Submission on the low emissions economy

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The following are some brief comments on a number of issues raised in your paper. A number of examples are drawn from the southern Kapiti Coast.

What are the issues for government to consider in encouraging alternative low-emissions land uses?

One of the issues overlooked is the value of wetlands in sequestering carbon. For example see:

https://link.springer.com/article/10.1007/s10980-012-9758-8

Wetlands have been significantly reduced in size over the period of human settlement in New Zealand but there are now opportunities to create new wetlands. This includes expanding wetlands on public land. For example see

http://www2.nzherald.co.nz/the-country/news/article.cfm?c_id=16&objectid=11905322

What are the main barriers to sequestering carbon in forests in New Zealand?

Many local restoration groups plant trees. In the last year this has been encouraged by organisations such as 'Trees that Count'. However, this puts the burden on a small group of volunteers rather than spreading this cost/effort across the whole of society. In addition, much of this planting is based on a landscaping/gardening model. This involves relatively high cost plants being produced in nurseries. There now needs to be a 'forestry' style model applied to some of these plantings. The Paekakariki firm Groundtruth has been experimenting with low cost forestry style native planting in Queen Elizabeth Park in Kapiti. The cost is roughly 25% of the landscaping style of planting. The Productivity Commission would be advised to talk to Groundtruth to better understand the cost savings in this style of planting.

While planting for carbon sequestation often focuses on marginal farmland, there are opportunities for significant plants on various types of 'public' land. This includes regional parks, local authority land, KiwiRail land and land owned by NZTA. Often this land is weed covered. As an example of land owned by NZTA, there is the Perkins farm bought as part of the Transmission Gully project. Local groups have developed planting plans for the surplus land. See:

https://ngauruora.files.wordpress.com/2015/06/perkins-farm-restoration-28-november-final.pdf

This land would be an ideal carbon sink. But actually achieving this seems difficult under current structures. The government in various ways could support such restoration work.

What are the main barriers to the uptake of electric vehicles in New Zealand? And **What policies would best encourage the uptake of electric vehicles in New Zealand?**

There are a number of types of electric vehicles operating in New Zealand, including electric trains. Continuing to support public transport provision by electric vehicles should be part of any move to a low emissions economy. It is also difficult to understand why the full electrification of the North

Island main trunk rail line and the branch to Tauranga is not part of a carbon reducing transport policy.

There should also be support given to the introduction of electric campervans to support the decarbonisation of this part of the tourist industry.

But an area overlooked in the report is that of electric bikes. The use of such bikes is expanding rapidly and is likely to continue to expand. This potentially greatly increases biking opportunities for New Zealanders whether it be for commuting or recreation. Hence a need to continue to support bike friendly cities and other urban areas. This might include having bike racks with charging stations built in. Town planning needs to put at its centre opportunities to bike, walk and use public transport. We should aim for biking levels to be similar to countries such as Holland. Electric bikes overcome the disadvantages created by our often hilly environments.

In addition to encouraging the use of electric vehicles, what are the main opportunities and barriers to reducing emissions in transport?

Long distance bus travel is a neglected issue in New Zealand public policy research and development, including on the subject of climate change. As a mode of transport, the only mention of it in the 2017 Ministry of Transport's report Transport Outlook Current State 2016 is '[p]ublic transport between cities is provided mostly by private bus operators (p. 54). No mention is made of bus travel to rural areas and small towns.

According to a report prepared by the American Union of Concerned Scientists, 'Motor coaches and trains are a carbon bargain' (p.3).1 Their 2008 study notes that 'a couple boarding a motor coach will cut their carbon nearly in half, compared with driving even a hybrid car. And if they take the motor coach rather than flying, they will cut their emissions by 55 to 75 percent, depending on the distance they travel (p.6).' Potentially long distance buses have the potential to further reduce carbon emissions through switching to battery or hydrogen power.

While long distance bus travel is likely to remain relatively small compared with flying, it is still an important part of the long distance transport mix. However, it is held back at the moment by poor service and poor infrastructure. We have written about this in a number of forums including:

http://pureadvantage.org/news/2017/02/24/first-world-travel-third-world-facilities/

https://www.greaterauckland.org.nz/2017/04/19/guest-post-first-world-travel-third-world-facilities/

https://transpert.tumblr.com/

To fix this requires input by bus companies, local authorities and central government.

Finally, another seemingly small issue. In Kapiti an expensive new expressway has just been completed. But in surrounding urban streets, local bus users are expected to stand in the rain while waiting for buses. There seems a lack of funding at the local level for infrastructure supporting bus travel. Making local bus travel more pleasant is another small way of potentially reducing carbon emissions.

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[1] American Union of Concerned Scientists. Getting there greener: the guide to your lower-carbon vacation. Cambridge, MA: UCS Publications; 2008. Available from: http://www.ucsusa.org/sites/default/files/legacy/assets/documents/clean_vehicles/greentravel_report.pdf