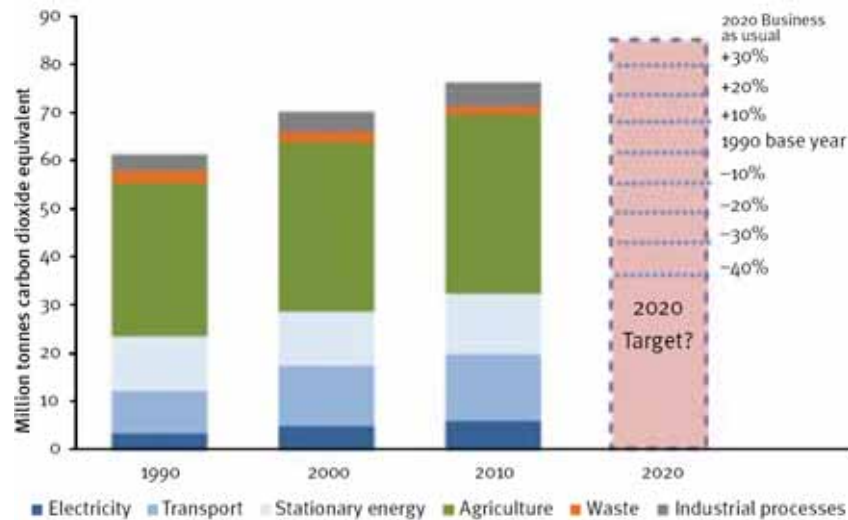
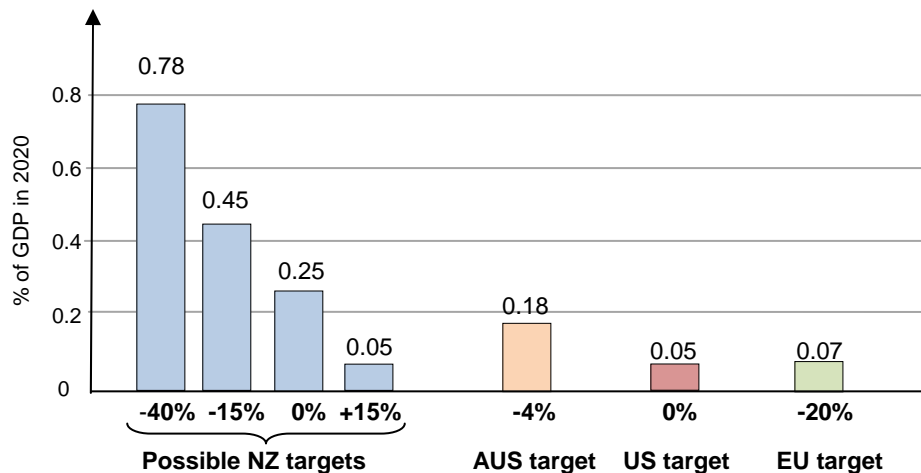


CLIMATE CHANGE: NEW ZEALAND'S 2020 EMISSIONS REDUCTION TARGET

- New Zealand's emissions will be about 40% above 1990 levels by 2020. A 2020 target significantly below this will impose large costs on the Crown and New Zealand economy.



- A fair 2020 target imposes similar costs on New Zealand's economy to the costs that other OECD countries face in meeting their respective targets (an 'equal cost' approach). The estimated *first order* costs, as a % of GDP in 2020, of various proposed targets (relative to 1990 emissions) are shown below.



- On average, OECD countries have proposed targets of about 15% below 1990. Because New Zealand has: a) relatively high population growth; b) limited opportunities to reduce emissions; and c) low GDP/capita, using an equal cost approach a fair target for New Zealand would be 15% above 1990. The *additional* costs to the Crown of accepting a more ambitious target of 15% below 1990 are approximately \$7 billion over the period 2013-2022, with a further \$5 billion in wider economic impacts.
- [free and frank*

] New Zealand could follow the example of other countries and also announce more ambitious targets, conditional on specific levels of effort from other countries. Further, other countries have chosen to express their target relative to a more recent base-year to better reflect the effort that would be required to meet the target. New Zealand's target of 15% above 1990 translates to 8% below 2005.
- Various options for New Zealand's 2020 target are presented over the page.

Option	POSSIBLE RANGES FOR NEW ZEALAND'S 2020 TARGET			Comment
	Less ambitious	—————>	More ambitious	
1 Equal cost approach using Australia as comparator <i>Note: Australia's targets</i> 4% below 1990 14% below 1990 24% below 1990	5% above 1990 <i>Unconditional</i>	7% below 1990 <i>Conditional</i> on other OECD countries on average at 15 to 25% below 1990	20% below 1990 <i>Conditional</i> on other OECD countries at least 25% below 1990, and non-OECD countries substantially reducing emissions	<p>These targets are consistent with Australia's proposed targets, both in terms of costs and with respect to the conditions.</p> <p>These targets would impose 3 to 5 times higher costs on New Zealand compared with other OECD countries. New Zealand would be doing a lot more than our fair share.</p>
2 Equal cost approach using a range of OECD countries as comparators <i>Note: current pledges from OECD countries equal 15% below 1990</i>	15% above 1990 <i>Conditional</i> on the current targets announced by other OECD countries	6% above 1990 <i>Conditional</i> on OECD countries increasing their effort to 25% below 1990	7% below 1990 <i>Conditional</i> on OECD countries increasing their effort to 40% below 1990, and non-OECD countries substantially reducing emissions	<p>The 15% above 1990 target is consistent with the average target announced by other OECD countries in terms of costs. More ambitious targets of 6% above 1990 and 7% below 1990 could be announced, conditional on equally more ambitious targets from other countries. This target range would be difficult to sell to environmental audiences.</p>
3 As in option 2, but using a 2005 base-year <i>Note: current pledges from OECD countries equal 11% below 2005</i>	8% below 2005 <i>Conditional</i> on the current targets announced by other OECD countries	15% below 2005 <i>Conditional</i> on OECD countries increasing their effort to 25% below 1990	26% below 2005 <i>Conditional</i> on OECD countries increasing their effort to 40% below 1990, and non-OECD countries substantially reducing emissions	<p>As with option 2 but expressing the targets relative to 2005 base-year. The US and Japan have taken this approach (14% below 2005 and 15% below 2005 respectively).</p> <p>This option ensures relatively fair costs for New Zealand, but would be better received than the similar proposal in option 2. Treasury recommends this option.</p>
4 Average of equal cost approaches in option 1 and 2, using both 1990 and 2005 base-year	10% above 1990 12% below 2005 <i>Conditions as in option 2</i>	0% below 1990 20% below 2005 <i>Conditional</i> on OECD countries at 20% below 1990	15% below 1990 32% below 2005 <i>Conditional</i> on OECD 30% below 1990 and non-OECD countries substantially reducing emissions	<p>This is a hybrid of the 3 options above. New Zealand would incur more costs than the average OECD country but less than Australia. Targets are expressed relative to both 1990 and 2005 base-years. The conditions are a mix of option 1 and 2.</p>

