discount on NCM e-bikes to SAGE and LU staff/students. E.g. <https://www.nomadiccycles.co.nz/shop/p/ncm-munich-electric-bike>



- **Donated e-bikes.** SAGE learnt this year that the University had been donated 18 electric bikes which have been distributed around various departments. The location of most of these was identified. Some have dedicated uses and users (e.g. one for IT to respond quickly to IT call outs), while use and users of some of the others is less clear. Who is paying insurance and conditions of use still need to be resolved, but we are working towards having the available bikes at some central place (e.g. outside the Library or Rec Centre), where potential users could get a key and a log of who is using the bikes can be maintained, then publicising that they are available for use.
- **Bike storage:** Thanks to work by LincWorks, we now have a secure covered bike storage place on south side of Hudson. Publicity and signage are planned for early 2023.
- **Tyre inflating point.** Discussions continued through the year on a suitable location for this, and it was agreed the covered bike storage would be a good location for it; a very efficient manual foot pump will be made available. It might be necessary to consider having something outside the bike shed for other people.

Buses: A number of initiatives this year were directed at making bus travel cheaper and more convenient for students and staff.

- Metro vouchers: With the assistance of LUSA, SAGE distributed 468 \$10 Metro discount vouchers to about 200 students, many at the LUSA Market Day event on 21 February. Some students failed to redeem the vouchers and they were due to expire in February 2023, but John Gould negotiated an extension to their validity until April 2023, and emailed a reminder to redeem the vouchers.
- ECAN and CCC were invited to the Sustainability Expo in Grounded during Sustainability week, and staffed a transport stand providing information on bus and cycle routes, consultations, and giving away free reflective ankle straps and spoke tags.
- In August 2021, John Gould and Lin Roberts met with ECAN and AECOM staff developing bus transport options for ECAN, advising them of particular issues about the zoning, route and fare structures which were limiting use of the service by Lincoln students and staff. This helped inform the fare and zoning options released for public consultation early 2022.
- In April 2022, a number of university staff and students submitted on proposed changes to bus fares and zoning structure detailed in the 2023 ECAN Annual Plan. Among those submitting were our Sustainability Officer Patryk Szczerba on behalf of LU, John Gould & Lin Roberts on behalf of SAGE, Jeremy Kilgour on behalf of LUSA, Sam Dryden on behalf of School Strike 4 Climate, with John, Lin and Masters student Faye White making individual submissions as well. John Gould then presented his submissions in person on 27 April, which was positively reported in the Press the next day. Interestingly a number of our submissions asked for a hybrid between the proposed Options 1 & 2 (i.e. both reducing fares for students and community card holders to \$1/trip, plus reducing fares for everyone else to \$2/trip), and a hybrid option is what the councillors supported, and confirmed when the Annual Plan was finalised in June. This hybrid solution seems likely to have a much broader impact on car use and the city's emissions than any of the three options that were being considered, while also addressing equity issues.
- Good news for bus riders continued when in March the Government announced a decision to halve bus fares for three months 1 April - 30 June 2022, later extended to 31 March 2023.
- Articles were placed in the student magazine Ram and posters around campus about the Metro Vouchers and drawing attention to the ECAN submission opportunities and reduced bus fares, and the many advantages of taking the car, cf. driving.

7. Waste & recycling

Before Paul Dryden sadly left, he was making excellent progress with this, with weekly meetings towards getting campus wide recycling of a much wider variety of waste streams off the ground. David Riddough is picking up the area, and with Shane Timbrell will be meeting with Waste Management to see what they can offer. Mike Garth at Mrs Os has established systems and outlets for a variety of different kitchen wastes (e.g. different types of plastics, lids, batteries, bottle tops etc) and has identified a space on east side of back of the kitchens which could work well as a place to put recycling bins for a variety of sorted items accessible to rest of the University community. Getting an effective system established and well communicated will be a priority for 2023. Sam Dryden, Nigel McConnell and Barbara Nicholson are other members interested in progressing this.

Laboratories are another significant source of plastic waste, and Deb Poi has been driving a great initiative to deal with plastic laboratory waste (plastic grades 1, 2 & 5), working with Blenheim company Future Post. She aims to expand the trial into the new Waimarie building when we shift into there.

8. Plans for 2023

The 2023 programme is in the hands of the new SAGE committee, but three proposed areas of development are:

- Communication. Internal and external communication about sustainability proposals and achievements at Lincoln University continues to be very underdeveloped. Activities proposed for 2023 include preparing a campus map with sustainability highlights ready for orientation 2024; setting up a fuller seminar series (facilitated by having one person – Colin Meurk - who has kindly agreed to take on the task of identify a range of suitable speakers, and Daphne who will help with the logistics of making the events happen); enhancing and updating both the sustainability page on Lincoln's external website and a SAGE intranet page; and instituting regular two-way communication between the Sustainability Task Force and staff and students. Academic freedom of expression and obligation to act as 'critic and conscience' should not be seen as at odds with Lincoln marketing of its progress on sustainability.
- Action grants. Now that we have established criteria, and set up an application and assessment process, it should be possible to launch the call for Action Grants much earlier in the academic year, increasing the number of projects initiated and completed, adding both to sustainability awareness on campus and actual sustainability improvements.
- Recycling stations.

Thank you

Many thanks to the SAGE Office-holders 2022:

Chair: Dr Lin Roberts

Secretary: Teresa Cunningham

Treasurer: Mark Oldham

and to everyone who contributed to and participated in the various SAGE activities throughout the year!