Discussion Paper: Possible Design for a National Greenhouse Gas Emissions Trading Scheme

Information Sheet No. 5

Caps and gateways

What are caps and gateways?

The scheme cap sets a limit on the number of tonnes of greenhouse gas emissions that could be emitted by the covered sectors without incurring a penalty. A specific firm cap has not been proposed in the Discussion Paper.

Determining the duration, trajectory and level of the cap for the emissions trading scheme is a fundamental design issue. It defines the magnitude of the greenhouse gas abatement.

The number of years in advance for which caps are set (the cap period) has important implications for investor certainty, as well as for the flexibility of governments to respond to future developments.

A **short cap period** with an allied short time frame for which permits are issued—say, 5 years—is unlikely to provide investors with sufficient certainty to make investments. Investments in the stationary energy sector are typically long-lived and require long lead times. A short cap period is therefore likely to see investors defer decisions to replace ageing plant and to meet growing power demand.

A **longer cap period** — say, 30 years — would provide greater investor certainty. However, this would be at the expense of flexibility. Governments would face the risk that the cap might need to be altered in the future should, for example:

- new information in climate change science become available
- new greenhouse gas abatement technologies become available, or
- an international agreement on climate change action emerges that requires more (or less) aggressive abatement than was envisaged under the original cap.

One approach that could help balance the level of investor certainty and flexibility is for the scheme to adopt a mix of firm caps and a 'gateway' (or range) for potential future caps.

The aim of gateways is to provide information about the range of the future caps (upper and lower bounds); they do *not* provide exact future caps.

Possible design for caps and gateways

The possible design in the Discussion Paper is as follows (see Figure 1):

- A firm cap would be set for the first 10 year period and a gateway set for possible future caps for the second 10 year period.
- An additional year of firm caps (within the bounds of the

gateway) would be announced on a rolling annual basis.

- Every five years gateways for future caps would be updated and extended for another five years.

Advantages of the possible approach

- The possible approach ensures that there is always a 10 year firm cap and a range of possible caps for an additional 6 to 10 years, which increases investor certainty.
- The possible approach provides flexibility to the government as new technology and scientific information becomes available and future international commitments are negotiated.

Example

Step 1: Before the commencement of the scheme, and assuming the scheme commences in 2010, governments would announce firm annual caps for the years 2010–19, plus the ranges of emissions within which caps would be set for the years 2020–29. Governments could also issue permits in advance up to the lower bound of the gateway.

Step 2: After the commencement of the scheme, governments would announce an additional year of firm caps, chosen from within the range of possible caps announced during Step 1, on a rolling annual basis. In 2010, for example, governments would announce the firm cap for 2020. This step would be repeated on a rolling basis so that the market and investors would always have 10 years of firm caps.

Step 3: At the time of a proposed scheme review (in 2015), governments would announce a further range of possible caps for years 2030–34 of the scheme and could issue additional permits in advance up to the lower bound of the gateway. As a result, there would be 10 years of cap 'gateways' once more. Step 3 could be repeated at 5 yearly intervals following the commencement of the scheme.

Figure 1: Illustration of the gateway mechanism