

Setting New Zealand's post-2020 climate change target

Submission form

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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?

- We agree with the 1st and 3rd and bullet points but not the 2nd. See explanation.

EXPLANATION

Our concerns with the 2nd bullet point is because of the vagueness of the word “appropriately”. What is suitable or proper in the circumstances is always a judgment call. It will reflect the judgment of those who have the power to assert their interests in the circumstances of the time. We believe big business think tanks use money to influence Government actions and directions.

We would like this objective clarified and changed to “are managed in accord with New Zealand’s democratic processes”. For climate change is something that will affect us all for as long as humankind remains on this earth.

1b. What is most important to you?

*The values of **Fairness and Equity** are the most important to me. Climate change will have destructive consequences for many, especially those in the low socio-economic status. However, it will also provide new opportunities for local low technology businesses. I*

would like to see compassionate assistance for victims of climate change, and an equitable sharing of positive opportunities.

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?

A fair contribution would be a 40% reduction in net emissions below 1990 levels by 2030 – the minimum contribution required to keep the world under the critical 2 degrees of global warming.

An even fairer contribution would be a commitment to 50% below 1990 levels by 2030 and a commitment to assist our Pacific Island neighbours to become self-sufficient in terms of electricity over the same time period. Something that is already happening with solar panels technology.

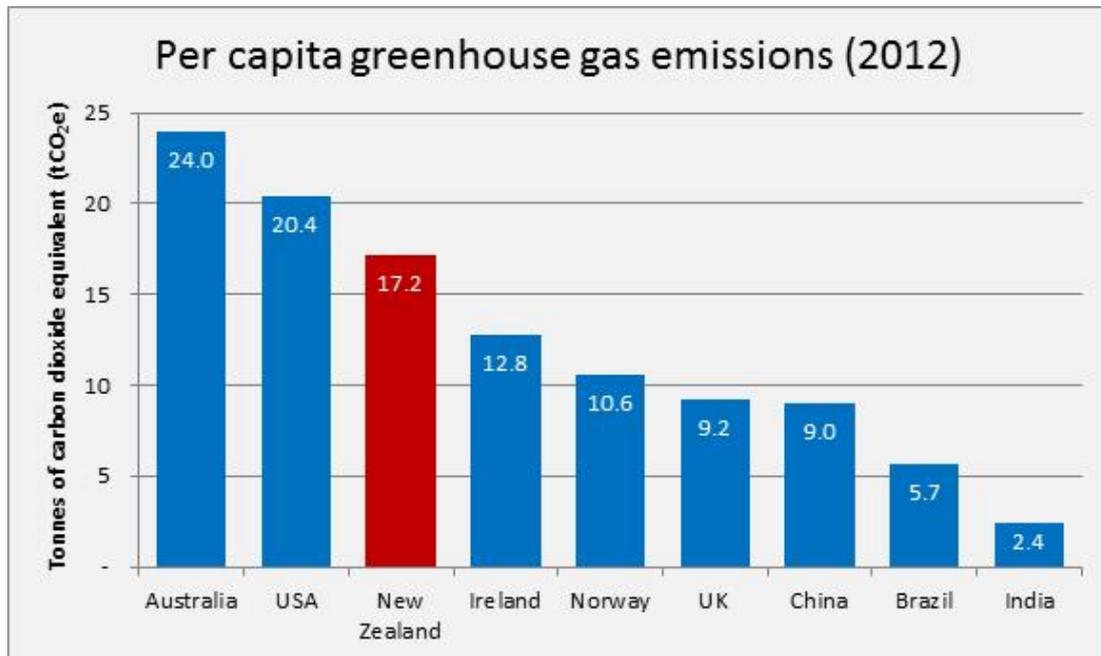
EXPLANATION

Three main reasons why New Zealand should aim for at least 40% target below 1990 levels are as follows:

- a) ***New Zealand is comparatively wealthy in global terms. Of 230 countries listed by the CIA fact book, New Zealand sits within the top 50 for GDP per capita.*** A fair and *ambitious* contribution is one that exceeds the reductions required to limit warming to 2 degrees (i.e. a greater than 40% reduction below 1990 levels by 2030).

- b) Ranked at 47 from the richest to poorest, with an average per capita GDP of \$35,000, New Zealand sits behind the US, Australia, the UK and the European Union (average over all EU countries \$38,000). But it is ahead of Italy, Israel, Spain, Russia, Mexico, Brazil, all of the countries of Africa, and well ahead of our closest Asian and Pacific Island neighbours. For example, according to the CIA Fact Book, per capita GDP for 2014 was an estimated \$24,500 for Malaysia, \$12,900 for China, \$10,200 for Indonesia, \$8,200 for Fiji, \$7,000 for the Philippines, \$5,800 for India, \$5,500 for Tonga, \$3,200 for Tuvalu, \$2,500 for Vanuatu and \$1,600 for Kiribati. (Source: <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2004rank.html>.)

c) As shown by the diagram below, New Zealand produces more than its international fair share of greenhouse gas emissions. That is just behind Australia and USA. (See diagram below.)



<https://www.climatechange.govt.nz/reducing-our-emissions/our-responsibility.html>, accessed 30-5-2015.

New Zealand enjoys a well developed infrastructure of road, rail, telecommunications and public buildings; of safe drinking water, sanitation, schools and hospitals and emergency services. Our banking and financial systems are well developed; we have reasonably honest and efficient public services at local, regional and central government level; and we have an independent justice system. These are all massive advantages for adapting to and coping with the downsides of climate change and the transition to a low carbon economy.

In terms of its geography New Zealand experiences many advantages. It has plenty of wind, water and sunshine to enable it to develop 100% renewable electricity. It has a climate that is excellent for plant growth (grass and trees) and a marine area that provides abundant marine resources.

Although climate change will throw many challenges (drought, flood, wind, etc) New Zealand is expected to experience less climate extremes than many other countries. To achieve 40% target or better we may need to reduce power generation by large commercial systems.

Micro-generation needs promoting. (The subject is hardly discussed in the document.)

For Micro-generation of electricity to be completely successful: -

1. The power grid needs to be adapted to enable embedded micro-generation to get the benefits of providing electricity at the site of its consumption.
2. People generating power and returning it to the national grid need to be paid a fair price for this energy. This is only fair and should encourage this useful source.
3. Hydro generation would still need to act as a buffer for renewables.

4. Our Government needs to stop giving cheaper power (than citizens pay) to multinational companies that exploit our country's cheap natural resources.
5. Fonterra, a major business, should be prevented from using coal to power milk drying plants.
6. Power companies need to have power saving as part of their policies. (So we can't end up in the ridiculous situation Wellington City Council may find itself in if it reduces energy needed to power street lights. While investigating fitting low energy lights the power company supplying Wellington's power said 'we will change Wellington contract to "compensate" for this reduction in revenue'! This is counter intuitive to encouraging citizens, local bodies or industry to reduce power usage and therefore the need for power to be generated from carbon producing sources.
7. Contact Energy has just announced a \$367M reward to investors. This sort of "profit" is criminal when you realize how hard it is for some people to pay for minimal power.

d) We feel strong Leadership by New Zealand's Government on methods to reduce climate change would have many reputable benefits for the country's status. This should start within NZ with the Government taking a strong position in highlighting the need for all of us to change our mind set, and encouraging communities and industries to take the initiatives to reduce all carbon emissions.

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?

This question is impossible to answer without considering income distribution. A fair impact would be for medium household income to remain at present levels and the gap between rich and poor reduced so that the bottom 50% of households experience a slight gain and the top 10% experience a reduction.

EXPLANATION

Currently there is a growing wealth gap in New Zealand. A document published by the Statistics NZ in 2007 showed that the top 10% of New Zealanders own over half (51.8 percent) the nation's wealth while the bottom 50% owned 5.2%. The middle 40% of New Zealanders owned 43% of net wealth.

Percent of total net worth		Cumulative percent	
Top 1%	16.4	Top 1%	16.4
Next 4%	21.3	Top 5%	37.7
Next 5%	14.1	Top 10%	51.8
Next 40%	43.0	Top 50%	94.8
Bottom 50%	5.2	All	100.0

Source: Product Development and Publishing Business Unit, Statistics New Zealand, 2 April 2007: ISBN 978-0-478-2690-6 (online).

The Statistics NZ publication shows a great disparity between the mean - \$159,600 – and median – \$69,800 – levels of wealth. What this means is that while half of all New Zealanders owned less than \$70,000, the average was skewed by a number of very rich individuals.

Since the Statistics NZ publication the wealth gap has continued to increase. For example, analysis by the OECD reported in the Dominion Post noted in 2011 that, “The richest 1 per cent of the population owns three times more than the combined cash and assets of the poorest 50 per cent.” (Source: <http://www.stuff.co.nz/dominion-post/news/5989628/The-gap-between-NZs-rich-and-poor>).

If these levels of inequality were reduced so that the mean income of households is the same as the average, it would be possible for most households in New Zealand to remain no worse off than at present. Conversely, if recent trends in wealth distribution continue, perhaps 10% of households will be better off while the majority are likely to be worse off and the bottom 50% will be **much** worse off.

Scraping the ETS for a Climate Tax is an option. A Climate Tax with a fair and transparent price on pollution and carbon emissions. With revenue going back to households and businesses as tax cuts. Its estimated to make households an average of \$319 per year better off even after increases in fuel, food and power are factored in.

Failure to act will cost. It is a threat to our economy and especially tourism & agriculture if we don't act. Our farming depends on stable climate. Increased droughts & damaging storms won't help. Profits will suffer.

The new Climate Economy Report released in 2014 by international economists found we can improve our economic performance while cutting emissions.

Chair of America, head of OECD, World Bank & Vice Chair of Deutsche Bank all agree.

Its not in our national character to sit on the fence & watch others do the work ! We were the 1st nation to give the woman the vote and we stood by our Pacific neighbours in rejecting nuclear testing. We have the moral fibre to act for a positive future.

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?

The most important opportunities for New Zealand should be:

- a) *Those which forestall increased emissions in future* – such as stopping coal, oil and gas production and imposing a ceiling on the number of dairy cows, until using new technology can reduce carbon emissions from dairy cows;

In recent years dairying, has turned more and more to agrichemicals (urea) and supplementary feeding of palm oil residues. These needlessly increase our carbon emissions as well as causing other environmental problems.

a. *The document needs to acknowledge that Land use management can increase or mitigate loss of soil (as an important carbon bank) and increase the value of wetlands as a carbon sink (as well as a sump for collecting and storing storm water.*

b. *We also need to recognise that areas of the world that used to be prolific producers and are now close to deserts due to over intensifying with unsustainable pastoral agriculture usually been the culprit. We want to make sure we don't follow. (Organic NZ, March-April 2015)*

- b) *Solutions that will deliver immediate or short-term reductions are needed*, because the longer the world delays, the worse the climate impacts will become and the greater the degree of difficulty and expense to move to a carbon neutral future. These may include actions to reduce energy waste; encouraging energy savings; encouraging the production of micro-generation and renewable energy by the private sector;

- c) *Measures to encourage long-term or permanent reforestation and native forest regeneration* will help to provide a carbon sink, while at the same time assisting soil conservation and improving the landscape for tourism and native wildlife. This will be especially important for western parts of the country expected to experience more rain with greater intensity. Trees in high rainfall areas can reduce soil loss and erosion and contribute to carbon capture both from the trees and from the build-up of soil.

- d) *Measures that reduce emissions from agriculture* by encouraging land management methods which retain and increase the capacity of soils and wetlands as a carbon sink, and by encouraging livestock production that focuses on quality rather than quantity (We should be producing Kobe-style beef, not hamburger meat for the American market, and we should be producing higher value processed dairy goods, not bulk milk powder and butter commodities.) We could also consider goats rather than cows ? I believe they produce less methane gas and are more efficient producers.

e) Forestry

1. Anomalies in use of forestry in offsetting seem contrary to the extensive de-forestation, and the long term costs. *The Government's target seems to ignore potential for mitigation of emissions from the regeneration of cut-over forest and native scrub to native forest; and planting of tree species which have a longer harvest interval than Pinus radiata, for example, macrocarpa, black walnut, redwoods, kauri, rimu*
2. *Tussock naturally lives long & is possibly another carbon sequencer.* DoC, Scion need to urgently investigate & research these.

f) *Measures to reduce emissions from transport.* These should include measures to encourage use of renewable energy fuels for long-haul transport (e.g. rail or biodiesel truck transport), encourage public transport, encourage walking or use of bicycles in urban areas; and retrofitting and urban development to reduce the need for vehicular transport. *Businesses such as Fonterra need to think local instead of transporting bulky items, such as milk, long distances.*

g) *Innovations in transportation logistics,* including electronic innovations that enable more integrated travel within New Zealand;

f) We need to stop subsidizing carbon emission traffic by reducing the roadways spending and start subsidize less polluting forms of transport.

Can we please have **Railways of National Significance** rather than Roads.

1. This needs to be coupled with promotion of public transport & encouragement of light rail & light rail options
2. We need tighter controls on vehicle emissions. Police need to be able to stop vehicles to check emission. (This is after all a health issue !)
3. We need strong promotion & support by Government of electric and bio-fuelled vehicles.
- 4 We urgently need fast rail connections between Auckland & Cambridge; & Auckland & Whangarei now. This would help ease Auckland's housing problem & traffic congestion. It would show the world that New Zealand is serious about reducing its climate change emissions.
- 5 Light rail, Wellington trolley buses & Christchurch tram services need expanding and are options that most New Zealand cities should be considering.
- 6 This needs to be followed by development of fast track train between Whanganui and Wellington & between Christchurch & Dunedin & for tourists to Picton.
- 7 Rail systems & their rolling stock need to be maintained & updated in NZ by NZers that understand their countries geography & the growing extremes & vagaries of its weather.

g) *We need measures to reduce fossil fuel emissions from electricity generation.* Despite the fact that New Zealand has abundant sources of renewable energy¹, 27 per cent of current generation is provided by thermal generation plants using gas, coal and oil (Source: New Zealand's Sixth National Communication, 2013, Page 30). Micro-generation electricity production by wind, water and solar, by private sector businesses and households can reduce pressure to build more

¹ For example, wind, solar, geothermal, biogas and biodiesel (from agricultural and forestry waste), tidal and small-scale run-of-river hydro.

large-scale plants by paying producers to contribute their surplus energy to the national grid. Oil and gas from fracking is more polluting than from old drilling technologies. This extraction method should not be used.

h) *Introduce amendments to building codes that require developers to design buildings and residential areas that minimise energy waste and establish more intensified housing in urban areas. Especially areas that are well served by public transport. Simple things such as positioning homes to maximise solar radiation would be a good start.*

Summary

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

New Zealand needs to aim for resilience and flexibility.

EXPLANATION

*New Zealand will not escape the global impacts of climate change; nor will it escape major impacts on our home environment, domestic economy and society. There is a significant literature that projects major turbulence in the years ahead². For these reasons, we must not lock ourselves into technologies that require expensive support infrastructure; or trade deals that we cannot withdraw from; or military engagements that are not related to the protection of our country; or policies that militate against local and regional solutions to climate change. *Suggesting that future technology developments will “save us” means people are not inspired to start making transitions which are required.* We need to bolster the social, environmental and economic factors that will serve to avoid danger, repair damage and encourage positive responses to opportunities (i.e. we need to maintain a strong education system and assist local and regional communities as well as the private sector to innovate and help themselves). We need citizens to know how to think outside the square rather than working to meet a set standard.*

² For example, see the World Economic Forum’s insight report, Global Risks 2014, Eighth Edition; Consensus Statement from Global Scientists on Maintaining Humanity’s Life Support Systems in the 21st Century, 2013; KPMG Expect the Unexpected: Building business value in a changing world, 2012; The US National Defence Panel Review of the 2014 Quadrennial Defence Review, Ensuring a Strong US Defence for the Future, 2014;

Other comments

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

An all-of-government approach is required to co-ordinate actions for climate change adaptation and transition to a carbon neutral future. There needs to be an independent Climate Commission.

And the Resource Management issues need to be judged against climate change affects.

EXPLANATION

*We know, with as much confidence as the world's climate scientists can provide, that if humanity does not **drastically** reduce CO2 emissions, the world will experience climate catastrophe. In the view of the World Bank³ we are heading for an average global temperature increase of 4 degrees centigrade. In the nation's response to climate change Government has a critical role to play by supporting research, assisting coordinated action, and promoting the up-take of low-carbon technologies and management practices.*

An all-of government approach is necessary because actions for climate change (both those required for adaptation and those required to take advantage of opportunities) span many aspects of society and the economy. For example, through provision of farm and forestry advisory services (either directly or through regional councils or farmer organisation), and through taxation, incentives and grants it can target the technologies and management practices that will reduce agricultural emissions and speed up conversions to forestry and native forest restoration. Such initiatives must involve regional councils and private business (such as Fonterra) as much as the Treasury, Ministry of Primary Industry and Ministry of Business, Innovation and Employment. In relation to buildings and urban form, the government already has a key role through the Resource Management Act and Design Protocol. But it needs to extend these initiatives and work with district and regional councils and the Building Industry Federation so that Climate Change affects must be considered too.

³ World Bank, 2012 4° Turn Down the Heat, Confronting the New Climate Normal.

Action:

1. We ask that a minimum target of 40% reduction in the net emission below 1990 level is achieved by 2030.
2. *We ask for a climate change plan NZers can be proud of !*
3. *ETS is impractical in an uncontrolled market. We need a more controlled market or a Climate Tax.*