

10 Setting Scheme emissions caps

The limit on emissions—the Scheme cap—is the central element of a cap and trade emissions trading scheme such as the Carbon Pollution Reduction Scheme. This chapter sets out the Government’s approach to Scheme cap setting.

The Scheme cap determines the number of carbon pollution permits that will be issued by the Government. Allowable emissions across the sources covered by the Scheme will be able to exceed the cap only if the excess is matched by the surrender of eligible international units, additional domestic permits issued as a result of forestry activities, additional permits issued under the price cap mechanism or, if allowed, Scheme offsets (see Chapter 6).

In a system with little or no international linkage, the interaction between the cap and the demand for permits is the primary determinant of the carbon price: the more stringent the Scheme cap, the higher the price, all other things being equal. However, as discussed in Chapter 11, the Government has decided to allow unlimited imports of eligible international units from Scheme commencement and to review the scope for exporting permits over time. This means, depending on the level of international prices and the longer term scheme linking policy, the domestic Scheme cap may be a less significant determinant of domestic carbon prices. Over time, the domestic carbon price is expected to converge on the international price, which in turn will be determined by global abatement demand and supply conditions.

The Scheme cap-setting arrangements remain important, however, because the Scheme cap will reflect national emissions targets and Australia’s international obligations. As the number of eligible international units that may need to be purchased will be determined by the ambition of national targets, targets will be the key to the overall cost to the Australian economy.

This chapter considers the following issues:

- Section 10.1 outlines the medium-term Scheme cap guidance.
- Section 10.2 considers the approach for extending Scheme caps and gateways.
- Section 10.3 discusses the setting and reporting of Scheme caps and gateways.
- Section 10.4 outlines the approaches for future adjustments to the Scheme cap in the light of expansions in Scheme coverage or changes in international circumstances.
- Section 10.5 describes the governance arrangements for setting Scheme caps and gateways.
- Section 10.6 sets out the proposed timeline for announcing Scheme caps and gateways.

10.1 Medium-term guidance on Scheme caps

The primary objective of the Scheme is to assist meet Australia's emissions reduction targets in the most flexible cost-effective way and to support an effective global response to climate change. Accordingly, Scheme caps for the first two years of the Scheme will be aimed at meeting Australia's Kyoto committed national targets, that is, for emissions to average 108 per cent of 1990 emissions for the years 2008 to 2012.

As a post-Kyoto internationally agreed outcome is not yet in place, the Government can only provide guidance, not certainty, over future emissions reduction targets. This guidance maintains Australia's international negotiation flexibility but also signals the Government's intention to maintain a downward emissions trajectory. Should the Government commit to stronger targets under a post-2012 international framework than anticipated by the proposed Scheme caps, it will make up any shortfalls by purchasing eligible international units.

Scheme guidance will necessarily include the specification of Scheme caps for some period into the future. Provision of relevant market information and predictable medium-term policy will assist financial market analysts and Scheme participants to identify and understand the overall supply and demand conditions for permits.

In a system with little or no international linkage, the interaction between the cap and the demand for permits is the primary determinant of the carbon price: the more stringent the Scheme cap, the higher the price, all other things being equal. However, as discussed in Chapter 11, the Government has decided to allow unlimited imports of eligible international units from Scheme commencement and to review the scope for exporting permits over time.

If the international price is below the domestic price, this will create an incentive for liable entities to import cheaper eligible international units for use in acquitting their liabilities under the Scheme. This is expected to reduce the demand for domestic permits and decrease domestic prices causing these to converge on the international price which in turn will be determined by global abatement demand and supply conditions. In this instance, the domestic Scheme cap will no longer be a significant determinant of domestic carbon prices.

If the international price is above the domestic price there will be no incentive for liable entities to import eligible international units. In this instance, the domestic Scheme cap will remain a key determinant of domestic prices until such time as the restriction on exports is lifted or the international and domestic price is equalised.

As there is uncertainty over relative international prices and future international linking policy, guidance over Scheme policy including Scheme cap setting will be required to inform business investment. Further, Scheme caps will be set in accordance with the indicative national emissions trajectory (see Chapter 4) which reflects Australia's international obligations. The ambition of the national targets will in turn determine the national effort. Stringent national targets might result in Australian business and the Australian Government having to purchase eligible international units from offshore to meet international obligations. This would provide access to low cost abatement while transferring wealth out of Australia. While this will diminish the effect of Scheme caps on the cost of compliance to individual businesses, the approach to cap setting will remain critical to the overall cost to the Australian economy.

In setting the future path of Scheme caps, there is a need to balance the provision of information to the market (to help promote an economically efficient, or lowest-cost, response) against the policy flexibility needed to adapt national targets to comply with evolving international obligations.

There are three broad options for the duration of Scheme caps:

- a long period of certainty, such as 10 years or more (recommended by the Task Group on Emissions Trading (TGET) ¹ and the National Emissions Trading Taskforce (NETT) ²).
- a medium period of certainty, such as five years (recommended by *The Garnaut Climate Change Review: Final report* (Garnaut Final Report)³)
- the minimum number of years required to align with the international commitment period. For example, the Government could provide just two years (2010–11 to 2011–12) to align with the current Kyoto Protocol commitment period. New Zealand⁴ and the European Union⁵ have aligned Scheme caps with their international obligations in their emissions trading schemes.

These options are detailed in Box 10.1 with reference to Australian and international proposals.

Box 10.1: Duration of caps in international and Australian scheme proposals

The first commitment period under the Kyoto Protocol extends for five years (2008–12). If the second commitment period were of the same duration, it would run from 2013 to 2017. The United Nations negotiations for a post-2012 outcome are unlikely to determine the length of the second commitment period before late 2009. The length of that period will depend in part on the shape of the overall post-2012 package.

The European Union Emissions Trading Scheme (EU ETS) originally announced that scheme caps in Phase I would be set for three years, and for five years in Phase II. It is proposed that in Phase III of the scheme, scheme caps will be set for eight years (2013 to 2020).⁶

A survey of EU ETS stakeholders and participants, commissioned by the European Commission as part of its review of the scheme, indicated that uncertainty created by the short initial phase for scheme caps was the biggest obstacle to market liquidity.⁷ Most of the companies and industry associations surveyed indicated that they would prefer phases of 10 years or more, with national allocation plans being announced two or three years before units are allocated.

At the start of the New Zealand Emissions Trading Scheme, scheme caps were set only for the years to the end of the Kyoto commitment period (2012). While the results of the current Review are unknown, it was previously proposed that domestic scheme caps after 2012 would coincide with the period set for future international emissions commitments.⁸

In Australia, both the National Emissions Trading Taskforce⁹ and the Task Group on Emissions Trading¹⁰ recommended that firm caps be set for a period of 10 years, followed by a 10-year range within which future caps would be established ('gateways').

The Garnaut Final Report¹¹ recommended that firm caps be set for five years, and that information be provided on possible longer-term trajectories and a long-term target, which would be specified in advance. Different trajectories would apply, depending on Australia's international commitments. The Government would announce when the specified conditions for switching tracks had been met five years in advance of the intended switch.

In the Green Paper, the Government proposed a form of medium-term guidance, which included setting and announcing Scheme caps for a minimum period of five years, followed by gateways (ranges of values that future Scheme caps might take) that extended 10 years beyond the period of set Scheme caps. Stakeholders broadly supported this proposal. However, many commented on the lengths of Scheme caps and gateways.

Green Paper positions

Scheme caps would be set and announced for a minimum period of five years in advance at any one time.

In the event that Australia's international commitment period extends beyond five years, scheme caps would be extended to the end of the commitment period.

By using gateways, the Government would provide guidance over future scheme caps beyond the period of fixed scheme caps.

10.1.1 Duration of Scheme caps

Stakeholders broadly supported the Government's Green Paper proposals:

[Transfield supports] the proposal to set and announce scheme caps for five years in advance, with gateways for a further ten years, as this will provide a sufficient level of clarity looking forward upon which to base investment decisions. (Submission 478, p. 3)

[Engineers Australia] supports the arrangements proposed for using medium term target gateways, rolling 5 year revisions to the emissions trajectory and related methods to set CPRS gateways and trajectories. Effectively providing 15 years of forward advice together with the flexibility afforded by banking and borrowing arrangements allow effective risk management.' (Submission 322, p. 6)

Several stakeholders argued for a longer period of known caps. Ten years of certainty over Scheme caps (or even longer, as advocated by some stakeholders) would provide a greater information set to inform carbon pollution permit prices. This would help to guide investment proposals with longer pay-back periods:

[The Australian Financial Markets Association] supports ten (not five) year firm scheme caps and gateways to ten years beyond the firm caps. Rolling gateways forward every five years accords with our thinking on the level of certainty required by the market. (Submission 550, p. 12)

Some stakeholders also wanted a longer guidance period:

While industry would always prefer a longer scheme cap, a period of 10 or 15 years for example, a scheme cap of 8 years from 2012–20 would be a step in the right direction. (Origin Energy, Submission 815, p. 42)

[Alcoa of Australia] supports a minimum 15 year fixed forward trajectory period [10 year of scheme caps and a 5 year gateway] to provide the certainty that businesses require to invest. Shorter periods would discourage new and sustaining investment and job creation, by undermining investment certainty.' (Submission 740, p. 29)

However, Australia's binding international targets have been agreed only to 2011–12. By extending deep into the future, a 10-year cap period risks significant misalignment

between caps and further obligations that Australia might negotiate and accept, and may also limit Australia's negotiating flexibility.

Origin Energy questioned the importance of international negotiations in setting Scheme caps:

We are not convinced that the decision about the length of the CPRS cap needs to be so constrained by the international negotiations. Whatever international agreement may be struck is likely to leave decisions about domestic policy settings to national governments and to allow national targets to be met 'net' of international trade in allowances. (Submission 815, p. 46)

Although providing certainty to liable entities, fixing Scheme caps independently of Australia's international position for that length of time also exposes the Government to potential risk. As noted in Section 10.4, the Government has decided not to adjust Scheme caps in line with internationally negotiated outcomes; instead, it will make up any shortfalls in national emissions reductions targets by purchasing eligible international units. Therefore, the Government and, indirectly, the taxpayer will bear any shortfall between the Scheme caps and internationally agreed targets.

A limited number of stakeholders advocated much shorter periods of guidance. The Australian Network of Environmental Defender's Offices argued that:

[Since the 1980s] it has been abundantly clear that emissions targets will get stricter over time if Australia is to meet an ambitious but necessary reduction target by 2050. There are therefore no compelling equity arguments that support 5 years' notice for industry. (Submission 517, p. 21)

Some stakeholders also argued for a shorter Scheme cap period or built-in flexibility for the Government to adjust Scheme caps downwards in the face of new information or changes:

[Greenpeace] supports 5-year caps but not longer, unless linked to an agreed international commitment period ... That is, the desire to provide information to the market should not override the need to maintain flexibility to ensure future emissions reductions requirements are able to be met without the government needing to buy back permits or purchase permits on the international market due to constraints in the CPRS. (Submission 692, p. 15)

We support the short time frame (five years) proposed for the announcement of scheme caps, but would prefer the frames were even shorter, to prevent blow-outs in the cost of buying back permits, should that become necessary. We are disappointed that all of the flexibility in the scheme is being awarded to industry. (Hunter Community Environment Centre, Submission 381, p. 4)

[I]t is critical that the legislation for the CPRS include built-in emergency measures to allow the Government to rapidly respond to new information or developments by reducing scheme caps, revoking permits, or other emergency measures. (Parramatta Climate Action Network and others, Submission 744, p. 3)

Minimum certainty over Scheme caps would align with the current Kyoto commitment period, ensuring consistency between the Scheme and Australia's international obligations. This is the approach taken in the New Zealand Emissions Trading Scheme. However, the

New Zealand scheme is completely open to international trade and its domestic carbon prices are set internationally, which means that domestic caps provide no new information about likely domestic carbon prices.¹²

Setting caps for a period longer than five years, at a time of significant uncertainty about international obligations, would provide a strong international signal of the Government's willingness to commit domestically to a particular emissions reduction target, but may also limit Australia's flexibility in negotiating its international medium-term target. On balance, setting caps for five years at Scheme commencement—consistent with the recommendations in the Garnaut Final Report¹³—strikes a reasonable balance between the need for investment certainty and the need to maintain flexibility for future international negotiations and commitments. The use of gateways provides more information on the future path of Scheme caps (section 10.1.2 refers).

In the event that Australia's international commitment period extends beyond five years, the Government will have the option to extend Scheme caps to align with the longer period.

Policy position 10.1:

The Government will provide Scheme caps to the end of five years and have the option to extend this certainty period to the end of any existing international commitment period, if longer.

10.1.2 Gateways

Scheme caps for a number of years could be followed by gateways (a range within which future Scheme caps would be set) as a guide to the Government's longer term cap-setting intentions. Scheme caps would be extended within the bounds set by the gateways. Investors would have certainty that the path of the Scheme cap would be consistent with the gateway. The gateway itself could also be extended at intervals, ensuring a continuous period of certainty, followed by guidance, over the short and longer term.

The principal advantage of using a gateway is that it allows the Government to give the market more information about future caps, while maintaining a degree of flexibility. Having information about constraints on future cap setting will help markets plan new investments.

A second potential advantage is that a gateway could promote Australia's international climate change objectives by signalling its readiness to commit to stricter domestic caps if other countries make similar commitments. The European Union, for example, has signalled that its Scheme cap will be tighter if other developed countries take on significant commitments.¹⁴

The only major potential disadvantage of using a gateway is that it might limit the Government's ability to set a cap outside the gateway range. However, that risk should be taken into account and balanced against the benefits of providing greater investor certainty and more accurate international signalling.

The width of the gateway will also be an important determinant of the information provided to investors:

Very wide gateways are needed to maintain flexibility, but this provides limited decision-making information to investors. Narrower gateways provide better information to investors; however, this may create the possibility of unfunded future liabilities for the Commonwealth. (Dr Nicholas Linacre, Submission 526, p. 4)

The gateway will become progressively less useful to the market as it widens to accommodate the full range of future circumstances that might influence cap-setting. The price impacts of cap changes are also likely to be heavily discounted.

The Garnaut Final Report¹⁵, NETT¹⁶ and TGET¹⁷ all proposed that some form of gateway be used. Similarly, caps for Phase III of the EU ETS are currently expressed as a gateway.¹⁸ In all of these proposals or arrangements, gateways take the form of a government commitment to a range of values for future caps.

In response to the Green Paper, stakeholders broadly supported the use of gateways in the Scheme as proposed. However, some were wary of the constraints gateways could impose on the ability to adapt to changes in the face of developing climate information. For example, the Australian Conservation Foundation argued:

The use of ranges and gateways could limit the Government's ability to take further action in response to new climate science, new technologies and international developments. ACF recommends that the Government does not set a limit on the most action it would be willing to take by 2020. This would allow targets of 40 per cent reductions by 2020 and potentially higher to be considered and adopted. The Government must have a mechanism that allows caps to be tightened—without compensation—if new climate science dictates. (Submission 809, p. 3)

On balance, the Government considers that a gateway in some form is desirable, as it balances the need for guidance against the flexibility to adapt to changing international conditions.

Policy position 10.2:

By using gateways, the Government will provide guidance on future Scheme caps beyond the period of fixed Scheme caps.

10.1.3 Length of the gateway

In deciding the duration of the period of gateways beyond the period of Scheme caps (the gateway 'length'), the Government considered:

- a short period of gateways, such as five years
- an intermediate period of gateways, such as 10 years (recommended by NETT¹⁹ and TGET²⁰)
- a long period of gateways, such as 15 years or more (implied in the Garnaut Final Report²¹).

Green Paper position

The initial length of the gateway would be 10 years beyond the minimum five years of scheme caps.

Some stakeholders preferred shorter gateway lengths:

The underlying concept of gateways is sound but a 10 year initial start and 5 year gateways may not give sufficient flexibility if more stringent action is required in response to changes in climate change data. (Environment Business Australia, Submission 864, p. 11)

At the same time, there may be little practical benefit in extending gateways more than 10 years beyond the period of cap certainty (a total of 15 years into the future). The further into the future the gateways extend, the less relevant the information provided will become. Gateways of that length might add little practical guidance beyond that already provided by the 2050 national emissions target, and would extend beyond the horizons of most planning decisions.

Moreover, given the uncertainty about when international negotiations will conclude and about their outcomes, it may be premature to set and announce a gateway that extends beyond 2025.

Finally, international linkages are likely to increase over time, bringing domestic carbon prices into line with international prices. This means that the length of domestic Scheme gateways would offer the market little new information about likely domestic prices.

In setting gateways, the Government must balance uncertainties about future international obligations and covered emissions (early in the Scheme) against the market's need to have clear Scheme parameters for as long as possible. Gateways should therefore include a long period of guidance (up to 10 years), taking into account progress in international negotiations. Stakeholders broadly supported the length of the gateways proposed in the Green Paper.

Policy decision 10.3:

The Government intends to provide up to 10 years of gateways beyond the minimum five years of certain Scheme caps, taking into account progress in international negotiations.

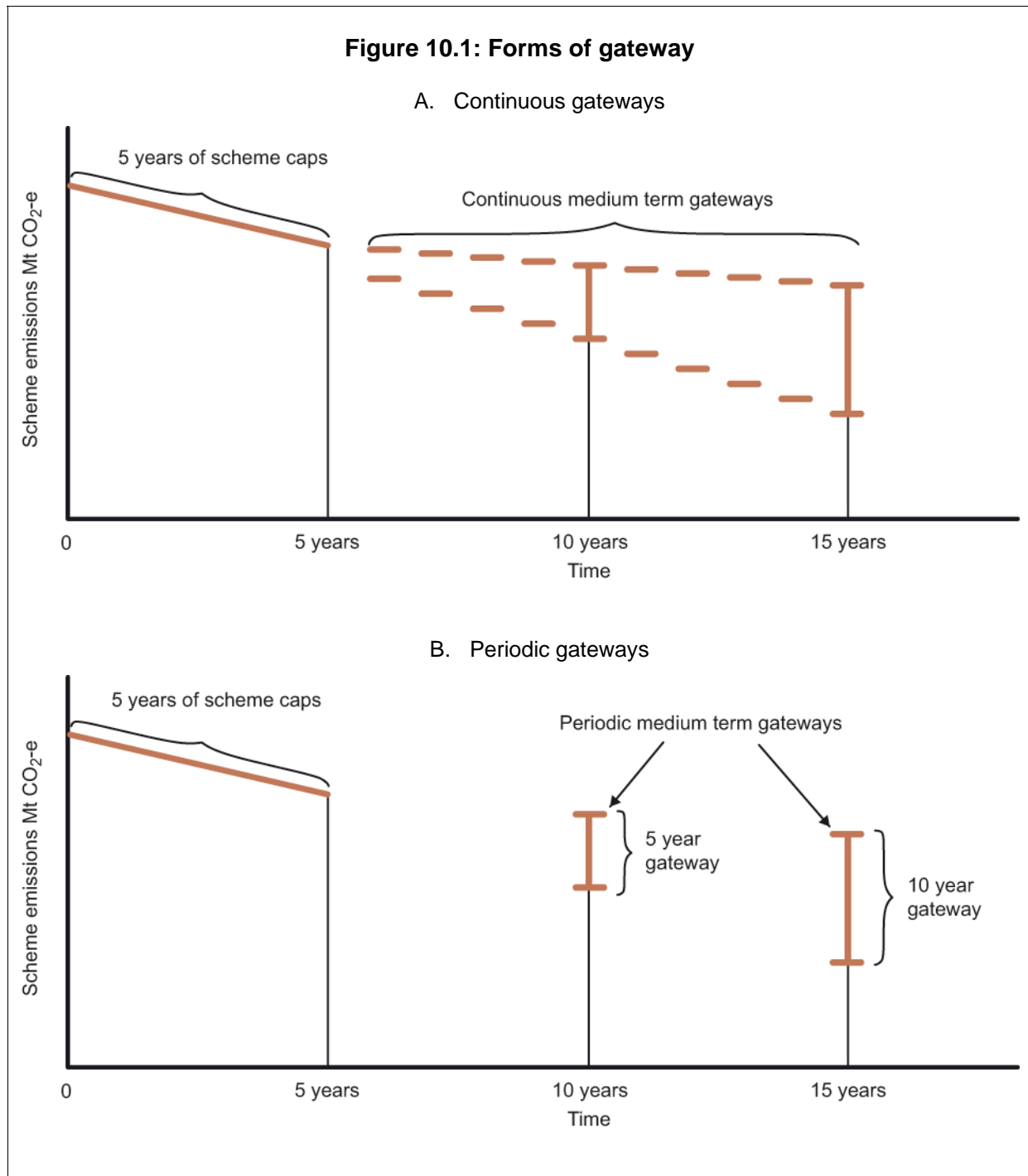
10.1.4 Form of the gateway

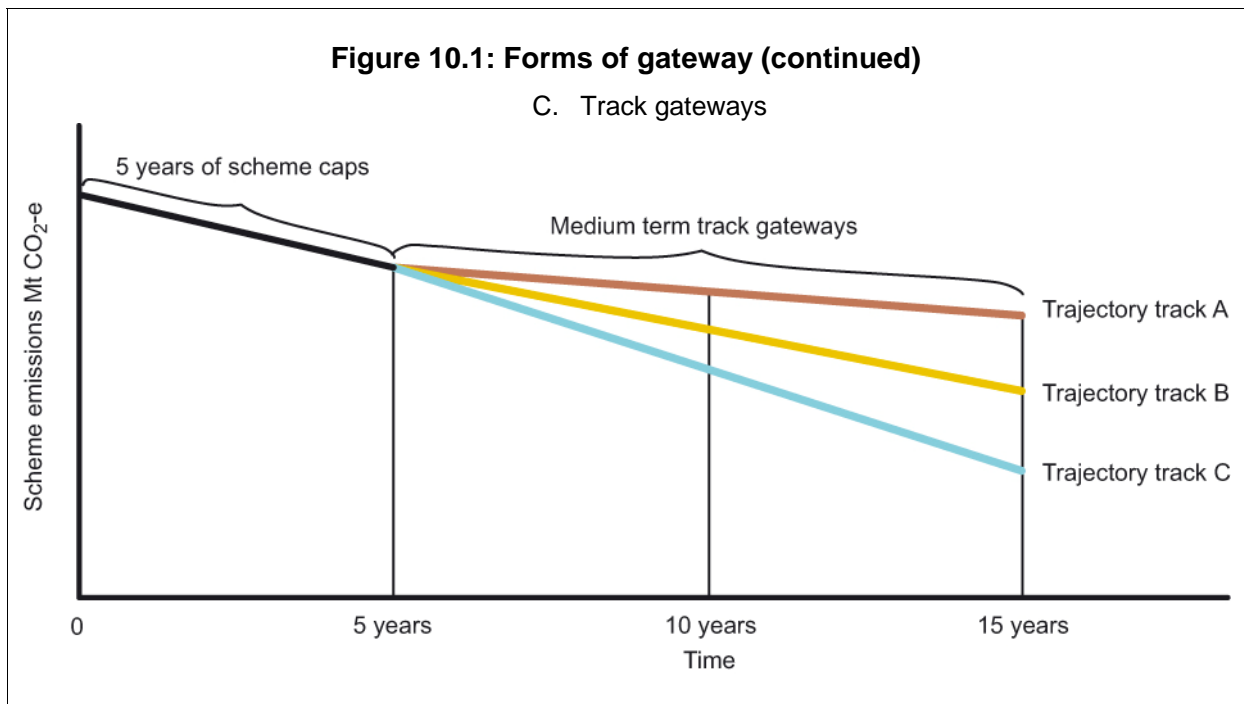
Three possible forms of gateways could be used:

- *Continuous gateways* would provide a range of values for Scheme caps for every individual year beyond the period of certainty. This form was proposed by NETT.²²
- *Periodic gateways* would provide ranges of values for Scheme caps but only in certain years set at regular intervals. For example, TGET proposed that periodic gateways be set in every fifth year at the five- and 10-year marks beyond the period of certain Scheme caps.²³

- *Track gateways* take the form of a number of potential tracks of future Scheme caps. The Government would announce the track that it was currently on and specify the circumstances under which it would shift tracks. This approach was proposed in the Garnaut Final Report.²⁴

The three approaches are illustrated in Figure 10.1.





Green Paper position

The Government would provide guidance over future scheme caps beyond the initial certainty period through the use of a gateway in each of the following years, to the end of the gateway period.

Stakeholder submissions did not generally focus on the form of gateways. However, those stakeholders that commented on the issue broadly supported the Government's preference in the Green Paper. For example, the Bureau of Steel Manufacturers of Australia recommended that:

Gateways should be 'continuous'—i.e. upper and lower bounds should be defined for each year within the gateway period. (Submission 408, p. 27)

The range approaches (periodic and continuous gateways) have greater flexibility than the switch approach (track gateway). A potential difficulty with a track gateway is that uncertainty about the future international environment makes it difficult to specify hard tracks and mechanistic switching rules. The international situation is likely to contain ambiguities that will make the track-switching decision difficult and potentially arbitrary, which would create uncertainty about the national emissions trajectory. Furthermore, to the extent that tracks are widely spaced, a switch might cause more disruption to the Scheme than proposals that take more incremental approaches. Therefore, the Government considers that a range approach is more appropriate for the Australian Scheme.

The difference between the two range approaches is small. Short periodic gateways (such as five years) and continuous gateways might provide about the same level of guidance because, in practice, the Government would take the five-year gateway into consideration when setting Scheme caps in the interval between the end of the certainty period and that gateway. Therefore, the caps in the interval years would be unlikely to deviate much from the values

they would have had if gateways were specified for every year. At the same time, continuous gateways provide an additional discipline and can be announced with very little loss of flexibility. On balance, the Government prefers continuous gateways.

Policy position 10.4:

The Government will provide guidance on future Scheme caps beyond the initial certainty period through the use of a gateway in each of the following years, to the end of the gateway period.

10.2 Extending Scheme caps and gateways

As discussed, over a period of time depending on international prices and the longer-term Scheme linking policy, the domestic Scheme policy may be a less significant determinant of domestic carbon prices. However, as there is uncertainty over relative international prices and future international linking policy, Scheme caps and gateways will need to be extended from time to time to provide an adequate level of guidance to the market.

10.2.1 Extending Scheme caps

To continue to provide guidance to investors, Scheme caps will need to be extended at certain intervals.

There are two broad options for extending Scheme caps. Longer intervals between cap extensions will lead to shorter minimum periods of certainty about caps. The Government will provide a minimum of five years of Scheme caps, or may elect to extend Scheme caps to align with international obligations if they are longer. At the end of the five-year period, the caps could be extended for, say, another five years. However, as each year passed, businesses would face a shorter horizon of cap certainty until the extension was made—this option would provide between zero and five years of certainty about caps at any time.

Conversely, shorter intervals between cap extensions, for example if caps were extended annually by one year, would provide four to five years of certainty about caps at any time.

Green Paper position

Scheme caps would be extended by one year, each year, as required to maintain a minimum five-year certainty period. Should the international commitment period (and therefore scheme caps) already extend beyond five years, an annual extension would become optional.

Stakeholders broadly supported the method of extending Scheme caps proposed in the Green Paper:

[BP Australia] supports the announcement of 5-year (minimum) rolling caps, with extension to an international commitment period (once negotiated). However, this should be a mandatory, not an optional, extension, as suggested in the Green Paper. (Submission 355, p. 8)

NETT²⁵ and the Garnaut Final Report²⁶ proposed that firm caps be extended by one year, every year, while TGET²⁷ recommended that every five years caps be extended by five years.

A short interval (such as one year) for extending Scheme caps has a number of advantages. It would increase flexibility for the Government, which could make small extensions to the cap each year in response to developments in the economy, in environmental science or in international objectives and commitments. It would help to maintain a minimum period of certainty over caps at all times. It would also provide a more regular flow of information to the market about future emissions constraints, which could help to promote a more continuous pricing response, rather than sharp, irregular adjustments.

The disadvantage of extending Scheme caps by one year, every year, is that the administrative costs of gathering advice, consulting stakeholders and effecting the change through the appropriate legislative mechanism would be higher than if Scheme caps were extended less regularly.

On balance, the Government considers that the benefits of maintaining the minimum period of certainty and providing more regular information to the market are likely to outweigh the administrative costs of a shorter interval for extending caps.

Policy position 10.5:

Scheme caps will be extended by one year, each year, as required to maintain a minimum five-year certainty period.

10.2.2 Extending gateways

To continue to provide guidance to investors, gateways will also need to be extended at certain intervals.

The two broad options for extending gateways are to extend them by one year, every year, or to extend them by five years, every five years (as proposed by NETT²⁸ and TGET²⁹). The Garnaut Final Report³⁰ did not canvass the extension of gateways—the range of potential trajectories is established before Scheme commencement, and there appears to be no explicit interval for extensions.

As with Scheme cap extension, longer intervals reduce the guidance period. If gateways were extended by one year, every year, that would provide 14–15 years of guidance at any time. However, extending gateways by five years, every five years, would provide 10–15 years guidance at any time.

Green Paper position

Gateways would be extended by five years, every five years, as part of a strategic review of international conditions and Australia's likely future international commitments.

The Australian Financial Markets Association, while arguing for longer Scheme caps, supported extending gateways by five years, every five years:

Rolling gateways forward every five years accords with our thinking on the level of certainty required by the market. (Submission 550, p. 12)

The Australian Securities Exchange also supported the use of gateways and strategic reviews:

The proposed five-year reviews and gateways provide a balance between providing some certainty for business while retaining a fair level of flexibility to reflect the outcome of on-going international negotiations on climate change. (Submission 811, p. 3)

Some stakeholders preferred longer gateway extension periods. For example, the Australian Environment and Planning Law Group of the Law Council of Australia stated that, assuming a 10-year gateway, a review of gateways every five years would mean that in year five of the Scheme:

gateways will only exist for the 5 years after the most recent trajectory target. This will only provide a 10 year outlook, which may be too short in respect of some investment decisions, i.e. many projects are based on a minimum 15 year life. (Submission 357, p. 25)

The Investor Group on Climate Change argued that gateways should be extended by one year, every year, and supported:

the adoption of a 10 year continuous gateway beyond firm scheme caps and for the gateway to be rolled forward by 1 year every year to maximise the period of investor certainty. (Submission 697, p. 8)

Since gateways play a more strategic role in future policy, a longer extension interval is desirable. A review of gateways, taking into account developments in international negotiations, could take place at each five-year Scheme review (see Chapter 16). This would still provide a minimum of 10 years guidance and possibly up to 15 years of certainty, depending on the point in the review cycle.

Best practice suggests that regulation be reviewed at a strategic level every five years. On balance, the Government has decided that gateways will be extended as part of a five-yearly strategic review. To ensure that the reviews do not adversely affect market certainty, their scope will be defined tightly.

Policy position 10.6:

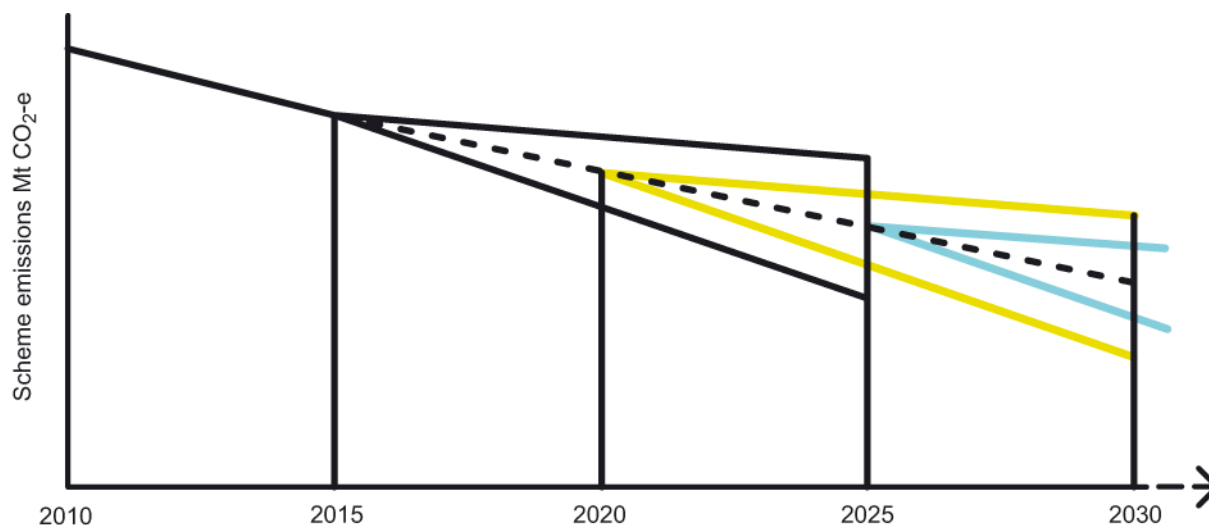
As part of a five-yearly strategic review, existing gateways will be extended by five years every fifth year from 2010–11.

10.2.3 Updating and narrowing of gateways

The quality of market guidance will be affected by how the gateways are updated as Scheme caps are extended. If gateways are not adjusted, gateways will effectively widen each year as Scheme cap years are extended towards the final year of the gateway.

To ensure that gateways provide the most useful information to the market, they can be narrowed and updated as part of the five-yearly strategic review. This approach, shown in Figure 10.2, was recommended by NETT.³¹

Figure 10.2: Updating and narrowing of gateways



ABN AMRO Australia was one of the few stakeholders to comment on the narrowing and updating of gateways. It suggested the incorporation of reset mechanisms that progressively narrowed the range into which Scheme caps could be annually extended:

In the absence of a reset mechanism, and assuming that distant Gateway 5yr Points are set relatively wide, over time the range into which Scheme Caps can be extended also gets relatively wide. This exposes the market and market participants to potentially significant step-changes in the setting of extended Scheme Caps. (Submission 828, p. 2)

On balance, the Government considers that a review of gateways, taking into account progress in international negotiations, could take place at each five-yearly Scheme review. The review could also consider the narrowing and updating of existing gateways.

Policy position 10.7:

As part of a five-yearly strategic review, existing gateways will be narrowed every fifth year from 2010–11.

10.3 Setting and reporting Scheme caps

This section describes how the Government will set Scheme caps and meet Australia’s international emissions reporting obligations.

10.3.1 Approach to Scheme cap setting

A primary aim of the Scheme is to help Australia meet its emissions reduction targets in the most flexible and cost effective way. The Government’s medium-term (2020) emissions objective is to reduce national emissions from five per cent to 15 per cent below 2000 levels

(see Chapter 4). The Scheme will reflect this national target through the stringency of the Scheme caps.

Australia's emissions reduction targets are specified in terms of *national* emissions. Because the Scheme will not cover all sources of emissions at commencement, so the Scheme cap and Australia's total national emissions will be different. Emissions from covered sources will form only a subset of total national emissions. Therefore, there needs to be a clear relationship between the Scheme cap and the indicative national emissions trajectory.

Green Paper position

At the end of 2008, in the context of the White Paper, the Government would announce an approach for setting scheme caps for the period 2010–11 to 2014–15, consistent with the indicative national emissions trajectory.

Since the gap between the Scheme cap and the indicative national emissions trajectory relates to uncovered emissions, this raises the question of whether uncovered emissions sources should share in the national emissions reduction effort and, if so, how.

If sources of emissions cannot be covered, the Government will, where practical, apply alternative mitigation measures (Chapter 6 refers). The purpose of such measures will be to ensure that uncovered sources make an equivalent contribution to achieving Australia's national emissions reductions objectives and have incentives to undertake abatement. Alternative mitigation measures could include regulatory requirements that entities meet certain emissions standards, or to adopt low-emissions technologies or management practices. To ensure an equivalent contribution, alternative mitigation measures will be designed to deliver abatement up to a cost that is roughly the same as the carbon price under the Scheme.

The Green Institute stated:

Australia's targets for reducing greenhouse gas emissions should be framed on the basis of full carbon accounting, with the caps for emissions trading set proportionately so that every sector bears its share. (Submission 365, p. 3)

To ensure that the Scheme helps Australia meet its internationally agreed national targets, and to account for the alternative mitigation measures applied to the uncovered sources, the approach to setting Scheme caps will be to subtract from the indicative national emissions trajectory the projected emissions from sources not covered under the Scheme.

It is possible that this calculation could deliver Scheme caps that lie outside the gateway range (at either the top of the gateway or the bottom). In that case, the cap would need to be set at the closest gateway point.

Policy position 10.8:

Scheme caps will be set equal to the indicative national emissions trajectory in the relevant year, less the projected emissions from those sources not covered by the Scheme. Where this would lead to Scheme caps that lie outside the bounds of the relevant gateway, the Scheme cap will be set equal to the closest bound (upper or lower) of that gateway.

10.3.2 Accounting for Scheme caps

There are two possible options for reconciling Australia's indicative national emissions trajectory and Scheme caps for reporting purposes:

- The Government could account for emissions from covered sources separately from emissions from sources not covered by the Scheme. For reporting purposes, reconciliation would then be a matter of subtracting covered emissions from national emissions.
- The Government could account for emissions from uncovered sources in the same way as it accounts for those from covered sources. Permits equal to the Scheme cap would be allocated by the Government, and covered entities would obtain and surrender permits equal to their emissions. The Government could make a similar notional allocation for uncovered sources of emissions. That is, as a matter of accounting, the Government could notionally allocate and retire permits each year on behalf of the uncovered sources of emissions.

Green Paper position

The difference between the scheme cap and the national target would be explicitly and transparently reconciled through notional allocation (and retirement) of permits for sources of emissions not covered by the scheme.

The difference between these options is only a matter of form. In each case, all emissions must be estimated and reported as part of Australia's national greenhouse gas inventory reporting, although the emissions from uncovered sources will be more difficult to estimate than will those from covered sources.

After Scheme coverage is determined, the issue is whether covered and uncovered sources of emissions should be accounted for in the same way. Under the notional allocation approach, the additional book entries may increase transparency. A notional allocation ensures that the relationship between covered emissions and the indicative national emissions trajectory is consistent and transparent over time. As the Scheme coverage expands to incorporate further sources of emissions, Scheme caps will expand, ultimately aligning with national targets as Scheme coverage approaches 100 per cent of national emissions. As Scheme coverage increases, the notional allocation would shrink and the real allocation would increase.

Stakeholders broadly supported the Government notionally allocating permits to the uncovered sources of emissions to ensure consistency and transparency between the covered emissions and the indicative national emissions trajectory over time.

On balance, a notional allocation would make Australia's national emissions reporting more transparent.

Policy position 10.9:

The difference between the Scheme cap and the national emissions target will be explicitly and transparently reconciled through notional allocation (and retirement) of permits for sources of emissions not covered by the Scheme.

10.4 Adjustment of Scheme caps

Scheme caps may have to be adjusted to accommodate extended Scheme coverage or, potentially, to take account of international developments.

10.4.1 Adjusting the cap for expanded Scheme coverage

When new sources of emissions are added to the Scheme, the Scheme cap will have to be expanded and progressively aligned with the indicative national emissions trajectory.

It will be important to give the market guidance on Scheme cap adjustments to enable it to more accurately assess how the addition of new sources of emissions will affect the price of carbon pollution permits.

Green Paper position

The Government would announce an approach in early 2010 for expanding the cap to accommodate increases in scheme coverage that provided a smooth scheme price path.

Because of the uncertainties about emissions from uncovered sources, it would not be advisable to specify well in advance the exact number of tonnes of carbon dioxide equivalent that would be added to the Scheme cap. The addition to the cap could inadvertently be made too tight or too loose.

The option of specifying an approach balances the desirability of providing some information against the need to maintain some flexibility to deal with future uncertainty. Furthermore, it allows the Government to specify in advance the stringency of the addition to the cap relative to historical emissions from the newly covered source, without committing in advance to a particular absolute emissions figure.

Stakeholders broadly supported announcing an approach as a means of providing guidance. For example, Chevron Australia stated:

Where uncovered sectors are to be brought into the scheme, Chevron supports the option that Government announce the detailed rules by which the sector will be included and the resulting increase in the scheme cap at least two years in advance of transition. (Submission 716, p. 24)

However, WWF–Australia considered that the Scheme legislation should provide for the later inclusion of uncovered sources, such as agriculture, to provide greater certainty to the market:

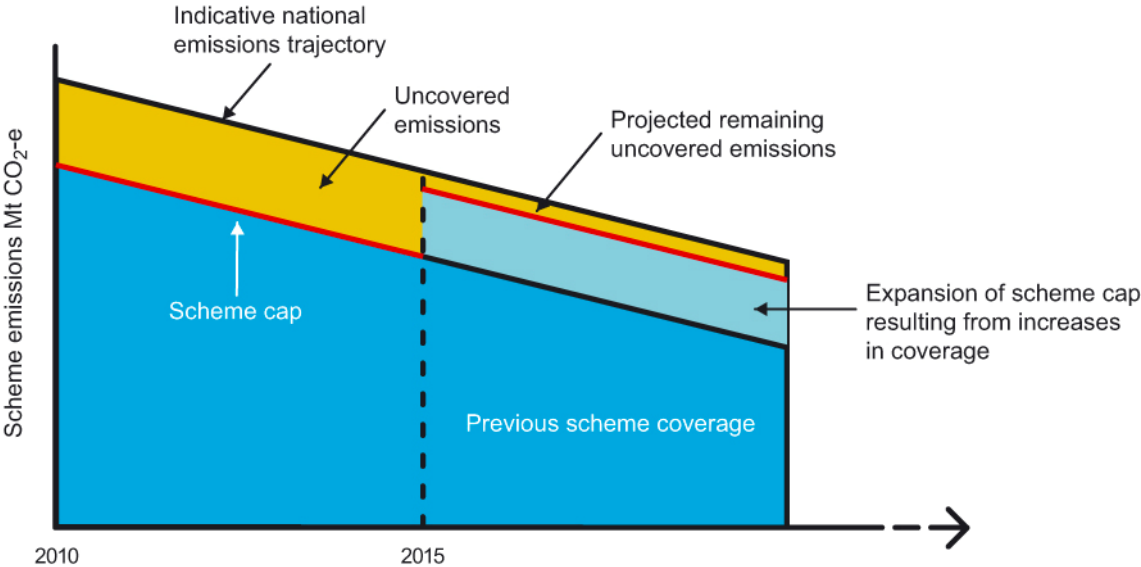
WWF submits that hardwiring the incorporation of those [uncovered] sectors into the legislation would do much to overcome uncertainty in the market about the price impacts of incorporating those sectors into the scheme. Consideration could also be given to a transitional ‘reserve’ price in relation to permits for several years on either side of the incorporation of the agriculture and forestry sectors. (Submission 522, p. 35)

In line with the methodology for setting Scheme caps generally, the Government will set the post-expansion Scheme cap equal to the indicative national emissions trajectory in the relevant year, less the projected emissions from remaining uncovered sources of the economy. For example, if in 2013 it were decided to include agriculture in the Scheme from 2015, the Scheme cap in 2015 would be equal to the indicative national emissions trajectory, less the projected emissions from remaining uncovered sources. At the time the decision was made to expand coverage, all existing caps and gateways would be updated to reflect this. Figure 10.3 illustrates this approach.

Policy position 10.10:

In line with the methodology for setting Scheme caps generally, the approach for expanding caps to accommodate increases in Scheme coverage will be that the Scheme cap will be set equal to the indicative national emissions trajectory in the relevant year, less the projected emissions from remaining uncovered sources of emissions, taking into account any alternative mitigation measures applying to those uncovered emissions.

Figure 10.3: Possible approach for expanding Scheme coverage



10.4.2 Adjustment in the light of international developments

Setting Scheme caps five years in advance is an exercise in risk management. There is considerable uncertainty about international developments after 2012, with little clear direction on the likely outcome of negotiations. If caps are set five years in advance, future

shifts in the international situation may mean that the caps are not aligned with Australia's internationally negotiated national targets. That is, given projected emissions from those sources not covered by the Scheme, the Scheme cap results in emissions reductions within the Scheme that are less than (or greater than) those required to meet internationally negotiated national targets.

A decision will need to be made as to whether the risk of non-alignment is borne by Scheme participants or by taxpayers, that is, whether Scheme caps are tightened or whether the Government makes up any shortfall through purchases of eligible international units on the Commonwealth Budget.

Green Paper position

The scheme cap would not be adjusted in the event that it is incompatible with internationally negotiated national targets and, if necessary, the Government would make up any shortfall in internationally agreed targets by purchasing international emissions units.

As noted in section 10.1, depending on the international price, domestic prices may be determined by international factors. Under some circumstances this will mean that adjustments to the Scheme cap will no longer be a significant determinant of domestic carbon prices. However, while there is uncertainty over relative international prices, Scheme cap adjustment policy will have an important role to play in maintaining price stability within the Scheme.

If, following the advance announcement of Scheme caps, the Government were to commit to a national emissions trajectory that was stricter than that implied by these caps, it would have two broad approaches for meeting the national targets.

- The Government could tighten the Scheme cap to match the change in Australia's international commitments. This could be done by buying back permits, or by reducing the number of permits that the Government sells at future auctions. In both cases, a policy of altering the caps would transfer some of the risk of changes in Australia's international obligations to participants in the Scheme. Cancellation of permits is not considered in this section, as it is proposed that the legislation provide that the Government cannot cancel permits without providing compensation (see Chapter 8).
- The Government could make up the shortfall on its own account rather than through the Scheme. This could be achieved by the Government honouring international agreements through the purchase of eligible international units without changing the Scheme cap. This is the approach recommended in the Garnaut Final Report.³²

Stakeholders broadly supported the second approach to make up the difference between Scheme caps and internationally negotiated targets.

[The Australian Financial Markets Association] supports the Government covering any mismatch between international obligations and pre-set scheme obligations (recognising that this would leave the Government exposed to international price movements) and the same treatment should apply to gateways. (Submission 550, p. 12)

The Australian Chamber of Commerce and Industry also supported this approach:

ACCI supports the Government's approach to a scheme cap when it is incompatible with international negotiations by purchasing international emissions units to make up any shortfall. This is vital to making the scheme cap a credible signalling mechanism for business and the market. (Submission 786, p. 7)

However, the Hunter Community Environment Centre argued against the use of eligible international units to make up the shortfall:

[F]or the scheme to work—to actually reduce carbon pollution commensurate with global requirements and risk aversion—we need the flexibility to screw down emissions [as] low and as quickly as possible ... The 'Clean Development Mechanism' credits under the Kyoto Protocol frequently come from projects that do not reduce greenhouse pollution and also have been associated with human rights problems. Any successes we have in shoring up the integrity of the CPRS will be completely undermined if dodgy international credits are allowed to be traded. (Submission 381, p. 5)

The Australian Network of Environmental Defender's Offices also contended that the Government should not make up the shortfall through the purchase of eligible international units, but that industry should bear the responsibility for achieving emissions reduction targets:

[T]here is no reason why taxpayers should foot the bill where the Government has to buy international permits to fill the shortfall during the 5 year notice period. This is inconsistent with the polluter-pays principle. GHG emitting industries are responsible for the need to regulate in the first place, and they should not be given further concessions and allowed to further delay necessary action to reduce emissions. The primary goal of the scheme must be to ensure that GHG reduction targets are met in the short and long term. (Submission 517, p. 21)

Altering Scheme caps after their announcement would disrupt the market by affecting the supply of permits, thereby weakening the value of announcing caps in advance. On the other hand, government purchases of eligible international units would quarantine the Scheme from external shocks and provide investors and others in the broader economy with certainty about short-term caps. Standing ready to purchase eligible international units presents only a small fiscal risk, because Scheme caps will extend for only five years (or to the end of a known international commitment).

Furthermore, because the Government would take domestic commitments and objectives into account when negotiating international commitments, it would be able to manage risks over such a time horizon. For this reason, the Government has decided to purchase eligible international units if necessary.

Policy position 10.11:

The Scheme cap will not be adjusted in the event that it is not aligned with internationally negotiated national targets and, if necessary, the Government will make up any shortfall in internationally agreed targets by purchasing eligible international units.

10.5 Governance arrangements

Political accountability suggests that elected representatives (the Parliament and the Government) should be given responsibility for major political decisions which require the balancing of broad environmental, economic and social considerations and which have far-reaching implications. Where the decisions are of particular consequence, or where it is desirable to establish a high degree of certainty, it would be preferable to involve the Parliament by setting the decisions out in legislation. In cases where decisions need to be made at frequent intervals or where flexibility is necessary, it would be preferable to assign the role (through delegated legislation) to the Government, acting through the responsible minister.

This section sets out the governance arrangements applicable to the Scheme caps and gateways.

10.5.1 Approach to setting and extending Scheme caps and gateways

Decision making for caps and gateways requires appropriate accountability. The governance arrangements also need to take account of the regulatory process for decision making. In the Green Paper, the Government proposed that the Australian Parliament be ultimately accountable for these decisions and that caps and gateways be set out in delegated legislation, rather than be included in legislation (which is particularly cumbersome to amend).

Green Paper position

The scheme caps and gateways would be set out in delegated legislation.

Some stakeholders raised concerns about Parliament, rather than an external regulatory body, setting Scheme caps annually. For example, although the Climate Institute supported the Government's proposal to announce annual caps for rolling five-year periods and longer term gateways, it had reservations about the method of setting Scheme caps:

[T]he proposal for annual cap extensions to be disallowable instruments raises serious questions of excessive political transaction costs for the Scheme. While it is important to provide policy certainty over at least a five year time horizon, significant uncertainty will also arise if the issue of the cap is open for discussion each and every year.
(Submission 702, p. 12)

On the other hand, some stakeholders were concerned about the responsible minister having too much discretion in determining the aspects of the gateway. For example, KPMG argued:

Although in the initial stages of the CPRS some flexibility should be encouraged, the current lack of predictability and the absence of clear criteria and third party review in the gateway setting process, will generate uncertainty amongst participants and investors. While KPMG agree that the ultimate decision on the level of the gateway should rest with the Government, we believe that the Minister's level of discretion is currently too high. (Submission 545, Executive Summary, p. 13)

Similarly, Commerce Queensland did not support the proposal for the Parliament to retain responsibility for setting Scheme caps and gateways:

In our view, this approach is undesirable as it will result in these important decisions being subject to the vagaries of the parliamentary process. There is a real risk that a future Australian Government may need to settle for a sub-optimal compromise position on either caps or gateways in order to secure parliamentary passage of the relevant legislation. (Submission 816, pp. 7–8)

The Scheme caps and gateways, as a function of the national target range and trajectory, will be key drivers of the cost of the Scheme and will have potentially significant implications for the national economy. In the interests of accountability, the elected representatives, rather than an independent regulator, should make decisions about Scheme caps and gateways, taking into account societal costs. This is consistent with the recommendations of the Garnaut Final Report.³³

If decisions about setting Scheme caps and gateways are of particular consequence, or where a high degree of certainty about Scheme caps and gateways is desired, it would be preferable to involve the parliament by setting the decisions out in legislation. If such decisions need to be made at frequent intervals or if flexibility is necessary, it would be preferable to assign the role to the Government, acting through the responsible minister within the framework set out in legislation.

Including Scheme caps and gateways in the Act establishing the Scheme would signal that the targets were designed to be durable, which would increase market information and, therefore, investor certainty. However, the requirement for ongoing Scheme cap and gateway setting over time would make it impractical to include these in the Act, as the Act would then require frequent amendment. Establishing Scheme caps and gateways in the Act would also limit the Government's ability to adjust the level of caps and gateways in response to changes in international circumstances, technological advances and economic conditions.

Therefore, the first five years of Scheme caps and any Scheme caps that are added after the first five years of Scheme caps will be included in delegated legislation (regulations). This will provide parliamentary scrutiny while meeting the flexibility criterion and practicality requirements. Similarly, the first 10 years of gateways and any gateways that are added will be set in regulations.

Having set the policy framework, the Government will establish a process of periodic independent public reviews, which will be incorporated into the regulatory process to make decisions made under the Scheme more accountable and transparent. Five-yearly strategic reviews will be conducted by a committee commissioned by the responsible minister (see Chapter 16). Gateways will be narrowed and extended every fifth year from 2010–11, as part of the five-yearly strategic reviews, and changes to gateways, in line with gateway setting more generally, will also be made through regulation.

On balance, ensuring that parliament sets Scheme caps and extensions through regulation provides for the greatest measure of public accountability, while meeting flexibility requirements.

Policy position 10.12:

Scheme caps and gateways will be set in regulations, taking into account current and anticipated international obligations.

10.5.2 Default Scheme cap

Delays in putting in place the regulations extending Scheme caps are possible. Such delays would reduce the certainty period over Scheme caps from five Scheme caps to four, to three, and so on. To ensure that five Scheme caps are always in place in line with the Government's commitment to medium-term policy certainty, a default mechanism will be required. The Government will need to decide on the basis for setting a default cap.

There are three broad options for setting a default cap:

- the default cap could be set such that the reduction is equal to the average reduction in some number of previous years
- it could be set equal to the middle of the relevant gateway
- it could be set equal to some proportion of the previous year's Scheme cap (for example, 99 per cent, 98 per cent, and so on). For example, the Mandatory Renewable Energy Target legislation sets a default equal to 100 per cent of the previous year's Scheme cap.

Setting the legislative default Scheme cap reduction equal to the average of previous years' reductions could result in a measured continuation of emissions reductions under the Scheme if regulations are delayed. However, taking an average may not lead to representative reductions where the Scheme is expanded to include new sources of emissions during the preceding period.

Setting the default equal to the middle of the relevant gateway could be done by formula or by amending the legislation to specify the default number each time the gateways are updated or extended. In theory, setting the default to this level would match the market's expected Scheme cap level and would therefore have the least impact on the permit price. In practice, because the gateways would be updated and extended only every five years, the path of Scheme caps might have diverged from the gateway mid-point, rendering this point less relevant to market expectations.

Setting the default equal to some proportion of the previous Scheme cap could be done by formula. As the market would tend to use the previous Scheme cap as a guide, this approach would probably be the least disruptive to permit prices. Furthermore, such a default would, on average, have more legitimacy because it would relate to the parliament's most recent decision rather than to a gateway that may have been set up to five years earlier.

A reduction in emissions could be built into the default, to give confidence to investors that continued emissions reductions would be required, even if regulations were not in place. A simple default cap that declines at one per cent a year will achieve that outcome.

Policy position 10.13:

If regulations for the Scheme cap are not in place at 1 July each year, a default Scheme cap equal to the previous year's Scheme cap multiplied by 0.99 will be added to the end of the set Scheme cap period to maintain five years of Scheme caps at all times. This provision will be in the Scheme legislation.

10.6 Timing of Scheme cap and gateway announcements

The Government will announce final Scheme caps and gateways in early 2010 before commencement of the Scheme.

Green paper position

In early 2010, the Government would announce the finalised scheme caps for the first five years of the scheme (2010–11 to 2014–15) and 10 years of gateways beyond this period.

A number of stakeholders requested that Scheme caps be set and announced earlier than this. For example, Origin Energy stated:

It is not clear why the scheme cap for the first few years of the scheme, from 2010–12, cannot be announced at the end of 2008. Combined with a medium term target range and clear rules relating to the use of international offsets, scheme participants would then have enough information to be able to estimate prices from 2010–20.
(Submission 815, p. 45)

BP Australia also called for the Government to confirm, as soon as possible, the 2010–12 Scheme targets:

This is important to provide near-term certainty and established caps before a future international agreement influences the shape of the forward emissions trajectory. BP also recommends the release of information on medium term caps and trajectories as soon as possible—and preferably ahead of the White Paper—to permit assessment of industry impacts prior to its publication. (Submission 355, p. 8)

A 2008 Scheme cap announcement would provide early guidance for investors. However, it is also critical that the Scheme cap decision is made with the most up-to-date information available, including:

- information about developments in Australia's international commitments after 2012 (beyond the first Kyoto commitment period)
- modelling results that take into account more recent data and assumptions about emissions, complementary policies and economic data

- *National Greenhouse and Energy Reporting Act 2007* data for 2008–09 (available to the Government in November 2009).

Cap-setting decisions made before 2010 would therefore be premature, and the costs of errors could be high, since caps, once set, will not subsequently be adjusted.

Policy position 10.14:

In early 2010, before Scheme commencement and after the passage of legislation through parliament, the Government:

- will announce Scheme caps for the first five years, or, to the end of any new international commitment period if the Government elects to do so; and
- intends to announce up to 10 years of Scheme gateways beyond the minimum five years of Scheme caps.

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- 1 Prime Ministerial Task Group on Emissions Trading, *Report of the Prime Ministerial Task Group on Emissions Trading, 2007*.
 - 2 National Emissions Trading Taskforce, *Possible design for a national greenhouse gas emissions trading scheme: Final framework report on scheme design, 2007*.
 - 3 R Garnaut, *The Garnaut Climate Change Review: Final report*, Cambridge University Press, 2008.
 - 4 New Zealand Government, *The Framework for a New Zealand Emissions Trading Scheme, 2007*.
 - 5 Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC.
 - 6 Proposal for a Directive of the European Parliament and of the Council 2008/0013 of 23 January 2008 amending Directive 2003/87/EC.
 - 7 European Commission, Directorate General for Environment, 'Review of the EU Emissions Trading Scheme—survey highlights', survey conducted by McKinsey & Company and Ecofys, November 2005.
 - 8 New Zealand Government, *The Framework for a New Zealand Emissions Trading Scheme*.
 - 9 National Emissions Trading Taskforce, *Possible design for a national greenhouse gas emissions trading scheme: Final framework report on scheme design, 2007*.
 - 10 Prime Ministerial Task Group on Emissions Trading, *Report of the Prime Ministerial Task Group on Emissions Trading, 2007*.
 - 11 R Garnaut, *The Garnaut Climate Change Review: Final report*, Cambridge University Press, 2008.
 - 12 New Zealand Government, *The Framework for a New Zealand Emissions Trading Scheme, 2007*.
 - 13 R Garnaut, *The Garnaut Climate Change Review: Final report*, Cambridge University Press, 2008.
 - 14 Proposal for a Decision of the European Parliament and of the Council on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020.
 - 15 R Garnaut, *The Garnaut Climate Change Review: Final report*, Cambridge University Press, 2008.

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- 16 National Emissions Trading Taskforce, *Possible design for a national greenhouse gas emissions trading scheme: Final framework report on scheme design, 2007.*
 - 17 Prime Ministerial Task Group on Emissions Trading, *Report of the Prime Ministerial Task Group on Emissions Trading, 2007.*
 - 18 Proposal for a Directive of the European Parliament and of the Council 2008/0013 of 23 January 2008 amending Directive 2003/87/EC.
 - 19 National Emissions Trading Taskforce, *Possible design for a national greenhouse gas emissions trading scheme: Final framework report on scheme design, 2007.*
 - 20 Prime Ministerial Task Group on Emissions Trading, *Report of the Prime Ministerial Task Group on Emissions Trading, 2007.*
 - 21 R Garnaut, *The Garnaut Climate Change Review: Final report*, Cambridge University Press, 2008.
 - 22 National Emissions Trading Taskforce, *Possible design for a national greenhouse gas emissions trading scheme: Final framework report on scheme design, 2007.*
 - 23 Prime Ministerial Task Group on Emissions Trading, *Report of the Prime Ministerial Task Group on Emissions Trading, 2007.*
 - 24 R Garnaut, *The Garnaut Climate Change Review: Final report*, Cambridge University Press, 2008.
 - 25 National Emissions Trading Taskforce, *Possible design for a national greenhouse gas emissions trading scheme: Final framework report on scheme design, 2007.*
 - 26 R Garnaut, *The Garnaut Climate Change Review: Final report*, Cambridge University Press, 2008.
 - 27 Prime Ministerial Task Group on Emissions Trading, *Report of the Prime Ministerial Task Group on Emissions Trading, 2007.*
 - 28 National Emissions Trading Taskforce, *Possible design for a national greenhouse gas emissions trading scheme: Final framework report on scheme design, 2007.*
 - 29 Prime Ministerial Task Group on Emissions Trading, *Report of the Prime Ministerial Task Group on Emissions Trading, 2007.*
 - 30 R Garnaut, *The Garnaut Climate Change Review: Final report*, Cambridge University Press, 2008.
 - 31 National Emissions Trading Taskforce, *Possible design for a national greenhouse gas emissions trading scheme: Final framework report on scheme design, 2007.*
 - 32 R Garnaut, *The Garnaut Climate Change Review: Final report*, Cambridge University Press, 2008.
 - 33 R Garnaut, *The Garnaut Climate Change Review: Final report*, Cambridge University Press, 2008.