

Emission Critical

Issue 9: September 2009

Legislation establishing New Zealand's emissions trading scheme (ETS or the Scheme) was passed into law on 10 September 2008. Since then, with the change in Government and a nine month review of the ETS, significant uncertainty has surrounded the design of the Scheme. Following the release of the Select Committee recommendations on 31 August 2009, the Government indicated amendments to the ETS would be made. The Climate Change Response (Moderated Emissions Trading) Amendment Bill (the Bill) was introduced under urgency on 24 September 2009. This Bill amends the Climate Change Response Act 2002. The Government has indicated that it wants the Bill passed into law prior to the International Climate Change Summit to be held in Copenhagen in December 2009.

In amending the ETS, the Government is aiming to reduce its competitive impacts, provide greater certainty for economic growth and make the Scheme more affordable in the current economic climate. It is intended that the changes will provide a smoother transition for participants into the ETS and protect against price volatility in the early years of the Scheme. However, the proposed changes significantly weaken the price drivers for emission reductions.

The changes will create greater harmonisation between the ETS and the Australian Carbon Pollution Reduction Scheme ('CPRS'), with the intention that this will reduce trans-Tasman competitiveness risks. Further objectives of the Bill are to maintain flexibility for possible changes in post-2012 international climate change arrangements and to improve the administrative effectiveness of the ETS.

This edition of Emission Critical sets out the proposed key changes to the design of the ETS and details the actions businesses should take to be prepared.

Summary of changes to core design features

The main proposed amendments to the Act are to:

- Delay the entry date into the Scheme for stationary energy and industrial processes by six months and agriculture by two years, and to bring forward the date of entry of liquid fossil fuels by six months;
- Create a transitional phase from 1 July 2010 to 31 December 2012 where some participants will only be required to surrender 1 unit for every 2 tonnes of CO₂e emitted;
- Introduce a price cap by providing an option for participants to pay \$25 in lieu of surrendering units;
- Provide free allocations of units to agriculture and emissions-intensive, trade exposed industries on an intensity basis, and to increase the level of free allocations to the fishing sector;
- Initially set the point of obligation for agriculture at the processor level;
- Prevent the export of New Zealand units, except for New Zealand units relating to forestry;
- Provide the power to make regulations for the setting of emissions reductions targets; and
- Amend the surrender date for units from 30 April to 31 May of each year.

Who is captured and when?

2007	2008	2009	2010	2011	2012	2013	2014	2015
	Jan 2008 Forestry		July 2010 Liquid fossil fuels Stationary energy Industrial process			Jan 2013 Waste and synthetic gasses		Jan 2015 Agriculture

Stationary energy, industrial processes and liquid fossil fuel sectors

The Bill provides for the stationary energy, industrial processes and liquid fossil fuel sectors to enter the Scheme and commence unit surrender obligations from 1 July 2010. Participants will continue to be required to monitor and report emissions from 1 January 2010, as currently required under the Act. During the transition phase of 1 July 2010 to 31 December 2012, participants in these sectors will be required to surrender 1 New Zealand Unit ('NZU') for every 2 tonnes of CO₂e emitted. A fixed price option of \$25 for each unit a person is liable to surrender for CO₂e, or a combination of unit surrender and fixed price, will also be available during this period.

As a result, during the transitional phase to 2012, the effective price of carbon for the stationary energy, industrial processes and liquid fossil fuels sectors will not exceed \$12.50 per tonne of CO₂e. The Bill allows these sectors to bank any excess units on hand for use in future periods but prevents these units from being exported while a price cap is in place.

Agriculture

The Bill delays the entry date for the agriculture sector into the ETS from 1 January 2013 to 1 January 2015. It also increases the level of transitional assistance given to the agricultural sector, by way of a more gentle transition in recognition of the limited abatement options available.

Reporting dates for the sector remain unchanged. Voluntary reporting by the agriculture sector is due to commence on 1 January 2011 followed by mandatory reporting in 2012. The point of obligation will be amended to sit at the processor level. The Bill will provide for the future option of placing the point of obligation at farm-level and will remove the option of operating a hybrid point of obligation.

Forestry

The provisions of the Bill leave the forestry sector largely unchanged. The Bill provides for the forestry sector, both pre-1990 and post 1989, to be able to satisfy emissions liabilities with the \$25 fixed price option. The 2 for 1 option will not apply to either pre-1990 or post-1989 forestry unit surrender obligations. The forestry sector will be able to bank and export units during the transition phase of the Scheme. Further amendments to the Act will include detailing as much as possible on the forestry allocation, in particular the quantum of units transferred during Commitment Period 1.



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Point of Obligation – Who is a participant?

The point of obligation to account for CO₂e emissions will largely remain unchanged, except for the agricultural sector where the point of obligation will initially sit at the processor level. The table below sets out the point of obligation for each sector.

Table 1: Point of Obligation, Mandatory participants

Main Sector	Sub Sector	Point of Obligation for Mandatory Participants
Pre 1990 Forestry	<ul style="list-style-type: none"> Deforesting > 2 hectares in 5 years 	<ul style="list-style-type: none"> Generally, the land owner
Liquid Fossil Fuels	<ul style="list-style-type: none"> Owning obligation fuel 	<ul style="list-style-type: none"> Owning obligation fuel exceeding 50,000 litres in a year for home consumption or for domestic use ex-refinery.
Stationary Energy	<ul style="list-style-type: none"> Coal Natural Gas Geothermal Fluid Combustors of used oil, waste oil, used tyres or waste Refined petroleum Solid biofuel 	<ul style="list-style-type: none"> Importer, mining > 2, 000 tonnes p.a. Importing > 10,000 litres pa or mining other than for export. Generating electricity or industrial heat. Where generating electricity or industrial heat. Using intermediate crude oil products for energy or feedstock purposes. Generating electricity or industrial heat.
Industrial Processes, including synthetic gases	<ul style="list-style-type: none"> Iron and steel Aluminium Clinker, burnt lime Glass Gold SF₆ HFCs, PFCs, 	<ul style="list-style-type: none"> Production Consumption of anodes or production of anode effects Resulting in calcination of limestone or calcium carbonates Producing using soda ash Production Importation, including in goods. Importation, including contained in goods, other than goods that are household goods or effects of a passenger of a ship or aircraft which are not intended for gift, sale or exchange or have medical uses including meter dosed inhalers. Manufacture other than through producing aluminium resulting in the consumption of anodes or the production of anode effects.
Agriculture	<ul style="list-style-type: none"> Fertiliser: Processor Fertiliser: Farm Animals: Processor Animals: Farmer 	<ul style="list-style-type: none"> Importation or manufacture of synthetic fertilisers containing nitrogen. Purchasing, other than for onselling synthetic fertilisers containing nitrogen for application to land. Slaughtering ruminant animals, pigs, horses or poultry by specified persons who are not a retail butcher. Dairy processing of milk or colostrums. Exporting from New Zealand live sheep or cattle, sheep or pigs in accordance with an animal welfare certificate. Producing eggs by a person who is the operator of a risk management programme under the Animal Products Act 1999. Farming, raising growing or keeping ruminant animals, pigs, horses, or poultry for reward or for the purpose of trade in those animals, or in animal products taken or derived from those animals.
Waste		<ul style="list-style-type: none"> Operating a disposal facility

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Voluntary 'opt-in' provisions

Entities can elect to opt-in as participants in the ETS. On election, these participants will be subject to the same obligations, regulations and requirements as mandatory participants.

Table 2 sets out those parties who are entitled to opt-in as participants. Generally, entities would only opt-in to the ETS where they consider they would be better off managing their carbon liabilities directly rather than have to accept the costs associated with emissions management higher up the supply chain.

Table 2: Opt-in

Main Sector	Sub Sector	Point of Obligation for Voluntary Participants
Post -1989 Forestry		<ul style="list-style-type: none"> Owning, other than land subject to a forest sink covenant Holding a registered forestry right or leaseholder, other than land subject to a forest sink covenant Parties to a Crown conservation contract
Removal Activities	<ul style="list-style-type: none"> Producers of carbon embedded products Carbon capture and storage HFCs, PFCs or SF₆ 	<ul style="list-style-type: none"> Producing a product that contains a substance that is permanently embedded, or temporarily embedded in the product and exported with the substance embedded, and would result in emissions if not embedded, subject to specific requirements Where the person would otherwise be a participant if the CCS had not occurred, it results in a reduction from New Zealand's annual inventory report, and any prescribed threshold is met. Where person is required to surrender units if carbon dioxide was not captured or stored and the result of this CO₂ is a reduction in emissions reported in the New Zealand annual inventory and any prescribed threshold is met. Exporting or destroying where contained in goods, and any prescribed threshold is met.
Liquid Fossil Fuels	<ul style="list-style-type: none"> Aviation 	<ul style="list-style-type: none"> Purchasers of obligation jet fuel from one or more mandatory participants > 10 million litres p.a
Stationary Energy	<ul style="list-style-type: none"> Coal and natural gas 	<ul style="list-style-type: none"> Purchasing coal from one or more participants who mine coal where the total purchased > 250,000 tonnes p.a. Purchasing natural gas from one or more participants who mine natural gas where the total purchased > 2 petajoules p.a.

Participants who elect to opt-in to the ETS will have registration requirements and similar compliance obligations to mandatory ETS participants. Specific mechanisms apply to remove these obligations from the original mandatory participant.

Assistance provided to shield at risk sectors

Certain sectors, considered competitively at risk by the introduction of a carbon price, will be given free allocations of units to shield them from the full cost of carbon.

Allocations to industry

Under the Scheme, industries that face international competition from firms not currently facing emissions pricing will receive transitional assistance by way of free allocations of units. The reason for providing the free allocations is to offset the increase in input costs that include the cost of carbon.

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The Bill amends the basis for allocation from a grandfathered approach of 90% of 2005 emission levels to an intensity basis. This means that allocations are provided on a unit of production basis, based on an industry average. The pool of available credits for allocation is uncapped.

The intensity basis will have two levels; moderately emissions-intensive and highly emissions-intensive, based on industry average. The high intensity threshold will be set at greater than 1,600 tonnes CO₂e/\$million of turnover, where the Government estimates approximately 15 companies are eligible. The moderate intensity threshold will be at greater than 800 CO₂e/\$million, where approximately 50 companies will be eligible.

Assistance will be given to these industries at a rate of 0.6 for moderate and 0.9 for high until 31 December 2012. From this point the assistance would be phased out at a rate of 1.3% per annum. This phase out rate is consistent with Government policy of a 50% reduction in emissions by 2050. The changes will generally see most emissions intensive industries receiving higher allocations than under the current Act. The Government justifies the greater protection to avoid the loss of key industries and to avoid carbon leakage.

The Bill intends that the eligibility thresholds and phase out rates of free allocations will reduce trans-Tasman competitiveness risks by being closely aligned with Australia's proposed CPRS.

Fishing

As some vessels which fish in the New Zealand exclusive economic zone use fuel that is purchased outside of New Zealand and may not include a cost of carbon, the ETS provides for a free allocation of units to New Zealand fishing industry, meeting certain thresholds. The Bill amends the recipients of the free allocations to the holders of fishing quotas and increases the allocation of units to 90% of 2005 emissions levels (originally 50% of 2005 emissions), adjusted for the 2:1 progressive obligation for the transitional period of 1 July 2010 to 31 December 2012.

Agriculture

The Act currently provides for free allocations from 2013 of 90% of the 2005 emissions resulting from included agricultural activities. This assistance was to be decreased linearly until 2030. The Bill amends the allocation of free units to an intensity basis, with the phase out consistent with industry.



Compliance obligations

ETS participants have rigid requirements to register, and to set up monitoring and reporting systems for specific emission activities. Significant penalties may be imposed for failing to meet compliance obligations. The key message for participants is to understand how the legislation will impact them, and to ensure systems are comprehensive to address all compliance obligations.

Mandatory and opt-in participants must register under the ETS within 20 working days of becoming a participant, and apply to open a holding account for emission units.

The legislation envisages a compliance regime that is similar to that used in the New Zealand tax system, with annual reporting requirements using a self-assessment.

Participants who undertake activities that remove greenhouse gas emissions from the atmosphere, such as afforestation, reforestation and carbon capture and storage projects, may also receive emission units for emissions removed. Specific compliance and verification requirements apply prior to emissions units being issued under the ETS.

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Returns must be filed within three months of the emissions year end and liabilities met by 31 May each year.

Participants will face significant civil and criminal liabilities for failure to meet their obligations under the ETS. In the event that a participant fails to surrender the required units or pay the \$25 amount/obligation, they will face a financial penalty of \$30 per tonne of shortfall if the shortfall is not paid within 20 days of the determination of a breach by the administering agency.

In the event where a participant knowingly fails to meet this obligation, the financial penalty increases to \$60 per tonne, and must be paid within 90 working days, with the possibility of criminal convictions.

Where there is a failure to meet other obligations, civil penalties start at \$8,000 for the first infringement and ranging up to \$50,000 for other offences. Where the participant fails to meet the obligation knowingly, more stringent criminal penalties, larger fines and personal criminal convictions apply. Interest may also apply for late payment.

As these penalties may present severe consequences for participants, it is imperative that businesses fully analyse and monitor their emissions profile, establish comprehensive systems to ensure compliance, and put measures in place to fulfil annual reporting and compliance requirements.

A participant may be relieved of all or part of their obligations in specific circumstances where another party voluntarily chooses to opt-in to the ETS as a participant.

In limited circumstances, by Order in Council, a person or class of persons may be exempted from being a participant. Stringent rules will apply and the Minister will need to be satisfied that such exemption would not undermine the

environmental integrity of the ETS and the costs of making the order do not exceed the benefits of not making the order. This provision is only likely to be used in exceptional circumstances.

Emissions information will be required to inform accounting and tax requirements. In setting up compliance systems, thought should be given to how this information can be integrated to address the participants' wider compliance needs.

Sourcing of Emissions Units

To meet emissions obligations under the Scheme, participants may either exercise the fixed price option or purchase units, being NZUs or other prescribed Kyoto compliance units.

NZUs will be available in the New Zealand market from sectors that have been granted free allocations and do not require these units for their own operations, or from persons who have sequestered carbon, such as forestry participants. However, as forestry participants' units may be sold offshore, it seems likely that many of these units may be unavailable in the domestic market. Units may be accessed directly or through a broker or trading platform.

To the extent there is scarcity of NZUs, the most likely other source of offshore emission units available for ETS compliance will be Certified Emission Reductions ('CERs'), created under the Kyoto Protocol's Clean Development Mechanism ('CDM'). These units are created from emission reductions projects in developing countries. CERs can be purchased directly from a project developer in their relevant country or through the secondary market. However, with CERs currently trading above NZ\$25/unit, we would envisage that participants will utilise the \$25 fixed price plan.



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The indirect impacts of the scheme – cost

The purpose of a price based measure, such as an ETS, is to create a financial incentive for emission reductions by allowing the market to impose a cost. In the New Zealand scheme, this impacts on all sectors and GHG emissions. As a result, New Zealand businesses and households will face the flow-on costs of carbon to the economy, regardless of whether they are participants in the scheme. While there has been significant debate over the potential economic impacts, and impacts as a result of the interim price cap, it is clear that everyone will be affected.

The increased costs imposed by the ETS will manifest either directly from liabilities associated with emissions reported by participants or indirectly as a result of the increased costs such as fuel and electricity prices. The explanatory note in the Bill estimates that the cost of petrol will increase by 1.8% and household electricity is expected to increase by 3.6%. Wholesale electricity prices, coal and gas will significantly exceed these percentages.

As outlined, free allocations and some additional assistance will be given to some sectors. However, despite these measures to help ease the transition to a carbon constrained economy for some entities, it is vital that businesses consider the potential risks, obligations and financial impacts on their operations resulting from the price of carbon created by the ETS. Robust carbon management strategies should be implemented to identify high cost impacts, and measures introduced to price carbon into all business decisions.

Tax Issues

Background

The tax rules for emissions-related transactions are contained in the Income Tax Act 2007 and the recently passed Taxation (International Taxation, Life Insurance, and Remedial Matters) Bill.

Non-forestry sectors

The tax rules for the non-forestry sectors have been designed to reflect the desire for an accrual basis for calculation of emissions income and expenditure. Expenditure associated with a participant's obligations will generally be treated as a deductible expense. Participants with a balance date other than 31 December will need to undertake a reasonable part-year greenhouse gas inventory analysis to determine the accrual to balance date.

The latest bill proposes that taxpayers may pay a cash sum of \$25 per liable unit obligation rather than explicitly acquire

emissions units to meet their obligations under the ETS. Although the payment of cash, rather than the surrender of units, may appear to be a "carbon tax", this is not the case. The payment is made pursuant to the ETS and is designed to cap the cost of emissions units which would otherwise need to be surrendered. Unlike a carbon tax, the \$25 is effectively the cost of an emissions unit not a tax on a unit of emissions. Deductibility should therefore be consistent with the deductibility provisions applying to emissions units purchased and surrendered to meet emissions obligations.

The proceeds from the sale of emissions units will be assessable income in the year of sale and a deduction will be allowed against that income, in the year of sale, equal to the cost of the unit.

Transitional tax issues may arise for participants entering the ETS from 1 July 2010. Emissions income and expenditure is likely to be calculated on a part year basis, and this information will need to be used to inform provisional tax payments. Some of these payments may be due before 1 July 2010, being the introduction date for the Scheme liabilities. Where the final entitlement to free units is unknown at a particular provisional tax instalment date, uncertainty will also exist as the extent to which units will need to be acquired (or payment made).

With such a tight frame, it is not difficult to foresee issues arising for participants in relation to exposure to use of money interest on provisional tax, whether due to over or under payment at each provisional tax instalment date. In order to mitigate exposure to use of money interest, participants will need to have robust emissions-measurement and reporting systems in place as soon as possible.

In light of the above, relaxation of the use of money interest rules may be warranted during a transitional period.

Forestry sector

The tax implications relevant to forestry have not been amended. Transactions of emissions units relating to pre-1990 forest land will generally be on capital account. Sale of the free emission units allocated to pre-1990 forestry land owners will give rise to exempt income. Similarly, purchase of emissions units to cover any deforestation liability will not be deductible. An exception arises when forest land is held on revenue account i.e. the sale of the forest land, without trees, would give rise to assessable income. In these circumstances, transactions involving pre-1990 forest land are generally treated as if the land were post-1989 forest land.



Transactions of emissions units relating to post-1989 forest land will generally be on revenue account. Sale of emission units generated from sequestration post-1989 will give rise to assessable income. Purchase of emissions units will give rise to a deduction in the year of surrender if surrendered to meet a post-1989 forestry obligation under the ETS. However, were such emission units purchased to replace a post-1989 issued unit which has been disposed of, a deduction for the “replacement unit” will be allowed in the year the replacement unit is purchased..

GST

New Zealand has decided to adopt a unique zero-rated GST model for supplies of emissions units in the compliance market. The zero-rated model will provide greater efficiency in the compliance market which will promote the Government’s objectives as well as help attract foreign firms.

For arrangements entered into after 31 December 2008 emissions units are treated as a zero-rated supply of “services” for GST purposes. The zero-rated treatment applies to allocations, sales and surrenders of emissions units, as well as supplies of goods and services in exchange for the allocation or surrender of units (i.e. barter transactions).

The zero-rated treatment will also be extended to include the issue of units under the Permanent Forest Sink Initiative once the July 2008 Tax Bill receives royal assent. From 1 April 2010, the supply of some non-emissions units may also be zero-rated (provided they are verified by reference to an internationally recognised standard).

In the voluntary market, units are treated as a service subject to the general GST rules.

Accounting Issues

There is no specific standard or interpretation that deals with emission accounting. The International Interpretation on how to account for emission trading schemes (IFRIC 3 Emission Trading) was withdrawn in 2005 by the International Accounting Standards Board (IASB) as it proved to be controversial because it resulted in a mismatch between the valuation of assets and liabilities leading to volatility in the income statement. Despite its withdrawal, IFRIC 3 still remains a valid interpretation of existing International Financial Reporting Standards (‘IFRS’).

In the absence of specific IFRS guidance, management must use its judgement to develop a relevant and reliable accounting policy. A large number of accounting practices

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have emerged in Europe. Only a few comply with IFRS. The problem is compounded by the volatility in market prices of emission units leading to a potential volatility in Company income statements and in valuation of assets and liabilities on the balance sheet.

Main accounting issues

As discussed above, entities need to develop accounting policies, based on existing accounting standards, on how to account for:

- Emission units whether purchased or granted;
- Emission liabilities created by the obligation to deliver units equal to emissions that have been made; and
- Any other related instruments, such as emission derivatives.

The main questions that entities need to ask when preparing accounting policies are:

- At what value / where in the balance sheet emission units are recognised initially?
- Are emission units amortised and/or revalued?
- How are obligations for emissions valued?
- How will the selected accounting policy impact assets, liabilities and profit?

The main area of debate is how to account for the emission liability. Given the lack of specific international guidance, in PwC's view there are 3 accounting models that comply with NZ IFRS, each of which depends on the policy for recognising any emission unit assets.

The accounting policies chosen (for both the assets held and the obligations incurred) will have an impact on the balance sheet and income statement through the measurement of emission units, liability and deferred income (deferred income arises where emission units are granted to the entity in advance of satisfying any conditions attached to those units). Once the entity selects its accounting policies, those policies should be clearly disclosed and applied consistently.

Way forward

In December 2007 the IASB activated work on the Emissions Trading Schemes project, however it did not indicate when a paper will be issued.

Until further international guidance becomes available, it is not expected that the New Zealand Board will issue further guidance on emission trading accounting. However, the Board continues to monitor the IASB project and may need to consider issuing guidance if the IASB's project is delayed.

In addition, any New Zealand and Australian guidance will need to consider accounting by Public Benefit Entities and whether this would be different to accounting by profit oriented entities (especially in circumstances where such an entity receives emission units from the government for no consideration).

Concluding comments

While the number of businesses immediately implicated in the ETS is relatively small (outside of the forestry sector) relative to the number of businesses operating in New Zealand, the impact will be felt economy-wide. Furthermore, the impact of the Scheme will almost certainly deepen, as international negotiations are underway in pursuit of more ambitious emission reductions than those implied by the first commitment period.

It is clear the momentum to reduce greenhouse gas emissions is continuing to build, and businesses and households will have to pay increasing attention to the efficiency with which they use fossil fuels in particular.

The ETS, and any foreseeable variant of it, will impose significant costs and obligations on business. These need to be understood in detail if they are to be effectively managed. Businesses that are required to participate in the ETS have no option but to prepare themselves. But the change in mindset the ETS heralds makes it certain that a much larger number of enterprises will need to start to manage their carbon emissions.

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