

CLIMATE DEFENCE NETWORK

P O Box 11-057
Wellington

Sustainable Transport Discussion Paper
Ministry of Transport
P O Box 3179
Wellington

Dear Sirs/Madams,

Please find enclosed a brief submission on the *Sustainable Transport* discussion paper.

As an organisation concerned about climate change issues we have concentrated on that aspect of the discussion paper.

Thank you for giving us the opportunity to contribute to this discussion.

Yours sincerely,

Professor Don Locke
Climate Defence Network

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SUBMISSION ON THE DISCUSSION PAPER "SUSTAINABLE TRANSPORT"

February 26 2008

The Climate Defence Network (CDN) welcomes the release of the discussion paper *Sustainable Transport*, an update of the New Zealand Transport Strategy. It shows encouraging developments in the Government's thinking on the relationship between transport and climate change. However we believe that the document does not fully appreciate the magnitude of the challenges facing New Zealand and the world.

There is increasing evidence that human-induced climate change is proceeding at or beyond the most pessimistic rates modelled by the Intergovernmental Panel on Climate Change, reflecting the fact that greenhouse gas emissions have been rising more rapidly than predicted, and that the ability of some natural systems to absorb these increased emissions is beginning to decline. For example, the IPCC has recently removed the upper limit from its projections of sea level rise during this century.

Spurred on by such concerns, the scale and scope of the international political response to climate change continues to increase. Regarded as a fringe issue only a few years ago, climate change and the associated goal of carbon-neutrality must now be at the core of transport, energy and economic policy. This will lead to profound changes in our transport system and our economic system more generally. We are only in the early stages of these changes.

Targets

The discussion paper's agreed high-level outcome target is to

halve per-capita domestic greenhouse gas transport emissions by 2040

We believe this target is grossly inadequate for several reasons:

- There is a growing consensus that greenhouse gas emissions need to be reduced by 80-90% by 2050. Transport emissions must at least play their part in this reduction
- It needs to be a reduction in total, not per capita, emissions

- It needs to be measured against the internationally-accepted Kyoto baseline of 1990 levels, not 2007 emissions

Since total transport emissions have increased by more than 60% since 1990, even an absolute (not per capita) reduction in domestic emissions on 2007 levels would be less than a 20% reduction on 1990 levels.

For these reasons we believe that the target for 2040 needs to be, at an absolute minimum:

an absolute reduction of 50% in transport greenhouse gas emissions, compared to 1990 levels

This target may need to be strengthened in the light of further scientific evidence on the rate of climate change.

Actions

CDN believes that the first principle for a sustainable transport system must be to:

provide transport energy in ways which have a low net emissions profile and use the minimum possible quantity of fossil fuels

In the short term this requires

- using a mixture of regulation and incentives to reward the fuel-efficient use of efficient internal combustion vehicles
- using a mixture of regulations, incentives and information provision to encourage and reward the importation, purchase and retention of fuel-efficient vehicles
- providing disincentives for multiple car ownership by one household
- educating drivers in vehicle maintenance and driving techniques which enhance fuel economy
- implementing price-based measures to discourage car use in urban centres (e.g. congestion charging), and using the proceeds to enhance the provision of alternative modes

In the medium term it requires

- electrifying transport wherever possible, provided this can be done in ways that reduce net emissions. Priorities for electrification include urban public transport (road and rail), the more heavily-used rail freight lines, and a transition to electric road vehicles, both plug-in hybrids and fully electric

In the longer term it may require the replacement of fossil fuels used in transport by second generation biofuels. At the moment, however, we note

growing concerns over the switch to biofuels as a response to carbon emissions, in particular the evidence (as in two studies recently published in the journal *Science*) that current forms of biofuel production actually increase net greenhouse gas emissions, through habitat destruction and through the biofuel manufacturing process itself.

In addition, CDN urges the introduction of a quota that reduces the amount of oil consumed in New Zealand by a set amount each year. Such a quota could be linked to tradeable greenhouse gas emission permits.

Air and Sea Travel

We also note that the discussion paper does not discuss air and sea transport (except in the context of safety and oil spillages). We believe that this is inadequate, inasmuch as both air and sea travel are heavily dependent on fossil fuels, are a considerable source of greenhouse gas emissions, and have major flow-on effects to other aspects of the transport system.

We believe that the Transport Strategy should be amended to give substantially more coverage to air and sea transport, including the need to ensure that emissions from international travel are included in international accounting for GHG emissions and that the factors which exacerbate aviation's climate effects (such as the formation of contrails, and the height at which emissions are released) are also taken into account.

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