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New Zealand Government response to climate change: largely fogged up?

Climate change is a critical challenge to international health, as recently outlined in major medical journals.[1,2] There is also an ethical obligation on developed countries,[3] who have generated most of the existing greenhouse gases, to show clear leadership on this issue. This is especially so when it is clear that time is running out for the international community to avoid warming of 2°C above pre-industrial levels,[4] the guardrail for dangerous climate change.

New Zealand in particular should also be concerned about its environmental reputation, given its dependence on tourism and exporting primary products. With these issues in mind and considering the upcoming international negotiations in Copenhagen, we briefly review the actions of the new Government of New Zealand (Table 1).

The actions are ordered by the extent to which they represent forward progress on emission reduction ('direction of change').

Table 1. A brief assessment of the progress the current New Zealand Government has been making towards mitigating climate change (since election in late 2008 to 20 September 2009)

Actual or potential intervention	Overall direction of change	Comments
Economic measures		
Government subsidies to stimulate improvements in home insulation	Continued progress	The government showed a bi-partisan approach by adopting this policy even though it was developed by the previous administration.
Government plans for investment in broadband (which may reduce travel requirements)	Continued progress	These plans are proceeding (albeit with some criticisms around under-funding and fragmentation[5]) and will probably bring educational, social and economic co-benefits.
Allowing local government to apply local fuel taxes	Possibly backwards	This law was reversed, hence reducing a revenue source for improving public transport, walkways and cycleways, although similar revenue will now be raised via national petrol tax adjustments.
Replacing vehicle biofuel sales obligation with grants	Probably backwards	The removal of this obligation added 1 million tonnes to NZ's projected emissions in the first Kyoto commitment period,[6] but a modest biofuel grants programme was announced in the 2009 Budget.
Pricing signals such as an emissions trading scheme (ETS) or taxes to discourage greenhouse gas emissions and promote reforestation	Backwards	Commentators have pointed out the numerous design limitations of the proposed modified ETS[7,8] which suggest the modifications will increase emissions. The current proposed version is significantly weaker than the one introduced to law by the previous administration.
Additional investment in the roading network	Backwards	Increased road investment supports the continued private vehicle dominance of the transport system, in contrast to directly investing in public transport.

Actual or potential intervention		
Regulatory measures		
Tightening regulations for home insulation (new houses & for renovations)	No progress	Given the low quality of NZ housing,[9] this is an area with major scope for achieving health benefits[10] and is highly cost-beneficial.[11]
Tightening regulations for consumer information on vehicle fuel efficiency and emissions	No progress	Further developments have been suggested based on NZ-specific research on vehicle advertisements[12] with the European Union providing a model.
Regulations to increase plant protein and low-meat meals (e.g. in institutional meals such as in hospitals)	No progress	This is an approach being taken in the UK (e.g. by the National Health Service[13]). It is an area with co-benefits for health,[14] and cost savings in the NZ setting.[15]
Removing the moratorium on new thermal power stations	Backwards	The result of repealing this moratorium is that thermal (fossil fuel fired) power stations are more likely to be built, increasing emissions, especially if the price on carbon under the ETS is low, as appears likely following changes to the ETS.
Fuel efficiency standards for imported motor vehicles	Backwards	This development, started by the previous administration was halted.[16] Hence an opportunity was lost to improve vehicle fleet efficiency, reduce greenhouse gases, reduce urban air pollution, and save consumers costs in the long term.
Tightening regulations for energy efficiency standards and labelling of appliances	Backwards	The government dropped the phase-out of energy inefficient light bulbs and consideration of further promoting efficient shower heads. Long-term consumer cost savings and water savings would have been co-benefits.
Requirements for government departments to move towards carbon neutrality	Backwards	This "Carbon Neutral Public Service initiative" (developed by the previous administration) was dropped.[17]
Research		
Tax credits for renewable energy research	No progress	This would potentially encourage market innovation in this area (and is especially relevant given wind power potential in NZ).
Establishing a specific science and health research funding stream around climate change mitigation and adaptation	No progress	Although some research funders do support relevant research, there is no separate funding stream dedicated to this topic.

This analysis is very brief and does not consider many additional interventions used in other OECD countries to promote energy efficiency and reduce greenhouse gas emissions. Nevertheless, our analysis suggests relatively few areas of clear progress, and many areas of either "no progress" or where government response has gone backwards (Table 1).

This picture suggests it is likely that New Zealand emissions will not decline significantly, as they need to if we are to cut emissions significantly by 2020 as the Intergovernmental Panel on Climate Change (IPCC) recommends. Indeed, the situation raises doubts as to the claim that this country acts as a responsible member of the international community or that it is much concerned with its "clean and

green" reputation. Fortunately, as a small dynamic country this pattern could readily be reversed and the past provides examples of such international leadership—e.g. giving women the vote, developing social welfare systems and opposition to nuclear weapons.

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