New Zealand's post-2020 climate change target

Submission made by:
Refining NZ

Introduction

Refining NZ welcomes the opportunity to make this submission.

1. Refining NZ is the only oil refinery in New Zealand. It supplies approximately 40% of the energy needs of New Zealand and 70% of the transport fuel needs. The remainder is imported.

2. Refining NZ is an energy intensive, trade exposed business.

3. Our objective is to produce the highest quality conventional fuel with the lowest carbon footprint practically possible and have made substantial investment in our refinery in order to produce low sulphur diesel and remove benzene from petrol.

4. Refining NZ supports the intent of limiting or reducing Green House Gas (GHG) emissions. We are committed to making energy and emissions improvements under the Negotiated Greenhouse Agreement (NGA) we have had with the Crown since 2002, and we continue to meet our NGA obligations.

5. Oil Refining is a global activity with a clear link between remaining competitive in the international market through reducing energy use, and as a consequence, reducing GHG emissions. Refining NZ is a case in point: energy costs account for around 36% of Refining NZ’s corporate costs. Our $365 million Te Mahi Hou (TMH) expansion will improve our competitiveness mainly through improved energy efficiency and as a consequence, reduce our carbon footprint by around 120,000 tonnes per year.

6. Refining NZ is a major contributor to the Northland regional economy, with over 300 employees. In addition, for every job at the refinery another two are created in Northland and a further six in New Zealand (in sectors supplying the refinery).

We submit our answers to your detailed questionnaire below. However, we would like to highlight the following key points as they pertain to us in this debate:

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1 Bruce, P. Hughes, D. et al (2008); “The New Zealand Refining Company – Our Contribution”; NorthTec and Institute of Public Policy; P 6.
New Zealand faces specific challenges which must be recognised by policy makers and negotiators in any assessment of a fair New Zealand contribution for global reductions. This is so, given the high level of renewable electricity already generated in New Zealand, and particularly so in the case of refining, where overseas competitors may be reliant on coal fired electricity generation. Being ahead as a nation internationally, on the CO₂ reduction curve means the next increment of savings is more difficult and expensive to achieve.

The above point is pertinent to Refining NZ given we need to remain competitive as an internationally trade exposed industry. Reduction of CO₂ emissions may be harder for Refining NZ to achieve than it is for overseas competition and put us at a relative capital or operating cost disadvantage.

Refining NZ believes policy makers also need to be cautious about overestimating the reduced use of conventional fuels in New Zealand. The future of transport will require a mix of fuels, of which conventional oil will continue to play a substantial part:

- Conventional fuels offer a unique mix of affordability, availability, portability and higher density than any existing alternative transport fuel;
- Ongoing improvements in internal combustion engine efficiency will further extend the attractiveness of conventional fuel, including from a carbon reduction perspective;
- Domestic aviation fuel emissions are likely to grow as a result of increased New Zealand bound tourism. The replacement of international fleets with fuel efficient planes we believe, will only go some of the way to reducing the carbon impact of increased tourism;
- Hybrid vehicles offer a practical transition to lower carbon motoring with the vast majority also using conventional fuel;
- Thus, for the medium term New Zealand will still rely on hydrocarbon fuels for much of its energy needs. It is fair to assume that any future reduction will come from reduced fuel imports.

Therefore, with New Zealand having a long term need for conventional transport fuels, CO₂ reduction targets which lead to Refining NZ’s closure may result in the production of New Zealand’s fuel requirements offshore, by less energy efficient, more carbon intensive refineries. Increased CO₂ emissions due to longer shipping supply chains may exacerbate this issue. Thus, closure of Refining NZ could paradoxically, increase GHG emissions globally (carbon leakage).

Finally, while the New Zealand ETS has come in for much criticism, Refining NZ believes that:

- An ETS remains the most economic way of reducing CO₂ emissions in the long term and we would support measures to improve its effectiveness and central place in a New Zealand CO₂ reduction policy; and
- The fungibility of local and overseas ETS “tickets”, again, while having come in for criticism given the availability of cheap overseas tickets, remains an important mechanism to create a level international playing field between energy intensive trade exposed businesses such as Refining NZ.
Comment and discussion

Objectives for the contribution

1a. We have set the following three objectives for our contribution:

- it is seen as a fair and ambitious contribution – both by international and domestic audiences;
- costs and impacts on society are managed appropriately;
- it must guide New Zealand over the long term in the global transition to a low emissions world.

Do you agree with these objectives for our contribution?

☐ Yes
☐ No

1b. What is most important to you?

- For energy intensive trade exposed businesses such as Refining NZ, emission costs cannot be passed on to consumers.
- The uneven application of international GHG initiatives, which would only exacerbate Refining NZ’s trade exposure.
- Overly onerous targets which lead to Refining NZ’s closure may result in unintended consequences, such as the production of New Zealand’s fuel requirements offshore by less energy efficient, more carbon intensive refineries together with increased CO₂ emissions in longer shipping supply chains. Thus, closure of Refining NZ could paradoxically, increase GHG emissions globally (carbon leakage).
- To date, other nations’ domestic policy has continued to extend support to the industry through allocation or other mechanisms.
- Any phase-out of support in New Zealand will need to be in parallel with those of competing nations.

“It must guide New Zealand over the long term in the global transition to a low emissions world.” ²

- With regards the statement above, Refining NZ believes that policy and agreements need to be resilient against governmental change to provide investment certainty.
- Cross-party support (of at least, the major parties) in ETS settings should be sought. Political uncertainty is not helpful for Refining NZ when formulating its long term capital investment plans.

² MFE (2015); “New Zealand’s Climate Change Target – our contribution the new international climate change agreement” (discussion document); P 7.
What would be a fair contribution for New Zealand?

2. **What do you think the nature of New Zealand’s emissions and economy means for the level of target that we set?**
   
   - New Zealand faces specific challenges which must be recognised in any assessment of a fair contribution for global reductions. This is so, given the high level of renewable electricity already generated in New Zealand, and particularly so in the case of refining, where overseas competitors may be reliant on coal fired electricity generation.
   
   - Refining NZ is happy to have its energy efficiency performance benchmarked against international competitors. In so doing, all refineries are competing on a fair and transparent basis.

How will our contribution affect New Zealanders?

3. **What level of cost is appropriate for New Zealand to reduce its greenhouse gas emissions? For example, what do you think would be a reasonable impact on annual household consumption?**
   
   - Rather than “second guessing” the cost impact on New Zealand households, we believe that the market mechanism of the ETS, with its use of credits remains the best means to reduce carbon emissions on a lowest cost, first come basis.

4. **Of the opportunities for New Zealand to reduce its emissions (as outlined on page 15 of the discussion document), which do you think are the most likely to occur, or be most important for New Zealand?**
   
   - Refining NZ is monitoring and sees the opportunity of participating in biofuel technology.
   
   - Refining NZ recognises the place of electric and hybrid vehicles, and sees the growth of such alternatives as a logical step towards reducing New Zealand’s dependency on imported fuels, and hence, carbon.
   
   - Domestic aviation fuel emissions are likely to grow as a result of increased New Zealand bound tourism. However, the replacement of international fleets with fuel efficient planes we believe, will only go some of the way to reducing the carbon impact of increased tourism.

Summary

5. **How should New Zealand take into account the future uncertainties of technologies and costs when setting its target?**
Refining NZ believes policy makers need to be cautious about overestimating the reduced use of conventional fuels. The future of transport will require a mix of fuels, of which conventional oil will continue to play a substantial part:

- Conventional fuels offer a unique mix of affordability, availability, portability and higher density than any existing alternative transport fuel;
- Ongoing improvements in internal combustion engine efficiency will further extend the attractiveness of conventional fuel;
- Hybrid vehicles offer a practical transition to lower carbon motoring with the vast majority also using conventional fuel.

Refining NZ can only assimilate proven technologies for which there is a valid business case.

However, we maintain a watching brief on biofuels believing that a viable future for biofuels rests with "drop in" second generation and at some point in the future, the refinery could well refine these fuels.

Other comments

6. **Is there any further information you wish the Government to consider? Please explain.**

“Our modelling suggests that meeting targets solely through domestic emissions reductions will increase the cost. This means that it will be important to secure the use of carbon markets in the new agreement.”

- We agree generally with the above assertion about the use of international carbon markets.
- While the New Zealand ETS has come in for much criticism, Refining NZ believes that the holding and fungibility of overseas ETS “tickets” remains an important mechanism to create a level playing field between global energy intensive trade exposed businesses.
- Furthermore, we believe that the ETS review should not be concluded until the outcome of the Paris agreement is known.

For Refining NZ

Sjoerd Post  
Chief Executive Officer

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3 MFE (2015); “New Zealand’s Climate Change Target – our contribution the new international climate change agreement” (discussion document); P 13.