

## Climate Change: Preferred Policy - Price Measures

### What is a “price measure”?

A “price measure” is either an emissions charge or emissions trading that will impose a cost on a carbon-generating fossil fuel (i.e. gas, coal or transport fuels). The price is applied in proportion to the relative global warming impact that results from use of that fuel.

The purpose of a price measure is to encourage actions which will help reduce greenhouse gas emissions, where those actions come at a lower cost than the cost per tonne of the price measure itself. Such actions could include: fuel switching i.e. switching to energy sources that result in lower emissions (e.g. from coal to gas or gas to a form of renewable energy such as wood); or promoting the use of alternative practices or technologies that result in lower emissions (e.g. cycling or using public transport instead of driving a car).

A price signal of this type is particularly important for investments in long life capital stock (e.g. homes, buildings, vehicles, transport infrastructure).

### What is the proposed price measure under the Government’s preferred policy package?

The Government’s preferred climate change policy would apply a price measure to most New Zealanders – New Zealanders who, for the purposes of climate change policy are considered part of the “General Energy Users Group”

This group includes businesses, organisations, institutions and households for which energy – electricity, gas, coal or transport fuels – is a cost, but may not be a major cost in their operations.

The price or emissions charge would be applied on carbon fuel in the first commitment period of the Kyoto Protocol, starting in 2008. It would approximate the price of carbon on the international market and would change periodically to reflect changes in the international emissions price.

The price would not exceed a Government-imposed upper limit, or cap, of NZ \$25 per tonne of CO<sub>2</sub> equivalent.

As an alternative to an emissions charge, it is also possible that emissions trading could be introduced. This would only occur if the international carbon market proved itself to be functional, and the price proved to be reliably *below* the NZ\$25 per tonne of CO<sub>2</sub> cap.

### How will a price measure be applied?

It is likely that responsibility for paying the charge will be imposed in the first instance at the wholesale level. For example, for electricity production it would be imposed at the source where coal and gas is produced; in the case of transport fuels, it would be imposed on suppliers before the fuel gets to the pumps.

It is expected that the costs of paying the charge at this “upstream” level will be passed on through to consumers at the retail level. This would be reflected in price increases of affected fuels and electricity (see table below for examples).

Further work has still to be done on the design of the emissions charge (see below).

### What happens to the money the Government collects from the emissions charge?

The price measure will be aimed at reducing emissions, not at improving the Government's fiscal position. The Government has established the principle of revenue recycling, whereby revenue raised through the price measure will be recycled back into the economy, for example:

- (a) to fund programmes and policies to directly reduce greenhouse gas emissions (for example using the new Projects mechanism (see separate paper) or programmes under the National Energy Efficiency and Conservation Strategy); and/or
- (b) through the tax system.

**What costs am I likely to face from an emissions charge?**

The Government has estimated the kind of price increases which New Zealand households and businesses might face from an emissions charge, based on the likely international price for a tonne of carbon. The lower price (\$10 per tonne of CO<sub>2</sub> equivalent) is based on prices now being reached in private trading overseas. The higher price (\$25/tonne) is the maximum effect an emissions price can have, given the Government's price cap.

<b>Estimated price increases resulting from emissions prices</b>				
	<b>\$10/tCO<sub>2</sub></b>		<b>\$25/t CO<sub>2</sub></b>	
	<b>Residential</b>	<b>Industrial</b>	<b>Residential</b>	<b>Industrial</b>
<b>Petrol</b>	3 cents/litre (2%)		6 cents/litre (6%)	
<b>Diesel</b>	3 cents/litre (5%)		7 cents/litre (12%)	
<b>Electricity</b>	4%	6%	9%	16%
<b>Gas</b>	3%	9%	8%	24%
<b>Coal</b>	8%	17%	19%	44%

**Putting the price impacts into context**

The price increases outlined in the table above equate to price rises resulting from other effects. For example, changes in the international oil market can result in price increases of more than 5 cents per litre of petrol. Analysis shows that applying a price measure to the General Energy Users Group will not have a large economic impact on New Zealanders, particularly in the context of the revenue being recycled.

**If most of New Zealand's electricity is hydro-powered and the emission price is on fossil fuels, why will my power prices rise?**

Hydropower stations – a renewable energy source – generate over half of New Zealand's electricity. However, the electricity price is still expected to rise because in general, it is the gas and coal-fired power stations that set the price of the wholesale electricity market – and an emissions charge will apply to the gas and coal used by these power stations.

## **Will a price measure apply to other New Zealanders and groups outside the General Energy Users Group?**

Industries or businesses that meet the criteria for the “Competitiveness-at-risk” group (see separate summary paper and/or discussion document) that successfully negotiate a Negotiated Greenhouse Agreement (NGA) with the Government will be exempted – or partly exempted – from the emissions charge. However, the extent of their exemption will be subject to negotiation and dependent on their ability to adopt world’s best practice in reducing their greenhouse gas emissions.

The emissions charge will also apply to energy use in the on farm agriculture sector (i.e. transport fuels and electricity). There will, however, be an exemption on-farm for farmers’ methane and nitrous oxide emissions.

A charge will **not** be applied to hydrofluorocarbons (HFCs) or perfluorocarbons (PFCs). It will also not apply to sulphur hexafluoride (SF<sub>6</sub>) emissions if the industry concerned is able to negotiate a satisfactory approach to managing their emissions.

Emissions from the waste sector will also not be subject to a charge although a waste levy is being considered for this sector as part of the Waste Strategy (see *Climate Change: The Government’s Preferred Policy Package, A Discussion Document, April 2002* for an explanation of this strategy).

## **Design of an emissions charge**

The Government still has work to do on designing the emissions charge, and this is subject to consultation. People interested in looking at the design issues may wish to view the follow two working papers broadly related to this area:

- *The Design of a Possible Low-Level Carbon Charge for New Zealand: A Working Paper.* The Treasury, 1997. Available at: [www.treasury.govt.nz/pubs/rtp/carbon/carbon.htm](http://www.treasury.govt.nz/pubs/rtp/carbon/carbon.htm)
- *Managing Greenhouse Gas Emissions: The Energy Sector – 3.* A Ministry of Economic Development paper on emissions trading design issues for the energy sector. Available at [www.med.govt.nz/ers/environment/climate/emissions/energy/energy03.html](http://www.med.govt.nz/ers/environment/climate/emissions/energy/energy03.html). (The issues this paper considers for emissions trading “points of obligation” are likely to be similar to the issues involved in deciding who is responsible for payment of an emissions charge.)

*It should be noted that the approaches to applying an emissions charge outlined in these two papers may differ from the Government’s preferred policy package.*

## **Suggested Issues for Feedback**

Considering the approach the Government has taken in formulating its policy package on climate change:

- Do you support or oppose the policy treatment for the General Energy Users Group?
- If you support it, why?
- If you oppose it, why? What other suggestions do you have?

*Feedback can be provided through consultation forums or in writing by the closing date of Friday 14 June 2002.*

This summary is drawn from *Climate Change: The Government’s Preferred Policy Package, A Discussion Document, April 2002*, available at [www.climatechange.govt.nz](http://www.climatechange.govt.nz).