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Low Emissions Economy Inquiry
New Zealand Productivity Commission
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Low Emissions Economy Report - Submission

Thank you for the opportunity to comment on the Low Emission Economy Report. Council has previously commented on the Issues Paper, and the issues raised in that submission remain relevant. For this submission Council has focused its comments on the new issues in the Report that most affect the Rangitikei District in particular:

- An inclusive transition
- Agriculture into the ETS
- Wastewater treatment plants into the ETS
- Aquaculture
- Wetlands

We support the Government's decision to establish a separate Climate Commission. This will reduce the potential for political interference and introduce policy setting certainty.

An Inclusive Transition

The Report identifies a number of policies to ensure the transition to a low emissions economy does not have a disproportionate effect on low income households. Council is supportive of the need to support low income households who are likely to be disproportionately affected. However, Council does not support the Commission's view that communities facing large shocks should not also receive assistance, and that assistance should be targeted at individuals, rather than regions.

The closure of a large business in a regional economy, such as the Rangitikei District, can have significant negative consequences for the well-being of the entire community (not just individuals). The solution is not to move those individuals to a different location in New Zealand, as this would only create more significant adverse effects on local communities. Instead, assistance should be provided directly to those communities to support the establishment of alternative low emissions industries. Often regional economies have advantages for business establishment already, such as low land prices which could be enhanced by additional Government incentives.

Recommendation: That where a regional community experiences a large shock due to the transition to a low emissions economy, there are policies in place to assist (e.g. incentivise the establishment of low emissions industries).

Making this place home.

Agriculture into the ETS

The Rangitikei is a diverse District with a largely rural population supported by a range of small towns. The views from Councillors on putting agriculture into the ETS were highly mixed. Views in support of putting agriculture into the ETS recognised that this would be a key mechanism for reducing emissions from the agricultural sector which account for such a high percentage of New Zealand's total emissions. Support for free NZU's, decreasing over time, was considered as a key mechanism for reducing shocks to the sector and enabling a smooth transition to lower emission practices or land uses. However, in the Rangitikei, substantial tracts of hill country have been converted to forestry already, in recognition of the need to limit erosion. This will be the case in other parts of the country so closer regard is needed to where the proposed substantial increase in afforestation can be achieved. If agriculture is included in the ETS, the template for assessing emissions needs to be simple and effective. The Commission mentions the use of OVERSEER to undertake the emissions assessment. Council has concerns regarding the ability of this model to effectively measure emissions, given it has been designed for measuring nutrients. It is essential that any model used is simple to use and effective for all agricultural emissions, if the system for assessing emissions is too complex, it will make compliance and the move to lower emissions land uses unnecessarily difficult.

The views opposed to the inclusion of agriculture into the ETS raised concerns particularly related to the dairy industry. The relative increase in dairying is largely due to the previous Government's productivity growth targets for 2025. In addition, many dairy farmers have high debt from significant capital investment. These parties do not have the flexibility to diversify their land uses due to significant capital investment and their inclusion in an ETS system is likely to cause these parties significant financial strain. So considerable attention will be needed on identifying how low emission agricultural productivity can be achieved and incentivising that, with Central Government providing a lead role in any incentives. If agriculture is included in the ETS, Council believes substantial riparian planting zones should be included as carbon sinks. This is particularly important for dairy farms, where riparian planting would not only have the benefit of sequestering carbon but would also have an environmental benefit of assisting with nutrient run-off/cleaning up rivers. This is an instance of a trade-off options, Council considers that more thought is needed about such strategies and relevant information provided to landowners and farmers.

The proposed strategy for reducing emissions relies heavily on an increase in forestry, particularly, pine trees. Council would like to express concerns about the encouragement of large scale planting of pine trees, particularly on marginal hill country. Pine trees can create a range of adverse environmental effects, particularly upon harvesting, such as increased sedimentation of nearby waterways. Given forestry is a low labour intensive industry, increasing forestry, in place of sheep and beef farming operations may increase depopulation of rural areas, which can lead to loss of local services. Council also faces issues of funding significant costs of upgrading or repair of local roads during harvesting. Further consideration should be given to permanent solutions – native regeneration, support for Manuka planting.

It is important to note that it is likely a number of hill country sheep and beef are already carbon neutral or actually sequestering carbon. Many have bush areas and/or woodlots and farm extensively, mostly sheep, so naturally have low methane emissions plus low Nitrogen use.

If an ETS was to be implemented for agriculture, Council supports the point of obligation to be at the farm level. While it would be more difficult to implement, it provides more tangible incentives for the reduction of emissions, while retaining the greatest flexibility for how each farm chooses to do this.

Implementing the point of obligation at a farm level removes industry averaging and allows those farmers putting in the most effort in reducing emissions to be rewarded (planting trees, reducing nitrogen usage, best practice cultivation, stock number reductions). It is the method most likely to promote behavioural change.

Nevertheless, Council strongly recommends that funding to support mitigation technologies is fundamental. There are currently few mitigation methods available to reduce agricultural emissions, therefore, research and development are essential to enable significant gains while reducing adverse effects on the industry.

Recommendation: If agriculture is put into the ETS there are incentives (in addition to the free allocation of NZUs) for reducing livestock in favour of other agricultural production, there is a more detailed mapping of where increased afforestation is most feasible, and the point of obligation should be at the farm level.

Recommendation: That additional funding is provided for research and development of mitigation technologies for agricultural emissions.

Wastewater Treatment Plants into the ETS

The Commission has asked whether the ETS should be extended to cover wastewater treatment plants. The Commission has highlighted that emissions from wastewater treatment plants only represent 0.45% of New Zealand's emissions. The Rangitikei District has 6 wastewater treatment plants to service. These costs already include resource consents, upgrades and ongoing maintenance, and are posing a significant affordability issue for the District. Council acknowledges the need to address climate change and recognises that even small contributions can assist in reducing carbon emissions and accepts that we should show leadership where we can contribute to lower emissions; however, because of the relatively low impact, we request the Commission considers whether the emissions benefits which could be gained are proportional to the likely costs.

Recommendation: That further consideration is given to likely costs of including wastewater plants into the ETS before doing so.

Aquaculture

As a country strongly reliant on agriculture, there needs to be a greater consideration around New Zealand benefitting from diversification of its land-based industries. Where agricultural land has access to either a freshwater or saltwater supply it may be suited to land-based aquaculture operations (fish farming in ponds), ideally being able to be incorporated into existing infrastructure. The initial benefits from the conversion of dairying land into land based aquaculture is seen in feed conversion ratios (less demand on inputs), effluent discharge (the controllable outputs), and the Green House Gas (GHG) emissions (the by-product outputs) from such operations. The Food and Agriculture Organisation of the United Nations Technical Paper 609 (2017) highlighted that the GHG emissions per kilogram of fish production ranged from 1.37-1.84 kg carbon dioxide equivalent (CO₂e) per/kg; with the largest source of GHG emissions being associated with the production of the raw materials for fish food. In contrast, dairying production globally is seen to contribute 18.4 kg CO₂e per/kg of milk and beef production generating 38.9-67.8 CO₂e per/kg of meat. In summary, the production of beef produces 21-37x more of a carbon footprint per kilogram than fish.

There are a number of land based farming operations starting to set up in New Zealand, in both the North and South islands. However, with the entrenched outlook focusing towards beef and dairy, the land based aquaculture industry still needs assistance in getting off its feet (especially considering its emissions). Of note is that globally, farmed fish production adds up to 16.5 kilograms per person per year. Over the last decade, aquaculture has grown continuously and is the fastest growing animal food producing sector, growing at 6.6% per annum from 1970 to 2008.

With aquaculture looking to supply 46% of the world's food supply in terms of volume over the next few years, New Zealand needs to diversify its outputs, not only for economic reasons but also for the environment. In conjunction with this, by 2030 the world's population is forecasted to reach 9 billion, meaning 3 billion more people (and market) will be looking for animal protein.

Recommendation: That the Commission seriously considers the benefits of aquaculture as a key industry in the transitioning to a low emissions economy.

Wetlands

The Commission's report also seems to be lacking acknowledgement of the benefit wetlands could have in addressing emissions. The number of wetlands throughout New Zealand has been destroyed, as their benefits have not been acknowledged. Wetlands are a permanent solution for sequestering carbon, which also provide other benefits, such as water-quality improvement and flood abatement.

Recommendation: That the Commission seriously considers the benefits of increasing wetlands as part of the solution for transitioning to a low emissions economy.

Summary

Overall, the transition to a low emissions economy needs to occur based on a holistic approach, where the potential for political interference is reduced and policy certainty is increased. While environmental considerations should prevail, any decisions need to consider the full implications on all areas of individual and community well-being and provide support if required. One of the key drivers of change will be for land owners to have an economically viable alternative. Consumer desires for more environmentally friendly products may help to drive this change, but Government must lead this change.

Yours sincerely

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

Andy Watson
Mayor of Rangitikei