



New Zealand Productivity Commission  
PO Box 8036  
The Terrace  
Wellington 6143

8 June 2018

### **Low-Emissions Economy: Draft Report**

To Whom It May Concern,

Thank you for the opportunity to submit on your draft report. I fully support the strong case you make for transitioning New Zealand to reach net-zero GHG emissions by 2050.

I am making this submission as Senior Research and Policy Analyst for the Office of the Deputy Vice-Chancellor (Research and Enterprise) at the University of Otago. Given my role, I am particularly interested in your material on R&D innovation in chapter 5 (“Innovation”).

#### **Innovation**

First, I will venture a general observation. Chapter 5, while setting out to articulate an optimal innovation strategy to lower emissions, characterises New Zealand as a technology or knowledge taker – not a knowledge maker, and recommends that we should be a “smart follower”. This characterisation, I believe, courts passivity and misses an opportunity to exhort our science system to harness – invest in – our longstanding “number eight” ingenuity in the creation of new knowledge.

I will address each of chapter 5 recommendations briefly below.

<b>R5.1</b>	The Government should phase out all subsidies that support the ongoing production and use of fossil fuels.
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Agree. This would free up around \$88 million p.a. (Loomis, 2017) that could be reinvested in clean energy R&D.

<b>R5.2</b>	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
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	innovation so that it can play a central role in the transition, alongside effective emissions pricing.
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Strongly agree. There is great scope within the national science system – across investigator-led, mission-led and industry-led science – for the Government to prioritise investment into low emissions research. New Zealand universities have broad, deep research expertise across the many discipline areas that could feed into this.

Tying into this, I strongly support your view (expressed in chapter 10) that agriculture – including horticulture and cropping – should be fully covered by the NZ Emissions Trading Scheme. An economic imperative like this would certainly drive research innovation. For an agricultural economy like New Zealand’s, necessity will be the mother of innovation.

A salient current opportunity for investing in industry-led innovation is the new Government’s proposed 12.5% R&D tax incentive/credit. A further opportunity might be created here if the tax credit were weighted towards low emissions R&D – by the Government offering a larger tax credit [20% or more?] to companies involved in this kind of research.

As I will discuss below, the paper is largely silent on ways to fully engage Māori as Treaty partners. Prioritizing the Vision Mātauranga Capability Fund as a vehicle for Māori-led emissions innovation might be one way to proactively uphold this partnership.

<b>R5.3</b>	<p>The Government should take steps to:</p> <ul style="list-style-type: none"> <li>strengthen the national innovation system such as by clarifying its low-emissions objectives, and by improving linkages, the identification of relevant innovation opportunities, and knowledge transfer and sharing; and</li> <li>align the various complementary parts so they work well together in the transition to a low-emissions economy.</li> </ul> <p>The scope should include not only science and research, but broader innovation, knowledge dissemination and learning, skills, infrastructure, regulation and finance.</p>
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Agreed. The Government needs to embed low emissions imperatives across its funding systems.

<b>R5.4</b>	<p>The Government should investigate and implement any cost-effective institutional models for:</p> <ul style="list-style-type: none"> <li>scanning new low-emissions technologies around the world to identify ones with promise for New Zealand but that may need adapting to suit local conditions; and</li> <li>helping firms to improve their absorptive capacity for external knowledge, including new low-emissions technologies.</li> </ul>
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Agreed, and this might be partly achieved through focused R&D tax credits for emissions innovation. As discussed above, I believe this “smart follower” approach should supplement not supplant Government support of our talented local “knowledge makers”.

<b>R5.5</b>	Policy should keep the market environment competitive and flexible to allow “creative destruction” to take place, so that resources can flow from firms that lag in adopting low-emissions technologies to firms that lead.
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Agreed, though this market flexibility would require emissions to be priced at a level that disincentivizes the adoption of lagging technology. The market would thus only be flexible in a limited way – companies would evolve or die.

### Partnership with Māori

The paper notes some consultation with Māori, but not much – engagement meetings with the Climate Change Iwi Leaders Group and with Te Rūnanga o Ngāi Tahu. Several sections of the report reference Māori in their role as kaitiaki and as landowners, but the overall level of engagement with Māori seems thin.

For a topic as important as climate change mitigation, and given the longstanding, inseparable bond Māori have with the health and wellbeing of the New Zealand environment, this is disappointing.

Of the report’s 142 findings, two (F7.14 and F7.15) – 1.4% – reference Māori or the Treaty. Of the report’s 53 recommendations, one (R7.11) – 1.9% – references Māori. This absence is problematic in view of the Crown’s ongoing Treaty obligations.

The wording of the few findings and recommendations is also problematic. F7.14 and F7.15 state:

<b>F7.14</b>	Inclusion of a Treaty of Waitangi clause in the legislation would acknowledge both the importance of the kaitiakitanga role of mana whenua and the stability and longevity of the fundamental constitutional arrangements on which a low-emissions future would be achieved.
<b>F7.15</b>	The legislative framework could strongly signal a partnership approach between Māori and the Crown in achieving the goal of a low-emissions economy. However, relying on legislative provisions alone will not be sufficient to uphold Treaty principles of partnership, mutual respect and good faith. Much will depend on the quality of leadership.

I suggest the F7.14 finding statement be changed to read: “Inclusion of a Treaty of Waitangi clause in the legislation **will** acknowledge both the importance of the kaitiakitanga role of mana whenua and...”. I suggest the first sentence of the F7.15 finding be changed to read: “The legislative framework **will** strongly signal a partnership approach between Māori and the Crown in achieving the goal of a low-emissions economy.”

The wording of the related recommendation is even more noncommittal around Treaty partnership:

<b>R7.11</b>	The legislative framework for a low-emissions economy should provide for mechanisms for Māori to advise the Government on policy, process, and decisions relating to emissions budgets and the Government’s strategy to achieve them.
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I suggest the R7.11 recommendation statement be changed to read: “The legislative framework for a low-emissions economy **will provide mechanisms for Māori to partner with the Government** on policy, process, and decisions relating to emissions budgets and the Government’s strategy to achieve them.”

As the Crown’s Treaty partner, Māori need to be more strongly visible throughout the report and the various work streams that flow from it. This can only hasten progress towards reaching net-zero GHG emissions by 2050.

These few suggestions notwithstanding, it is a pleasure – and a relief – to read such a comprehensive and well-researched paper on climate change mitigation.

Thank you for this opportunity to provide feedback.

Yours sincerely,  
David Geraghty.

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