

Comments on Low-Emissions Economy (Draft Report)

Sustainability Action Group for the Environment (SAGE), Lincoln University

SAGE consists of a group of Lincoln University staff and students who work with the University's Senior Management to encourage greater sustainability on campus through the adoption of relevant policies and practices. Extracts from Lincoln University's Sustainability policy relevant to the Low-Emissions Economy report are attached in Appendix 1.

SAGE's key submission points are:

- A concern that the report does not convey a sufficient sense of urgency, given the current and future impacts of a rapidly warming climate
- Major opportunities exist for significant short-term reductions in transport related emissions through policies encouraging greater use of carpooling, cycling/walking and public transport
- Transitioning away from dependence on coal fired boilers for space heating and hot water by institutions such as Lincoln University, should be facilitated by assistance from government in the form of technical advice and financial incentives.
- SAGE supports several proposals mentioned in the report including, but not limited to, a Climate Change Act, the Zero Carbon Act and the establishment of a Green Investment Bank.

1. **SAGE** thanks the Productivity Commission for the opportunity to comment on the Low-emissions economy (Draft Report). We acknowledge the urgent and important need to address climate change for the benefit of current and future generations, by rapid implementation of a multi-pronged approach addressing systems of transportation, agriculture, energy etc.

2. **SAGE** is amenable to ongoing involvement with the Commission to help progress this report into action.

3. General Comments

Overall, we found the Low-emissions economy (Draft report) to be relevant, realistic, well-balanced and thought provoking, but insufficiently ambitious given the imminent harm human behaviour, at a population level, is causing the environment each day. It provides a good initial assessment of climate issues in Aotearoa New Zealand and offers many well-considered proposals as to how these might be addressed. It is encouraging, at last, to witness authentic Government leadership in addressing the most challenging issue of our generation.

The issues covered in the report are broad and far reaching. Here at Lincoln University, as well as other NZ institutes and across the globe, there is a plethora of relevant research about how reductions in GHG emissions might be achieved through changes in land use and innovations in agriculture, although these will not be addressed in this submission.

Rather than trying to address the multiple questions and recommendations raised in the report, this submission will focus primarily on two of SAGE's key areas of interest:

- rapidly transitioning to more sustainable modes of transport for staff and students

- transitioning away from dependence on a central coal fired boiler for space heating and hot water.

In addition, SAGE supports and endorses some particular recommendations, positions and proposals, which are mentioned below.

4. Concern that the report does not convey a sufficient sense of urgency

SAGE is concerned that the report does not convey a sufficient sense of urgency, given the current and future impacts of a rapidly warming climate, such as the rapid disappearance of summer sea ice in the arctic, the threat to low-lying Pacific nations of sea-level rise and the increasing frequency and magnitude of extreme weather events.

5. Opportunities for significant short-term reductions in transport related emissions

Based on our experience at Lincoln University, SAGE believes that major opportunities exist for significant short-term reductions in transport related emissions through greater encouragement of carpooling, cycling/walking and use of public transport.

The report focuses on a paradigm shift to Electric Vehicles (EV) and self-drive vehicles to reduce transport related emissions out to 2050. In the short-term, to perhaps 2030, interim measures are urgently needed. Even if the current Government target of 64,000 EV's by 2021 is achieved, this would still represent less than 2% of all light vehicles in NZ.

At Lincoln many students and staff commute by car (almost exclusively petrol/diesel including many older vehicles) from Christchurch or surrounding settlements on a daily basis. Average daily car travel is about 35-40km. It is not unusual for the main carpark to be full (and there to be 1000+) cars parked on campus. The free parking available on campus acts as an incentive to this and many cars carry a single occupant.

In this context SAGE would strongly endorse recommendation 11.1 of the report that:

The Government should introduce CO2 emissions standards for light vehicles entering the New Zealand fleet, subject to detailed consideration of design options (for example, including or excluding small traders).

A number of strategies including introducing parking fees, promotion of carpooling and cycling are currently being explored. SAGE believe that a combination of incentives and disincentives would achieve behaviour change and reduce backlash, and support from the Government to make such policy changes will improve the accountability of implementing change. Greater use of public transport is also an option for reducing dependency on cars. Incentives such as subsidizing student/staff bus fares is another approach being considered. The future introduction of electric buses or those using biofuels will further contribute to reducing emissions.

Any assistance, from Government to help incentivise an immediate transition to more sustainable transport options for students and staff would have other multiple benefits relating to health, social well-being and reduced road congestion. Just as older people (Goldcard holders) qualify for free travel on many buses in off peak hours, could not tertiary students be offered free or subsidized use of public transport on weekdays?

In conclusion, NZ is at the coalface of a paradigm shift in transportation. We are no longer able to ask "How much will it cost to implement this change?" Instead, we are forced to answer the question "How much will it cost if we don't change?" SAGE encourages the Government to consider using policies to place more onus onto NZ citizens as individuals, communities, families and businesses so that there is accountability for actions and a sense of citizenship and responsibility.

The first step towards change is not just to rely on changes in agriculture, but to make immediate changes to public transport policy which serve to place bias on more sustainable modes of transport their personal contribution to GHG emissions.

6. Transitioning away from dependence on coal fired boilers.

Like many institutions Lincoln University is currently dependent on coal fired boilers for much of its space heating and hot water requirements and in winter time can burn over 300 tons per month. While alternatives such as switching to woodchips have been explored and could be technically viable, these would require far greater storage capacity than currently available and require many more deliveries by truck to meet the increased fuel volumes required.

While as an interim measure, there are some low cost opportunities for greater energy conservation in student hostels (eg. shorter hot showers etc.) and classrooms, replacing or converting the coal fired boilers will require a very significant multi-million dollar investment. This major transition would be greatly facilitated by assistance from government in the form of technical advice and financial incentives such as interest free loans, tax breaks or grants and would reduce the carbon footprint of the University by several thousand tons of CO₂ emissions annually.

7. SAGE endorses the proposed Climate Change Act, Zero Carbon Act and establishment of a Green Investment Bank and Report Recommendations listed below (see Appendix 2).

SAGE endorses the adoption of several proposals highlighted in the report including but not limited to:

- A Climate Change Act (based on the UK Climate Change Act 2008) but tailored to fit the New Zealand context
- A Zero Carbon Act – as proposed by Generation Zero
- The establishment of a Green Investment Bank.

8. Public education campaigns and support for Climate Change Mitigation Advocacy

SAGE proposes that the Climate Commission should be tasked with spear-heading a major public education type Climate Change Mitigation campaign (eg. running TV, Radio, Online, Print media adverts etc. along the lines of the ECCA – energy conservation messages)

It is further suggested that support and funding for existing non-governmental organizations who are advocating, and raising awareness about climate change and implementing mitigations, would be a very cost-effective way to help address the looming crisis.

Submitted on behalf of the Sustainability Action Group for the Environment (SAGE)

Lincoln University

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APPENDIX 1

Lincoln University's Sustainability policy states as its purpose, a commitment to be an international and the national leader in promoting and achieving ecologically, socially and economically sustainable development. This commitment is in compliance 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.

A key policy outcome is to ensure Lincoln University phases out use of fossil fuels and achieves carbon neutrality by 2030.

Policy objectives relating to University Operations addressing energy, transport and climate change, state that the University will:

- Minimise use of materials and embedded energy used in construction and operations, and those containing harmful substances.
- Maximise the re-use of all construction and operations materials including electronic waste, relocate or recycle all materials that cannot be re-used, minimise land fill waste and waste containing materials harmful to our ecosystems.
- Maximise composting and use of organic waste.
- Where use is unavoidable, use best management practices to dispose of chemicals and other toxic substances.
- Maximise production and use of renewable energy and phase out reliance on fossil fuels.
- Promote energy efficiency for heating, cooling, lighting, transport and for landscape management and farming operations.
- Promote the use of sustainable transport options both for University operations and by staff and students travelling to the University, including greater use of; electric vehicles, public transport, carpooling, cycling and walking.
- Promote carbon offsetting by staff and students when travelling especially by air and start actively planting trees and encouraging the regeneration of native bush as a way to mitigate climate change

APPENDIX 2

Report Recommendations – Endorsed by SAGE

INNOVATION

R5.1 The Government should phase out all subsidies that support the ongoing production and use of fossil fuels.

R5.2 New Zealand should establish the transition to a low-emissions economy as a high priority within its national innovation system recognising the importance of that goal and that it will require extensive economic transformation and restructuring. The Government should provide major public backing and funding support for innovation so that it can play a central role in the transition, alongside effective emissions pricing.

INVESTMENT

R6.4 The Government should develop, in conjunction with interested parties including the private sector, a low-emissions investment strategy for New Zealand. Relevant topics should include:

- the strategic alignment of direct government investment intended to support the transition to a low-emissions economy (eg, grants, loans and other initiatives such as the proposed Green Investment Fund), as well as the interaction between policies such as disclosure requirements and direct government funding;
- the investment mandates of large public institutional investors (eg, ACC & NZ Super Fund);

LAWS AND INSTITUTIONS

R7.1 The broad principles and framework of the United Kingdom’s Climate Change Act should be used as a basis for designing a new architecture for New Zealand’s climate change legislation. Yet such a legislative framework should be carefully tailored to fit the New Zealand context.

R7.2 The Government should seek to achieve a high level of political support and consensus for new climate change legislation, with an aim of enacting legislation that has a strong prospect of policy and legislative durability regardless of the make-up of the government.

R7.3 A long-term greenhouse gas (GHG) emissions-reduction target should be set in primary legislation. Legislative emissions targets require careful design and should be formulated following a robust public policy process seeking broad agreement.

TRANSPORT

R11.1 The Government should introduce CO₂ emissions standards for light vehicles entering the New Zealand fleet, subject to detailed consideration of design options

R11.2 The Government should introduce a price feebate scheme for vehicles entering the fleet, subject to identifying the most suitable design features for the New Zealand context. The feebate scheme should replace the existing road-user charge exemptions for light EVs.

R11.3 The Government should provide financial support for charging infrastructure projects to support the uptake of EVs. Support should be limited to specific gaps in the charging network that are not commercially attractive to the private sector (eg, charging stations in rural regions).

R11.4 The Government should encourage government agencies where practical to procure low-emission vehicles.