



29 September 2017

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Low Emissions Economy Inquiry  
New Zealand Productivity Commission  
PO Box 8036  
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**WELLINGTON 6143**

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### **Low Emissions Economy Issues Paper - Submission**

Thank you for the opportunity to comment on the Low Emission Economy Issues Paper. The document covers a significant range of matters, therefore, Council has focused its comments around those that most affect the Rangitikei District.

### **To what extent is it technically and economically feasible to reliably measure biological emissions at a farm level?**

Council believes that while it would be easy to use generic metrics to measure emissions on a per animal basis, that these measures would be too crude to be useful. As discussed in the issues paper, there are likely to be animals that naturally produce less methane than others, and such a crude measure would not acknowledge this, or farmers that are working towards increasing numbers of animals with naturally lower emissions.

### **What are the main opportunities and barriers to reducing emissions in agriculture?**

The Commission highlighted a number of potential technologies to reduce biological emissions in Box 3. Council requests that Central Government ensures that any unintended consequences of these mitigation options are fully explored before being implemented. For example it is important that a methane vaccine, if successfully developed, would not have adverse effects on animal productivity or humans, and the characteristics of the product such as taste and texture. Likewise, if a nitrogen inhibitor was developed to put onto pasture to reduce the loss of N<sub>2</sub>O, research needs to have been undertaken to examine potential downstream effects on the environment, including flora and fauna, or the animals which will be consuming the pasture, as well as effects on pasture productivity. This reflects the need for a holistic approach.

Council considers that the main opportunity to reduce emissions in agriculture are through simple solutions, such as targeted breeding. If research can be undertaken to identify genes of animals which, while being good producers, have naturally low emissions, targeted breeding of these animals is an easy solution to reduce emissions.

Council would like the Commission to consider the potential for on-farm carbon sinks. Further incentives could be placed on farmers to provide carbon sinks (in the form of increased vegetation on the site) to mitigate the emissions of animals on site, or by some form of contractual arrangement off-site. In the long term whole farm sectors could become carbon neutral. Nevertheless, any policy response to increase requirements for mitigation would need to be implemented incrementally, with associated incentives/disincentives to ensure farmers are not unduly affected.

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

Council considers that the most successful transitions for low emissions land uses will occur over the long term, in particular through intergenerational change. It is important that changing land uses is supported by incentives to ensure making the change is easy and not subject to significant risk. There will need to be a shift in skill sets, as the skills needed for agriculture are considerably different than those for horticulture/forestry. Central Government would also need to ensure that policies to encourage land use change are adaptable, so that farms would benefit from mixed land uses. Farms that have stock could also have forestry or horticulture. The most important factor for encouraging land use change is to ensure the change is incremental and sustainable. Change should be supported with access to skills required for the transition.

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

The key barrier to increasing the number of forests in New Zealand has been unstable Central Government policy. Recent deforestation has often been due to the increased returns associated with land use conversion from forestry to other activities such as dairying, in tandem with the undermining of the Emissions Trading Scheme through inconsistent Government policy.

### **What policies, including adjustments to the New Zealand Emissions Trading Scheme, will encourage more sequestering of carbon in forests?**

There is a need to increase the funding arrangements for afforestation. The current funding available is insufficient for the change needed to significantly increase the number of forests throughout New Zealand if a fully functioning Emissions Trading Scheme is not part of the package. Additionally, there may be productivity gains available when the effects of climate change are considered with respect to regional species selection. Further research could be undertaken to provide information on the species of forests which would be suitable with increased warming. For example pine trees in some areas are increasingly becoming subject to disease due to increasing moisture and temperatures (e.g. red needle cast) and so alternatives need identification and testing. It could be advantageous to consider forests as permanent sites rather than for harvesting. Research may also show that there are some trees that are more effective carbon sequesters.

### **What are the main opportunities and barriers to reducing emissions in transport?**

Council considers that the best opportunity for reducing emissions in transport is to have an increased investment and emphasis on rail transport, both for freight and as passenger transport. To ensure a co-ordinated approach across New Zealand the infrastructure and policy would need to be nationally consistent. To achieve this there would need to be incentives to ensure rail transport is economically more viable than road transportation for some product classes. Consideration is warranted for the implementation of truck transportation zones (appreciating that there may still be the need for large trucks for certain types of haulage i.e. houses or large structure).

### **What changes will be required to New Zealand's regulatory, institutional and infrastructural arrangements for the electricity market, to facilitate greater reliance on renewable sources of energy across the economy?**

Council considers that there is significant scope for an increased focus on the benefits of solar energy, particularly at a residential scale, or for remote communities. This will require further development of existing technology and potential subsidies. Big schemes are not necessarily the solution, as a local focus on solar power could significantly decrease reliance on significant infrastructure projects. It is also important that locally generated electricity could be easily sold back into the grid. This would further incentivise small scale schemes.

### **Is New Zealand's current statutory framework to deal with climate change adequate? What other types of legislation might be needed to effectively transition towards a low emissions economy?**

Council considers that there needs to be a holistic approach to successfully transition towards a low emissions economy. The statutory framework should not just be focused on a particular act to deal with climate change, but needs to be integrated into all sectors (such as transport, resource management, and primary production). The holistic approach will need to ensure that legislation works to incentivise low emissions actions while dis-incentivising high emissions actions.

### **Who are the most important players in driving forward New Zealand's transition to a low emissions economy?**

Council acknowledges that successful change will only occur if there is buy-in from all levels, however, considers that Central Government is the most important player in setting a national direction and putting in place the tools to transition to a low emissions economy.

### **What measures should exist (and at what scale and duration) to support businesses and households who have a limited ability to avoid serious losses as a result of New Zealand's transition to a low emissions economy?**

Council considers that the key for ensuring that those who are likely to have serious losses are provided with compensation, but more importantly, an incremental and sustainable transition to ensure that those losses occur over time (rather than all at once).

**Should New Zealand adopt the two baskets approach? If so, how should it influence New Zealand's emissions reduction policies and long-term vision for the future?**

Council agrees that New Zealand should adopt the two baskets approach. Given the disparate contribution to climate change, setting separate targets is appropriate.

**What does your long-term vision for a low-emissions economy look like? Could a shared vision for New Zealand be created, and if so, how?**

Council considers that a long-term vision for New Zealand is essential if New Zealand is to successfully transition to a low emissions economy. It is essential the vision is holistic, encourages innovation and increased use of technology. The vision, for the Rangitikei District, would be to ensure that the transition happens slowly, with appropriate incentives and disincentives to ensure that the community are not unduly affected. A shared vision would need to be created through consultation with all sectors and the general public. The vision should not be in conflict with other government policies. All government policy work should underpin this vision.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Andy Watson', written in a cursive style.

Andy Watson  
**Mayor of Rangitikei**