

# Australian Carbon Pollution Reduction Scheme Green Paper – Proposed Approach on Allocation

Briefing for the Stationary Energy and Industrial Processes  
Technical Advisory Group (SEIP TAG)

Prepared by the Emissions Trading Group  
21 July 2008

## Introduction

- The Australian Federal Government has recently released a green paper on the design of its national emissions trading scheme – the Australian Carbon Pollution Reduction Scheme (CPRS). The paper identifies the key design decisions that are required, discusses alternative approaches, and in most instances indicates a preferred approach. Submissions on the green paper are due by 10 September 2008. The Australian Government then plans to issue a white paper outlining its final decisions on scheme design, and an exposure draft of the required legislation, by the end of 2008.
- This briefing note summarises the Australian government's currently preferred design in relation to the free allocation of permits under the scheme. It then contrasts that with the approach that has been taken in New Zealand.

## Care Needed When Comparing the Schemes

- The green paper sets out the Australian Government's currently preferred design approach. It is likely that the final design of the CPRS will differ in at least some areas from this currently preferred approach.
- The emissions profiles and industrial structures of the two countries differ quite significantly. As a result, simple comparisons between the two schemes will sometimes not be appropriate.

## Summary of Preferred Approach to Allocation Under the CPRS

### *Targeting of Assistance*

- Allocation under the CPRS would be provided to two key groups:
  - Emissions-intensive trade-exposed (EITE) industries
  - Strongly affected industries

### *Assistance to Strongly Affected Industries*

- The paper proposes that to be considered strongly affected an industry must:
  - be non-trade exposed
  - be emissions-intensive

## IN-CONFIDENCE

- include some entities that are emissions-intensive compared to their competitors, such that they cannot pass on carbon costs and could experience significant losses in asset values
- have significant sunk capital costs
- not have significant economically viable abatement opportunities available
- The only non trade-exposed firms suggested as being likely to be strongly affected by the scheme are coal-fired electricity generators.
- A suggested level of assistance for coal-fired generators is not provided (the decision would not be taken until after the medium-term targets had been agreed). However, the paper does state that in order to ameliorate the risk of adversely affecting the investment environment, a “limited amount of direct assistance” would be provided.
- Assistance for strongly affected industry would be provided upfront and would be ‘one off’.

### ***Eligibility for EITE Assistance***

- Eligibility for EITE assistance would be calculated on an industry-average basis (although specific rules are proposed for firm closure – see below).
- Eligibility for EITE assistance would be assessed on the basis of specific activities or processes within an industry, rather than the industry’s total emissions.
  - For example, rather than assessing eligibility of the aluminium sector as a whole, eligibility would be assessed separately for: bauxite mining; alumina production; lime production; soda ash production; anode and cathode production; primary aluminium production; and semi-fabrication of aluminium. Some of these activities might be found to be eligible to receive assistance while others were not.
  - Similarly, it would be possible that emissions associated with the production of a certain product were eligible to receive assistance, but that emissions associated with its transportation to markets was not.
- An activity would only be eligible to receive assistance if its industry-average level of emissions per unit of revenue is higher than 1,500 tonnes of CO<sub>2</sub>-e per million dollars of revenue (with a higher level of assistance for activities with an industry-average emissions intensity above 2,000 tonnes of CO<sub>2</sub>-e per million dollars of revenue – see below).
- Both existing and new firms undertaking an eligible activity would be eligible to receive assistance.
- A relatively simple approach to assessing trade exposure is proposed: that all industries be considered for EITE assistance unless there is “a physical barrier to trade”.

### ***Scope of EITE Assistance***

## IN-CONFIDENCE

- Where an activity is eligible to receive assistance, the number of permits provided will take account of direct emissions and indirect electricity emissions.
- Only emissions covered by the scheme will be taken into account when considering assistance levels.

### **Level of Assistance**

#### *Overall*

- The Government's preferred position is that "up to around 30 per cent of Australian permits be allocated free to EITE entities" (including agricultural emissions). Prior to agriculture entering the scheme the overall level of assistance would be around 20% of the total number of permits available.
- In terms of eligible industries, initial assistance would cover around 90 per cent of "baseline emissions" for EITE activities that have emission intensities above about 2,000 tonnes CO<sub>2</sub>-e per million dollars of revenue, and around 60 per cent of baseline emissions for firms with emissions intensities between 1,500 and 2,000 tonnes CO<sub>2</sub>-e per million dollars of revenue.
- These threshold rates of assistance may be reconsidered on the basis of further information to ensure that the total quantum of EITE assistance is limited to around 30 per cent of permits.
- The degree of assistance will then be reduced at a pre-announced rate over time, with the intent that the share of assistance provided to the EITE sector does not increase significantly over time. As the overall number of permits issued into the scheme is expected to decline in accordance with the national trajectory, this will see the total number of permits freely allocated reduce over time.
- Beyond 2020:
  - Assistance would be withdrawn if broadly comparable carbon constraints are introduced in key competitor economies
  - Assistance would be phased out over a five-year period in the event of acceptable international action that places obligations on an industry's major competitors
  - Assistance would be continued as proposed in the absence of broadly comparable carbon constraints or acceptable international action.

#### *For Eligible Firms*

- The number of permits received by individual firms in eligible industries would be determined:
  - for direct emissions: by multiplying their output by the relevant emissions intensity baseline (i.e. average level of emissions per units of output using a historical industry average) and by the relevant assistance rate

## IN-CONFIDENCE

- for indirect emissions: by multiplying their output by an industry electricity-intensity baseline (i.e. average industry electricity use per unit of output), and then in turn by an electricity factor (reflecting the impact of the carbon price on the price of electricity) and an assistance rate
- Firms' output figures would be 'rolled forward' so that their level of assistance was increased as their output grew, and decreased if it declined. While not signalled as a preferred approach, the paper notes that rather than attempting to forecast each firm's output for a year, its allocation could be based on its output in the previous year.
- At the same time, the assistance rate for each activity would be steadily reduced over time (see above). As a result, firms will on average face a reduction in the absolute number of permits they receive, and an even greater reduction in the level of assistance provided per unit of output.
  - By way of example, if the overall level of assistance was reduced at, say, 1% per year, and output was growing at 3% per year, a firm growing at the average rate would see a 1% annual reduction in the number of permits they received, and a 4% reduction per year in the number of permits they received per unit of output.
- Firms will have a relatively high degree of certainty over the number of permits they are eligible to receive over the upcoming 5 years, but less certain after that. As a result, the total level of free allocation provided may fluctuate around the desired level from year to year to the extent that the Government's forecasts of output growth for each activity prove to be incorrect. That is why the cap on the number of permits allocated under the CPRS would be a soft one, rather than binding in every year.
- If an entity ceases undertaking an EITE activity it would be required to return any permits associated with production that did not occur.
- Allocations for indirect electricity emissions would take account of whether the entity has any contractual arrangement with regard to electricity supply that would shield them from any price increases.

### Discussion of Similarities and Differences with the NZ ETS

- There are many similarities between the preferred design of the CPRS indicated in the green paper, and that taken under the NZ ETS. Under the CPRS:
  - assistance would be provided in the form of a free allocation of permits
  - assistance would be focused mostly on EITE industry, but with limited one-off assistance to strongly affected industry that is not trade exposed (coal-fired electricity generators in the case of the CPRS and pre 1990 forestland in the case of the NZ ETS)
  - the initial level of assistance for EITE activities would be set at no more than 90% of baseline emissions
  - there is a clear intention to phase out assistance over time

## IN-CONFIDENCE

- The green paper takes a more prescriptive approach to defining how to calculate the level of assistance for individual firms than is provided under the allocation plan process in the Climate Change Bill. The greater level of flexibility under the NZ ETS was provided in order to allow more careful analysis of the costs and benefits of the different options available, including the administrative and technical challenges inherent in an intensity-based approach. However, in all but a small number of areas the Australian approach could be adopted under the current New Zealand legislative framework if desired. Key proposed features of the CPRS that could be adopted under the existing NZ ETS legislation include:
  - the distribution of permits on an intensity basis (within the fixed cap defined under the Climate Change Bill)<sup>1</sup>.
  - emissions associated with growth in output, or firm entry, being eligible to receive the same level of assistance as incumbent firms' baseline emissions
  - the use of an emissions-intensity threshold to determine eligibility
  - eligibility being determined on the basis of specified activities, rather than an industry's overall emissions
  - higher levels of assistance being given to firms undertaking activities that are more emissions-intensive
  - the use of a very simple trade exposure test
- There are a small number of elements of the preferred approach set out in the green paper that are inconsistent with the current Climate Change Bill in New Zealand:
  - the total number of permits to be allocated under the NZ ETS is subject to a binding limit, whereas under the CPRS it is subject to a 'soft cap' (in contrast there is a greater requirement under the CPRS for the government to stipulate the overall number of units that will be issued into the scheme, through the indicative national emissions trajectory and five year scheme caps)
  - the speed and timing of the phase out of free allocation under the NZ ETS is fixed (subject to the review mechanism) whereas under the CPRS phase out can be slowed down or sped up in response to international events.
- It is difficult to compare the relative generosity of the level of free allocation under the two schemes, given differences in the two countries' circumstances and uncertainties over how the international environment will evolve. But if anything the free allocation approach under the NZ ETS appears to be slightly more generous than that being considered under the CPRS:
  - At 30% of the total number of permits available, the CPRS would see a much smaller proportion of Australia's permits freely allocated. With agriculture excluded that figure would be 20%.

---

<sup>1</sup> The green paper proposes that each industry baseline would be based on emissions and output data over the period 2006/07 and 2007/08.

## IN-CONFIDENCE

- In contrast, we estimate that under the NZ ETS in 2013 the free allocation to the industry and agriculture sectors would be equal to about 79 per cent of our Kyoto assigned amount (assuming it was the same as in CP1)<sup>2</sup>. Looking solely at the NZ industrial sector the estimated level of free allocation to industry (which is still uncertain, as it will depend on eligibility criteria and the methodology for electricity) would be 19 per cent of average annual gross emissions in CP1.
- The CPRS will limit assistance to industry activities that pass a relatively high emissions-intensity threshold. As a result, eligible firms will often receive allocation in relation to a portion of their total emissions.
- The CPRS will begin to reduce assistance rates earlier than under the NZ ETS.
- No firm will receive more than 90% of baseline emissions under the CPRS, and many will only receive 60% from the outset.
- There will be no free allocation under the NZ ETS from 2030, subject to a change in policy under the review mechanism. In contrast free allocation to EITE firms can in principle be provided indefinitely under the CPRS (subject to the specified criteria for cessation discussed above).
- The differences in approach to allocation between the CPRS and NZ ETS should not limit the ability of the two countries to formally link their schemes in the future if desired.

---

<sup>2</sup> The New Zealand scheme would also provide free allocation to the forestry sector in tranches rather than on an annual basis and this has been excluded from the prior calculation.)