

# Regulatory Impact Statement

## Climate Change Response (Moderated Emissions trading) Amendment Bill

### Regulatory Impact Statement

#### EXECUTIVE SUMMARY

The New Zealand Emissions Trading Scheme (NZ ETS) came into force on 26 September 2008. The key purpose of the NZ ETS is to enable New Zealand to comply with its international obligations under the Kyoto Protocol and the United Nations Framework Convention on Climate Change (UNFCCC) (including for reducing and reporting on emissions levels) while providing certainty for economic growth, equity and flexibility to respond to possible changes in the post-2012 international framework.

There is concern that the NZ ETS as currently designed may not meet these objectives, given the current weak state of the economy and the recent developments in the Australian Carbon Pollution Reduction Scheme (CPRS). There is a need to ensure that there is a smooth transition for industry into the NZ ETS in order for it to adjust to the scheme while coping with the current economic recession. There is also a need to ensure that the levels of assistance (in the form of free allocation) are appropriate and key sectors of the economy do not experience undue competitive impacts as a result of the NZ ETS. Finally, there is a need to provide business with some certainty regarding the future of the NZ ETS and the levels of emissions reductions that New Zealand will be committed to meeting in the long term.

A number of problems have been identified with the NZ ETS, which the current government has committed to addressing. The issues fall into two categories:

1. Economic impacts – This includes concerns that the scheme could have large initial impacts on businesses given the current economic climate and that in the longer term, it could result in the loss of key industries that are exposed to a carbon price ahead of international competitors. A key initiative since the development of the current NZ ETS is the Australian CPRS. The proposed CPRS will provide greater assistance to emissions intensive, trade exposed (EITE) industries than the NZ ETS. This could disadvantage New Zealand firms that compete in markets with Australian firms.
2. Implementation timeframes - There are some implementation dates in the Climate Change Response Act (CCRA) which will be difficult to achieve as there is not enough time for allocation plans to be developed and for the sectors to prepare to enter the NZ ETS. The most pressing is the entry date of the Stationary Energy and Industrial Processes (SEIP) sectors

which will begin to accrue obligations under the NZ ETS from 1 January 2010.

Accordingly, it is proposed to make amendments to the NZ ETS. These are aimed at reducing the impacts and smoothing the transition for industry during the current recession and revising the allocation methods to align with Australia, providing greater protection for the competitiveness of the EITE sectors of the New Zealand economy.

The proposed amendments will allow New Zealand to comply with its international climate change obligations while retaining an incentive for emissions reductions within New Zealand and minimising the impacts on the economy.

The key amendments included in the preferred option are:

- A transition phase from 1 July 2010 to 31 December 2012 which will lessen the impacts of the NZ ETS on industry in the early years of the scheme. The transition phase includes:
  - a fixed price option of NZ\$25 per tonne; and
  - A revised core scheme obligation for SEIP and Liquid Fossil Fuels (LFF) participants (who will enter the NZ ETS on 1 July 2010) of only 1 unit for every 2 tonnes of CO<sub>2</sub>e emitted for the period 1 July 2010 to 31 December 2012;
- Uncapped, intensity-based allocation for EITE industries. Eligibility thresholds will be set to reduce trans-Tasman competitiveness risks;
- The entry date for the agriculture sector will be changed to 1 January 2015. Free allocation to the agriculture sector will be provided on an intensity basis (consistent with industry), and an initial processor-level point of obligation will apply; and
- The introduction of a domestic target for New Zealand of a 50 per cent reduction of net greenhouse gases from 1990 levels by 2050, set through regulation.

## **ADEQUACY STATEMENT**

A Regulatory Impact Statement (RIS) was prepared for these proposals, and independently reviewed by Treasury's Regulatory Impact Analysis Team (RIAT). RIAT has formed the view that the level and quality of analysis presented is not commensurate with the significance of the proposals, which represent major design changes to the Emissions Trading Scheme, and that the RIS does not provide an adequate basis for informed decision-making. Some key risks identified by RIAT include (but are not limited to) the following:

- There is no clear analytical basis for the proposal to align some key design elements of the New Zealand ETS with those in the currently

proposed Australian Carbon Pollution Reduction Scheme (CPRS). For example, there is no discussion of the overall suitability or benefits of applying these elements to New Zealand's unique emissions profile and industrial structures;

- There is no discussion of the risks of harmonising with an overseas scheme that has not yet been finalised or agreed and may yet be subject to significant revision. Such risks may include the potential impacts on business certainty and investment decisions, and the overall credibility, sustainability and effectiveness of the NZ ETS; and
- There is no information on the implied transition path for firms over the medium- to long-term, particularly given that the proposal is for a temporary period of greater assistance coupled with an ambitious long-term emissions reduction target. Without this, it is hard to assess whether it is likely that the design changes will allow for a smoother transition for business.

## **STATUS QUO AND PROBLEM**

### **Outline of current situation**

The New Zealand Emissions Trading Scheme (NZ ETS) came into force on 26 September 2008.<sup>1</sup> 'Emissions trading' is a market-based approach for achieving environmental objectives where emission units are traded between participants. In effect, those emitting greenhouse gases have to pay for increases in emissions and are rewarded for decreases. This encourages emissions reductions.

The NZ ETS covers emissions of the following six greenhouse gases: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF<sub>6</sub>). These are the greenhouse gases covered by the Kyoto Protocol<sup>2</sup>.

The NZ ETS covers the following sectors of the economy: forestry, liquid fossil fuels (transport), stationary energy, industrial processes, synthetic gases, agriculture and waste.

In respect of each sector covered by the NZ ETS, there are a number of 'participants'. Each participant must calculate the emissions from their activities and surrender to the government one emission unit for each tonne of greenhouse gas emissions (measured in tonnes of CO<sub>2</sub> equivalent (CO<sub>2</sub>-e)) for which they are responsible. There are various types of units that participants can use to meet their obligations under the emissions trading scheme.

The primary unit of trade for the New Zealand emissions trading scheme is the New Zealand unit (NZU). The NZU is a unit issued and allocated by the

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<sup>1</sup> Except for the sections of the Act relating to GST which came into force on 1 January 2009.

<sup>2</sup> Under the Kyoto Protocol New Zealand has committed to limit its emissions to 1990 levels in the first commitment period (2008-2012). This can be achieved through domestic emissions reductions or international offsetting.

government under the scheme. One NZU corresponds to one tonne CO<sub>2</sub>-e emissions.

In addition, participants can use most types of international Kyoto emission units for compliance. As with NZUs, this is done by transferring the Kyoto emission units to a surrender account. Kyoto emission units are units established under the rules of the Kyoto Protocol and include units assigned to parties at the start of the commitment period (currently 2008-2012) and for certified emissions reductions or removals.

The Climate Change Response Act identifies who is required to be a participant under the NZ ETS. For example, in the transport sector, importers of liquid fossil fuels are required to be participants. In general, the 'point of obligation' is established at a high level in the supply chain so that there are relatively few participants in each sector. Householders are not participants under the NZ ETS.

Under the NZ ETS, different sectors start to have obligations under the scheme at different times. The forestry sector has an obligation to surrender units in respect of relevant emissions from 1 January 2008. Under the current legislation, further sectors will "enter" the scheme as follows:

- The stationary energy and industrial processes sectors will have obligations to surrender units in respect of their emissions from 1 January 2010.
- Participants in the liquid fossil fuels sector will have obligations to surrender units in respect of emissions from 1 January 2011.
- Participants in the waste, agriculture and synthetic gases sectors will have obligations to surrender units in respect of emissions from 1 January 2013.

A sector is said to have "entered" the NZ ETS from a certain date where it has obligations to surrender units in respect of emissions from that date.<sup>3</sup>

As well as imposing an obligation on participants whose activities are covered by the scheme, the NZ ETS provides for 'allocation' of units to certain participants. Introducing an emissions trading scheme will impact on certain parts of the New Zealand economy and society more than others. Allocation is a means of providing assistance or compensation to strongly affected parties.

There are two main reasons for providing assistance to firms. One is to provide compensation where the introduction of a carbon price has reduced the value of assets. The other is to protect the competitiveness of firms, particularly those that are emissions-intensive and trade-exposed as these firms are unable to pass the carbon cost on to consumers. The appropriate method of allocation will depend on the reason for providing it.

Under the current NZ ETS, allocation has been provided in relation to pre-1990 forest land, to compensate land owners for the loss in value of their land as a result of the costs imposed by the NZ ETS. A similar equity rationale

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<sup>3</sup> A sector may have obligations to report on its emissions (but not surrender units) prior to its "entry" date.

applies in the case of allocation to the fishing sector. In respect of other sectors, the purpose of allocation is to avoid the loss of industries that would not have occurred if our competitors had adopted equivalent emissions pricing. The detail of how units are to be allocated to these persons will be set out in the relevant 'allocation plan' for that sector. No allocation plans have yet been finalised.

## **Summary of Problem**

The key purpose of the NZ ETS is to enable New Zealand to comply with its international obligations under the UNFCCC and the Kyoto Protocol (including for reducing and reporting on emissions levels) at least cost to the economy while providing certainty for economic growth, equity and flexibility to respond to possible changes in the post-2012 international framework.

There is concern that the NZ ETS as currently designed may not meet these objectives, given current weak state of the economy and the recent developments in the Australian CPRS.

The Government's objectives for the modified NZ ETS are therefore to:

- Strike a balance between New Zealand's environmental and economic interests;
- Provide a smoother transition for participants than the original scheme; and
- Achieve harmonisation with the proposed Australian Carbon Pollution Reduction scheme (CPRS).

A number of problems have been identified with the NZ ETS, which the current government has committed to addressing, in a manner which is consistent with New Zealand's international trade obligations, including under the World Trade Organisation. The issues fall into two categories:

### **1. Economic impacts**

There are concerns that the NZ ETS as currently designed may cause large negative economic impacts on key sectors and the economy as a whole. These concerns are exacerbated by the current economic downturn and the introduction of the proposed CPRS which provides greater protection to key industries in Australia. There are two main areas of concern:

#### ***Initial impacts of the NZETS on businesses given the current economic climate.***

There is a need to provide smoother transition into the scheme while participants are dealing with the current recession and becoming familiar with their obligations and the operations of carbon markets. The concern is that while carbon markets are immature there could be potentially high and volatile carbon prices in early years of the scheme. It may be difficult for firms to manage their liabilities in such an uncertain environment.

### ***The loss of production from key industries***

The concern about loss of production is greatest for firms that are both emissions-intensive (where production leads to significant levels of emissions) and trade-exposed (compete against goods produced in other countries that do not face similar emissions costs). The fear is that a loss of competitiveness from these EITE firms will result in carbon leakage, with market share being lost to countries that do not have emissions reduction policies in place. This will see a loss in production in New Zealand with no global environmental benefit.

There is justification for providing greater protection to avoid the loss of key industries that are expected to be competitive once international competitors adopt equivalent carbon pricing regimes and there is a concern that the phase out of free allocation under the current scheme may cause key industries to lose competitiveness. Other countries (in particular Australia) are developing emissions trading schemes incorporating greater assistance for at-risk firms than is currently provided under the NZ ETS.

### ***Harmonisation with the Australian Carbon Pollution Reduction Scheme***

A key initiative since the development of the current NZ ETS is the Australian CPRS. The proposed CPRS will provide greater assistance to EITE firms than the NZ ETS. This could disadvantage New Zealand firms that compete in markets with Australian firms.

The New Zealand and Australian economies are closely linked, with many companies operating and trading across the Tasman. Further, Australia is New Zealand's principal export market – 22.9 per cent of New Zealand's total exports were to Australia in the year to June 2008 - and New Zealand is Australia's sixth largest export market – 5.6 per cent of its total exports were to New Zealand in the year to June 2008. Australia and New Zealand also compete in third markets. Of the top ten export markets for each country, New Zealand and Australia have six in common. Differences between the emission trading schemes of both countries, particularly levels of protection, could have a large impact on levels of trade between the two countries.

EITE industries likely to be affected by the NZ ETS which may form a significant part of trans Tasman trade include:

- aluminium oxide
- copper
- dairy products
- petroleum
- pulp and paper
- iron or non-alloy steel.

Together these categories of export are worth around NZ\$500 million and NZ\$1.5 billion per annum to New Zealand and Australian exporters respectively. Seen only in terms of trans-Tasman trade, this represents a

significant proportion – around 7 per cent of trans-Tasman exports from New Zealand (possibly rising to 10 per cent of New Zealand exports if it assumed that all ‘confidential exports’ are emissions intensive), and around 15 per cent of Australian exports.

These figures describe areas of export risk for trans-Tasman trade. They also describe some of the key areas of import substitution risks if the importers concerned are being treated more favourably than domestic producers. However this is not an exhaustive list-risks to exports and import substitution could change when a carbon price is introduced, and could expand to other sectors.

The main source of competitiveness concerns relates to the allocation of permits under the New Zealand and Australian schemes. Stakeholders in both countries have raised this as an issue. The proposed CPRS currently allows for intensity-based allocation. Under this method, allocation is awarded on a unit of production basis for particular activities, based on the industry average emissions for that activity for the period from 2006 to 2008. The total pool of allocation to the industry sector is uncapped and both new and existing firms will be eligible for assistance. Initial levels of assistance are 94.5 per cent of emissions for highly emissions-intensive activities, and 66 per cent for moderately emissions-intensive activities. The free allocation is phased out at the rate of 1.3 per cent per annum.

This method of allocation provides greater protection to levels of competitiveness because it minimises the marginal impacts of an emissions price. It provides an incentive for firms to improve efficiency, but does not provide an incentive to reduce levels of output against business as usual.

In contrast, the NZ ETS currently prescribes a cap on the total pool of free allocation to the industrial sector equivalent to 90 per cent of 2005 emissions from eligible firms. The free allocation is phased out from 2018 to 2030 (a faster rate than under the CPRS). This method aims to avoid large reductions in output and unemployment but otherwise leaves firms facing the full cost of carbon including for new growth. This would invariably lead to some reduction in output.

Differences in allocation methodology between the two countries could also affect longer-term investment decisions and there is a risk that industries may shift production across the Tasman. It is difficult to quantify the potential extent of this occurring.

In summary, although competitiveness will depend on a variety of factors, all other things being equal, differences in allocation methodologies could cause certain activities to become more productive in one country over another, leading to one country losing market share or production shifting across the Tasman.

*Allocation under the European Union Emissions Trading Scheme (EU ETS)*

Another competing economy with an emissions trading scheme is the European Union. Phase 3 of the EU ETS (2013-2020) will provide two levels of allocation - for those at significant risk of carbon leakage, and for other covered industries. Firms deemed at significant risk of leakage could receive up to 100 per cent allocation based on 2005-2007 emissions. However, the free allocation to individual installations will not exceed the level of a benchmark corresponding to the 10 per cent cleanest technologies in the EU. If an installation emits more than the benchmark level, it will need to acquire allowances up to the level of its actual emissions. The allocation to significantly at risk firms decreases by 1.74 per cent per year. Not at-risk sectors will receive 80 per cent allocation based on 2005-2007 emission levels, decreasing to 30 per cent in 2020 and zero in 2027.

Overall allocation in the scheme is made on an absolute basis, with an effective intensity-based allocation to individual participants within the pool via the top 10 per cent benchmark. This approach would be difficult to implement in New Zealand as some industrial sectors have a small number of participants which could lead to difficulties in establishing a benchmark.

It is difficult to quantify the level of allocation for EU firms deemed to be significantly at risk as this will depend on work yet to be completed on benchmarks and the distribution of emissions efficient technologies within industries. Therefore it is also difficult to determine whether this approach is more or less generous than the Australian and New Zealand schemes. Nominally it is more generous than the current NZ ETS allocation methodology, but whether this is the case in practice will depend on the stringency of the benchmarks. However it is worth noting that at-risk sectors under the EU ETS will represent approximately 75% per cent of total industry emissions covered by the EU ETS, which is a larger proportion than the emissions intensive industries defined under the CPRS.

## **2. Implementation timeframes**

The third problem with the current NZ ETS is that some implementation dates in the Act will be difficult to achieve as there is not enough time for allocation plans to be developed and for the sectors to prepare to enter the NZ ETS. The most pressing is the entry date of the SEIP sectors, which will begin to accrue obligations under the NZ ETS from 1 January 2010. There is not time to prepare an allocation plan for these sectors by 1 January 2010. If this date remains, there is likely to be a significant time lag between obligations beginning to accrue for these participants and an allocation plan being finalised (and units transferred).

## **OBJECTIVES**

Under the Kyoto Protocol New Zealand is obliged to return emissions to 1990 levels during the first commitment period (2008-2012), or take responsibility for the difference through international offsetting. Additionally, New Zealand is currently participating in negotiations for a future international climate change agreement which is likely to involve deeper commitments for emissions reductions from 2013 onwards.



The key purpose of the NZ ETS is to enable New Zealand to comply with its international obligations under the UNFCCC and the Kyoto Protocol (including for reducing and reporting on emissions levels) at least cost to the economy while providing certainty for economic growth, equity and flexibility to respond to possible changes in the post-2012 international framework.

There is concern that the NZ ETS as currently designed may not meet these objectives, given current weak state of the economy and the recent developments in the Australian CPRS.

The Government's objectives for the modified NZ ETS are therefore to:

- Strike a balance between New Zealand's environmental and economic interests;
- Provide a smoother transition for participants than the original scheme; and
- Achieve harmonisation with the proposed Australian carbon Pollution Reduction scheme (CPRS).

These objectives address the need to ensure that there is a smooth transition for industry into the NZ ETS in order for them to adjust to the scheme and cope with the current economic recession. There is also need to ensure that the levels of assistance are appropriate and key sectors of the economy do not experience undue competitive impacts as a result of the NZ ETS. A further objective is to provide business with some certainty regarding the future of the NZ ETS and the levels of emissions reductions that New Zealand will be committed to meeting in the long term. Finally, the scheme must also be workable and affordable.

## **ALTERNATIVE OPTIONS**

### **1. Change implementation dates in existing legislation.**

The first option is to leave the majority of the NZ ETS as it is currently legislated, and change the entry date for the Stationary Energy and Industrial Processes (SEIP) sectors.

The entry of the SEIP sectors would be delayed by 12 months from 1 January 2010 to 1 January 2011<sup>4</sup>. This would incur a fiscal cost of roughly \$175m. The benefits are that the sector has more time to prepare to enter the NZ ETS, which could reduce the impacts to some extent. It also allows government sufficient time to prepare allocation plans.

This option however does not address all of the objectives listed above. It does not improve the competitiveness issues or provide assistance in early years of the scheme. Key differences would remain between the NZ ETS and the CPRS limiting harmonisation between the two schemes leaving the potential for increased transaction costs and competitiveness distortions.

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<sup>4</sup> If the only change to the CCRA (2002) is to delay then the current allocation framework would have to be adhered to. A 12 month delay would therefore be necessary. If there is a change to the allocation framework in the Act, then a shorter timeframe for the entry of this sector is possible.

## 2. Abolish the NZ ETS

The second option is to abolish the NZ ETS. Under this option, the New Zealand government would meet its commitments under the Kyoto Protocol by purchasing emissions credits from international markets.

The fiscal cost of abolishing the NZ ETS is estimated to be \$1.5bn in Commitment Period 1 of the Kyoto Protocol (2008-2012). The costs for future commitment periods would depend on the emissions reductions required under the 2020 target, but it can be assumed that they would be significantly higher than this.

This option is not preferred as it is not the long-term least-cost option for New Zealand to meet its international climate change commitments and it would not encourage any emissions reductions within New Zealand. The NZIER and Infometrics report (2009) found that in the short run (to 2012) there is little difference between the economy wide welfare impacts of the government paying, and a narrow tax/trading scheme<sup>5</sup>. However the government pays option has a key disadvantage as it does not establish a price signal for carbon into the New Zealand economy. This means that firms have little incentive to change their production patterns or invest in emissions-reducing technologies. As the carbon price rises above a certain level<sup>6</sup>, the modelling showed that that an emissions trading scheme becomes the cheaper option.

Climate change is a long term problem and an international climate change framework of some description will exist long after 2012. In order to meet future international climate change commitments at least-cost to the economy, it is desirable to introduce a carbon price while the cost is still relatively low. This allows sectors time to adjust and smoothly transition to a low carbon economy. Delaying adjustment could be costly in the future as New Zealand would lock in investment choices that are inefficient in the long run when climate change agreements become more stringent and the world moves towards carbon pricing. Retaining the NZ ETS would also bring New Zealand in line with developments in other countries including the European Union, Australia and the United States.

## 3. Replace the NZ ETS with a carbon tax

An alternative price-based mechanism to an emissions trading scheme is a carbon tax. This is a very similar instrument to an emissions trading scheme, the fundamental difference being the mechanism by which the price is set. Under a carbon tax regulators set the price per unit of emissions, whereas under an emissions trading scheme regulators set an allowable level of emissions or 'permits'. A scarcity of these permits creates a price. A carbon tax therefore provides greater certainty over the price as changes to taxes are

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<sup>5</sup> NZIER and Infometrics (2009) – Economic modelling of New Zealand climate change policy.

<sup>6</sup> The point at which a carbon price becomes preferable differed between the models. At \$25/tonne Infometrics' model ranks a carbon price equal to a government pays scenario while the NZIER model slightly favours the latter. At higher prices both models show that carbon pricing is least cost.

usually signalled well in advance, whereas an emissions trading scheme provides greater certainty over the level of emission reductions.

The other important difference is the ability to link the domestic policy response to climate change with the international response. The current global agreement is based around restricting quantities of emissions produced and an international emissions trading scheme. A domestic emissions trading scheme will allow linking with the international regime and other domestic emissions trading schemes. This provides New Zealand firms with access to the cheapest emissions reductions, regardless of where in the world they occur.

Arguments in support of a carbon tax are that greater certainty over price makes the liability easier for businesses to manage, and the administrative costs are likely to be lower than under an emissions trading scheme.

A carbon tax is not the preferred option for the following reasons:

- An emissions trading scheme can ensure New Zealand access to least-cost abatement (within the constraints of any restrictions placed on imports of units) because it gives New Zealand firms the ability to access the international emissions market.
- An emissions trading scheme leaves New Zealand well placed to meet commitments to expected future international climate change agreements
- Emissions Trading Schemes are increasingly the domestic climate change policy instrument choice of New Zealand's trading partners. Adopting emissions trading in New Zealand provides the best chance of our businesses facing an emissions price that is in tune with the economic climate that New Zealand businesses and their competitors face.

#### **4. Delay the entry dates of all sectors other than forestry until 1 January 2013**

Under this option, all sectors would enter the NZ ETS on 1 January 2013, other than the forestry sector. The entry date for the forestry sector would remain at 1 January 2008.

This option would allow ample time for the preparation for sectors to enter the NZ ETS and solve the timing issues. It would also minimise the impacts of the scheme on trade exposed sectors until 2013. In theory, the economic implications of this proposal are minor, provided there is no significant deforestation and there is an incentive for the post 1989 forestry sector to continue to invest in forestry projects.

However there is a risk of greater economic implications. A delay of sectoral entry until 2013 would signal uncertainty about the future existence and design of the NZ ETS, a future carbon price may not be factored into investment decisions which would delay the adjustment of the economy and

increase the costs to New Zealand of complying with its international commitments in the long run.

This option would give rise to significant fiscal costs. The estimated fiscal cost of a delay to 2013 for the Stationary Energy and Industrial Processes (SEIP) and Liquid fossil Fuels (LFF) sectors is approximately \$1.275 billion<sup>7</sup> relative to the status quo (i.e. existing CCRA provisions).

The fiscal impact could be partially offset by removing the allocation of NZUs under the Forestry Allocation Plan. It is estimated that the CP1 allocation, after allowing deductions for exemptions, will be approximately 16 million units<sup>8</sup>. Cancelling this would result in savings of approximately \$400 million. The total fiscal cost of this proposal is therefore approximately \$875 million.

This would raise an equity issue for the pre 1990 forestry sector. This would be the only sector facing liabilities under the NZ ETS from 2008 to 2013. If the allocation of units were not provided the sector would not be given any compensation for the loss in the value of their assets.

If sectoral entry dates are delayed there will be no domestic demand for units generated from the post 1989 forestry sector. In order to ensure sufficient buyers for these units, the Government could consider setting up guaranteed purchasing arrangements for units generated from forestry. There would also be a strong case for permitting exports of units from the post 1989 forestry sector.

From an international perspective, delaying the entry of sectors until 2013 will be seen as a weakening of New Zealand's commitment to address climate change. This is likely to have some effect on New Zealand's bargaining position in the negotiations for future international agreements.

If sector entry dates are to be delayed, the current reporting schedules in the Act could still be retained. Mandatory reporting is currently due to commence for the SEIP and LFF sectors on 1 January 2010. For the agriculture sector, voluntary reporting is due to commence on 1 January 2011 followed by mandatory reporting in 2012. Retaining these reporting schedules would assist sectors with managing their emissions and preparing for entry to the NZ ETS in 2013.

## **PREFERRED OPTION**

The preferred option is to retain the NZ ETS with amendments to reduce the competitiveness impacts and smooth the transition into the scheme for industry. It is also desirable to revise the allocation methods to align with Australia, providing greater protection the competitiveness of the emissions-intensive trade-exposed sectors of the New Zealand economy. This option

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<sup>7</sup> Assumes a carbon price of \$25.

<sup>8</sup> This is based on approximate estimates of the deforestation that could occur on exempt areas.

therefore allows New Zealand to comply with its international obligations and retains an incentive for emissions reductions within New Zealand, while minimising impacts on the economy.

The key amendments included in the preferred option are:

- The SEIP and LFF sectors will enter the NZ ETS on 1 July 2010
- A transition phase from July 2010 to 31 December 2012 which will lessen the impacts of the NZ ETS on industry in the early years of the scheme and smooth the transition. The transition phase includes:
  - a fixed price option of NZ\$25 per tonne; and
  - a revised core scheme obligation for SEIP and LFF participants (who will enter the NZ ETS on 1 July 2010) of only 1 unit for every 2 tonnes of CO<sub>2</sub>e emitted for the period 1 July 2010 to 31 December 2012.
- Uncapped, intensity-based allocation for EITE industries. Eligibility thresholds will be set to reduce trans-Tasman competitiveness risks.
- The agriculture sector will enter the NZ ETS on 1 January 2015. Free allocation to the agriculture sector will be provided on an intensity basis (consistent with industry), and an initial processor-level point of obligation will apply.
- The introduction of a target for 50 per cent reduction of net greenhouse gasses from 1990 levels by 2050, set through regulations.

### **SEIP and Liquid Fossil Fuels sectors**

The SEIP and LFF sectors will both enter the NZ ETS on 1 July 2010. There will be two main changes to these sectors; a transition phase from July 2010 to June 2012 and intensity-based allocation. Participants will still be required to monitor and report emissions from 1 January 2010 as currently provided for under the Act.

#### Transition phase July 2010 to December 2012

The stationary energy and industrial process (SEIP) and liquid fossil fuel (LFF) sectors would both be brought into the scheme on 1 July 2010 and would face a reduced price for the period from the date of entry to 31 December 2012. For those 2 ½ years, the price of carbon in the NZ ETS will be moderated through the combination of two design changes:

- a revised core scheme obligation, with participants required to surrender only 1 unit for every 2 tonnes of CO<sub>2</sub> emitted (effectively providing a 50% discount); and
- a fixed price option of NZ\$25 per tonne

In order to prevent arbitrage occurring while the fixed price option is in place, a ban will be placed on the export of NZUs converted to AAUs from the SEIP, LFF and fishing sectors. However the banking of units freely allocated to these sectors will be permitted. Prohibiting the banking of the free allocation for SEIP, LFF and fishing sectors would reduce the scale of the market for these participants and lead to opportunities for market manipulation. Allowing banking reduces this risk.

Together, these two changes would ensure that the *effective* price of carbon facing participants in these sectors would never exceed \$12.50 per tonne before 1 January 2013, and could be lower if the international carbon price fell below NZ\$25 over that period.

These changes will substantially lessen the impact of the NZ ETS on participants in these two sectors until the end of 2012, providing a far smoother transition for industry and the economy as a whole. In turn this will help to ensure that households do not face large price increases. The changes will therefore provide a significant improvement for the important first years of the scheme's operation, when participants are becoming familiar with their obligations and the operation of carbon markets. Although there could potentially be a big jump in the carbon price at the end of the transition phase this should not have a large impact on the sector as they will have time to prepare and will be able to monitor movements in the carbon price during the transition period.

This change will reduce the level of abatement from the scheme during the transition phase. However as firms will be aware that they will face a higher carbon price in the future there will still be an incentive to invest in emissions reducing technology and practices. New Zealand will still meet its commitments under the Kyoto Protocol, but the government may have to purchase emissions units from overseas in order to do so. This is discussed in more detail in the section on wider economic impacts.

#### Intensity-based allocation approach for industry

The second change is the adoption of an intensity-based approach to the free allocation of units to emissions intensive, trade exposed (EITE) industry. This will see New Zealand adopting a similar approach to allocation to that which is expected to be put in place in Australia.

Under an intensity-based approach the number of units each firm receives will be updated each year to reflect changes in output levels, effectively reducing the price of carbon faced by those firms eligible to receive assistance. The key elements of the proposed intensity-based approach include:

- activities will be eligible to receive assistance if they meet trade exposure and emissions intensity tests, or are eligible under the CPRS;
- more emissions intensive activities (likely to be in industries such as food beverage and tobacco manufacturing, petroleum coal and chemical manufacturing and machinery and equipment manufacturing) will receive a higher rate of assistance than less emissions intensive activities. Initial

levels of assistance under the CPRS have been increased to 94.5% and 66% respectively through the Global Recession Buffer Mechanism. However, given the reduced price period until December 2012 and absence of any initial phase-out of free allocation the initial levels of assistance of 90% and 60% respectively are appropriate under the NZ ETS;

- the level of assistance will be reduced by 50% during the transition phase (from 1 July 2010 to 31 December 2012) and the credits earned from removal activities will also be reduced by 50% during this period;
- the number of units individual firms are entitled to receive will be calculated on the basis of industry average emissions for each activity or evidence of industry average emissions from Australia;
- new entrants, or firms that are expanding, will automatically see their allocation increased, while shrinking firms will see their allocation decreased; and
- the level of assistance will phase-out at a rate of 1.3 per cent per annum beginning in 2013.
- the phase out of free allocation will also be considered through a five-yearly review, with the first review conducted in 2011. Any significant changes to the provision of free allocation will require a five year notice period.

This adoption of an intensity-based approach to allocation will provide ongoing protection for the subset of New Zealand firms that would otherwise be most at risk of suffering a substantial loss of competitiveness under the NZ ETS. This is because intensity-based allocation will reduce the marginal cost impacts of an emissions price. An increase in output of a firm will lead to both an increase in the liability to surrender emission units, and the number of emissions units issued. The marginal cost and competitive effects are therefore reduced by the free allocation. Additionally, free allocation can be provided to both existing firms and new entrants. As this form of assistance takes into account expansion of production of emissions-intensive trade-exposed industries, it supports growth in these industries and reduces the likelihood of carbon leakage.

An intensity-based approach to allocation will therefore help to avoid undue disruption to the economy, and maintain the ability of businesses in sectors where New Zealand currently has a clear competitive advantage to continue to grow. This change would provide savings over the early years of the scheme's operation, but impose increasingly large fiscal costs over the long term.

The allocation methodology and thresholds would be based as much as is sensible on the Australian CPRS model. The CPRS approach is based on extensive analysis, and drawing from the CPRS approach will assist in implementing intensity-based allocation within the limited time available.

The CPRS model uses allocative baselines based on the historical industry average of emissions per unit of output. This method provides an incentive for

firms to be more efficient than the industry average while still maintaining competitiveness with international firms.

This change is likely to reduce the level of abatement from the scheme particularly beyond 2018 (when the current allocation is due to start phasing out). New Zealand will still meet its commitments under the Kyoto Protocol, but the government may have to purchase a greater amount of emissions units from overseas in order to do so. Again, this is discussed further in the section on wider economic impacts.

Implementing the Australian allocation methodology would bring about benefits from reduced transaction costs for businesses operating across the Tasman and reduced trans-Tasman competitiveness distortions, particularly for emissions-intensive companies.

Given the increased benefits that industry will receive under intensity-based allocation, the current Innovation Fund will be removed from the Act as it is no longer necessary. In addition, the provision for the Household fund under section 223 of the CCRA will be removed.

### **Forestry sector**

Only minor changes will be made to the treatment of forestry under the modified NZ ETS:

- Emissions liabilities from the pre 1990 and post 1989 forestry sectors will be covered by the NZ\$25 fixed price option that accrue before 1 January 2013.
- The reduced 1:2 core obligation will not apply to either pre 1990 or post 1989 forests. This mitigates the risk that a short term reduction in price could drive short term deforestation, causing an increase in emissions.
- The forestry allocation plan process will be continued, with the option to cancel the second tranche of 34 million units relating to the 2013-2021 period if offsetting is introduced from 2013.

These changes are expected to have only minimal impacts on the sector and the wider economy. The \$25 fixed price option is in line with the expected international price, so the sector faces the same incentive to reduce emissions as under the current scheme. It will provide a modest benefit to forest owners wishing to deforest during CP1, through greater price certainty.

The forestry sector will be permitted to bank and export units during the transition phase. The arbitrage risks associated with this are low, and restrictions on banking and exports would reduce the economic incentives for this sector adding costs to the economy as a whole. Allowing banking is desirable to assist with managing the long term nature of forestry investments. However it may be necessary to ban exports from the forestry sector in the future in the event that the NZ ETS and the CPRS are linked. In this case, foresters would be able to sell units to the Australasian market.



To reduce litigation risk and to retain flexibility over the second tranche of allocation, it is necessary to amend the draft allocation plan. It is further recommended to amend the Act to include as much detail as possible on forestry allocation; specifically to make explicit that only 21 million units will be transferred during CP1 and the approach to distributing units.

### **Agriculture sector**

As agriculture makes up nearly 50 per cent of New Zealand's emissions, it is important that it is covered by the NZ ETS. However, the impact of the NZ ETS as currently legislated on the agriculture sector could be significant, given that the sector has limited abatement options available to them. Therefore there is a strong case for facilitating a gentler transition for agriculture into the ETS than is currently proposed. There is also a case for ensuring we can reflect on Australian decisions expected in 2013 about possible inclusion of agriculture in the CPRS from 2015, before agriculture enters the NZ ETS.

The entry date for the agriculture sector will therefore be changed to 1 January 2015. The delayed start will substantially lessen the impact of the NZ ETS on the agriculture sector until the end of 2015, providing far smoother transition for the sector and the economy as a whole.

A further amendment to the agriculture sector is to shift to an intensity-based approach to allocation. The approach to phase out will be consistent with industry. In line with the industry allocation provisions, there would be a review of allocation policies every five years.

The adoption of an intensity-based approach will protect the competitiveness of this industry until more effective emission abatement technologies have been developed, or until there is more effective global action on agricultural emissions including by developing countries, than is the case with the current international framework.

A processor level point of obligation<sup>9</sup> will initially be adopted for the agriculture sector (as the Act currently allows for); and the Act will be amended to keep open the option of a farm-level point of obligation at a later stage, subject to stakeholder views and a number of key administrative challenges being successfully addressed. The options for a hybrid point of obligation will be removed from the Act.

Allocation to agriculture should be based on the current year's output, rather than historic output levels. To ensure that agriculture sector participants can receive allocation well in advance of surrendering units, the surrender obligation for all sectors should be extended from the end of April to the end of May.

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<sup>9</sup> The point of obligation refers to the participant who is obliged to surrender units for the emissions related to their production. For the agriculture sector, this could be at the farm level or the food processor level.

The legislation will specify certain criteria to which the Minister must have before making an Order in Council moving the point of obligation to the farm, including:

- The ability to enforce compliance;
- The costs including administrative and compliance costs;
- The benefits in terms of additional mitigation.

The reporting dates for the sector will remain unchanged. Voluntary reporting by the agriculture sector is due to commence on 1 January 2011, followed by mandatory reporting in 2012.

### **Fishing sector**

As fishing is an emissions-intensive trade exposed sector, the allocation will be increased from the current level of 50%, to 90% of 2005 emissions for two and a half years (July 2010 to December 2012). The transition phase (i.e. 50 per cent progressive obligation) will also apply to this sector and the number of units allocated to this sector will be reduced by 50% during the transition phase. The fiscal and economic impacts of this change are likely to be small.

It is proposed that legislation will specify a total number of units for free allocation to the fishing sector and that this number will be equivalent to 90% of 2005 emissions for two and a half years (i.e. to match the reduced price period), adjusted for a 2:1 progressive obligation being in place. It is further proposed that the number placed in legislation be based on a Ministry of Fisheries fuel consumption estimate for 2005 of 216 million litres. This is believed to be the best estimate available. This amount of fuel would result in 700,000 emissions units being granted to the sector.

### **Introduction of a '50 by 50' emissions reduction target for New Zealand.**

The New Zealand government intends to introduce a 50 per cent reduction in New Zealand's carbon-equivalent net emissions, as compared to 1990 levels, by 2050. The '50 by 50' target is intended to:

- Make a definitive and credible statement about New Zealand's long-term contribution to addressing climate change; and
- Give taxpayers, business, industries and farmers clear, long-term certainty about where domestic climate change policy is headed so that they can plan and invest accordingly.

Key criteria in the development of the '50 by 50' target were that it needs to be internationally credible, suitable to New Zealand's unique economic profile and time-bound. A '50 by 50' target is not inconsistent with the IPCC's 450 parts per million climate stabilisation scenario and New Zealand's international negotiating position proposes supports a global long-term concentration target of not more than 450ppm. It is also broadly equivalent to the Australian long term target of a 60 per cent reduction by 2050 compared to 2000 emission levels.

It is proposed that a regulation making power for setting targets be introduced. The regulation making power would also require the target to be reviewed following the release of future Intergovernmental Panel on Climate Change Assessment Reports. The regulation making power would have the same legal effect as a target under the existing gazette mechanism but has the benefit of having a perceived higher status than a target set under the existing mechanism. Furthermore, a regulation making power would provide flexibility to amend the target in response to future IPCC assessment reports.

### **Fiscal impacts**

The table below sets out an assessment of the fiscal implications of the preferred option:

#### ***Fiscal costs***

(\$m, costs shown as positive, savings as negative)

	Pre-2013	2013	2015	2017	2013-2017	2020	2030
SEIP entry dates and p.o.	588	0	0	0	0	0	0
Ind allocation	-177	-181 to -351	-179 to -350	-177 to -348	-896 to -1748	-49 to -221	411 to 586
Ag entry date	0	281	0	0	573	0	0
Ag allocation	0	0	106	74	270	305	1,581
Fishing allocation	4	-14	0	0	-14	0	0
Total	415	86 to -84	-73 to -244	-103 to -274	-67 to -919	84 to 256	1992 to 2167

Note: Costs are based on a unit price of \$25 until 31 December 2012 and \$50 from 1 January 2013.

### **Implications for the wider economy**

The modified NZ ETS will cover all sectors and all gases within a reasonable timeframe. It will therefore achieve its original objective of reducing emissions and allowing New Zealand to comply with its international obligations in a manner that is least-cost to the economy, equitable and flexible. It sends a clear signal that the economy will face a carbon price into the future, providing businesses with certainty to plan investment decisions.

The transition phase under the modified NZ ETS will smooth the transition for participants in early years of the scheme and minimise the chance of high or volatile carbon prices. This will give firms time to adjust to their obligations under the NZ ETS while minimising the impact of the scheme during this period.

In addition, moving to an intensity-based allocation model will minimise the impacts of competitiveness on New Zealand firms and industries that are exposed to international competitors who do not face equivalent carbon charges. Intensity-based allocation provides an incentive for firms to improve efficiency, but does not provide an incentive to reduce levels of output, and can be better targeted at those sectors whose international competitiveness is most at risk from the introduction of a price on carbon. Recent economic analysis<sup>10</sup> has shown that intensity-based allocation will assist with lowering the costs of the NZ ETS and protecting EITE industries.

These two changes will assist with achieving the objectives of striking a balance between New Zealand's environmental and economic interests, and providing a smoother transition and greater certainty for economic growth into the future.

### Transition phase

The transition phase will operate for a relatively short period of time, and there is expected to be minimal change in total costs to the economy between this option and the status quo. The difference will be where the costs fall within the economy.

The transition phase will result in lower cost to industry than the NZ ETS as currently legislated for this period if the international carbon price is above \$12.50 per tonne (which is expected to be the case). Firms in the SEIP sector are expected to benefit the most. The duration of the transition phase is too short to affect investment decisions, and as firms will be aware that they will face a higher carbon price in the future there will still be an incentive to invest in low emissions and energy efficient technologies.

The transition phase will result in a smaller increase in fuel costs than the current NZ ETS, lowering the cost to households. Petrol is expected to rise by about 3c/litre (1.8 per cent) which is less than the 6.1c/ litre (4 per cent) that is estimated to result from a carbon price of \$25 per tonne, and the increase in electricity prices is estimated to be 0.8c/KWh (3.6 percent) compared to 1.4c/KWh (6.3 per cent) from a carbon price of \$25. These figures assume that the carbon costs are fully passed through.

However, while the transition will reduce costs to industry the government will have to meet any difference between the fixed price option and the international carbon price in order to meet New Zealand's liability under the Kyoto Protocol.

### *Forestry*

One sector that could experience significant impacts is the forestry sector. This sector can adjust quickly to changes in the carbon price, so there is the potential that a short term reduction in price could drive short term

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<sup>10</sup> NZIER and Infometrics (2009) *Economic Modelling of New Zealand Climate Change Policy*.

deforestation as foresters seek to convert land while the prices are relatively low. This would cause a short term increase in emissions. The forestry sector has therefore been excluded from the reduced obligation but will be able to access the \$25 fixed price option, which approximates the expected international carbon price over this period providing the same incentive to reduce emissions as the current NZ ETS.

Unlike the SEIP sector, the pre-1990 forest sector will also receive a full allocation of units during the transition phase as the free allocation represents compensation for the long term reduction in land values faced by the sector.

The ownership of post-1989 forests is currently the only 'net removal activity' allowed under the NZ ETS. In contrast to the rest of the economy, owners of these forests benefit from a higher price on carbon. Reduction of expected returns to forestry or high levels of uncertainty among investors could reduce investment in new planting and participation of existing post-1989 foresters in the ETS – both outcomes come at a high economic cost. It is difficult to quantify this impact. However, it should be noted that even relatively small changes to the new planting rate can create a significant economic impact. If the new planting rate under the modified scheme is 10,000 ha per year lower than the new planting rate under a scheme that allows exports, an economic benefit to New Zealand (potentially in the order of \$125-\$200 million<sup>11</sup>) would be delayed.

In order to provide some certainty for investment decisions, the banking and exporting of emission units will be permitted for both the pre-1990 and post 1989 forestry sectors during the transition phase. The risk of arbitrage from allowing exports during the transition phase is considered to be low as the level of deforestation for pre-1990 forests is not expected to be significant. Allowing exports for post 1989 foresters will ensure that the sector receives the full economic incentive for new investment.

### Intensity-based allocation

Intensity-based allocation for industry is likely to give rise to a fiscal saving from 2010 to 2012 of \$177 million, as initially a smaller proportion of firms will receive assistance. It is also estimated that there will be savings of \$181 - \$351 million in 2013 and \$49 - \$221 million in 2020. By 2030 there will be a fiscal cost of approximately \$411 – 586 million. The fiscal cost arises from the government taking responsibility for a proportion of emissions from the firms that receive free allocation and the cost will depend on the chosen rates of assistance.

An intensity-based allocation approach will provide greater protection to the competitiveness of the industries that receive assistance and will lower the cost of the emissions trading scheme on these participants. Protecting the

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<sup>11</sup> This is based on findings from both Scion (2008) and University of Canterbury that the expected value of forestry land with a \$30 international price on carbon would increase by \$5,000-\$8,000. To estimate the economic cost of a decrease planting these values are multiplied by the number of new hectares planted over CPI (25,000 ha).

competitiveness of more firms by providing a higher rate of assistance for a longer period will benefit eligible firms, but will come at a cost to the economy as a whole, by delaying the transition of the New Zealand economy to a carbon constrained world. The consistency with New Zealand's international trade obligations would also need to be taken into account. The review mechanism will allow for future changes to free allocation.

The costs and benefits of intensity-based allocation on the wider economy are somewhat ambiguous. Economic theory suggests that placing responsibility for emissions with those who reduce them is the least-cost way to meet emissions targets; however this ignores adjustment costs, economic regrets when other countries may introduce emissions pricing in the future and some general equilibrium effects, particularly around reduction in exports. Recent economic modelling by NZIER and Infometrics suggests that these factors may be significant, and that it may be beneficial to freely allocate units to emissions-intensive trade-exposed firms. NZIER and Infometrics also found that free allocation based on a lump sum payment to compensate firms for stranded assets is more costly than production-linked free allocation.

The Infometrics/NZIER report (2009) concluded that competitiveness at risk issues need to be considered. Free allocation, linked to production can be a cost-reducing mechanism of dealing with high costs of abatement and lack of action by other countries. The report also found that free allocation for stranded assets (provided as a lump sum payment) is more costly than production-linked free allocation. As technology options become available and the rest of the world takes steps to implement equivalent pricing regimes, the benefit of free allocation becomes reduced. Although the phase out of free allocation under this option is gradual, it will be subject to a five yearly review and can be changed if New Zealand's economic circumstances are such that this level of assistance is no longer beneficial.

Under an intensity model, highly emissions-intensive firms will receive more assistance than under the previous allocation approach. However some firms that would have received assistance under the previous approach will fall below the emissions-intensity thresholds and will be ineligible to receive assistance under the new approach. The firms that do not receive allocation will however still benefit from the transition phase in the first two and a half years after SEIP and LFF enter the scheme.

Preliminary analysis from the Ministry for Economic Development suggests that the firms eligible for assistance would come from the following industries:

- Food, beverage and tobacco;
- Non metallic mineral products;
- Petroleum, coal and chemical manufacturing;
- Machinery and equipment manufacturing;
- Aluminium drawing, rolling and extruding; and
- Basic iron and steel manufacturing.

Using the same approach as Australia for allocation methodologies and price controls could bring about benefits from reduced transaction costs for

businesses operating across the Tasman and reduced trans-Tasman competitiveness distortions, particularly for emissions-intensive companies. It will also enable New Zealand to draw on the Australian experience and analysis when developing allocation methodology.

There is no single perfect approach to allocation, and no single perfect approach to determining eligibility. Having said this, use of the Australian approach has some attraction in that Australian analysis suggests that their thresholds are likely to cover those sectors whose international competitiveness is most at risk from the introduction of a price on carbon. To quote the Australian Treasury (Australia's Low Pollution Future, the Economics of Climate Change Mitigation, 2008, p. xiv)

*In the absence of unified global action, an emission price may distort the international competitiveness of Australia's emissions intensive trade-exposed sectors (EITEs). There is little evidence of carbon leakage. Nevertheless, allocation of some free permits to EITEs, in accordance with the shielding arrangements proposed .... eases the transition to a low-emission economy for shielded sectors while maintaining incentives for emission reductions.*

#### Introduction of a '50 by 50' emissions reduction target

As it is proposed that the target be set through regulation, with a review mechanism, it is unlikely that the economic consequences will be significant. The economic implications of setting the '50 by 50' target in the purpose provisions of the CCRA are likely to depend on New Zealand's obligations under any future international climate change agreement. If New Zealand's international emission reduction obligations are less stringent than 50 per cent by 2050 then the target could impose costs on the economy. To prevent this, the Government could be to adjust the target to reflect New Zealand's international commitment.

It is difficult to estimate the economic impacts of such a target due to the long timeframe involved, and no economic modelling of the costs and benefits of a '50 by 50' target has been completed for New Zealand. However, studies completed internationally, including work by the Garnaut Climate Change Review and the Australian Treasury suggest that economies continue to grow when taking on large emissions reductions targets, albeit at a slower rate. For example the Australian Treasury found that with an emissions reduction target of 60 per cent below 2000 levels by 2050, average annual economic growth is reduced from an 1.3 per cent to 1.1 per cent for Australia. This model assumed staged international participation of carbon pricing by the rest of the world.

The costs to New Zealand of such a target will be influenced by the actions of the rest of the world and will be lower if other countries take on similar targets. However economic modelling still indicates that the economy will continue to grow even when international participation is limited. Although the recent modelling by NZIER and Infometrics only modelled scenarios out to 2020, the results showed that the New Zealand economy continued to grow under all

scenarios, even under a \$100 carbon price and no action by the rest of the world.

The 2006 Stern Review found that if the world does not act to address climate change, the overall risk could be equivalent to losing at least 5 per cent of global GDP per annum now and forever. If a wider range of risks are taken into account, this could rise to 20 per cent or more. Similarly the Garnaut Climate Change Review conducted in 2008 also found that the costs of inaction were greater than the costs of action.

Although New Zealand is only responsible for a small proportion of global emissions, there is a risk that New Zealand could suffer significant environmental effects as a result of climate change. Additionally, if the global economy is affected this will have flow-on effects to the New Zealand economy. The only way to address these environmental and economic risks is through a global agreement and New Zealand's ability to influence global agreements relies on its active participation in negotiations, and its reputation as a country that is willing to do its fair share and meet its international obligations.

In addition, there are international and trade risks if New Zealand is not perceived to be doing its fair share to address climate change. New Zealand is a small, open economy that relies on international agreements and treaties to support its trade. There is also a risk that trade barriers could be established against countries that have not taken on emissions reduction commitments.

## **Risks**

Fiscal cost to the Crown being higher than anticipated. Both the transition phase and the intensity-based allocation shift some of the costs of New Zealand's international liability from emitters to the crown, and subsequently increase the risk to the Crown. This is a particular risk for intensity-based allocation. If the cost is on emitters, emitters have the choice as to whether to purchase permits to cover their emissions, reduce output or invest in mitigation options. The Crown has fewer options for managing emissions, and will be liable for any emissions that exceed the level of emissions specified in Kyoto and successive agreements.

The transition phase will operate for a relatively short period of time so the risk is not large. Intensity-based allocation is a long term provision that could potentially expose the crown to large risks. However the 5 year review will provide a mechanism for the policy to be changed if the cost is becoming excessive.

Arbitrage arising from the fixed price option. If units issued through the fixed price option fall below the international price the units could be sold at a profit at the Crown's expense. The level of arbitrage risk will depend on the difference between the fixed price option and the expected international price. In order to mitigate this risk, the export of units will be banned from all sectors who can access the fixed price option, other than forestry. This will not reduce



the risk of arbitrage completely (since banking is still possible), but might reduce the level of administrative complexity. It is desirable to allow banking for SEIP and LFF sectors, as a ban on banking would reduce the size of the market for these participants and may lead to opportunities for market manipulation.

Compressed timetable. Although delaying the entry date for the SEIP sector by 6 months will allow more time to develop an allocation plan, and there is a greater chance of achieving this timeframe than the timeframe under the current Act. However there is still a risk that the allocation process would not be complete by the entry date of 1 July 2010.

The most likely option for mitigating this risk is to draw on work completed under the Australian CPRS. The Australians have made significant progress towards producing activity definitions and allocative baselines and are expected to complete the majority of this work by the end of 2009. Drawing on Australian work as much as possible is likely to allow the timetable to be met.

Opposition to intensity-based free allocation: There is a risk of opposition to this approach from industry stakeholders who may expect free allocation under the current model, but will receive no allocation under the proposed new approach. This is mitigated to some extent by the transition phase.

## **IMPLEMENTATION AND REVIEW**

The Bill for substantive amendments to the NZ ETS will be introduced into the House in late September, and is due to be passed in December 2009.

Updated draft regulations for the stationary energy and industrial processes sectors involvement in the NZ ETS were released for consultation alongside draft regulations on unique emissions factors and other removal activities on 2 June 2009. These regulations are due to be published on 1 October 2009.

### Transition phase

The fixed price option would operate by participants being able to pay a fixed charge to fulfil surrender obligations. The export of units would be banned from the LFF, SEIP and fishing sectors in order to minimise the risk of arbitrage, and units issued under the fixed price option would be for immediate surrender. A ban on the exports of units could be achieved through existing regulatory powers, but legislative changes may be needed to ban the conversion of NZUs to AAUs for export.

### Intensity-based allocation

The provision for allocation to industry will be further developed following passage of the Bill, with a view to providing firms with as much certainty as possible by July 2010.

### Review

It is necessary to review the NZ ETS and the allocation model on a regular basis. Five yearly reviews are proposed, which is in line with the Australian CPRS. In terms of operation, the scheme will be effective if participants are calculating emissions and surrendering returns on a timely basis.

## **CONSULTATION**

The New Zealand government announced a Special Select Committee Review of the Emissions Trading Scheme and related matters on 12 December 2008. The Review has very broad terms of reference, which include (among other things):

- consider the impact on the New Zealand economy and New Zealand households of any climate change policies, having regard to the weak state of the economy, the need to safeguard New Zealand's international competitiveness, the position of trade-exposed industries, and the actions of competing countries
- examine the relative merits of a mitigation or adaptation approach to climate change for New Zealand
- examine the relative merits of an emissions trading scheme or a tax on carbon or energy as a New Zealand response to climate change

The period for public submissions closed on 27 February 2009. In total 278 submissions on the terms of reference were received and 102 submissions were heard by the Select Committee. Key industry submissions highlighted concerns about loss competitiveness if faced with a price on carbon prior to international competitors. Additionally many were in favour of a smoother transition into the NZ ETS and many submitters supported fixed price options in early years of the scheme and an output based approach to free allocation. The Review reported to Parliament on 31 August 2009. The submissions to the Review and the findings from the Review have been reflected in the development of these amendments. The Government has also engaged with the Climate Change Iwi Leadership Group on modifications to the NZ ETS.

In addition, updated draft regulations for the stationary energy and industrial processes sectors involvement in the NZ ETS were released for consultation alongside draft regulations on unique emissions factors and other removal activities on 2 June 2009. Submissions on this package of draft regulations closed on 13 July 2009.

The Ministry of Economic Development, Ministry of Transport, Ministry of Agriculture and Forestry, Ministry of Fisheries, Ministry of Foreign Affairs and Trade, Te Puni Kōkiri and the Treasury were consulted on these proposals.