

5 A framework for the Carbon Pollution Reduction Scheme

The Australian Government intends to commence an emissions trading scheme—the Carbon Pollution Reduction Scheme—in 2010. The framework that has been used to assess design options for the Scheme is outlined in this chapter.

The Government's intention is to commence the Carbon Pollution Reduction Scheme on 1 July 2010. The Scheme will be Australia's primary policy tool to drive reductions in emissions of greenhouse gases. The Scheme will reduce carbon pollution, that is, pollution caused by emissions of carbon dioxide and other greenhouse gases. The consequent economic cost of carbon pollution is not currently reflected in the costs of business or the price of goods and service - because firms face no cost from increasing emissions, the level of emissions is too great. Unless businesses and individuals bear the full responsibility for their consumption and production decisions, the level of carbon pollution will remain too high.

The Scheme is designed to redress this market failure. Emissions trading is simply a mechanism to achieve an objective. That objective is to reduce carbon pollution, and to do so efficiently by putting a cap on emissions.

Addressing this market failure is a significant economic reform. Tackling climate change will not be easy, and there will be adjustment costs. However, this is not a choice between a no-cost option and an option with costs. It is a choice between taking responsible action now, or neglecting to act and facing much higher costs and more serious climate change later.

Australia's future economic prosperity will depend in large part on how effectively we manage the transition to a carbon-constrained world. Economic reform is necessary to improve our carbon productivity—that is, to increase our output per unit of carbon emitted—just as previous economic reforms improved the productivity of our labour and of capital. The nations that are the most open and adaptive to change are those most likely to prosper in the long term.

This chapter outlines the framework that has been used to assess design options for the Scheme:

- Section 5.1 sets out the objective of the Carbon Pollution Reduction Scheme.
- Section 5.2 describes the criteria that have been used for assessing different design options.
- Section 5.3 explains how a 'cap and trade' scheme works.

5.1 The objective of the Scheme

In making the choices involved in the design of the Scheme, the Government is guided by the objective of the Scheme.

Green Paper position

The objective of the scheme is to meet Australia's emissions reduction targets in the most flexible and cost-effective way; to support an effective global response to climate change; and to provide for transitional assistance for the most affected households and firms.

A number of submissions in response to the Green Paper addressed Government's proposed objective for the Scheme, the majority of which were generally supportive, such as those from Cement Australia (Submission 850), BP (Submission 355) and Millennium Inorganic Chemicals (Submission 794).

5.1.1 Meeting Australia's carbon pollution reduction targets in the most flexible and cost-effective way

The need to reduce global greenhouse gas emissions is clear: failure to reduce emissions will lead to a loss of environmental amenity and very large economic costs. However, policies designed to avoid the costs of climate change will generally involve their own costs. Therefore, the first part of the objective recognises that it is desirable for emissions reduction targets to be achieved in the most flexible and cost-effective way.

The Scheme will use a cap and trade mechanism to reduce greenhouse gas emissions. By setting a limit on emissions, the right to emit greenhouse gases becomes scarce — and scarcity entails a price. Putting a price on emissions will drive a structural shift in the economy, from emissions-intensive towards low-emissions goods, technologies and processes. Modelling conducted by the Treasury published in *Australia's Low Pollution Future* illustrates that while growth in emissions intensive sectors of the economy is likely to slow when a carbon price is introduced, growth in low and negative emission sectors is likely to accelerate. Therefore, at the national level large reductions in emissions do not require reductions in overall economic activity¹ - indeed, Treasury modelling indicates that strong growth can be sustained while delivering significant reductions in emissions.

One of the benefits of a market-based mechanism is that the Government does not need to determine where or how emissions are best reduced. Emissions trading allows the efficient discovery of abatement opportunities. Consumers and businesses, who generally have better information about their preferences and costs, can decide the best way to reduce emissions. Long-run expectations of carbon prices will drive the development of new low-emissions technologies that are consistent with lowest cost emissions reductions.

Some stakeholders consider that the Scheme objective should explicitly focus on driving technological change and investment. Shell Australia proposed that 'a central objective of climate change policy should be the efficient direction of capital within the market towards low and zero carbon emission investment' (Submission 561, p. 2). As shown by the results of the Treasury modelling, the Scheme is expected to drive large scale investment in low emissions technology. However, fundamentally the Scheme is intended to reduce Australia's emissions. The development and deployment of low emissions technologies is a likely—indeed, necessary—element of achieving this goal, but is not the Scheme's objective in its own right.

Other stakeholders consider that the Scheme should focus on achieving emissions reduction goals solely through domestic action. One proponent of this view is Friends of the Earth Australia, which states that ‘allowing offsets either directly or indirectly via other markets into the scheme will undermine the effectiveness of the scheme’s capacity to reduce [domestic] emissions’ (Submission 411, p. 5).

The abatement of one tonne of emissions has the same environmental benefit whether it occurs in Australia or elsewhere in the world. Therefore, it is not desirable for the Scheme objective to focus on achieving emissions reduction targets primarily through domestic abatement, as that would be more costly for Australian businesses and consumers but deliver no additional global environmental gain.

5.1.2 Supporting an effective global response to climate change

The second part of the objective acknowledges that, acting alone, Australia cannot solve the climate change problem. Like other nations, Australia must rely on international cooperation to achieve the necessary reductions in global greenhouse gas emissions. Therefore, it is vital that Australia’s mitigation efforts, including the Scheme, are designed to support an effective global response.

As discussed in Chapter 1 and Chapter 3, Australia has the standing and capacity to positively shape an international agreement that addresses climate change beyond 2012. Australia’s mitigation effort makes a direct contribution to reducing global emissions and also highlights Australia’s commitment to achieving an ambitious global outcome, establishing our role as a serious and credible participant.

Some stakeholders considered that the objective of the Scheme should place a greater emphasis on an international agreement on emissions reductions. For example, the World Wide Fund for Nature (WWF) believes that the Scheme should have three objectives, one of which should be ‘to actively foster an international agreement’ (Submission 522). On the other hand Millenium Inorganic Chemicals (Submission 794) would prefer the Scheme be contingent on a global constraint.

While the Government understands the WWF desire for a global agreement, it does not believe that the current objective is incompatible with this objective. The Government intends the second part of the objective, to support an effective global response to climate change, to encompass the fact the design elements should foster international agreement.

A well-designed and successfully implemented Scheme can contribute to shaping the global response, for example by:

- helping Australia meet its international climate change obligations, including those under the United Nations Framework Convention on Climate Change (UNFCCC), our national target under the Kyoto Protocol and any post-2012 agreement
- contributing to a reduction of greenhouse gas emissions
- demonstrating to other countries that emissions reduction targets can be achieved cost effectively through an emissions trading swith broad coverage
- supporting Australia’s international negotiating position

- helping to support the development of international emissions trading.

With respect to the Scheme being contingent on a global agreement, this is not really a question of whether the Scheme should be implemented, but whether Australia should take action to limit emissions now. As outline in Chapter 1, the Government accepts the finding of the Garnaut Final Report that the costs of delaying outweigh the costs of action.

5.1.3 Providing transitional assistance for the most affected households and firms

The final part of the objective recognises that, because the Scheme will increase the cost of carbon, some parts of society, especially low-income households and those parts of business that are emissions intensive, will face particular challenges. Therefore, the Government must carefully manage the adjustment to a carbon-constrained economy.

As an integral part of Scheme design, the Government will implement a range of measures to assist households and businesses adjust to the Scheme. Measures for households are discussed in Chapter 17. Measures to assist businesses are discussed in Chapter 18.

5.1.4 Possible other Scheme objectives

Greenpeace Asia Pacific consider the objective of the Scheme ‘should also include Ecological Sustainable Development (ESD) principles, to guide the “weighting” of possibly competing objectives, and the precautionary principle’ (Submission 692, p. 4). One Thousand Years (Submission 743) agreed with this view. ESD principles are inherent in the objective of the UNFCCC and the Kyoto Protocol.² The Government considers that, like the international architecture, the objective of the Scheme is consistent with ESD principles as it primarily relates to addressing climate change by reducing emissions. Furthermore, the assessment criteria that have been applied in designing the Scheme reflect ESD principles. However, the Scheme design has been deliberately focused on reductions in greenhouse gas emissions, rather than on an explicit goal to promote other environmental or social objectives. Additional objectives would be targeted more effectively and efficiently through other policies.

5.1.5 Conclusion

The Government has listened to the feedback from stakeholders and believes the objective proposed in the Green Paper adequately reflects the issues raised. The Government confirms the Scheme objectives to be sound, and its final policy position is to confirm that objective.

Policy position: 5.1

The objective of the Carbon Pollution Reduction Scheme is to meet Australia's emissions reduction targets in the most flexible and cost-effective way; to support an effective global response to climate change; and to provide for transitional assistance for the most affected households and firms.

5.2 Assessment criteria

The Scheme will be designed to meet the overall objective. However, in considering each element of the Scheme, the Government has carefully assessed the various design options using a consistent set of criteria.

Green Paper position

The Government indicated that while the Carbon Pollution Reduction Scheme would be designed to meet the overall objective, each design element of the Scheme would involve a choice between multiple design options. The Government's preferred position was that design options be assessed against the following assessment criteria:

Environmental integrity. Design options should achieve the desired environmental outcomes. Impacts on environmental outcomes can be direct, for example when a cap on emissions is set, or indirect, such as when a design option affects the credibility of the Scheme or the development of an effective global emissions constraint.

Economic efficiency. The new emissions trading market should achieve its environmental goals as efficiently as possible; that is, permits should go to the highest value use, and the lowest cost abatement should be undertaken. Furthermore, the operation of the Scheme should not impose an excessive compliance burden, and should be simple and predictable to facilitate informed and efficient investment decisions.

Minimisation of implementation risk. A complex Scheme design poses greater risks to the smooth and timely commencement and ongoing implementation of the Scheme. Some design parameters and services may help to ensure that the transition to the Scheme is manageable.

Policy flexibility. Flexibility in the design of aspects of the Scheme is desirable to allow the Scheme to respond to changing circumstances and to allow the inherent uncertainties associated with climate change to be dealt with appropriately.

Promotion of international objectives. Design options should support Australia's international negotiating objectives and be consistent with international obligations, including trade and climate change treaties. The Scheme's design should be compatible with relevant internationally accepted standards and practices.

Green Paper position (continued)

Implications for the competitiveness of traded and non-traded industries. The introduction of a carbon price ahead of a global carbon constraint has the potential to affect the international competitiveness of traded industries in Australia. In developing measures to address such impacts, and in the design of the Scheme more generally, it is important to consider the effects of different options on the competitiveness of all Australian industries. This will ensure the most efficient allocation of resources and that the productive potential of the economy is maximised.

Accountability and transparency. Decision makers are required to justify their decisions and are subject to public scrutiny. The Scheme's operational rules and parameters should be made simple and transparent.

Fairness. Distributional impacts should be taken into account in the overall package of Scheme design and associated assistance measures.

Most stakeholders support these criteria as a basis for assessing different design options. For example, a joint submission from the energy industry, including from the Energy Supply Association of Australia, the National Generators Forum, the Energy Retailers Association of Australia and the Australian Pipeline Industry Association, expressed support for the criteria (Submission 715, p. 8). The submission agreed with the Green Paper that some criteria are more relevant to particular design issues than others and that some aspects of the design may require a trade-off between two or more of the criteria.

Other stakeholders highlighted different approaches that are nevertheless consistent with the Government's proposed approach. For example, ExxonMobil stated:

... we analyse and compare the various policy options by evaluating the degree to which they:

- ensure a uniform and predictable cost of [greenhouse gas] emissions across the economy
- consider the priorities of the developing world
- maximise the use of market forces
- promote global participation
- minimise complexity and administrative costs
- maximise transparency to companies and consumers
- adjust in the future to new developments in climate science and the economic impacts of policies (Submission 254, p. 3).

These criteria are consistent with those proposed in the Green Paper. The first and third points relate to the economic efficiency criterion, which emphasises the efficient achievement of

emissions reductions through a well-functioning market. The second point (requiring consideration of the developing world) and the fourth point (about global cooperation) are components of the criterion promoting international objectives. The degree to which complexity and administrative costs are reduced, raised in point five, relates to minimising implementation risk because it is about ensuring a manageable transition for the Scheme. The need for transparency reflects the accountability and transparency criterion. The final point (about the responsiveness of the policy to developments in science and the economic impacts of policies) is captured by the policy flexibility criterion, which recognises that circumstances will shift over time.

Chevron Australia (Submissions 716) suggested that some additional elements should be added to the assessment criteria definitions. Many of those suggestions are consistent with the proposed criteria. However, Chevron considered that the desire to minimise implementation risk should not be used to justify shifting risk from the Government to liable parties. The Government agrees with this point. The Government always intended that the ‘minimisation of implementation risk’ criterion considers implementation risk for the Scheme in its entirety; it is not focused solely on implementation risks for government but also on risks for liable entities and other market participants.

Chevron also considered that policy flexibility should not be used to justify shifting risk from government to liable parties. It would also be inappropriate for the Scheme to be designed to shield liable entities from the real uncertainties simply by shifting risks to the taxpayer. This is unlikely to lead to an efficient response over the long term. As for any risk allocation decision, costs will be minimised when the risk is allocated to the party most able to control it. That said the Government recognises that while allocating risk to those most able to control it is the most efficient approach, such an allocation also has implication for perceived equity. In keeping with the Government’s balanced approach to Scheme design, the Government has taken account of both equity and efficiency consideration when contemplating risk allocation decisions.

On the implications for the competitiveness of traded and non-traded industries, Chevron considered that Australia’s trade-exposed industries must not be competitively disadvantaged, in terms of either production from existing operations or investment in new facilities. They agreed that the timing of new trade-exposed facilities must not be affected by the availability of carbon pollution permits. While the Government agrees that support should be provided to Australia’s emissions-intensive, trade-exposed industries, the Government considers that it is also important to take into account implications for the competitiveness of non-traded industries. Higher assistance for trade-exposed industries will tend to draw resources away from non-trade-exposed industries, raising their costs and impacting on their profitability.

The Government recognises that different stakeholders will both weigh the criteria differently and assess policies differently even when using the same criterion. For example, some stakeholders believe that the fairness criterion requires that the polluter should pay, others that the fairness criterion should be interpreted as the cost on business compared with a world with no carbon constraint. The Government considers that much of what has been suggested by stakeholders is captured by the proposed assessment criteria and that they are the appropriate basis for assessing design options.

Policy position 5.2: Assessment criteria

Design options have been assessed against the following assessment criteria:

- environmental integrity
- economic efficiency
- minimisation of implementation risk
- policy flexibility
- promotion of international objectives
- implications for the competitiveness of traded and non-traded industries
- accountability and transparency
- fairness.

5.3 A cap and trade Scheme

The Scheme will put a price on carbon in a systematic way throughout the economy. It will employ a ‘cap and trade’ emissions trading mechanism to limit greenhouse gas emissions. Setting a limit means that the right to emit greenhouse gases becomes scarce—and scarcity entails a price. The mechanics of the Scheme are set out in Box 5.1.

Box 5.1: Mechanics of a cap and trade Scheme

Emitters of greenhouse gases need to acquire a permit or emissions unit for every tonne of greenhouse gas that they emit.

The quantity of emissions produced by firms will be monitored, reported and audited.

At the end of each year, each liable entity will need to surrender a permit or unit for every tonne of emissions that they produced in that year.

The number of permits issued by the Government in each year will be limited.

Firms will compete to purchase the number of permits that they require. Firms that value the permits most highly will be prepared to pay most for them, either at auction or on a secondary trading market. For some firms, it will be cheaper to reduce emissions than to buy permits.

Certain categories of firms will receive some emissions permits for free, as a transitional assistance measure. Those firms could use the permits or sell them.

A critical point is that the costs to the community arise not from the Scheme itself but from the overarching commitment to reduce national emissions. Alternative approaches to reducing

emissions will impose higher costs on the community because they would not use the incentives created by the market mechanism to draw out all low-cost opportunities to reduce emissions.

As well as driving actual emissions reductions, the introduction of a carbon price provides a financial incentive for investment in low emissions technology research, development and commercialisation. Investment in technological solutions that reduce greenhouse gas emissions has the potential to deliver high financial returns to those sectors with a high cost of abatement. Those sectors have a strong incentive to reduce their exposure to a carbon liability.

An emissions constraint should also lead to changes in consumer behaviour that support a lower carbon economy. For example, higher electricity prices will provide an incentive for consumers to conserve energy in their homes.

The implications of the Scheme will be significant. Indeed, the capacity for the Scheme to change the economy over time puts it on par with other important economic reforms, such as reducing tariffs or deregulating the financial system. Placing a limit, and hence a price, on emissions has the potential to change the things we produce, the way we produce them, and the things we buy.

5.3.1 Essential elements of a cap and trade Scheme

In a cap and trade scheme, aggregate emissions are capped at a level that is consistent with the environmental objective. There are several different types of greenhouse gases and many different sources of emissions across the Australian economy. The Scheme coverage establishes the types and sources of emissions that are subject to the cap. Scheme coverage is discussed in Chapter 6.

The cap sets a limit on the aggregate annual emissions from all the covered gasses and from all the covered sources of emissions. The level of the Scheme cap determines the environmental contribution of the Scheme: the lower the cap, the more abatement that must occur. The actual cap and the scope of coverage can be determined independently. However, broader coverage will reduce abatement costs and therefore allow for more ambitious emissions caps. Individual caps are not set for individual sectors or entities but for the Scheme as a whole. Caps can be set for single years or for a number of years. As discussed in Chapter 10, the Government will set annual caps.

The number of tradeable carbon pollution permits will be equal to the Scheme cap—if the cap were to limit emissions to 100 million tonnes of carbon dioxide equivalent (CO₂-e) in a particular year, 100 million emissions permits would be issued for that year. Additional permits will be issued when providers of forestry abatement opt-in to the Scheme or when synthetic gas is destroyed.

Entities responsible for emissions sources covered by the Scheme will be obliged to surrender an eligible compliance permit for each tonne of CO₂-e that they have emitted during the compliance year.

A common misconception is that the Scheme will set limits on emissions for individual companies or facilities, and that companies will be able to sell permits if they emit less than their limit, or be required to buy permits if they emit more. This is not the case. The limit on

emissions applies to all covered emissions sources—there is no limit on emissions from individual sectors, firms or facilities. Companies are free to emit at whatever level they choose, as long as they surrender an eligible compliance permit for every tonne of those emissions at the end of the compliance period. Some companies may receive some permits free of charge, but that does not change this basic compliance rule in any way.

Carbon pollution permits will be tradeable, and their price will be determined by the market. The price will be positive (greater than zero) if permits are scarce—that is, if the economy’s unrestrained demand for creating emissions exceeds the number of available permits. As discussed in Chapter 8, the more efficient the carbon market, the more cost effectively abatement will be achieved.

The Scheme cap will achieve the desired environmental objectives only if it is enforced. Entities responsible for emissions covered by the Scheme must monitor their emissions and report to the Government. Arrangements for the verification and assurance of emissions and a penalty for non-compliance are discussed in Chapter 7. Non-compliance will attract a penalty.

Carbon pollution permits could enter the market either by auction or by administrative allocation. As long as the cap remains unchanged, the way permits enter the market does not significantly affect the abatement outcome. A company will face the same incentives regardless of whether it receives carbon pollution permits via an administrative allocation or by purchasing them in the market. Companies are likely to be willing to pay for permits if their internal costs of abatement are higher than the price of permits and to directly reduce their emissions if their internal costs of abatement are lower than the price of permits. Companies that own permits would be willing to sell them if the revenue received from selling permits exceeds the profits from using them. A company perspective is illustrated in Box 5.2.

Box 5.2: A company perspective

Different companies will have different abatement costs and opportunities. Under the Scheme, the decision whether to emit or abate will differ from company to company. Consider a situation where the market price for a carbon pollution permit is \$25.

Company A can reduce its emissions for a cost of \$20 per tonne of emissions. Its cost of abatement is lower than the market price for a permit. If the company had permits, it would sell them. If the company had no permits, it would be cheaper for it to abate than to buy a permit so that it could emit. Company A will be \$5 better off by abating.

Company B can reduce emissions for a cost of \$50 per tonne of emissions. Its cost of abatement is higher than the market price for a permit. If the company had permits, it would use them and emit. If the company had no permits, it would buy them in the market so it could emit.

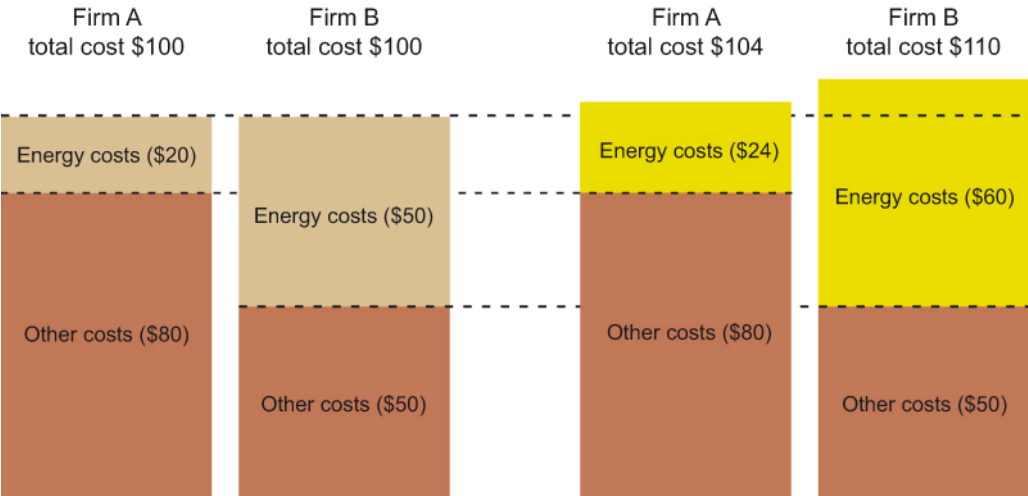
These market incentives work to move the permits to the highest value use and to encourage the cheapest abatement to occur first. The ability to trade permits ensures that the emissions cap is achieved at least cost to the economy.

The introduction of a carbon price will change the relative prices of goods and services, making emissions-intensive goods more expensive relative to those that are less emissions

intensive (see Box 5.3). This provides the right incentives for consumers and businesses to adjust their behaviour, resulting in a reduction of emissions.

Box 5.3: The Carbon Pollution Reduction Scheme will change relative prices

This stylised example illustrates how relative prices of goods will change with the introduction of an emissions trading scheme. In this example, an assumption is made that the Scheme increases energy costs by 20 per cent, energy costs being directly related to emissions. The two entities, particularly entity B, will have an incentive to find ways to produce their output with less energy and therefore less emissions as a result of their production. It is assumed that the additional cost of production associated with emissions is passed through to the consumers of their products. So, consumers will also have an incentive to change their consumption which will also lead to less emissions.



5.3.2 Comparing the Scheme with other possible policy responses

In the Green Paper the Government argued that market-based approaches to reduce emissions allow abatement to be achieved at a lower cost to the economy than direct regulation because abatement can occur where and when it is most cost-effective. It also argued that an emissions trading scheme is preferable to a carbon tax.

Both taxes and emissions trading schemes place a price on carbon. An emissions trading scheme restricts the quantity of emissions and allows the market to set the price of carbon pollution permits—the carbon price. A carbon tax increases the cost of emissions by a set amount and allows the market to determine how much abatement to undertake in response—that is, whether it is more cost effective to pay the carbon tax or to undertake abatement.

If the Government had full information about the relationship between carbon prices and the quantity of emissions reductions that such prices would induce, a carbon tax and an emissions trading scheme could deliver similar economic and environmental outcomes. However, while the Government can make estimates, it does not have complete information about that relationship.

The key benefit of an emissions trading scheme over a tax is that it secures the environmental objective by controlling the quantity of emissions directly. It is possible that emissions trading

may provide greater long-term policy credibility, as the community can see the direct link between the policy instrument and the environmental objective. Australia's international commitments are likely to continue to be defined as quantitative targets, so this approach allows international obligations to be managed more effectively.

In the Green Paper that Government recognised that governments can also achieve abatement by regulating or placing legal restrictions on the activities that cause greenhouse gas emissions. However, the Green Paper noted that direct regulatory measures are often costly to administer and to comply with. Regulatory approaches provide little incentive to innovate or to do more than is absolutely necessary for compliance.

Relying entirely on alternative regulatory approaches, involving mandating some activities and proscribing others, is highly unlikely to achieve an efficient outcome. The primary reason is that the Government has insufficient information to know where the cheapest abatement opportunities might lie. Australia's emissions are the result of myriad individual decisions, any one of which could potentially be altered when faced with a carbon price. The Government could never know the right combination of decisions to change—and even if it did, this mix is likely to change over time. For example, even at a high level, the Government cannot know by how much each sector of the economy should reduce its emissions to achieve a particular emissions outcome in the least costly way. However, if the Government were to rely purely on regulatory measures, it would in fact be determining this balance. Because the Government can only ever have incomplete information about the economy's abatement potential, the abatement outcome of a purely regulatory approach is likely to be different from that achieved by emissions trading. The Scheme uses a market to determine where, and at what cost, emissions reductions occur. Instead of the Government deciding the best way to reduce emissions, the market allows consumers and businesses to do so, on the basis of their own preferences and costs.

In their submissions in response to the Green Paper, a number of stakeholders recognised the benefits of emissions trading. For example, BP Australia 'endorses the use of a well-designed emissions trading scheme as the centrepiece of climate policy—to provide for market-based, least-cost solutions to [greenhouse gas] emissions reduction' (Submission 355, p. 2).

Some stakeholders disagreed with the proposition that emissions trading was the best mechanism for achieving the required abatement, arguing that a carbon tax would provide an increased level of certainty for industry and the investment community. This argument was put forward by a number of companies, including ExxonMobil Australia (submission 254) and some industry associations, including the National Association of Retail Grocers of Australia (Submission 899).

It is unlikely that any government would be able to remove the real uncertainties associated with greenhouse gas mitigation over the long term. Both a carbon tax and an emissions trading scheme would need to be adjusted over time to reflect new emissions targets as the international architecture matures and scientific understanding of the global mitigation effort improves.

The Scheme has a range of measures to allow market participants to manage price uncertainty. Those measures include advance notice of the national trajectory and targets, Scheme caps, and linking arrangements; banking and limited borrowing of permits; and a price cap in the initial years of the Scheme. Furthermore, an emissions trading scheme can be

expected to provide market participants with a range of options, such as derivatives products, that will allow them to directly manage price risks.

To provide a similar level of certainty under a tax system, the Government would need to pre-commit to tax rates over a number of years. This would be difficult because it would require an understanding of the changing relationship between the tax rate and emissions levels, and the influence of changes in technology and shifts in the economy on that relationship.

Some stakeholders maintained that a carbon tax was administratively more simple and could therefore be implemented sooner. For example, Mark Stewart noted that one of the advantages of a tax was that it could be ‘implemented much sooner than complex cap-and-trade systems. Because of the urgency of the climate crisis, we do not have the luxury of waiting while the myriad details of a cap-and-trade system are resolved through lengthy negotiations’ (Submission 991, p. 5).

For a number of reasons, the Government does not consider a carbon tax more administratively simple than an emissions trading scheme:

- Most of the implementation and administrative requirements apply equally to an emissions trading scheme and a carbon tax. For example, both would require the Government to establish the coverage of the mechanism; establish and implement a reporting and compliance regime; establish either the appropriate tax rate or the Scheme cap; establish governance arrangements; consider the impacts on households and industry, and any necessary assistance measures; and develop and pass legislation.
- The Government would need additional information about the relationship between carbon prices and resulting emissions to design a tax system that delivered the same level of control over the quantity of emissions.
- An emissions trading scheme can easily be linked to other schemes, giving firms the capacity to access least-cost abatement opportunities internationally. As this occurs, carbon prices will equalise across countries, creating a global carbon price, without the need for centralised decision-making (other than the decision to allow linking). In theory, carbon taxes could also be harmonised, but in practice currently there is no international process that is considering such an approach.

The Garnaut Final Report recognised the benefits of emissions trading over a carbon tax. However, the report proposed a transition phase (2010 to the end of 2012) in which permits would be sold at a fixed price rather than auctioned. The Government does not consider a fixed-price transition desirable (Chapter 15 discusses this issue in more detail).

Some stakeholders consider that, while emissions trading is an appropriate measure, it is not sufficient to overcome all barriers to emissions reductions. For example, the Green Building Council Australia (Submission 496), Engineers Australia (Submission 322), the World Wide Fund for Nature (Submission 522) and a number of individuals suggested that additional regulatory measures should be adopted, for example to improve energy efficiency and encourage the uptake of renewable energy. While emissions trading is an efficient way of achieving low-cost national abatement, the Government recognises that additional measures will still be required to transition to the low-carbon economy. There is a role for

complementary measures to work alongside the Scheme to help to reduce Australia's emissions. Complementary measures are discussed further in Part 3.

Other stakeholders were concerned that emissions trading is prone to rent-seeking behaviour and therefore unlikely to achieve the established environmental objective. For example, Friends of the Earth stated that it is 'sceptical that the establishment of a trading scheme will be able to withstand the political pressures of the fossil fuel industry and other polluters who will attempt to reduce their liabilities under such a scheme' (Submission 411, p. 1). Others focused on the impact of rent seeking on the cost-effectiveness of the Scheme. For instance, Greenpeace stated that 'it is important to accept ... [that] pressure from special interest groups, will be a distortion of the [emissions trading] mechanism' (Submission 692, p. 3).

It is unclear whether the Scheme would be any more prone to rent seeking by special interest groups than would be the case with other policy approaches. Indeed, the transparency of the Scheme may be some protection against rent seeking. For example, the issue of the appropriate share of permits to the emissions-intensive trade-exposed sector (discussed in Chapter 12) has been the subject of much public debate. It is not clear whether other regulatory measures in a range of spheres that have provided exemptions or weaker regulatory constraints for some parties have been subject to the same level of debate. The Government has taken a careful approach in designing the Scheme, a key benefit of which is that the Scheme cap will be transparently related to Australia's national emissions reduction targets.

The Scheme also reflects the Government's best practice regulation principles in seeking to minimise compliance and administrative costs for both business and Government (see Box 5.4).

Box 5.4: Best practice regulation and the Scheme

The design of the Carbon Pollution Reduction Scheme reflects the Government's best practice regulation principles in seeking to minimise compliance costs for business. The scheme builds, where possible, on existing regulatory structures, providing certainty for participating entities. Where new regulation is required for the introduction of the Scheme, it has been designed to impose minimal administrative costs.

The Scheme regulatory will be amalgamated with the Greenhouse and energy Data compliance obligations for liable entities. The use of the Corporations Act 2001 to regulate permits and ensure the ongoing credibility of the Scheme, rather than the creation of new regulatory regime, will further minimise the administrative costs for both market participants and for Government.

The introduction of the Scheme provides a national approach to climate change. The Government will continue to engage with the States and territories to maximise the opportunities for streamlining obligations of the Scheme and state and territory programs.

Five-yearly strategic reviews will also ensure that the Scheme continues to operate effectively and efficiently and provide an opportunity to monitor, and potentially reduce, the administrative costs of the Scheme incurred by participants and the Government.

The Government considers that the Scheme is the best policy measure to deliver a reduction in emissions. The Scheme can reduce Australia's emissions in a flexible and cost-effective way. It can also support an effective global response (for example, by linking to the international market), while also allowing for efficient and effective measures to assist households and firms with the transition.

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- 1 Australian Government '*Australia's Low Pollution Future: The Economic of Climate Change Mitigation*' Commonwealth of Australia 2008.
 - 2 Article 2 of the UNFCCC states: 'The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.'