



Z Energy submission on the NZ ETS Review 2015/2016 consultation

Z Energy welcomes the review of the New Zealand Emissions Trading Scheme (NZ ETS) that is being carried out by the Ministry for the Environment.

The review provides a timely opportunity to develop a meaningful policy response in order to meet the recently-agreed global climate target. Z supports the New Zealand Government setting an ambitious pathway so all parties – business, government, and society - can move towards a common, and meaningful goal.

Failure to prepare for climate change has been identified as posing the greatest risk to the global economy over the next decade in a World Economic Forum survey released recently. In the New Zealand context, this risk can include ongoing and protracted policy uncertainty for business; damage to New Zealand's credibility and brand; and reduced competitive advantage, with New Zealand losing its global reputation as an innovator and leader. These risks sit alongside the global environmental and social risks caused by rising temperatures, like species extinction, sea level rises here and in the Pacific, and the impact of extreme weather events on health, infrastructure, tourism and the agriculture sector.

We will only be able to reduce emissions in all sectors if we have coherent, predictable government policies that match the new global ambition. This will need to include efforts to support the path towards a global price that is supported by a linked emissions market, enduring and long-term political accord to encourage and stimulate alternative energy investment, and a meaningful price on carbon that will engender real behavioural change.

Z Energy understands that:

1. The Government is reviewing the New Zealand Emissions Trading Scheme (NZ ETS) to assess how it should evolve to support New Zealand in meeting future emissions reduction targets and its ongoing transition to a low emissions economy. This follows the announcement by the Government in July that New Zealand's post 2020 target is to reduce greenhouse gas emissions to 30 per cent below 2005 levels by 2030.

2. The review will focus on:
 - some transitional measures introduced to moderate the impacts of the NZ ETS
 - what is required for the NZ ETS to evolve with changing circumstances including future targets
 - operational and technical improvements.

3. Submissions on priority issues close on 19 February 2016; and submissions on other review matters close on 30 April 2016. We have chosen to submit on both matters at once; while retaining the option to submit additional materials later.

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Submission Form

Context and drivers for the review

1. Do you agree with the drivers for the review?

Z Energy (Z) agrees with the drivers for the review, and welcomes it. Z would like to acknowledge the complexity and challenge that lies in trying to find an effective market mechanism that supports the government's goals of reducing New Zealand's contribution to climate change, while also protecting international competitiveness and ensuring costs fall fairly.

Z's comments acknowledge these challenges and seek to provide some input that might be constructive in shaping the design of the future NZ ETS.

The agreement reached at the United Nations Framework Convention on Climate Change 21st Council of the Parties (COP21) in Paris recently represents an opportunity for New Zealand to build on the momentum created by the accord. A market-based emissions trading scheme is likely to be the most effective way to encourage meaningful behavior change – that being the obvious purpose of any such scheme. However, Z's view is that the current settings need to change significantly as the NZ ETS does not impose sufficient cost to either change behavior or incentivise cleaner, low-carbon alternatives.

In particular, Z's submission is that the current NZ ETS: a) bears a per-tonne price point far too low to effect meaningful change, and b) isn't linked internationally to a fully-functioning, fungible supply of credible units. Both of these points, including the continuation of the current two-for-one surrender obligation need to be the focus for a meaningful review of the scheme.

Z's submission is that a future NZ ETS should:

- Place an absolute cap on emissions, in order to incentivise meaningful change
- Cover all sectors, and all gases to full obligations under this cap
- Support the transition to net zero emissions and a reduction in gross emissions domestically
- Phase out the two-for-one allocation as quickly as possible
- Introduce auctioning as soon as possible
- Include credible international units as soon as feasible, with restriction on the number and quality of units able to be purchased from offshore
- Ensure any price pass-through is not targeted at those least able to afford the impacts; and any policy response to this end incorporates across-government social equity considerations in its application.

2. What other factors should the Government be considering in this NZ ETS review?

The NZ ETS in its current form does not incentivise long-term, durable, or meaningful change in order to effectively halt and reduce climate change. In particular, the shifting context due to political discord, policy changes, and previous changes to the scheme have disincentivised long-term business investment in alternative technologies and fuels. Z Energy's \$20m investment in a sustainable biodiesel plant, currently under construction in Wiri, South Auckland, is arguably the only commercial-scale biodiesel project underway in the world that has being built without a supporting government levy or subsidy. This leadership should not be taken for granted, and is

unlikely to be replicated by those considering large capital investment in long-term sustainable renewable fuels.

Such large-scale investment would be far more likely in an environment where policy certainty is supported by long-term, cross-party political accord, in which New Zealand's political leaders recognise the real and present opportunity provided by showing bold and ambitious leadership on enabling a functioning, linked, and liquid domestic carbon market.

Z supports a strong and functioning market-based mechanism as the most appropriate response to encourage cross-sector emissions reductions. However, carbon pricing through the NZ ETS as currently designed will not lead to material emissions reductions in sectors such as transport where price elasticity is very weak. Further policy measures will be required for such sectors.

Moving to full surrender obligations

3. Should the NZ ETS move to a full surrender obligation for the liquid fossil fuels, industrial processes, stationary energy and waste sectors?

Yes: In light of the successful conclusion of the Paris Agreement, an immediate move to a full surrender obligation is supported.

We agree with the Discussion Document that there is now a strong rationale for participants from the liquid fossil fuels, industrial processes, stationary energy and waste sectors to take full responsibility for their emissions, as macro-economic conditions have changed since the original introduction of the scheme.

The NZ ETS has been in place since 2008; the very start of the Global Financial Crisis, and most sectors have been included in the scheme since 2010. The New Zealand economy has made a solid recovery since the 2008/09 recession, which was relatively shallow compared to other advanced economies, and there has been moderate but sustained growth over recent years¹.

Moving to full surrender obligations would increase the incentive to reduce emissions, and give businesses greater certainty when making investment decisions. This could promote better planning, especially for decisions related to long-lived assets that will be affected by potentially higher costs of emissions in future.

In short, Z's view is that New Zealand is now more able to afford to take meaningful action on climate change, and the scientific impetus as to why this matters means New Zealand can no longer afford not to take meaningful action.

Inaction or unnecessary delay in moving to a full surrender obligation risks undermining the credibility and efficacy of any future trading scheme.

4. What impact will moving to full surrender obligations have on you or your business?

Please include specific examples or evidence of the impacts on you or your business of:

- a) increased carbon prices, including actions to reduce emissions and future investment decisions. Please comment on effects that may occur at carbon prices ranging from \$5 to \$50, including any evidence of actions taken previously when carbon prices were higher.

¹ As noted in the Treasury's [New Zealand Economic and Financial Overview 2015](http://www.treasury.govt.nz/economy/overview/2015) (published in April 2015), www.treasury.govt.nz/economy/overview/2015

Increased carbon prices will be passed through and result in higher fuel costs for businesses and consumers. This will somewhat reduce demand for transport fuel as fuel users invest in efficiency and cease or change marginal activities to alternatives.

However we note from our experience of fuel cost volatility in recent years that fuel demand over the short to medium term is relatively inelastic to changes in price. This is backed up by academic study. A Land Transport NZ study from 2007 concluded that a 10% real rise in petrol costs would reduce petrol consumption by 1.5% within a year and 2% after 2 years². A re-designed NZ ETS would need to carefully address this pass-through in order to not inadvertently discriminate against those who can least afford its impacts, while still ensuring broad and effective behaviour change toward lower emission outcomes.

Z's modelling indicates that changes to the carbon price in the range of \$5-\$50 will have only a marginal impact on transport fuel consumption and therefore emissions over the short to medium term³. However we note this is unlikely to be the same for other sectors.

We also note that fuel prices currently are relatively low (diesel prices have dropped 23% (28cpl) and petrol 12% (25cpl) in last 6 months) and pump price reductions over the last few months are well above the level of increase that even a \$50/t carbon price would impose, yet demand remains relatively inelastic. If \$50/t was the carbon price and the two-for-one rule was removed, we estimate diesel prices would increase by approximately 14cpl at the pump. As mentioned above, diesel prices have declined by 30 cents per litre in the last 6 months, so this would be recovering only half of the recent price drop. Since fuel prices dropped from the levels of 6 months ago of \$2.07/L (subsequently declined 12%) and \$1.26/L (24%) for petrol and diesel respectively, year on year demand for petrol has grown by only 3.8% and diesel by only 1.4%. An increase in cost of 14 cents per litre (at \$50/t carbon) on a household that uses 1000 litres of fuel per annum equates to \$2.70 per week.

In theory, increased carbon prices may spur investigation and investment into the provision of NZ ETS-exempt fuelling e.g. biofuels or future alternatives such as electrification or hydrogen, if demand and a viable, investable route to market was able to be created.

While many other factors are important, it is unlikely that even \$50/t would be sufficient to support a business case for investment in further renewable at large scale in the medium term, which is what would be required to noticeably reduce emissions for New Zealand's existing transport fleet (and expected transport fleet over the next decade).

Z submits that a sector-by-sector analysis of a response to the carbon price should be carried out. Where the response is found to be inelastic, a review of policy options outside of the NZ ETS should be considered.

5. If full surrender obligations are applied, when should this be implemented?

² <https://www.nzta.govt.nz/assets/resources/research/reports/331/docs/331.pdf> (page 8)

³ See also the NZIER report which shows road transport emissions reductions of -0.4% when moving from an effective carbon price of \$5 to \$10 and -1.9% when moving from \$25 to \$50 (<http://www.mfe.govt.nz/publications/climate-change/economic-impacts-removing-nz-ets-transitional-measures> p10)

We would recommend taking action as early as practical while still ensuring a functioning market.

The goal of the NZ ETS should be a well-functioning market that leads to accurate price discovery. Long-term or gradual phasing-in of a full surrender obligation would dull and defer the price signal. As long as there was a well-functioning market, Z's preference would be to reach the future state as soon as possible: this provides clarity for investment decisions particularly regarding further investment in renewable fuels and technologies.

Managing the costs of moving to full surrender obligations

6. If the NZ ETS moves to full surrender obligations, should potential price shocks be managed?

Yes: In a closed domestic market the risk of volatile price movement is high. Volatility is not a desired carbon market characteristic as it gives uncertainty to the price signal and consequent investment decisions. While in the fuel industry we have reasonable ability to pass on costs to customers, other industries may need time to adjust pricing. Therefore retaining a Fixed Price Option makes some sense, however it would need to be at a significant enough level to incentivise change. We would recommend a rising Fixed Price Option, e.g. a \$5 per annum increase. A rising lid safety valve may be a good compromise. The benefit of introducing a gradually rising price cap is the price certainty it brings as it reduces the potential for price shocks, and allow for flexibility while international markets are still being developed elsewhere.

7. If potential price shocks associated with moving to full surrender obligations should be managed, how should this be done?

As above, we need to reach a future certain state as soon as possible, without causing unintended consequences getting there.

Once auctioning has been introduced and has "matured" and/or international linkage been established, the Fixed Price Option could be raised or removed.

In the absence of international unit access, auctioning is required to ensure a liquid and functioning NZ ETS. We would support auctioning to be phased in with pilot auctions and subsequent full auctioning prior to the NZ ETS becoming reliant on the fall back of the Fixed Price Option for NZU supply. The key auction settings need to be established as a priority and signalled in order to provide market certainty.

8. If the \$25 fixed price surrender option value should change, what should it change to and why?

Refer above.

Other issues: business responses to the NZ ETS

9. Do you consider the future cost of emissions in your business planning? Please explain your answer.

Yes: Z makes assumptions in our annual, five year planning and wider Z valuation scenarios that considers both the possible and probable landscapes (economic, social and environmental) and how we choose to operate with that. This includes making forecast assumptions on crude prices, Gross Domestic Product, exchange rates, consumer behaviour, refining and marketing margins, and sales volumes which are all subject to significant volatility. For the NZ ETS component, we forecast both a unit rate and any associated demand impact and assume that we will recover that rate from the market. We request that any targeted policy changes are flagged early

in order to be able to establish how revenue can be recovered in a highly competitive environment across multiple lines of business where contracts are already in place that may restrict passing through an increase (material or otherwise).

Clarity and normalisation of the NZ ETS and subsequent clarity of carbon price path would assist in considering the future cost of emissions in our business planning.

10. What would improve your ability to take into account the future cost of emissions in your business planning?

Certainty of NZ ETS settings, and reduced politicisation of scheme details, through greater cross-party agreement, are essential in order to maintain and encourage investment in low-carbon alternative fuels and technologies. Any changes as a result of the NZ ETS review need to include consideration of business planning that will result in a clear pathway to support transparent and reliable decision-making.

11. Under what conditions should free allocation rates start to be reduced after 2020?

Z supports all sectors and all gases being covered under an emissions cap to ensure a fully-functioning emissions market. A clear timeframe for inclusion of all sectors (including agriculture) and a clear set of criteria for the phase out of industrial allocation will provide businesses with the certainty needed for future investment decisions.

12. What impact would it have on your investment decisions over the next few years if there was a clear pathway or criteria for phasing out of free allocation after 2020?

While there would be no impact directly on Z, free allocation phasing would impact NZU supply to market and therefore pricing. We would be supportive of a clear pathway forward that is final and locked in to provide clarity to the market. Short dated or indefinite free allocation rights that have a binary outcome risk at the end are not conducive to good decision making.

Increased certainty of allocation criteria would reduce the sovereign risk factor in investing in New Zealand. This would enhance the probability of major capital investment going ahead in greenfield investments, and emissions reductions and productivity improvements on existing facilities. Such projects are typically evaluated on a Net Present Value basis over 10-15 year periods.

Other issues: managing unit supply - forestry

13. How does the carbon price impact your forestry investment decision-making?

As noted in our letter to Ministers of 20 May 2014, Z Energy, Norske Skog and the government jointly funded the first stage of a feasibility study into the production of biofuels from wood waste, termed 'Stump to Pump', through the Primary Growth Partnership.

The possibility of using wood waste from the forestry sector to provide additional revenue streams to wood processors through biofuel development is a medium term prospect, but one which Z believes has considerable long-term potential for New Zealand.

The economic viability of converting wood waste to biofuels will be highly dependent on the availability, price and any emission-related costs attributed to wood waste.

Using the Stump to Pump project as an example, Z's analysis of options to implement Harvested Wood Products (HWP) rules in the NZ ETS highlighted the following impacts:

1. Reduced availability of wood waste as the domestic pulp and paper sector is impacted by the short two year half-life for its products and the potential for foresters to preferentially export logs for long-life products (e.g. sawn timber with a half-life of 35 years).
2. A greenhouse gas emissions cost being imposed on wood waste combustion either directly on wood waste consumers or indirectly from foresters looking to recover such costs.
3. The potential for double accounting where the NZ ETS imposes an upstream cost on wood waste and a downstream cost on the transport fuel product.
4. The imposition of a one-for-one unit surrender ratio on wood waste (in line with the current forestry sector treatment), whereas fossil based transport fuels currently have a two-for-one unit surrender ratio.

For these reasons Z Energy requests a full analysis and consultation with potentially affected stakeholders prior to making any decisions on HWP rule implementation.

To help provide investment certainty to potential users of wood waste as a biofuel or bioenergy source, Z proposes that the government investigate providing a clear undertaking that should HWP accounting rules be introduced in the NZ ETS, wood waste will remain zero-rated for emissions in bioenergy applications.

For Z this represents a sensible and relatively simple outcome that protects the future viability of using wood waste products for renewable energy projects.

14. Are there opportunities for the NZ ETS to increase incentives for forestry investments, outside of NZU price?

N/A

15. What are your reasons for the above answer?

N/A

Other issues: managing unit supply – international units

16. If international units are eligible for NZ ETS compliance in the 2020s, should any of the following restrictions be placed on their use?

a) restrictions on where units can be sourced from (location of and/or types of projects)

Yes: Z submits that environmental integrity, measurement reporting and verification standards are vital to maintain the integrity of the NZ ETS.

b) restrictions on how many units can be surrendered

Z submits that a functioning and effective carbon trading market needs to align with international carbon markets in order to support the lowest-emission providers of credible credits. Z would support restricted access to international credits that have been established and proven to not undermine the environmental integrity of the NZ ETS.

c) others (please explain).

If linking with other jurisdictions' schemes, mutual recognition of emission units is required (including forestry NZUs).

Other issues: managing unit supply – auctioning

17. Should auctioning be introduced in the NZ ETS?

Yes.

If yes, when?

- a) in the next two to three years

Refer response to Q7.

18. What should be the role or purpose of an auctioning function in the NZ ETS, if one were introduced?

- a) to align supply in the NZ ETS more closely with our international target

Auctioning would help to avoid too many international units being purchased and surrendered by participants, as was the case with the CP1 period units, with a surplus of international units being carried through to the Kyoto CP2 period. Z would support the revised NZ ETS encouraging links with international markets which create carbon sinks and credible offsetting initiatives which result in meaningful emissions reductions.

- b) to more actively manage NZU prices

Auctioning would help mitigate the risk of under-supply of NZUs with resultant reliance on the Fixed Price Option, or if no Fixed Price Option is available, the risk that NZU prices become politically unacceptably high, leading to regulatory intervention.

In both cases, longer term NZ ETS policy certainty would be undermined.

19. How should auctioned NZUs relate to other sources of unit supply in the NZ ETS, especially NZUs generated through forestry removals and/or international units?

Z submits that auctioning should supplement these other supply routes.

Other issues: managing price stability

20. What impact has carbon price volatility in the NZ ETS had on your business?

- c) significant.

Z's experience of carbon price volatility has mostly been in the administrative burden incurred through managing cost pass-throughs effectively; the legal and advisory costs associated with this, and in managing internal resource to manage the consequent process risks.

21. Do you think measures should be in place to manage price stability?

Yes: As above, the New Zealand carbon is a small illiquid market. In a domestic-only mode price it is very susceptible to any unit supply-demand imbalance.

22. What do you consider are important factors for managing price stability?

- a) upper price limits (eg, fixed price option, or a price ceiling implemented through an auctioning mechanism)

The fixed price option should be retained to provide a price ceiling until robust experience with NZU auctioning has been developed.

23. What should the Government consider when managing price stability?

As above, policy durability and cross-party political buy-in is essential to encourage a domestic unit supply-demand balance. Should access to international markets be re-established, the risk of price controls creating unit arbitrage opportunities would need to be carefully evaluated to avoid unwanted outcomes.

Other issues: operational and technical matters

24. Are you aware of ways the administrative efficiency of the NZ ETS could be improved?

Early and clear policy certainty would encourage internal education and upskilling in order to avoid reactive and administrative complication.

Setting out a clear timeframe by which free units are phased out, and all sectors are covered under the NZ ETS and how, will encourage investment certainty for business.

Other issues: addressing barriers to the uptake of low emissions technologies

26. Are there any barriers or market failures that will prevent the efficient uptake of opportunities and technologies for reducing emissions?

As above, clear and durable policy settings, which encourage long-term investment pathways, and effectively result in cross-subsidisation of low-emissions projects would most likely result in the efficient uptake of opportunities and technologies for reducing emissions.

It is also essential that any assumptions made around fuel demand elasticity result in across-government policy consistency that doesn't unintentionally disadvantage those who can least afford to bear the cost.

27. If so, is there a role for the Government in addressing these barriers or market failures and how should it do this?

As above, our modelling shows even with a \$50 price per tonne on carbon, the costs would be passed through in the transport sector, and elasticity of demand would not effect changes in order to equate to a significant-enough revenue pool in order to lead to meaningful policy changes to meet the global climate commitment.

Any other comments related to issues set out in the discussion document

28. Please comment here

The review of the NZ ETS needs to be one of a suite of domestic responses that provide a compelling and comprehensive response to tackling climate change. Z is committed to meaningful action on climate change, and requests that the government's policy framework provides a collection of responses that lend themselves to constructive and long-term investment certainty. Previous uncertainty and inconsistency in policies such as those concerning biofuels, Harvested Wood Products, electric vehicles, and the ad hoc application of the ACC levy through vehicle registration rules, lead to an uncertain future in which business decisions are difficult to make. Z requests a consistent and comprehensive long-term policy framework across all emitting sectors.