
Climate Change Contribution Consultation

This is the submission of FIRST Union ('FIRST'), regarding the Discussion Document '***New Zealand's Climate Change Target: Our contribution to the new international climate change agreement***' ('the discussion document').

FIRST is a private sector union with 27,000 members across multiple sectors including finance, textile, clothing, baking, wood, retail, transport and logistics. Our kaupapa is laid out in our strategic plan and is focused around the theme of 'decent work, decent lives', which comprises four principles – jobs for all, a living wage, secure work and safe jobs.

Climate change will impact these four principles, radically transforming our notions of work and testing our ability to organise a society that benefits all.

Introduction

FIRST is glad this public consultation is taking place, and sees this as the beginning of a new era of community engagement of matters of environmental, social and economic importance.¹ For too long NZ's national response to climate change has been undermined by a general lack of transparency and consultation.² As well as shutting out the voices of environmental experts and movements, this approach limits the extent to which workers, community groups, faith groups and concerned individuals can have an input on policies that reflect their collectively interests. We have thus far been left with a one-sided response to a multifaceted problem that tends to reflect the interests of a vocal business lobby rather than an engaged society. Much of the discussion at Lima centred around the required content for national contributions in Paris, and we note that the questions asked in the document represent only a small part of this required content. We note that the discussion document is so thin on information and opportunities for engagement that it can, at the very best, be considered as an absolute beginning in terms of consultation and discussion.

¹ While the obligation to generate the INDC had been known since the Lima discussion, the consultation was only announced on 7 May, giving less than a month for submitters to engage.

² At times this has strayed into sheer arrogance, for example when the Minister of Climate Change Tim Groser responded to questions around leaked Treasury calculations on the costs of climate change inaction by saying, "I think what Treasury got wrong was that it did not use sufficiently sophisticated software to conceal the redacted information." See:

<http://www.scoop.co.nz/stories/PA1505/S00283/questions-and-answers-may-19.htm>

As the workers that make up FIRST look towards the Paris negotiations, we are under no illusions about the scope climate change. Already it claims 150,000 lives a year,³ and between 2030 to 2050 this number is expected to grow to at least 250,000 a year.⁴ Talk about current health impact of climate change, and how this will worsen. The global insurance giant Lloyds has estimated the cost of natural catastrophes since 1980 has grown by \$870 billion in real terms. Treasury has estimated the costs of inaction sitting between NZ\$3 billion and NZ\$52 billion.

The implications for workers across the world are dramatic. As energy becomes more costly and reliance on human labour grows, work itself will become more difficult. Research from the US National Oceanic and Atmospheric Administration indicates that heat stress in peak summer months already reduces labour capacity to around 90 percent, and this is predicted to drop to 80 percent by 2050.⁵ Over time entire industries will become obsolete, others will expand in their places, while altogether new industries will develop, with different demands for education and training. Ensuring workers in these new industries have their rights protected may be a difficult task. Without appropriate planning these transitions may leave large numbers of workers unemployed, placing immense strain on state budgets and social order.

Paris is the first time that all countries will front up with pledges to take climate action. Time is running out for the world to act, and NZ is dragging its heels. While NZ has one of the highest (nominal) GDP per capita in the world (21st), it is squandering its opportunity to play the good global citizen. NZ consumers currently consume a disproportionate per capita share of the global carbon budget, with a greenhouse gas equivalent emissions rate of more than double the global average.⁶ We need to take radical steps to decarbonise our supply chains as quickly as possible, and we need to do this in a way that ensures the interests of NZ workers are kept at the forefront of our minds. ***We demand a just transition to a low-carbon economy, in which workers' access to a decent job, their wages and their conditions are protected.***

The Discussion Document makes the point that since NZ is a small country (0.15% of global GHG emissions) we can only play a limited role in addressing climate change. The same was true for our opposition to the racist policies of apartheid South Africa and the same was true for our opposition to nuclear proliferation. But we made a stand, and realised not only that the struggle was not as hopeless as it had once seemed, but that we *did* make a difference. Our target under the first commitment period of Kyoto Protocol (2008-2012), to

³ World Health Organization 'Climate Change', Available at <http://www.who.int/heli/risks/climate/climatechange/en/>

⁴ World Health Organization 'Climate Change and health' Fact Sheet No 266 (August 2014) <http://www.who.int/mediacentre/factsheets/fs266/en/>

⁵ Dunne, J., Stouffer, R., & John, J. (2013) 'Reductions in labour capacity from heat stress under climate warming' *Nature Climate change* 3, 563-566. Available at: <http://www.nature.com/nclimate/journal/v3/n6/full/nclimate1827.html>

⁶ This point is compounded by the high proportion of imported manufactured goods consumed by NZers, since the outsourcing of NZ's production has also resulted in the outsourcing of those carbon emissions.

return to 1990 levels, was only reached through a combination of creative accounting and reliance on forestry sinks.⁷ For the second commitment period under the Kyoto Protocol (2013-2020) NZ has committed to a 5% reduction from 1990 levels, however it is widely understood that meeting this goal will require the purchase of carbon credits.⁸

All the indications tell us that we need to make deep cuts to our emissions and we need to make them as quickly as possible. Summarising the scientific literature, the IPCC's Fifth Assessment Report (released in late 2013) argued that we had 485GtCO₂ left in our global carbon budget, putting us on track to exhaust that budget by 2045 (at current emission levels). Developed countries, whose historical economic development has relied heavily on fossil fuel exploitation and GHG emissions, will have to play the key role in emissions reductions, and NZ is no exception.

It is the view of FIRST Union that New Zealand must push for a target of at least 40% reduction of GHG emissions by 2030. Further, we believe that economic and social costs and impacts of these reductions must be carried by those in the best position to deal with them, the wealthiest members of NZ society.

Question 1

- (a) Do you agree with the above objectives for our contribution?
(b) What is most important to you?

In essence our contribution is to be assessed against three objectives: i) that it is 'fair and ambitious', ii) that its 'costs and impacts on society are managed appropriately', and iii) that it 'must guide NZ over the long-term ... to a low emissions world'. None of these are inappropriate objectives, however the problem is they are each so hopelessly broad as to be useless. They will be dealt with in turn below, however particular emphasis is placed on the second objective, ensuring appropriate management of costs and impacts across society.

Fair and ambitious

It stands to reason that a fair and ambitious target is better than an unfair and/or non-ambitious target. However it is an extremely subjective objective to measure our contribution, and leaves us with an enormous potential range in which our targeted contribution might sit. For many of our members for whom climate change is a very

⁷ The Sustainability Council 'New Zealand's Climate Change Targets, Projections and Liabilities' (December 2014). Available at: <http://www.sustainabilitynz.org/wp-content/uploads/2014/12/NZsClimateChangeTargetsProjectionsandLiabilitiesDec2014.pdf>

⁸ Calculations from the Sustainability Council estimate that there is a 33% gap in the wrong direction between this modest target and NZ's expect performance in 2020.

significant issue, a target of 20% reductions below 1990 level by 2030 might be considered 'fair and ambitious'. For migrant worker members of the Union Network of Migrants (UNEMIG, a division of FIRST Union) who are observing rising sea levels and/or an increased frequency and severity of natural disasters in their home countries, an even more ambitious target (say 50% below 1990 levels by 2030) might be more in line with what they consider 'fair and ambitious'. The only things against which the objective should be measured are i) that we will progress beyond our previous commitments (i.e. greater than 5% above 1990s levels by 2020) and ii) that our unique national circumstances (high ag emissions and renewable energy) be taken into account.

For FIRST Union, a fair and ambitious target is one that takes into account the NZ economy's reliance on GHG emissions in achieving its current level of economic development, relative to other countries. In other words a fair target takes seriously the obligations of common but differentiated responsibility (formulated at the 1992 Rio Earth Summit and a key concept in the Kyoto Protocol), noting the leadership role to be taken by developed countries in the UNFCCC.⁹ It is a target that is achievable but will take serious planning. Furthermore, there is a strong economic imperative to setting a stronger and more ambitious goal at this stage, since the cost of action to curb or mitigate climate change grows over time. According to a meta-analysis of studies on the cost of climate action, a one-decade delay in addressing climate change would lead to a 40% increase in the net present value cost of addressing climate change.¹⁰

Appropriate management of costs and impacts across society

In implementing any policy, one of the key responsibilities of government is of course to manage its costs and impacts across society, this is beyond question. For FIRST Union this is the most important objective because it raises questions around the distribution of labour and wealth in society and the extent to which the state ought to place a role in intervening in that distribution to achieve certain aims. Inequality in NZ grown significantly since the 1980s with the median wage rising around \$5000 in inflation-adjusted dollars from 1984 to 2013, while the top 1% average income has risen from \$176,500 in 1984 to \$382,000 to 2013. In just two years between March 2011 and March 2013, the average income of the top 0.1% grew from \$227,000 (from \$665,000 to \$892,000). In other words, the burden of costs associated with any climate action should sit clearly with those in the best position to cover those costs.

However the appropriate distribution of costs and impacts across 'society' ought not be limited to NZ alone. As the opening statement of the Discussion Document's foreword suggests, '[c]limate change is a truly global problem', and its impacts will be truly global. Emissions in one part of the world will be partly responsible for climate change effects

⁹ Article 3(1) of the Convention states that "the developed country Parties should take the lead in combating climate change and the adverse effects thereof."

¹⁰ Furman, J., Shadbegian, R., Stock, J. (25 February 2015) 'The cost of delaying action to stem climate change: A meta-analysis'. Available at: <http://www.voxeu.org/article/cost-delaying-action-stem-climate-change-meta-analysis>

across the rest of the world, and extreme weather events in particular locations. Further, NZ consumers benefit from cheap labour and lax environmental regulations in other parts of the world (including those countries excluded from obligations under the first Kyoto period), making the costs of production cheaper. Costs and impacts in terms of those international trade and investment relations must also be managed so as to ensure that the costs of climate action sit with those in the best *global* position to cover those costs.

The question of how these costs and impacts are distributed and managed is what we need to consider. The mechanism favoured by National and Labour governments since the mid-2000s has been the use of markets to distribute those risks and impacts. The Emissions Trading Scheme ('the ETS') is the market mechanism instituted at the end of the previous Labour Government's term in 2008 (a cap and trade scheme that, somewhat absurdly, had no cap). The ETS does not appropriately managing costs and impacts across society, and that handing what is a *state responsibility* over to markets for management undermines our ability to engage in meaningful climate action. Markets can be deregulated, they can be cornered, and they can be very profitable to those with legal teams that know how to operate them. They are no substitute for regulation based on sound principles.

A number of principles can guide us in this task, and I will suggest that there are three relevant principles that need to be considered: polluter pays; just transition; and energy democracy. The 'polluter pays' principle means that those who engage in economic activity that causes carbon pollution – in other words those that profit off carbon pollution – must bear the costs of that pollution. The concept of 'just transition' takes into account the significant economic changes that will have to take place to tackle climate change, and says that this transition must take place in a planned way so that workers, their families and their communities aren't left bearing the brunt of that transition to new ways of producing wealth. 'Energy democracy' merges the transition to a low-energy economy with a strengthening of democracy and public participation, based on ensuring everybody has access to enough energy that is produced in a way that doesn't harm the environment or people. In practice, this will mean keeping fossil fuels in the ground.

Must guide NZ over the long-term to a low emissions world

While this objective is critical, the paucity of detail provided has left it so open-ended as to be totally useless. There is no further explanation given as to what kind of period is meant by the 'long-term' – is this over a ten-year period, a fifty-year period, or a one-hundred year period? While the Lima Call to Action¹¹ demands that our contribution must be greater than our current commitments, a target that is that set significantly behind other developed countries could still be considered as 'guid[ing] NZ over the long-term to a low emissions world'. In fact if NZ were to ignore its international law climate change obligations altogether and do nothing, a crash in the use of fossil fuels through major supply disruptions or shortages would also 'guide NZ over the long-term to a low emissions world'. Further, we

¹¹ 'Lima call to action'. Available at:

https://unfccc.int/files/meetings/lima_dec_2014/application/pdf/auv_cop20_lima_call_for_climate_action.pdf

have no indication as to how long the 'long-term' referred to here is, and if NZ's current commitments are anything to go by it will much too long to have the necessary impact we need to see.

NZ's contribution must be much more direct than that. Our response to climate change must be one of the guiding principles upon which we base our future economic development, and each year should demonstrate marked improvements on the previous.

Question 2

What do you think the nature of New Zealand's emissions and economy means for the level of target that we set?

This question highlights a number of particular facets of the NZ economy – high level of renewable energy generation, high agricultural emissions, the loss of forestry sinks, low population density and high population growth – intimating that NZ has few low-cost options to reduce domestic emissions compared with other developed countries. These issues will be dealt with in turn below, but first of all it is argued that the very precept is inappropriate. If it is accepted that these challenges are insurmountable, then there are two inferences that can be drawn, that the NZ economy needs to undertake radical changes.

Renewable energy

It is often celebrated that NZ generates around 80% of its electricity demands through renewable sources, particularly hydroelectric power and wind power. However energy (which is presumably used here to refer to *electricity*, since transport is considered separately) still accounts for 22% of NZ's GHG inventory, with 25% of electricity generation being fossil fuel powered. The nature of the NZ economy is such that the transition to a 100% renewable electricity generation is not only possible, but it ought to take place straight away. Global coal markets have collapsed and workers are being put out of business in the sector at an alarming rate. Now is the perfect time to redirect the capital saved by this market crash towards reinvestment in renewable energy and to finish the project of decarbonising the NZ electricity grid.

This project of decarbonising the remaining NZ electricity infrastructure will provide a significant employment effect (particularly in rural regions), and a number of studies point to renewable energy as having a net positive long-term employment effect.

Agricultural emissions

Agricultural emissions – particularly meat and dairy – make up around 48% of our GHG emissions inventory, however the high value of these exports (36.3% of NZ's total exports in 2013, totalling almost \$17 billion) means they are critical in securing foreign exchange. Its profitability lends agriculture a privileged place within the initial ETS, first excluded until

January 2013, then pushed back to 2015, then deferred indefinitely. The dairy intensification frontier is NZ's leading cause of climate change, as well as polluting water-ways and destroying ecosystems,¹² exploiting migrant workers¹³ and a whole series of regulatory subsidies that support the industry. Some have suggested that if the externalities of dairy farming were appropriately valued then they would likely exceed their revenue; in other words, the indefinite deferral of agriculture emissions is simply untenable in the long-term.

As well as being profitable, it is noted in the document that NZ is a relatively efficient food producer and NZ agricultural exports are cited as a solution to food security issues, highlighting the need for 70% more food by 2050. The document is careful not to note that NZ's agricultural exports improve the global food security situation, because in fact the matter is not always clear. While on the one hand the global position of Fonterra has made dairy products accessible to a large number of people across the developing world, the question is whether people in the developing world have the income to buy those goods. The NGO GRAIN note that while NZ is the most efficient dairy producer in the developed world, countries in the global South like Pakistan, Argentina and Uganda were either the same price or cheaper, yet had a massive positive job creation advantage (200 jobs to 5 jobs).¹⁴ To simply assert that NZ food exports are contributing to global food security is not sufficient to make the case, and certainly do not excuse us from the obligation of minimising our GHG emissions from agricultural production.

FIRST Union has members in many food supply chains in NZ, including *Goodman Fielder* (whose brands include Edmonds, Meadow Fresh, Tararua, Chesdale and Ernest Adams), *Bidvest*, *Inghams*, and *Chelsea*. These workers will be no doubt affected in some way by the inclusion of agricultural emissions within our climate change contribution. It is critical that these jobs are considered and provision is made for any potential hardship that comes about as a part of this inclusion. However if NZ is going to tackle climate change then agricultural emissions must be included in our contribution, and must be included by the time the NZ delegation goes to Paris to negotiate the next commitment period.

Forestry sinks

Forestry is an area of particular concern to FIRST because we are the union with coverage over the wood sector. Following the privatisation and deregulation of the sector in the 1980s and early 1990s it is an area that has been largely forgotten by government policy, and the severe health and safety and workers' rights crises in this industry is testament to this fact.

¹² See Dr Mike Joy, *Squandered: The Degradation of New Zealand's Freshwaters* (2015). Available at: <https://freshwaternz.files.wordpress.com/2015/05/squandered.pdf>

¹³ FIRST Union has been approached on numerous occasions from Filipino workers who have been subject to multiple serious breaches of employment law, and we have reason to believe this a widespread problem across the sector.

¹⁴ See GRAIN (December 2011) 'The great milk robbery: How corporations are stealing livelihoods and a vital source of nutrition from the poor', p6. Available at: <http://www.grain.org/article/entries/4259-the-great-milk-robbery-how-corporations-are-stealing-livelihoods-and-a-vital-source-of-nutrition-from-the-poor.pdf>

Given the wide range of environmental, social and economic benefits that forestry has, we believe this is an area where public investment in long-term afforestation projects is crucial.

For some time forestry has been considered as the saving grace for NZ in reaching its climate change obligations in the Kyoto commitment periods. As the so-called 'wall of wood' from the 1990s planting boom is harvested, it will also likely become a justification for not reaching our targets. While forestry absorbs carbon in the short-term, we must bear in mind that for every tonne of carbon absorbed by forestry there is an associated future liability. In other words, forestry requires effective management for it to be an effective sinking strategy.

The pre-budget announcement of \$22.5 million in afforestation grants means a \$1300-per-hectare subsidy (in exchange for the Crown taking the carbon credits) will result in 15,000 hectares of silviculture activities until 2020. While this is a step in the right direction, it is a drop in the bucket compared to what is required, both in terms of combating climate change and developing employment in regional NZ.

Low population density and high per capita road transport

It is true that NZ has a low population density when all the nation's land is taken into account, however the vast majority of NZers (just under three quarters) actually live in urban areas. The 'high per capita use of road transport' which the report mentions is actually byproduct of decades of mis-investment, comprising enormous investments in roading and motorways and under-investment in public transport and infrastructure design.

FIRST Union is also one of the unions with members in public transport sectors, particularly bus drivers. Public transport is an area that will need huge investment over the coming years, absent the threat of climate change, as the energy return on energy invested in individualised forms of fossil-fuel powered transport (i.e. petrol-powered cars) becomes increasingly unaffordable for working- and middle-class people.

Population growth

The inclusion of population growth in the list of factors as relevant is somewhat of a misnomer. Between 1983 and 2012 fertility rates in NZ have fluctuated between 1.9 and 2.2, so approximately equal to the rate of replacement. Population growth in NZ is driven by migration, and in 2014 net migration was up a record 51,000 people. Further, it should be noted that that rate of population growth is quite deliberate under NZ's immigration policy settings. If the rate of population growth is considered too high in the context of our climate change objectives then the government not only has considerable flexibility within the Immigration Act about how visas are granted, it also has the power to re-regulate this area.

However it is unclear why this has been raised as a relevant point of consideration, since the most important measure of GHG emissions for comparison between countries is on a per capita basis. In fact, given the majority of NZ's GHG emissions come from agriculture the current growth in NZ's population is actually helping to push down NZ's per capita GHG

emissions. In other words, relying on population growth as a reason for NZ's high per capita GHG emissions is a total misnomer and should be largely removed from the discussion at this stage.

Question 3

What level of cost is appropriate for New Zealand to reduce its greenhouse gas emissions? For example, what would be a reasonable reduction in annual household consumption?

Before answering this question as it stand, there are number of problems with this question. Firstly, it relies on the assumption that there is a static relationship that exists between economic prosperity and GHG emissions. There is now a sizeable body of literature on the decoupling of economic growth from GHG emissions, through combinations of efficiency measures. As the 2014 New Climate Economy Report makes clear, “[f]uture economic growth does not have to copy the high-carbon, unevenly distributed model of the past.”¹⁵ That report suggest that by changing the way we organise our cities, our land use and our energy systems there is significant scope to decouple economic growth from GHG emissions.

Secondly, the question implicitly suggests there will be a perfect distribution of the economic impacts of responding to climate change. There is no sense of progressivity to the burden that is shared, something that is neither true in the real scenario, or in the ideal scenarios. As we have suggested earlier in the submission, the benefits of economic growth should determine the burden of decarbonisation; in other words, the polluters should bear the brunt of this cost.

Thirdly, the question also fails to comprehend that there are significant costs associated with *inaction* in tackling climate change. In the short-term these costs may only be limited, but will begin to mount over the coming years. Recently-released Treasury documents estimate the costs of inaction between \$3 and \$52 billion (at a price of between \$10 and \$165 a tonne per tonne of carbon). This cost works out to be between \$2000 and \$34,000 per household. in other words even the lowest figure proposed per tonne of carbon works out to be higher than the cost presented for a 40% cut below 1990 levels (\$1800).

All the same, on these figures it would appear that the higher the target that is set, the smaller the reduction in household consumption is required. At 5% below 1990s an impact in household consumption of \$1270 would be endured, whereas if that target were scaled up by a factor of eight times to 40% below 1990s level then only an extra \$530 would be added; an 800% increase in target for just over a 2% drop in consumer spending power. While these figures are clearly only estimates at this stage and would be subject to significant

¹⁵ The New Climate Economy Report. Available at: http://static.newclimateeconomy.report/wp-content/uploads/2014/08/New-climate-economy_executive-summary_web.pdf

changes over time, it is also clear that the higher the target we aim for, the lower the costs of action on society as a whole.

Question 4

Of these opportunities which do you think are the most likely to occur, or be most important for New Zealand?

While this is an enormous question, it starts to point at the kind of thinking that is critical to tackling climate change in a serious considered manner. Considering the all-encompassing scale of the issue, it is inappropriate to think of climate change as a problem to be managed. It will require an entirely different process of thinking, and an entirely different model of economic development.

The question asks for two different kinds of answers – one regarding the likelihood of the delineated opportunities and one regarding the importance. With regards to the question of likelihood, it is most likely that NZ will take the final option; it will ‘remain aligned with the global transition’, or in other words it will take every opportunity to stall in making any ambitious commitments, and rely on inertia in the United States or China as support for its stated position as a ‘fast-follower’.¹⁶ It should be noted that this is in stark contrast to NZ’s traditional position on international negotiations: we have been at the forefront of many human rights struggles, including universal suffrage, anti-nuclear and anti apartheid struggles, as well as in the negotiation of international human rights and other international law instruments. Many New Zealanders see ourselves as a nation that leads the way, yet on climate change we are holding up play.

Transition to a low carbon economy

In terms of the most important opportunity available to NZ through climate change, the transition to a low-carbon economy is critical, in terms of greater energy security, limiting our vulnerability to oil price volatility and supply disruptions, *as well as* reducing costs to businesses and households. This is important due to the future need for reducing our reliance on fossil fuels anyway as inevitable shortfalls result in higher prices.

Despite a recent fall in oil prices due to a combination of geopolitical, geophysical and financial reasons, it is important for us to remember that fossil fuels (particularly oil) are finite resources and as the availability of these resources diminish their cost will go up. The fact that increasingly global oil demand is being forced into more difficult-to-extract and -process sources of oil indicates that ‘low-hanging fruit’ is gone and that obtaining oil in the future will itself entail greater energy (in other words the energy return on energy invested is falling). The question of when this will take place is the subject of complex debate between geologists, financial market analysts and ecologists, however for our purposes the question

¹⁶ By many accounts this is not an accurate representation of how NZ behaves in international climate change negotiations.

is largely academic. What is important to consider is ways that we can reduce our reliance on oil and increase our long-term resilience.

Question 5

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

There are two questions here, only the first is dealt with below.

Technology

Technology plays a significant role in this discussion document, appearing 32 times throughout. While reliance on new technology is not delineated as an official strategy, the persistent refrain of the importance of new technological breakthroughs throughout the document creates an impression on the reader. With respect, it is suggested that this is an extremely problematic strategy. We cannot rely on new technologies to solve our problems for us, for a number of reasons.

There is no evidence that new technologies will arise to combat the climate crisis, and there is also no evidence that other new technologies that arise won't exacerbate the crisis. The centuries of technological progress that have taken place since the Industrial Revolution have, of course, resulted in a massive increase in GHG emissions; it is technological innovation that has ushered in the potential of climate change. Further, if the right technological breakthrough doesn't come along as and when it is required then the climate crisis will still be there. It should also be noted that the periods of greatest technological innovation were periods in which there was an appropriate policy framework to support research and development. Rectifying the current failures within our climate change response mechanism (i.e. the ETS) or having some other mechanism that puts an appropriate price on carbon could go some way towards fostering the kind of technological developments we require to combat climate change. If the state doesn't design markets that give these kind of price signals then relying on markets alone to solve this problem will lead to disaster.

This is not to discount the role of technological breakthroughs to the ongoing adaptation of our species to our current predicament. What is important, however, is to ensure that we are not relying on technology as our only hope. The correct approach to technological innovations that arise from time to time to assist in increasing efficiencies throughout our supply chains is to treat them as additional benefits that go towards further reducing our target, rather than reducing our need to act on climate change.

This submission was written by FIRST Union's Strategic Adviser Edward Miller.