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Insight

Emissions targets: balancing environmental and economic objectives

Background

The Government is currently determining its policy for a 2020 greenhouse gas emissions target policy and is inviting public input. The outcomes of the emissions target policy will have real implications for New Zealand households and firms.

As is often the case with climate change discussions, there is misunderstanding around key terminology. It's easy to get caught up in rhetoric and slogans without appreciating the extent of the problem and the likely effects of proposed solutions. In order to have an informed public debate, it's worth taking some time to spell out the meanings of the key terms.

What is an emissions target?

The Ministry for the Environment[1] provides the definition of an emissions target:

An emissions target is a stated intention to meet a particular emissions level by 2020. It can be met by reducing emissions to that level but can also be met by storing carbon in forests ***or by purchasing emission units offshore*** *(emphasis added)*

So the target is **not** a domestic emissions reduction target. The Government is not seeking to determine a target for domestic emissions, but a target for the emissions reduction that New Zealand will take responsibility for. The meaning of "take responsibility" is as per the Ministry's target definition: we can reduce emissions, store carbon in forests, or purchase emissions units offshore.

[1] The Ministry for the Environment. (2009). 'New Zealand's 2020 emissions target'. Online at http://www.mfe.govt.nz/publications/climate/nz-2020-emissions-target/. Accessed 25 July 2009.

Where do Assigned Amount Units (AAUs) fit in?

The target defined in the manner above is equivalent to the level of emissions permits freely allocated to New Zealand under any international agreement. These permits are called Assigned Amount Units (AAUs). Under the current international climate change agreement (the Kyoto Protocol), New Zealand is allocated AAUs equivalent to its 1990 levels of emissions (61.9 million tonnes), for the period 2008-2012. The rules of the international agreement state that New Zealand must take responsibility for any emissions over and above the AAU amount.

What will the government do with the emissions target?

New Zealand's level of AAUs determines our share of global action on climate change, and the extent to which New Zealand firms and households should forego income to achieve this share. The Government's 2020 emissions target is effectively New Zealand saying "we think our share should be this". The distribution of these shares between countries will be negotiated in Copenhagen in December 2009.

Determining each country's 'fair share' will be difficult. For example, New Zealand is a high per capita emitter, yet a large proportion of our emissions come from food production which is consumed all around the world. Should New Zealand be 'penalised' for being efficient at producing one of life's essentials?

Why not focus on a domestic emissions reduction target?

The idea that a target can be met by purchasing emissions units offshore may seem like a cop out to some. It is not, and is actually one of the most important features of any international agreement on climate change. It allows emissions reductions to take place in the country where it is cheapest to do so. The climate doesn't care where the emissions reductions occur, so nor should we.

Importantly, New Zealand is still 'doing its share' by participating in an international agreement and purchasing emissions from other countries. We're simply being smart by doing the reductions in the places where it is cheapest.

This largely makes any domestic emissions reduction target a red herring. The level of domestic emissions is not the most relevant indicator of our contribution to global action on climate change. What matters is the level of emissions reductions that we take responsibility for. Under the type of emissions trading schemes being discussed for New Zealand, the level of domestic emissions reductions will be a function of the availability and cost of abatement technology and the world price of carbon (the latter being outside of our control).

Shouldn't we be bold?

So we know that setting a more stringent emissions target doesn't necessarily result in any more domestic emissions reductions taking place, but it does mean New Zealand will be less well off –

we will need to exchange more export revenue for emissions permits, rather than using this revenue for buying more goods and services.

The more stringent the emissions target, and the higher the world carbon price, the greater the costs to New Zealand households and firms. For example, under the '40 by 2020' scenario being promoted by some organisations, we estimate that with a (conservative) $25 carbon price, New Zealand would need to purchase emissions permits from offshore at a cost of $1.2 billion.

A 40% target would be – to say the least – a substantial contribution to global action on climate change, relative to the size of New Zealand's share of global emissions. But are we wealthy enough and willing to pay for it? The public consultation process, if properly informed, should provide a clear signal of our collective preferences on this issue.

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