Z Energy submission on the Productivity Commission's draft low-emissions economy report, April 2018.

15 June 2018

Z continues to strongly support the work of the Productivity Commission towards New Zealand's low-emission future, particularly the call for long-term, bipartisan commitment by government and the inclusion of iwi, communities, and business. Z notes that business has an increasing role to play in long term planning for a low emissions economy and refers to the excellent work done in this area by Westpac, and more recently Transpower. Globally, this reflects a trend for the business community to participate fully as citizens of the communities and nations they operate in, noting also the 2017 pledge by US businesses, universities, and governors to commit to the Paris Accord despite President Trump's decision to withdraw from the agreement. Z believes a commitment from business and government to work together in New Zealand in a genuine partnership on is fundamental to achieving a 2050 low-emissions economy and Z remains fully committed to this.

This brief submission supplements our 2 October 2017 submission on the Issues Paper and is set out as follows:

1. Z recommendations for three policy settings to materially reduce carbon emissions from the transport sector in the short term;
2. Z direct response to three specific recommendations;
3. Resubmission of our 2 October 2017on the original Issues Paper https://www.productivity.govt.nz/sites/default/files/sub-low-emissions-110-z-energy-391Kb.pdf particularly noting the issues raised on ETS settings and biofuels.

We welcome an opportunity to discuss these issues with the Commission in person, noting the broad and in-depth nature of the consultation the Commission has engaged in to date.

Z recommendations for policy settings to materially reduce carbon emissions from the transport sector

While Z is strongly supportive of the need for focus on long term solutions and certainty for all stakeholders, we set out in this section four options for the government to make material short term reductions in carbon (up to hundreds of thousands of tonnes).

Road transport makes up 17.3% of New Zealand's carbon emissions at a total of 13.6MT. Z is responsible for 9.5MT of this total through the products we sell and 53KT

through our own operational emissions (including all activities downstream of the Marsden Point refinery).

In November 2010, Z committed to a Sustainability stand (set out in detail in our previous submission). We shared our stand publicly and have reported on progress against it in our annual reporting each year since that date.

Key commitments under Z's sustainability stand are:

1. Reducing the carbon intensity in the products we sell;
2. Reducing NZ's reliance on fossil fuels;
3. Reducing Zs own waste and emissions.

Z is in action against these commitments. Our most significant commitment to date on reducing emissions in our core products is the commissioning of our biodiesel plant in Wiri, Auckland, "Te Kora Hou". Z has invested $35m in Te Kora Hou and will begin commercial production to key customers including Fonterra, Fulton Hogan, NZ Post, Downer, Waste Management, and transport companies North Fuels and Transport Investments Limited (TIL) planned for July, having just reached the milestone of producing on-spec biodiesel earlier this month. Roll out to private truck stops and bulk sites, followed by standalone truck stops, is planned for between August to October this year.

Z is the only biofuels manufacturer in the world (as far as we are aware) that has committed to biofuels production and supply with no subsidy. Our customers have therefore committed to paying more for their fuel, however this is a limited opportunity given how cost-sensitive consumers and businesses are in general on fuel costs.

Accordingly, there are four key policy settings we believe would materially reduce transport emissions;

1. Introduction of biofuel mandates or subsidies to complement EV incentives and encourage a short term scale up of operations and emissions reductions;
2. Removal of the existing differential in subsidies between ethanol and biofuels for the same reasons;
3. Support for the commercial consortium for the development of biojet, noting the issues in the report on aviation emissions and the emphasis on innovation as the ultimate 'silver bullet' in solving climate change issues.

Introduction of biofuel mandates or subsidies to complement EV incentives

Recommendation 12.1 in the report states that the government should not use subsidies or regulation to favour technologies to produce electricity given the rapid change and disruption in technology. Z submits that the same principle should apply to subsidies for low-emissions transport energy and the various technologies should be viewed as complementary with each having key roles in emissions reductions.

We noted in our first submission that the role of biofuels was under-represented in the Issues Paper and consider this remains the case in the current report. We ask the

Commission to consider how EVs and biofuels can work together in a complementary manner.

We agree with the report that electric vehicles have a key role in reducing transport emissions. We also note that widespread uptake will take time and as noted by the report, will be limited as a solution for heavy transport and aviation. Z believes that biofuels which use existing technologies without impacting the food chain, have a strong role in reducing emissions, both in the short and the long term. Biofuels can also address some of the more regressive impacts noted in the report as they can be used in existing vehicles and technology neutral subsidies could encourage uptake where EV purchase is a barrier to reducing emissions.

The use of biofuels could be accelerated by adopting policy incentives such as mandates or subsidies. The history relating to biofuel manages in New Zealand is (briefly) as follows:

1. *2008 Biofuels Sales Obligation* In 2008, a biofuels sales obligation was introduced and then replaced by the 2009 biodiesel scheme. The obligation required 0.05% of petrol and diesel in NZ to be sourced from biofuels, increasing to 2.5% by 2012. Industry responded and was prepared to comply – Shell installed ethanol tanks at Mount Maunganui. We are also aware of Mobil trialling bioethanol blends in Wellington. No real action ensued as the obligation was repealed by the incoming government. Z has since repurposed the Shell ethanol tanks for storing biodiesel
2. *2009 -2012 Biodiesel Grant Scheme* Under this scheme a subsidy of 42.5 cpl was available to biodiesel producers who sold 10,000L or more of biodiesel each month. This led to substantial innovation, including the company EcoDiesel which established the design of the plant that Z has ultimately based our biodiesel production facility on. EcoDiesel innovation as to establish the design of a plant that used existing technology but was capital *efficient for the New Zealand scale (globally, most plants are materially larger and more expensive as measured by capital cost per litre).*
3. *Supported Research Funding For example the Scion Biofuels roadmap and* Stump to Pump (co-founded by MPI, Norske Skog Tasman and Z).

With support, Z could double the size of our biofuels plant in 18 months from 20 ML a year to 40 ML at a one-off cost of $6-$8m, further reducing transport emissions by 37KT. While the marginal investment to increase capacity is relatively small, Z would be faced with greater price and quantity risk than we are currently facing for the total 40ML per year. With the right incentives, Z would be willing to forego the distinctive proposition of marketing NZ's only indigenously produced Biofuel and make this product available to other industry participants.

For instance, with a mandate in place, we would be able to price biodiesel at parity to imported mineral diesel, retain a manufacturing margin which would in turn provide sufficient incentive to expand our current facility and build further plants. We welcome further discussion on this.

Subsidies for ethanol and biodiesel

In line with the same principle, Z notes that disparities in taxation of various fuels need to be removed to achieve increased reduction in carbon emissions. Currently, ethanol is exempt from the 66.5cpl excise duty which applies to all other liquid fuels, including biodiesel. When bioethanol is blended with petrol, excise of 66.5 cpl is only paid on the mineral petrol portion of the fuel, not the bioethanol portion. Current policy settings in New Zealand allow for a maximum blend of 10% ethanol.

In the event of a sales mandate for biofuels, market participants would currently be incentivised to import bioethanol, incurring increased transport emissions and decreasing revenue received by government through excise taxes. We believe that this exemption should be removed and a subsequent biofuels mandate be put in place to complement the role of EVs in lowering transport emissions, particularly in the short term (EV purchase price is not forecast to be equivalent to ICE vehicles until mid-2020s and biofuels also have a distinct role in heavy transport and in addressing the regressive impact on users of older vehicles).

Z understand that government's commitment to increasing EV penetration includes an exemption from RUC but notes that this disadvantages manufacture and sales of biodiesel. As with excise relief on ethanol Z believes that EV uptake should not be incentivised preferentially to other low or zero carbon fuels such as biofuel.

Support for the commercial consortium for the development of biojet

Z agrees with the report in terms of the complexity of reducing carbon reductions in aviation. Z also agrees with the report that strong support and policy settings encouraging innovation is likely to provide the real 'silver bullet' breakthrough to resolving climate issues.

Z has worked hard over the past two years to build internal capability in innovation. Z is also a member of a consortium with Air New Zealand, Refining New Zealand, Auckland International Airport Limited, and Scion to consider development of biojet at scale. In the context of any emissions reduction effort, the development of viable biojet is important given the absence of a credible technology pathway for the replacement of liquid fuels through electrification.

The work done by the consortium to date suggests manufacture of biojet at scale in New Zealand is technically feasible but commercially infeasible. It is also likely that any such development would generate significant positive benefits apart from carbon abatement, including job creation, regional growth.

The consortium is currently working on opportunities to reduce the cost of the preferred option and we are meeting with government to identify the gaps and the assistance required, likely to include:

- Ensuring officials have the capacity to work with the consortium to unlock what it will take to make a viable biojet outcome;
- Support (including expression of interest in Provincial Growth Fund in the near future).

This work is exciting, innovative, and will need further government support to progress.

We now move to make specific comments on three of the report's recommendations below.

Recommendation 6.3 The Government should incorporate mandatory climate-related financial disclosures into existing regulatory instruments as appropriate. The disclosures should be in line with the recommendations of the Task Force on Climate-related Financial Disclosures.

Z supports this recommendation. Z has been reporting against voluntary ESG frameworks for the past few years. Our 2018 annual report complies with the Global Reporting Initiative, the International Integrated Reporting Framework, the United Nations Sustainable Development Goals, and the NZX ESG Reporting Guide.

Z is currently working with the McGuinness Institute on a request by the Institute to use Z's 2018 Annual Report as an example of what mandatory reporting should look like in practice. Our disclosures align with the OECD four capitals framework and ensure that trade-offs against the capitals are explicit, which we note that Treasury is now using and underpinned this year's government budget round.

ESG reporting also assists with ensuring transparency for stakeholders, including the ability to assess future risk which is increasingly associated with poor performance and planning against environmental, social, and governance outcomes in addition to financial outcomes. Z notes that while there are a variety of voluntary reporting frameworks for ESG reporting, the number of businesses reporting on climate change in New Zealand is low, and not keeping pace with global trends. Climate change reporting is even lower for central and local government reporting entities. For this reason, Z believes that ESG reporting should be mandatory, noting also the adage that "what gets reported on gets done".

Recommendation 11.4 The Government should encourage government agencies where practical to procure low-emission vehicles.

As above, Z supports this and welcomes the opportunity to also discuss the use of biofuels for existing government vehicles instead of replacing them, which drives material environmental issues external to the energy source particularly where the vehicles would not otherwise be up for replacement. Biofuels use also role models the range of solutions for consumers and businesses for whom new vehicle costs are a barrier to actively contributing to emissions reductions.

Recommendation 6.4 The Government should develop, in conjunction with interested parties including the private sector, a low-emissions investment strategy for New Zealand. Relevant topics should include:

the strategic alignment of direct government investment intended to support the transition to a low-emissions economy (eg, grants, loans and other initiatives such as

the proposed Green Investment Fund), as well as the interaction between policies
such as disclosure requirements and direct government funding;
the investment mandates of large public institutional investors (eg, ACC or the NZ
Super Fund);
the role of financial sector regulation in supporting the low-emissions transition; and
what constitutes low-emissions investment, with the aim of identifying a clear
taxonomy of measurable investment flows.

Z supports this recommendation and also notes that any investment mandates should distinguish between upstream and downstream operations in fossil fuels, the capacity and planning in place for the business to transition from dependence on fossil fuels and a number of related issues. Z notes that we do not have an upstream business and therefore do not need to continue to sell fossil fuels as our main energy source indefinitely. We have a number of projects underway to consider a non-fossil fuel future, in addition to working on carbon minimisation of our current business. Z is the only New Zealand based fuel retailer and has many individual and institutional New Zealand shareholders including ACC, NZ Superfund and a number of Kiwisaver investors. Z has been a very successful business for these businesses since the 2013 public float and continues to perform at or above market expectations.

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