

Submission on Productivity Commission's Draft Report

Achieving a low-emissions economy

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General comment

Overall I consider that the Draft Report is very good. In my view it:

- addresses the key issues
- clearly shows that achieving a target in the range of net-25Mt to net-zero by 2050 is feasible under a range of possible scenarios with carbon prices in the range likely to be necessary in other countries if they are to limit global warming to 2°C as envisaged by the Paris Agreement, and
- suggests a number of sensible and necessary policy interventions.

I offer the following comments in the belief that, if incorporated, they would improve the Final Report.

1. The uncertainty of technology developments

To gamble on technology developments being able to reduce our emissions is risky: if they don't eventuate, tough times lie ahead if we are still to meet our commitments.

The best way to manage this risk is to make conservative assumptions about technological development when designing the initial policy package and commit to reviewing the package in say 2030. If technology development turns out to be more favourable than the initial assumptions, the policy package can be adjusted accordingly at that time.

I consider that the Final Report should explicitly state this.

2. Key investment decisions

As the Draft Report says on p46, a key to reducing our emissions is to ensure that long-lived investments do not lock us into a high emissions pathway for many years. To achieve this the key investments that need to be avoided are:

- dairy expansion
- new fossil fuel electricity generation

and the key investments that need to be made are:

- forestry expansion
- electrification of transport
- replacement of fossil fuels with biofuels in transport and industrial heat
- low emission (renewables) electricity generation.

As the Draft Report notes, in some cases a carbon price alone is unlikely to achieve these outcomes and supporting policy measures are likely to be needed.

3. Bringing agriculture into the NZETS

Continuing on this theme, I totally support the Draft Report's recommendation that agriculture be brought into the NZETS.

4. Lock-in vs leakage

The Draft Report notes that measures to avoid lock-in may lead to emission leakage if our competitors do not take similar actions at the same time. I consider that it is more important for us to avoid lock-in than to minimize leakage: if we don't avoid lock-in we make life much more difficult for ourselves in the longer term whereas leakage from NZ is necessarily small in the context of global emissions and is likely to be a relatively short-medium term problem.

I consider that the Final Report should recommend prioritizing avoidance of lock-in over leakage risks.

5. Climate risk reporting

To further assist with getting the right investment decisions made, I consider that it should be mandatory for commercial enterprises greater than a certain size (including SOEs and farms) to assess and report to their owners the climate risks that they face.

I suggest that the Final Report makes this recommendation.

6. GHG emissions assessment by lenders

And again on the theme of ensuring that we get our key investment decisions right, I believe the Government should consider requiring financial institutions to require a GHG emissions assessment to be done for all projects worth more than say \$10 million and for the lending institutions to then take this assessment into account when making its decision on the requested loan.

I suggest that the Final Report makes this recommendation.

7. Distinguishing long-lived and short-lived gases

I find the discussion in the Draft Report that concludes by advocating a two-basket approach, weak and unconvincing.

Given that the only significant GHG sequestration in NZ is of a long-lived gas (CO₂), achieving net-zero emissions under a single basket approach necessarily means that we will have achieved net-zero emissions for our long-lived gases.

And on pp72/73 the Draft Report notes that the modeling suggests that setting the overall 2050 target at 25Mt is likely to deliver close to net-zero emissions for long-lived gases.

Given this, I cannot see that we need a two-basket approach to ensure that we give appropriate priority to the reduction, in net terms, of our long-lived gases out to 2050.

However, looking beyond 2050 it is likely that forestry expansion will slow and, as a consequence, less of our continuing gross emissions of long-lived gases will be offset by sequestration of the long-lived gas CO₂.

To help manage the risks associated with this situation it may be prudent to aim to achieve greater reductions in the gross emissions of our long-lived gases by 2050 than are likely to be achieved by a say, net-25Mt, or even net-zero 2050 target. This would require specific 2050 gross emission targets for our long-lived gases.

For this reason I do support a two-basket approach, but would urge the Commission to recast its discussion of the issue and strengthen its arguments in favour of it along the lines that I indicate above.

8. How we do things vs what we do

The Draft Report correctly states, many times, that achieving the required reductions in our emissions will involve dramatic changes in the economy. This could easily be interpreted by people as meaning that a consequence of reducing our emissions is that they will no longer be able to do the things that they really value in life.

I think it is very important to make a distinction between **how** we do things and **what** we do. I consider that the Draft Report's statements about dramatic change are correct in relation to how we do things – how we power our cars and heavy vehicles, how we generate our electricity, how we use our land, etc. However, all the evidence that I have seen suggests that our ability to do the things in life that we really value – eating well, having warm, dry housing, being able to spend time with family and friends, having meaningful work, having access to entertainment, playing sport, being able to travel, etc, etc – will not see marked changes. How we do these things will change substantially but our ability to do the things we value in life is likely to continue on much as before.

If people understand this, I think they will find it re-assuring and it will make them more willing to accept the changes that will be involved in our transition to a low emissions economy.

I suggest that the Final Report addresses this issue.

9. Questions posed in the Draft Report

Q 6.1 – Yes, this would be appropriate given the importance of the risks to NZ associated with climate change.

Q 10.1 – The benefits of farmers having incentives to influence their production and management decisions are potentially large. While having the point of obligation for a carbon price off-farm (e.g. with processors) may be administratively easier and less costly, the benefits of having a farm-specific incentive would be largely lost.

This suggests that a farm-specific obligation is preferable. Practical considerations may suggest that a farm-specific obligation is the regime for farms above a certain size and smaller farms are covered by a non-farm-specific obligation.

A recent report, *The Economics of Ecosystems and Biodiversity (TEEB) (2018). Measuring what matters in agriculture and food systems: a synthesis of the results and recommendations of TEEB for Agriculture and Food's Scientific and Economic Foundations report*. Geneva: UN Environment, details how there are many aspects of agriculture (both beneficial and deleterious) that are not reflected in current market prices and sets out an evaluation framework for more comprehensively 'costing' production from agricultural systems and practices. A price on emissions of methane and nitrous oxide is part of this. However, if other aspects of our agricultural systems and practices were also 'priced', the resulting adjustments in land use, production and management may result in additional reductions in emissions of methane and nitrous oxide.

I commend this report to the Commission and suggest that the Final Report notes that applying the TEEB evaluation framework may be a useful tool to help manage our emissions of methane and nitrous oxide.

Q 10.2 – I don't know how technically feasible this would be but I believe that enabling it would generate considerable goodwill from landowners. I urge that the Final Report recommends that in any assessment of the cost-effectiveness of including small areas of planting in the NZETS, this goodwill be included as a significant positive value.

Q 11.1 – It seems to me possible, that even decades into the future, in a few specific situations transport needs may best be met by fossil-fuel vehicles. Given this, I suggest that an appropriate signal would be better given by aiming to move to a special permit system for importing fossil-fuel vehicles, rather than a phase-out, by some specified future date.

Q 11.2 – Yes, I consider that a feebate scheme should cover vehicles within the heavy vehicle fleet. At least for the heavy vehicle fleet, for the purposes of the feebate scheme biodiesel should be classified as a low emissions fuel.

Q 16.1 – Yes, wastewater treatment plants are a significant source of methane emissions.

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