

Ministry of Business, Innovation & Employment
PO Box 1473
Wellington 6140

Email: energymarkets@mbie.govt.nz

Increasing the use of biofuels in transport: Consultation paper on the Sustainable Biofuels Mandate

Thank you for the opportunity to comment on the proposal to mandate an increase in the use of biofuels.

Oji Fibre Solutions (OjiFS) is a substantial energy user in the NZ economy, with much of it derived from biofuel.

OjiFS is concerned that the proposal to mandate the use of biofuels is a policy promulgated ahead of other related government initiatives. It is being consulted on ahead of Government's decisions on the Climate Change Commission's (CCC) recommendations, notwithstanding the actual and potential overlap between Government's climate and bioenergy policy. Separately, Government is considering how to increase the value from NZ's primary sector exports by targeting overseas markets and customers interested in the sustainable and environmental provenance of goods and services. The use of biofuels in the manufacture of NZ's packaged product exports could or should be considered including whether it is better to sell a bio-based product or one with an imputed green benefit because it was transported using biofuel.

The consultation paper does not comment on the potential overlap between a 'mandated biofuel' policy and other current policy and regulation including the ETS. Adding a mandated biofuel obligation to the costs of NZ's transport may not be justified when the compliance costs of such a mandate (e.g. 3rd party verification to international standards) is factored in. Cost effective biofuel options can and will be explored and adopted in response to a simple carbon tax on fossil fuel. The same or similar pressure arises from the elevation by regulation of the minimum cost of emissions credits under the ETS.

The merits of biofuel, in what form and over what time frame, are difficult to determine ahead of other climate mitigation and 'economic transformation' decisions the NZ (and other) Government(s) may choose to make. Enhancing the use of biofuel could reduce net national emissions of GHG's. It could also result in reduced use of paper including recycled paper and increased solid waste if it increased the cost of paper manufacture ahead of other materials more difficult to recycle.

The CCC has emphasised a greater role for electrification of freight and transport. The question of whether such electrification is an optimal response to climate change is yet to be decided on by Government. Presumably Government will need to decide:

- Whether the greater demand for GHG-neutral electricity offers the opportunity to utilise biofuels efficiently in additional electricity generation; and/or

- Greater use of electricity in transport means a lower demand for liquid transport fuels through, for example, electrification of rail freight.

The need to consider the merit of a biofuels mandate from a broad geo-political context is indirectly highlighted by reference to Z Energy's decision to 'hibernate' its biodiesel-from-tallow plant. (page 11). The Consultation Paper attributes Z's decision to the high price of tallow as a result of other countries subsidising the production of biofuel from that feedstock. The inference is that the economically rational approach for NZ is to export tallow and import that volume of biodiesel manufactured from it.

Whether exporting tallow and importing biodiesel made from it is an environmentally rational approach will depend on the findings of a 'circular' calculation of the emissions associated with its production and transport. Presumably, a calculation would include the use of fossil-energy derived fertiliser used in NZ agriculture enabling tallow production. It would also include a proportionate GHG-cost associated with ruminant agriculture and the energy cost of transporting tallow and biodiesel to and from NZ, respectively.

The consultation paper highlights the risk that assumed emissions reductions from liquid biofuels cannot be assured without adherence to (internationally agreed?) standards. The production of liquid biofuel from palm oil produced following the removal of natural forest cover may offer a GHG benefit over time but that is by no means obvious in the shorter term. The environmental picture becomes complex when other actual and potential impacts such as the loss of valued biodiversity and increased sedimentation of rivers is considered. Even at a national level the range of environmental considerations is broader than just net GHG emissions. Removing more or all of the biomass from an area of production forest for biofuel will have negative impacts including the loss of nutrients and an increased risk of soil loss (in the event of severe weather prior to re-establishment of a vegetative cover.) Replacing lost nutrients with artificial fertiliser adds a legitimate and potentially confounding layer of complexity in any net GHG calculation. Eg, should artificial fertiliser generated locally from natural gas be assumed to have the same GHG cost as imported fertiliser of less certain provenance and per-unit GHG production cost?

The converse calculation of positive benefits can be made, whereby biofuel from material that would otherwise contribute to NZ's solid waste could have GHG and waste minimisation benefits attributed. Any attribution would require detailed assessment based on some agreed baseline. In the case of transport fuels from the anaerobic breakdown of organic wastes, the assumed GHG benefit would need to be calculated after deducting emissions associated with the separate collection and transport of feedstock waste and after accounting for the displacement of the 'existing' GHG benefit derived by the current collection and utilisation of landfill gas.

The complex amalgam of environmental and economic considerations inherent in determining the merit of a bio-diesel mandate underscores the need for verification of claimed emissions reductions for any particular fuel. A 'biodiesel' feedstock involving unsustainable and potentially illegal forestry practices should reasonably be avoided and would therefore require a high degree of confidence in certification and verification processes. Such certification and verification are a legitimate but nevertheless 'dead weight' compliance cost. The need for verification of claims supports the proposal to require certification of lifecycle emissions provided:

- there is confidence that the (international?) standards take the full environmental life cycle into account and
- the verification of 'off shore' components of the overall emission is reliable and comprehensive, including considering the legal and ethical sources of biofuels feedstocks.

It is worth noting that the above discussion of additional matters relevant to a decision on mandated biofuel is primarily focused on net greenhouse gas emissions. It would be reasonable in our assessment to import to any consideration a wider range of considerations including the relative social and economic cost, for example of road transport versus rail. In the same vein, Government has a stated interest in regional employment and “adding value” domestically to NZ’s unprocessed commodity exports. A focus on those outcomes has an indirect GHG benefit if it reduces the total demand for liquid transport fuels by reducing the volume and weight of material to be shifted. We accept such considerations go beyond a mandated biofuels target but perhaps underscores why any decision on biofuels needs to be made in the context of NZ’s wider climate change policy as a minimum.

Recommendations

- Promote the development and adoption of biofuels indirectly, through the direct regulation and cost of GHG emissions using existing systems of emissions trading and or fuel taxes.
- Delay any determination of the merit (or otherwise) of mandated biofuel pending finalisation by Government of other GHG reduction initiatives.
- Ensure any mandated biofuel obligations are adopted only after quantification of the full compliance costs of such regulation. Such a cost – benefit assessment should include the need to set clear benchmarks and standards for 3rd party verification of net emissions reductions for both domestically manufactured and imported biofuels.
- A biofuel obligation not be mandated unless it can be assured that unintended and non-GHG related negative environmental impacts are addressed.

Yours sincerely,

Privacy of natural persons



Murray Parrish
Regulatory Manager
Oji Fibre Solutions