

Setting New Zealand's post-2020 climate change target

Submission form

The Government is seeking views on New Zealand's post-2020 climate change contribution under the United Nations Framework Convention on Climate Change (UNFCCC).

You can have your say by making a submission using this form or using the online tool available at www.mfe.govt.nz/more/consultations.

For more information about this consultation:

- Read our [Consultation on New Zealand's post-2020 international climate change contribution web page](#)
- Read our discussion document: [New Zealand's Climate Change Target: Our contribution to the new international climate change agreement](#)

Submissions close at 5.00pm on Wednesday 3 June 2015.

Publishing and releasing submissions

All or part of any written submission (including names of submitters), may be published on the Ministry for the Environment's website www.mfe.govt.nz. Unless you clearly specify otherwise in your submission, we will consider that you have consented to website posting of both your submission and your name.

Contents of submissions may be released to the public under the Official Information Act 1982 following requests to the Ministry for the Environment (including via email). Please advise if you have any objection to the release of any information contained in a submission and, in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. We will take into account all such objections when responding to requests for copies of, and information on, submissions to this consultation under the Official Information Act.

The Privacy Act 1993 applies certain principles about the collection, use and disclosure of information about individuals by various agencies, including the Ministry for the Environment. It governs access by individuals to information about themselves held by agencies. Any personal information you supply to the Ministry in the course of making a submission will be used by the Ministry only in relation to the matters covered by this consultation. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that the Ministry may publish.

Questions to guide your feedback

Your submission may address any aspect of the discussion document, but we would appreciate you paying particular attention to the questions posed throughout and listed in this form. You may answer some or all of the questions. To ensure your point of view is clearly understood, you should explain your rationale and provide supporting evidence where appropriate.

Contact information

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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

X No

1b. What is most important to you?

While the objectives are clearly relevant to the discussion I consider that they are insufficient and inappropriately framed. In particular the costs and impacts are narrowly addressed in the discussion document. I was frankly disappointed in the discussion document in both the issues that were covered and the structure that is being used to guide the submission process. There are many other issues ranging from biodiversity to health that are not evaluated. Also much has been made in the public meetings about the impacts of climate change and our moral obligations to respond in both a globally and intergenerationally equitable fashion. I agree with these sentiments but I also believe that there is a strong economic case for change which is not recognised in the consultation

document. If anything, the opposite is assumed and, drawing upon my expertise as a professor of Marketing, it is the business and economic case for setting strong climate change targets that I wish to address in this submission.

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?

Decarbonisation of Agriculture: It is well recognised that New Zealand has an unusual profile for its carbon emissions, but the fact that so much of them are generated from our primary sector and major wealth creating industry makes it imperative that these move to address these in a timely fashion before the risk that they create to our economic platform becomes too great. This must also be seen as an opportunity. I acknowledge we have started to explore methane reduction but the scope needs to be wider with further intensified effort. We have world class agricultural research industry and a key priority should be defining research outputs and opportunities for the decarbonisation of agriculture. This would be a far more sensible investment of our scarce research funding than the current allocation that supports fossil fuel exploration.

Vehicle fleet emissions: The other major area of emission that has to be challenged is the efficiency of our vehicle fleet. Comparisons to data from the United Nations (2011) and the World Transport Forum (2010) show that by most world standards this is poor, especially in relation to Europe. While there are some embryonic moves to change this situation these could easily be accelerated with appropriate policy initiatives to regarding minimum performance standards. For example, by establishing minimum performance standards China reduced its fuel usage from an average of 9.11 l/100km in 2002 to 7.77 l/100km in 2009. It should reach an average of 6.67 l/100km in 2015 and is on track for its target of 5.0 by 2020. We could do better than this with the electrification of a part of our vehicle fleet and at the same time reap benefits on our balance of trade by cutting petroleum imports. While improvements in public and active transport are also desirable, New Zealand does not actually have to go through any major revolution in our transport behaviour to make significant savings in our carbon emissions from vehicles. What is required is an appropriate policy framework that sets required performance standards and stimulates research on appropriate technologies and behaviour change.

Electricity generation: While our carbon emissions from electricity generation are low by world standards, there is an immediate opportunity to remove them entirely. New Zealand does not need any carbon based generation. There is consented renewable generation ready to be developed with the right market incentives (read removal of all subsidies on carbon) and a gesture to remove this quickly would enhance our international reputation greatly. My own meetings with energy researchers at international conferences suggest this would be well regarded and go some way to getting past a viewpoint that sees New Zealand relying on clever (and cynical) use of accounting protocols to respond to emissions issues (see UK Guardian newspaper quoted on RTCC 2015).

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?

My knowledge of climate change and the business and economic issues that surround it leaves me in no doubt that this question is irrelevant. It is nearly 10 years since the Stern Review established that the costs of not adapting to climate change were greater than the costs of so doing. In the 9 years since that report was published it has been cited nearly 5000 times and I am aware of less than 10 articles which have challenged this basic conclusion. This question should be rephrased as **“what level of cost is appropriate for New Zealand households to bear to maintain their current levels of greenhouse gas emissions?”** There are six related points that I wish to make in support of this position.

- a. **Deferring change in our behaviour regarding emissions will make the costs higher when they are subsequently demanded.** The current policy is based on a ‘fast follower’ strategy as opposed to ‘first mover’ (personal communication during a meeting with the Rt Hon Tim Groser at Otago University). In a ‘fast follower’ strategy the company avoids the costs often associated with new technological and market developments and tries to imitate the initiatives of others in a rapid fashion. There is a widespread debate about the relative advantages of these two approaches in business literature with no overall clearcut idea as to which approach is generally more successful. However, there are two conditions associated with responding to climate change that suggest ‘fast follower’ is not the best approach. Firstly, changes to reduce emissions will, in most cases, necessitate high levels of capital investment. This is not easy to do quickly and New Zealand does not have well developed capital markets. We are impoverished in that regard. Secondly, the behaviour changes required to reduce emissions may be large and complex running through many of our consumption practices. ‘Fast follower’ strategies are known to work best in situations where products and services are easily imitated and quickly adopted. As demonstrated in section 2 of the discussion document for this consultation exercise, this is not the case with emission reductions. If we reflect on the vehicle emissions situation outlined in the previous section, it is clear that a ‘fast follower’ strategy is not working anyway. We could improve our emissions record in this and other areas using existing technologies but we have not set a policy context that encourages such a change.
- b. **By committing to an active policy to reduce emissions we can promote commercial advantages for innovative New Zealand companies to become world leaders in the technologies needed for the future.** I strongly believe this opportunity exists in agriculture; witness the way our wine industry responded to the ‘food miles’ issue a few years ago. But there are other examples. Wellington Drive is a company that should be thriving in the current environment but it has a current share price of 3c and is struggling to raise capital in a national environment that does not support its initiative. In contrast over the last 15 years China has imposed some of the most demanding energy efficiency standards on its manufactured products. This has not been not simply to reduce energy

demand at home and limit its own emissions, but to prepare its businesses as world leaders in technologies ranging from refrigeration to motor vehicle engines.

- c. **By relying on the continued purchase of carbon credits we are essentially committing New Zealand to living on credit into the future.** No individual, household or country has ever lived in prosperity while they have maintained long term debt. We have a lot of business men in the current Government who know you can borrow wisely to invest but not to pay the daily grocery bill.
- d. **Access to trade agreements:** Game Theory, as developed in Economics, gives a rich understanding of how norms are established in trading and exchange relations which demand some level of mutual cooperation. Failure to comply with those norms results in other players punishing would be participants for their misdemeanours. Our inactivity to date on reducing emissions means that this is an entirely possible scenario which could freeze New Zealand out of future trade negotiations and reduce access to foreign markets for our products. Some indications that this has already been threatened did circulate in 2014. In order to put this threat to one side I believe that it is imperative that targets and achievements for climate change put us at least in the top half of any international league table of developed economies.
- e. **Allocation of costs and market efficiency:** The major costs of carbon emissions must ultimately be born by those who benefit economically and financially from generating those emissions. Current policy effectively depends on large general subsidies from taxpayers. As a professor of Marketing, I am generally in favour of markets as a way of allocating goods and services and getting some equitable means of exchange, but for markets to work effectively costs have to be allocated appropriately. The costs of carbon emissions are not, and while this is the case we will find it difficult to change as required. This month the IMF reported that global subsidies for carbon industries are larger than total world wide spending on health. This is why we have a climate change problem! We cannot turn our back on agriculture and say 'too hard' but rather must allocate the costs where they fall. If this is done in a planned and progressive way in every sector then we should have fitter enterprises more resilient for longer term success. Allocating costs where they arise may not achieve every change necessary to reduce our emissions but, unless we actually prohibit the activities that create large emissions, it is a necessary step to take.
- f. **The allocation of costs is all an equity issue.** For example, it is likely that Fonterra's use of coal as an energy source would change if carbon emissions were costed properly. At the moment there is no incentive for them to seek an alternative solution and New Zealand taxpayers are subsidising that choice. As a New Zealand taxpayer I am actually disgusted by that situation. It is another example of 'socialising the risk' and 'privatising the gain'. This is a long way from Adam Smith's view of the free market!

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?

Forestry: the questions overlap considerably so that a large part of this response is detailed in my response to previous questions. However, the other immediate action that New Zealand should

take is to reinvest in its forestry resource to act as a carbon storage facility. Replacement of forests due to be harvested can be done quickly and with a price on carbon, there is a clear economic case for not harvesting all forest anyway. An immediate priority should be a benefit/cost analysis of reforestation – possibly with natives in some areas that will never be harvested and help to meet other conservation objectives. New Zealand has large tracks of marginal land that may well be better deployed as a revenue earner if used as a permanent carbon capture resource under forestry. Paying for such development may well present a better risk option than the continued cost of purchasing carbon credits at unknown prices. The key reason why people have not made money to date out of investing in carbon credits is because the world is still subsidising carbon production. That will stop.

Future Carbon based exploitation: We should halt all the development of all future carbon based extraction in coal and also preferably oil. As a minimum we should stop all public subsidies for such developments (including research) and let those who wish to make a profit from the activity bear the full cost of any developments and subsequent costs for carbon emissions. We know that we cannot afford to burn the carbon resources that are already identified. Throwing public money at developing new fossil fuel options is a poor investment strategy. In most cases the ethical decision on investments is also the best economic one in the longer term.

Summary

5. How should New Zealand take into account the future uncertainties of technologies and costs when setting its target?

There are two points I wish to make in reply to this question.

Firstly, the literature on climate change makes us aware how complex the phenomenon is and how widespread the changes to our lifestyles might be in the future and, as such, it is not appropriate to pin hopes on any single technology as a 'silver bullet'. Current ideas about technologies to solve the climate problem, such carbon sequestration and geoengineering, are newer and far less developed than, for example, work on fusion as a controlled energy source. We have 60+ years of research trying to make fusion work successfully and we do not have 60 years to modify our behaviours to mitigate the effects of climate change. We have to set targets and modify behaviour based on our existing technologies.

Because New Zealand has a unique carbon emission profile we cannot assume that the rest of the world will develop technologies that are available for us to reduce our emissions and meet any future targets. Development and implementation of technologies that decarbonise the primary sector are essential and New Zealand has to be prepared to lead investment in these to assume any possibility that we might have access to them in the future.

Other comments

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

Air travel: There is a further issue related to question 2 which has so far received very little debate in any national response to climate change. New Zealand has a further unique characteristic in terms of its geographic location and isolation. This poses an additional threat to our economic future when (not if) air travel is faced by strong emissions reductions measures. Globally, air travel has been recognised as the fastest growing source of carbon emissions and as such it cannot be ignored in future analyses of our response to climate change.

Energy Productivity: In whatever capacity they arise, carbon emissions are the result of inputting energy into our economic and social system. A good way to view to consider emission reduction is in terms of a productivity increase. We do not have to frame the issue as one of 'hair shirts' and reductions in living standards, though I believe that will be the result of inactivity on the issue. Our productivity from the energy expenditure we make is low by world standards – the vehicle fleet, and building performance are two obvious examples where international data shows that we are not even 'fast followers' but 'laggards'. Using existing technologies we could increase our energy productivity and our standard of living while reducing emissions at the same time. The barrier here may be lack of capital for investment but that is a major opportunity for the Government to devise an appropriate policy framework that changes this condition. Let us frame this exercise as an opportunity to improve what we are doing, as opposed holding on to moribund technologies and behaviours for the sake of short term gains that benefit current polluters. If we do not adapt and reduce emissions we will not have an economy that will be fit enough to compete in global markets.

When your submission is complete

Email your completed submission to climate.contribution@mfe.govt.nz or post to Climate Change Contribution Consultation, Ministry for the Environment, PO Box 10362, Wellington 6143.

Submissions close at 5.00pm on Wednesday 3 June 2015.