7 Reporting and compliance

This chapter outlines the key reporting and compliance obligations that will fall on liable entities under the Carbon Pollution Reduction Scheme (the Scheme). It deals with how liable entities will be defined under the Scheme, the monitoring and reporting of emissions, audit, appropriate record keeping, the surrender of eligible permits and the enforcement provisions that will apply if entities do not meet their obligations under the Scheme.

A credible and robust Scheme will depend on strong monitoring, reporting, audit and compliance provisions. In submissions to the Green Paper, this was widely recognised by stakeholders. The Energy Supply Association of Australia (ESAA), for example, stated:

> For the Scheme to operate efficiently, market participants will need to have confidence in the accuracy of emissions reported and have timely access to the compliance data. (Submission 715, p. 14)

This chapter lays out the Government's framework for reporting and compliance that will support the effective operation of the Scheme:

- Section 7.1 outlines the Scheme's relationship with the National Greenhouse and Energy Reporting System.
- Section 7.2 defines who will be the legal entity liable for obligations arising from a covered facility under the Scheme.
- Section 7.3 outlines key monitoring provisions for emissions under the Scheme.
- Section 7.4 outlines reporting provisions for emissions under the Scheme.
- Section 7.5 outlines provisions relating to the audit of emissions under the Scheme.
- Section 7.6 describes the compliance process and timeline for the surrender of eligible emission permits under the Scheme, and the enforcement provisions that will be instituted to ensure compliance with the Scheme.
- Section 7.7 describes the role of the national registry in supporting the key elements of the Scheme.

7.1 The National Greenhouse and Energy Reporting System

The *National Greenhouse and Energy Reporting Act 2007* (NGER Act) provides a national framework for the reporting and audit of information related to greenhouse gas emissions, energy consumption and energy production. The NGER Act will underpin the Scheme,

providing the primary source of emissions data on which obligations under the Scheme will be based.

To streamline processes for liable entities under the Scheme, it will be important to use, to the maximum extent possible, the National Greenhouse and Energy Reporting System (NGERS) to report and measure energy and emissions data. In the Green Paper the Government expressed the following preferred position.

Green Paper position

The National Greenhouse and Energy Reporting System would be the starting framework for monitoring, reporting and assurance under the Scheme, but certain elements of it will be strengthened to support the Scheme.

Stakeholders strongly supported the proposal that NGERS provide the framework for monitoring, reporting and assurance under the Scheme. ExxonMobil Australia Pty Ltd, for example, stated:

> ExxonMobil supports the use of NGER as the starting framework for emissions monitoring and assurance under the emissions trading Scheme, as its goal is to streamline reporting into a consistent framework and therefore overcome duplication between the state and federal levels. (Submission 254, p. 8)

Stakeholders also generally supported strengthening specific elements of NGERS to support the Scheme, recognising that direct financial obligations will arise under the Scheme as a result of emissions reporting. Chevron Australia noted that while the NGERS framework could be used as the starting framework for reporting and assurance under the Scheme, elements may need to be strengthened to accommodate the financial assurance required under the Scheme. (Submission 716, p. 27)

The specific NGERS provisions to be strengthened in legislation to support the Scheme are outlined in this chapter.

Policy position 7.1

The National Greenhouse and Energy Reporting System will be the starting framework for monitoring, reporting and assurance under the Scheme. Specific elements of the National Greenhouse and Energy Reporting System will be strengthened to support the Scheme.

7.2 Defining the liable entity

In general, there will be two categories of liable entities under the Scheme, those liable for a facility that directly produces emissions above a certain threshold, and those entities that are specifically defined as upstream liable entities (for example, upstream suppliers of liquid fuels). This section deals with the identification of liable entities in relation to facilities that directly emit above a certain threshold. Where Scheme obligations are placed on upstream entities, Chapter 6 sets out the point in the supply chain where these obligations will fall.

7.2.1 Operational control over covered facilities

The Green Paper discussed a number of approaches to determining which entity would be liable for Scheme obligations arising from a covered facility. These approaches included:

- an 'operational control' test as defined under the NGER Act

or

- a 'financial control' test where Scheme obligations would fall on entities which have the ability to direct the financial and operating policies of the facility with a view to gaining economic benefits from its activities.[1]

In the Green Paper, the Government set out that the key principles guiding the design of the Scheme will be simplicity, transparency and ease of implementation for both industry and government. Conscious that entities have already begun organising emission reporting systems around an operational control approach as defined in the NGER Act, the Government expressed the preference in the Green Paper that the NGER operational control approach would also apply for the determination of liability under the Scheme.

Green Paper position

Entities with operational control over covered facilities or activities would be liable for emissions obligations arising from those facilities or activities under the Scheme.

Submissions generally supported the approach proposed in the Green Paper that operational control would be used to allocate emissions obligations arising from a covered facility based on consistency with the NGERS framework and given the extensive industry input that has occurred to date in establishing NGERS. For example Origin Energy noted:

> Origin supports the position that in general, entities with operational control over covered facilities or activities would be liable for emissions obligations under the Scheme. (Submission 815, p. 47)

The Investment and Financial Services Association (IFSA) also stated:

> Consistent with the current reporting obligations under the National Greenhouse and Energy Reporting System, IFSA is supportive of the Government's preferred position to adopt an operational control approach to allocate obligations under the scheme. (Submission 338, p 6)

A small number of stakeholders made separate proposals that the Scheme should take an equity share approach to allocating obligations for covered facilities under the Scheme as they propose that this would best reflect private commercial arrangements and align with financial reporting requirements. The Australian Industry Greenhouse Network (AIGN) noted:

> AIGN's main concern is with the use of NGERS reporting liability definitions for ETS acquittal liability. In summary, the ETS liabilities need to be aligned with the taxation law definitions of corporate liability. This means that the guiding rule for liability

should be equity ownership of the operations rather than operational control. (Submission 424, p. 9)

An equity share approach to apportioning obligations under the Scheme would amount to a departure from the operational control approach taken under the NGERS framework, to which entities are currently adapting for the purposes of emissions and energy reporting. Further, such an approach would significantly increase administrative complexity and raise implementation risks for the Scheme. Therefore, the Government does not support an equity share approach to allocating obligations under the Scheme.

The Government notes that in the majority of circumstances the same entity will have operational and financial control over a facility, and that in most cases, entities who will be allocated emissions obligations arising from a covered facility under the Scheme are currently using the operational control approach under NGERS. As such, in line with the Government's preferred position in the Green Paper, operational control will be the standard test for allocating obligations for emissions from a covered facility under the Scheme. This means that Scheme obligations will be placed on the entity that has the greatest ability to introduce and implement operational decisions for a covered facility.

Policy position 7.2

In general, an operational control test will be used to allocate emissions obligations arising from a covered facility. Exceptions to this rule are set out in section 7.2.2 below.

7.2.2 Exceptions to the operational control test

Some stakeholders did not agree that an operational control test should be used to allocate obligations in all cases under the Scheme. In the mining sector, where the entity with operational control of a facility is often different to the entity with financial control, some stakeholders argued in their submissions that the proposal to impose liability on the basis of operational control would place liability on an entity that does not derive the financial rewards from a facility. This was also raised in submissions from the pipeline industry where pipeline owners frequently contract out the operation of gas transmission pipelines to pipeline operators (Australian Pipeline Industry Association, Submission 584, p. 9).

In general, these submissions argued that an operational control approach to allocating obligations under the Scheme is not always appropriate in these sectors because the entity with financial control over the facility (that is, the entity that has the ability to direct the financial and operating policies of the facility with a view to gaining economic benefits from its activities) has the greatest influence over emissions arising from a covered facility. Stakeholders in these sectors requested that the Government show some flexibility where operational and financial control of a facility are held by different entities, by providing the opportunity for the entities to determine amongst themselves who will take on liability under the scheme (Leighton Holdings, Submission 402, p. 19; Babcock and Brown, Submission 489, p. 3).

The Government needs to balance the benefit of allowing greater flexibility with the potential costs associated with additional complexity and the risk of gaps in coverage. Balancing these considerations, the Government will provide some flexibility to shift Scheme obligations to the entity with financial control with the approval of the Scheme regulator. The Scheme

regulator will allow entities with financial control over a covered facility to take on Scheme liabilities where the following criteria are met:

1. both the transferee and the transferor agree to the transfer of liability under the Scheme; and

2. a single entity takes on Scheme obligations for a given facility (that is multiple parties could not take on obligations for a single covered facility); and

3. the entity taking on obligations under the Scheme agrees to accept responsibility for emissions reporting for that facility; and

4. the entity that is taking on obligations can demonstrate its capacity to obtain information to satisfy its reporting requirements under the NGER Act; and

5. the Scheme regulator is satisfied that the entity taking on Scheme obligations has the capacity to meet the liability; and

6. the entity taking on the liability is incorporated in Australia; and

7. the entity taking on Scheme obligations agrees to do so for a minimum of four years.

Policy position 7.3

With the approval of the Scheme regulator, entities with financial control over a covered facility will have some flexibility to take on Scheme liabilities where specified criteria are met.

In cases where the Scheme regulator approves a transfer of liability to an entity with financial control over a covered facility, the entity taking on liabilities under the Scheme will also be required to take on reporting obligations for that facility under NGERS.

7.2.3 Liability of controlling corporations

In the Green Paper, the Government proposed that a controlling corporation would be the liable entity under the Scheme where either the controlling corporation, or a member of the controlling corporation's group, has control over a covered facility. The Government expressed this preference to reduce compliance costs and implementation risks for corporations and the Government by reducing the number of liable entities under the Scheme.

Green Paper position

For corporations, obligations would be placed on the controlling corporation of a company group where a member of the group, which includes the controlling corporation, has operational control over a covered facility or activity.

This proposal is consistent with the NGER Act, which imposes reporting obligations on controlling corporations of a corporate group, where a controlling corporation is generally the corporation at the top of the corporate hierarchy in Australia. Corporate grouping in this way also provides increased surety for the Scheme as the controlling corporation is likely to have

greater access to funds and will therefore have a greater ability to meet its Scheme liability than an individual corporation with a single facility might otherwise have.

Most stakeholders did not comment on the proposal for grouping of liability under the controlling corporation. Therefore, the Government confirms that, as a general rule, a controlling corporation will be the liable entity under the Scheme where a member of the controlling corporation's group, has control over a covered facility. Some exceptions to this position are set out in section 7.2.4 below.

The entities that will form the controlling corporation's group include the controlling corporation and its subsidiaries.

Policy position 7.4

In general, Scheme obligations will fall on the controlling corporation of a corporate group where either the controlling corporation or a member of the controlling corporation's group has control over a covered facility.

Entities included in the controlling corporation's group will include the controlling corporation and its subsidiaries.

7.2.4 Liability of subsidiaries

A small number of stakeholders did express a preference that, in some cases, a member of the controlling entity's group other than the controlling corporation, should be able to take on liability for the obligations arising from a covered facility (Origin Energy, Submission 815, p. 46). These stakeholders argued that in some cases placing Scheme obligations on the controlling corporation would significantly impair the ability of some parties to pass through carbon costs in existing contracts and convey efficient price signals to end users (note that broader issues relating to the pass through of carbon costs are discussed in Chapter 15).

The Government recognises the potential for pre-existing contracts to inhibit appropriate economic and environmental outcomes in the transition to the Scheme. In general, the Government does not want to impede mutually agreed solutions to transitional difficulties. Therefore, with the approval of the Scheme regulator, controlling corporations will have some flexibility to shift Scheme obligations to a subsidiary within their group provided that criteria in section 7.2.2 are met, and with the caveat that Scheme obligations would revert back to the controlling corporation if the subsidiary fails to meet its obligations under the Scheme.

Policy position 7.5

With the approval of the Scheme regulator, controlling corporations will have some flexibility to shift Scheme obligations to another legal entity within their group where certain criteria are met, and with the caveat that Scheme obligations would revert back to the controlling corporation if the subsidiary fails to meet its obligations under the Scheme.

In cases where the Scheme regulator approves a transfer of liability for a covered facility to another entity within a controlling corporation's group, the entity taking on liabilities under the Scheme will also be required to take on reporting obligations for that facility under NGERS.

7.2.5 Government entities

The Government outlined in the Green Paper that government organisations would be liable under the Scheme for any covered emissions, but it did not outline the point of liability for these organisations.

Liability will apply to Commonwealth, state and territory governments where they have operational control over a covered facility. For instance, if a Federal government department had operational control over a covered facility, the Commonwealth would be the liable entity. Liability will also apply to Commonwealth, State or Territory statutory corporations and local councils.

Policy position 7.6

Liability will apply to Commonwealth, state and territory governments, statutory corporations and local councils where they have operational control over a covered facility.

7.2.6 Unincorporated joint ventures

In some emission producing industries, unincorporated joint ventures are commonly utilised to provide for the joint management of risks and rewards arising from a project. The parties to such agreements often contribute differing levels of funding and expertise to a project depending on the terms of the specific agreement.

In the Green Paper, the Government expressed the preference that covered facilities operated by unincorporated entities would attract liabilities under the Scheme. However the Green Paper did not discuss how this general approach would apply to specific commercial arrangements such as unincorporated joint ventures.

Typically, unincorporated joint venture arrangements are governed by a contract known as a Joint Operating Agreement. Under this agreement, the participants generally appoint an 'operator' to manage and undertake joint venture activities on behalf of the parties to the joint venture agreement. While the 'operator' is normally nominated to undertake and be responsible for the day-to-day running of the project, the joint venture participants usually meet costs and obligations incurred by the operator in relation to a facility according to the proportions set out in the Joint Operating Agreement.

A small number of submissions from the petroleum production and exploration industry, specifically commented on the point of liability for unincorporated joint venture arrangements. Submissions from this industry highlighted that the way in which joint ventures would prefer to discharge their obligations under the Scheme will vary on a case by case basis. Some joint ventures would prefer to have the operator purchase and surrender permits on behalf of joint venture participants, whereas in other instances, individual joint venture participants may prefer to meet their share of obligations independently (Australian Petroleum Production and Exploration Association (APPEA), Submission 834, p. 31).

As set out in section 7.2.1, the general approach under the Scheme is that the operational control test will be used to allocate emissions obligations arising from a covered facility. In the case where facilities are governed by unincorporated joint venture agreements, the 'operator' of the facility is likely to be the entity with operational control, and hence be the liable entity under the Scheme. While the entity with operational control will be the liable entity under the Scheme, the participants to joint operating agreements will also be free to break up the task and cost of purchasing compliance permits according to their specific agreements. The entity with operational control will still be liable to surrender the correct number of compliance units for the covered facility, but it could effectively do so with contributions from the other joint venture participants. This approach is consistent with the general approach taken under joint operating agreements whereby the costs incurred by an 'operator' in relation to project are split between the participants according to their private agreement.

The way in which different joint ventures approach the task of purchasing compliance permits is likely to vary on a case by case basis. Accordingly, private contract arrangements between the participants are likely to be more flexible and aligned to the specific needs of the parties than the alternative of the Government attempting to define an across the board rule in legislation. Such a rule would invariably be inappropriate for some arrangements, possibly requiring further special rules and additional complexity.

Where a single legal entity does not have operational control over the facility, the legislation establishing the Scheme will include provisions to require a single legal entity to be nominated by the participants to the joint venture to meet obligations under the Scheme.

Policy position 7.7

Where a covered facility is operated under an unincorporated joint venture agreement, the legal entity with operational control over the facility will be the liable entity under the Scheme.

- The participants to unincorporated joint venture agreements will be free to break up the task and cost of purchasing compliance permits according to their specific agreements, with the entity with operational control being finally liable to surrender the correct number of compliance units for the covered facility.

If a single legal entity does not have operational control over a covered facility, a single legal entity will be required to be nominated by the participants to the joint venture to meet Scheme obligations.

7.2.7 Trusts, partnerships and unincorporated associations

The Government's preferred position in the Green Paper was that other unincorporated entities, such as trusts, partnerships or unincorporated associations, would be liable under the Scheme if they have operational control over a covered facility.

Green Paper position

Unincorporated entities would also be liable under the scheme if they have operational control over a covered facility or activity.

Few submissions commented on this point. In keeping with the general approach taken under the Scheme, where a single legal entity is identified as having operational control over a covered facility, that entity would be the liable entity under the Scheme. If a single legal entity does not clearly have operational control over a covered facility, a single legal entity (a trustee, partner or member of the management committee of an unincorporated association) will be required to be nominated to meet Scheme obligations.

Policy position 7.8

Where a single legal entity is identified as having operational control over a covered facility, that entity would be the liable entity under the Scheme.

If a single legal entity does not have operational control over a covered facility, a single legal entity (a trustee, partner or member of the management committee of an unincorporated association) will be required to be nominated to meet Scheme obligations.

7.2.8 Liability for part year

Where an entity has obligations under the Scheme in relation to a facility for only part of a financial year, the entity's obligations will be determined on a pro-rata basis. This pro-rata approach will apply when a facility commences operations, ceases operations or the liable entity changes part way through a compliance year.

Policy position 7.9

Where an entity has obligations under the Scheme in relation to a facility for a number of, but not all days in a financial year, that entity's obligations under the Scheme will be determined on a pro-rata basis.

In applying the pro-rata approach, the Scheme regulator will also have discretion to consider the actual pattern of annual emissions.

7.3 Monitoring

Under the Scheme, all liable entities will be required to monitor their emissions according to defined methodologies to determine their emissions each year and to keep appropriate documentation and records to enable reported emissions to be audited.

The Green Paper noted that emissions monitoring and estimation can take several forms, from the use of observable activity data to estimate emissions, to site-specific sampling, through to direct measurement of emissions. The classes of methodologies available for use under NGERS are set out in the box below.

Box 7.1: Classes of methodologies available for NGERS

Method 1: the National Greenhouse Accounts default method

Method 1 provides a class of estimation procedures derived directly from the methodologies used by the Department of Climate Change when preparing the National Greenhouse Accounts. The use of methodologies from the National Greenhouse Accounts anchors Method 1 within the international guidelines adopted by the United Nations Framework Convention on Climate Change for the estimation of greenhouse emissions.

Method 1 specifies the use of designated emission factors in the estimation of emissions. These emission factors are national average factors determined by the Department of Climate Change using the Australian Greenhouse Emissions Information System.

Method 2: a facility-specific method using industry sampling and listed Australian or international standards or equivalent for analysing fuels and raw materials

Method 2 enables entities to undertake additional measurements—for example, the qualities of fuels consumed at a particular facility—in order to gain more accurate estimates for emissions for that particular facility. This method draws on the large body of Australian and international documentary standards prepared by standards organisations to provide benchmarks for procedures for analysing the properties of fuels being combusted.

Method 2 also draws on existing technical guidelines used by reporters under the Generator Efficiency Standards program.

Box 7.1: Classes of methodologies available for NGERS (continued)

Method 3: a facility-specific method using Australian or international standards or equivalent for sampling and analysing fuels and raw materials

Method 3 is very similar to Method 2, except that it requires reporters to comply with Australian or equivalent documentary standards for sampling (of fuels or raw materials) and documentary standards for analysing fuels.

Method 4: direct monitoring of emission systems, on either a continuous or periodic basis

Method 4 provides for a different approach to the estimation of emissions. Rather than analysing the chemical properties of inputs (or, in some cases, products), Method 4 aims to directly monitor greenhouse emissions arising from an activity. While this approach can provide a higher level of accuracy, depending on the type of emission process, it is more data-intensive than other approaches.

As for Methods 2 and 3, a substantial body of documented procedures on monitoring practices and state and territory government regulatory experience provides the principal source of guidance for the establishment of the system proposed under Method 4.

Adopting NGERS as the starting framework for monitoring and estimating emissions under the Scheme, and noting that the NGERS methodologies conform to international obligations and Australia's National Greenhouse Accounts, in the Green Paper the Government put forward the following preferred position.

Green Paper position

Emissions estimation methodologies under the scheme would be those available under the National Greenhouse and Energy Reporting System.

Stakeholders strongly supported adopting the NGERS methodologies for emissions reporting under the Scheme.

The NGERS methodologies will provide an important link between emissions reported under the Scheme and those reported under Australia's National Greenhouse Gas Inventory, ensuring that emissions reporting under the Scheme is consistent with Australia's international reporting obligations. The Scheme's use of NGERS methodologies will also ensure reporting continuity for liable entities, easing their compliance costs and ensuring that learning from the first years of NGERS is not lost.

A key element of the NGERS framework is to provide choice for reporting entities in selecting emissions estimation methodologies from among those set out under NGERS. Stakeholders also supported retaining this flexibility wherever possible, allowing entities to determine the most cost-effective method to meet their reporting requirements under the Scheme. Allowing reporters to choose the method they will use to estimate emissions enables them to balance the costs of using the higher methods (Methods 2 and above) against the

benefits of potentially improved emission estimates. In most cases, the choice of methodology available to reporting entities under NGERS will be retained under the Scheme.

The NGER Act does not currently require the reporting of all emissions or sinks that will be covered by the Scheme. The legislative package introducing the Scheme will require that emissions data from all sources and sinks covered by the Scheme be reported to the Scheme regulator.

Emissions-related information relating to entities that will have obligations under the Scheme but not currently required to be reported under NGERS includes:

- quantities and emissions associated with synthetic greenhouse gases that are produced, imported and exported
- quantities of fuels (such as coal, gas, liquid fuels) supplied to other entities by upstream suppliers (coal mines, gas producers, fuel excise and customs duty remitters) (see Chapter 6)
- net changes in forest carbon sequestration and other relevant information, such as forest management plans, relating to forestry operations that elect to opt into the Scheme—at present NGERS does not provide a methodology to report net changes in carbon sequestered in forests (see Chapter 6)
- emissions information relating to entities who will have obligations under the Scheme but are not constitutional corporations, such as unincorporated entities, some government organisations and individuals.

Some entities that will have obligations under the Scheme but are not currently obliged to report under NGERS already report their energy or emissions information to the Government for other purposes. In particular, importers of synthetic greenhouse gases and suppliers of liquid fuels currently report relevant data to the Government under existing ozone protection and fuel excise legislation. Recognising this, the Government expressed a preferred approach in the Green Paper that, to lower the compliance burden on reporting entities, the reporting of energy and emissions information under the Scheme would be aligned with existing regimes to the maximum extent possible. Section 7.3.3 discusses the streamlining of reporting for upstream fuel suppliers and the methodologies to be used for these entities.

Methodologies for reporting net changes in carbon sequestered from forestry operations will be built into the National Greenhouse and Energy Reporting (Measurement) Determination 2008 (NGER Measurement Determination) on reporting methodologies to facilitate the reporting of forestry information under the Scheme (see also Chapter 6).

The NGER Act will also be amended to require the reporting of emissions information for entities that are not corporations. These amendments will expand the NGER Act to cover all entities that may have obligations under the Scheme.

Policy position 7.10

Emissions estimation methodologies under the Scheme will be those set out under the National Greenhouse and Energy Reporting System.

The legislative package introducing the Scheme, including consequential amendments to the *National Greenhouse and Energy Reporting Act 2007*, will require that emissions data on all sources and sinks to be covered by the Scheme be reported to the Scheme regulator.

7.3.1 Methodologies at commencement

In general, 'higher order' methods are likely to produce more accurate estimates of emissions at the facility level than the 'lower order' methods, but also generally entail higher compliance costs for reporting entities. More accurate reporting of emissions under the Scheme will generally lead to the more efficient operation of the Scheme and greater fairness by ensuring that entities face liabilities in line with their actual emissions.

Notwithstanding the importance of allowing reporting entities to make their own judgments in balancing the costs of using 'higher order' methods against the benefits of potentially improved emission estimates, in the Green Paper the Government proposed limiting the number of methodologies available for estimating certain emission sources under the Scheme.

Recognising the tension between the accuracy of emission reporting and compliance costs for liable entities, in the Green Paper, the Government proposed that Method 2 or above would only be imposed as the minimum to be used from the commencement of the Scheme where those methodologies are already in widespread use throughout industry.

Electricity generation

Under NGERS, electricity generators that meet certain thresholds are required to estimate carbon dioxide emissions from the combustion of coal and gas using NGERS Methods 2-4. This requirement reflects widespread commercial practice in the sector and requirements in place under the Australian Government's Generator Efficiency Standards program. The Government noted this when setting out its preferred position in the Green Paper.

Green Paper position

The measurement and reporting of electricity sector emissions (as required for the National Greenhouse and Energy Reporting System and the Generator Efficiency Standards program) would have minimum standards for emissions estimation methodologies imposed from the commencement of the scheme.

Submissions did not oppose the continuation of the use of Method 2 as the base level for reporting of emissions, as is the current arrangement under NGERS. In its submission to the Green Paper, Alcoa noted:

> As it stands, Alcoa's power plants (refineries and Anglesea) are already included in the Department's Generator Efficiency Standards program, so [they] already use Method 2—a higher order method, for electricity emission factor determination. Alcoa

> does not object to the CPRS 5.7 requirement that Method 2, where used should continue to be used for a minimum period of four years. (Submission 740, p. 36)

Therefore, in line with the Government's preference in the Green Paper, electricity generators monitoring and reporting carbon dioxide emissions that are covered under the Scheme will be required to use Methods 2–4.

Policy position 7.11

Electricity generators will be required to use National Greenhouse and Energy Reporting System Methods 2–4 for estimating and reporting carbon dioxide emissions that are covered under the Scheme (as required for the National Greenhouse and Energy Reporting System and the Generator Efficiency Standards program).

Perfluorocarbon emissions

Perfluorocarbon (PFC) emissions from the aluminium sector are currently estimated using facility-specific estimation methodologies consistent with widespread business practice. Aggregated sector estimates voluntarily provided to the Australian Government using these methodologies are used to inform the National Greenhouse Accounts. Noting these existing practices, the Government set out its preferred position in the Green Paper.

Green Paper position

The measurement and reporting of perfluorocarbon emissions (from aluminium production, as is current business practice and used for the National Greenhouse Accounts) would have minimum standards for emissions estimation methodologies imposed from the commencement of the scheme.

Very few submissions commented on the reporting of PFC emissions from aluminium smelting using Method 2 or above. Given continuing industry practice, liable entities reporting PFC emissions will be required to use Method 2 or above in line with the Government's preference in the Green Paper.

Policy position 7.12

Liable entities reporting PFC emissions from aluminium smelting processes will be required to use National Greenhouse and Energy Reporting System Methods 2–4 for estimating these emissions under the Scheme.

Underground coal mines

Underground coal mines are currently required by state regulators to monitor emissions via direct monitoring methods for the purposes of state-based occupational health and safety regulations. These methods are analogous to direct reporting requirements of NGERS Method 4, set out under the NGER Measurement Determination. A number of major companies also publicly report directly monitored emissions data in their annual reports. These data are also used to inform the National Greenhouse Accounts. The Government noted this in arriving at its preferred position in the Green Paper.

Green Paper position

The measurement and reporting of fugitive emissions from underground coal mines (as currently mandated by state safety regulations for most mines) would have minimum standards for emissions estimation methodologies imposed from the commencement of the scheme.

Submissions generally recognised the adaptability of measurement technologies currently in place for health and safety reporting to meet reporting requirements under the Scheme. The Australian Coal Association stated:

> Of course, measurement of emissions for underground mines is more practical as we can directly measure emissions while mining. (Submission 530, p. 9)

In recognising this, some submissions noted that existing technologies would benefit from development to increase their accuracy by better measuring emission flow rates from underground coal mines (Xstrata, Submission 593, p. 15). Other submissions noted the considerable variation between mines in the application of these measurement methodologies, with resulting differences in the accuracy of measurement practices.

The Government recognises that continual improvement in the accuracy of emission estimates from underground mines and the consistent application of measurement equipment are important to ensure equality of measurement standards across the industry. However, existing monitoring technologies in place under state-based health and safety regulations are sufficient to comply with Method 4 methodologies for periodic monitoring of emissions as set out in the NGER Measurement Determination. These techniques provide relatively accurate measurements for reporting under the Scheme.

To ensure consistent application of methods across the industry, the Government has established a working group to work with the coal industry between now and mid-2009 to develop detailed guidelines on the application of emissions estimation methodologies. These guidelines will be consistent with the methods set out in the NGER Measurement Determination and aim to standardise the application of estimation methods across the industry to provide certainty to liable entities about their reporting obligations.

Industry submissions also sought clarity on how the Scheme would deal with uncertainty of emissions estimates. The Government canvassed the option of specifying target uncertainty ranges for the estimation of emissions in the Green Paper, but did not prefer this approach at Scheme commencement, as to do so would require it to specify rigorous methods for calculating uncertainty (which adds complexity) or to require participants to self-estimate uncertainty (which might reduce transparency).

In the lead-up to the commencement of the Scheme, the Government will continue to work with the industry to elaborate guidance on the application of higher order measurement methods and measurement uncertainty issues.

Policy position 7.13

Entities reporting fugitive emissions from underground coal mines will be required to use National Greenhouse and Energy Reporting System Methods 2–4 for the estimation of emissions under the Scheme.

Solid waste landfills

Emissions from solid waste at different sites depend on factors such as historical waste volumes, organic composition, site management practices, environmental conditions (geographical location) and the oxidation of methane in the landfill. Current NGERS methods available for estimating emissions from landfill sites provide for measurement based on industry average methods (Method 1) or facility-specific estimation of emissions using NGERS Methods 2 and 3. Submissions from the waste sector commented broadly on the accuracy of NGERS emission estimation methodologies and on whether minimum level methodologies should be set for use in estimating emissions from the sector.

While some submissions implied preferences for site-specific methods (NGERS Methods 2 and 3) due to their ability to better represent site-specific emissions (Thiess Services, Submission 229), views differed across the industry. For example, SITA Environmental Solutions stated:

> The waste industry has debated at length whether a simple proxy measure (a simplified Method 1) or the more complicated FODM (Methods 1–3) will give a more accurate or at least fairly allocated emission liability. There is little consensus. (Submission 406, p. 2)

In its submission to the Green Paper, the NSW Government proposed a simplified method for the estimation of emissions from waste landfills (Submission 903). The proposed methodology was a variation on NGERS Method 1, which would set default factors for waste streams entering landfills. This approach would lead to the equal treatment of new waste deposited at landfill sites around Australia, however it would also amount to reduction in the facility-level accuracy of reporting currently provided for under the NGERS methodologies. Such an approach would also amount to a departure from the principle that facility-level accuracy of emissions information should increase under the Scheme over time. For these reasons, this approach is not supported by the Government.

As discussed in Chapter 6, the waste sector also raised concerns over the coverage of emissions arising from past waste streams deposited at solid landfill sites (‘legacy emissions’). As set out in Chapter 6, an allowance for legacy emissions from solid waste deposited at landfill sites will be provided for transitional period (for a more detailed discussion of the coverage of waste sector emissions and legacy emissions see Chapter 6).

As most waste landfills will give rise to both legacy and non-legacy emissions, in order to provide for transitional arrangements, emissions estimation methodologies used to report emissions from waste landfills must have the capacity to distinguish between both types emissions. Under the NGERS framework, only indirect emissions estimation methodologies (Methods 1-3 under the NGER Measurement Determination 2008) have capacity to differentiate legacy and non-legacy emissions from waste landfills. Therefore, NGERS Methods 1-3 will be the only methods available for estimating the proportion of legacy

emissions arising from existing landfill sites. While the NGER Measurement Determination does not currently include a direct measurement methodology (Method 4) for the estimation of landfill emissions, the Government is working with the industry to explore the development of a direct measurement method. If developed, this methodology would be available for use by landfill sites in estimating total emissions arising from a site. If a direct measurement approach were adopted by a landfill site to calculate its total emissions, that site's legacy emissions would be calculated by applying the proportion determined as legacy emissions, developed using Method 1-3, to the total level of emissions determined using Method 4.

Policy position 7.14

Solid waste landfill sites will be required to use National Greenhouse and Energy Reporting System Methods 1–3 to estimate the proportion of legacy emissions arising from landfill sites.

7.3.2 Improving accuracy over time

In the Green Paper, the Government noted the importance of improving, over time, the facility-level accuracy of emissions reporting. Greater accuracy would make the Scheme fairer by ensuring that each facility faces carbon costs that most accurately reflect its specific emissions profile. More accurate facility-level information will also increase Scheme efficiency by revealing a more detailed profile of a facility's emissions and abatement opportunities.

The Government also noted the need to balance the benefits of greater accuracy in facility-level reporting with the potential higher measurement costs of more accurate methodologies. Weighing these issues, the Government expressed the following preferred position in the Green Paper.

Green Paper position

Staged increases in the accuracy of emissions estimates over time would be pursued by imposing increasing minimum standards for estimation methodologies, where this is cost effective for the scheme overall.

Additional sources would be investigated for the possible imposition of minimum standards for emissions estimation methodologies soon after the commencement of the scheme, but not in the first two years of the scheme. Sources that may warrant investigation include:

- fugitive emissions from open-cut coal mines
- emissions from coal use (non-electricity, such as steel production)
- waste sector emissions
- natural gas combustion emissions (non-electricity).

Stakeholders generally recognised the benefits to the Scheme of pursuing staged increases in the facility-level accuracy of emissions reports. ExxonMobil, for example, stated:

> ExxonMobil is also broadly supportive of the use of emissions estimating methodologies available under NGER and acknowledges the need for staged increases in accuracy and minimum standards for specific emissions sources. (Submission 254, p. 8)

In its submission, ESAA also stated that the energy industry considers that emission estimation methodologies should reflect the principle of continuous improvement (Submission 715, p. 14).

Industry stakeholders commented broadly on the preference for higher order methods to be developed for a range of sources after the Scheme begins to facilitate more accurate reporting of emissions at the facility level. Stakeholders also welcomed the Government's commitment to consult affected industries before implementing new minimum methodological standards to be used for reporting emissions under the Scheme.

For example, in its submission to the Green Paper, the Australian Institute of Petroleum noted the necessity for a clear statement regarding advance consultation on methodology changes (Submission 673, p. 30).

The Government will consider staged increases in the required accuracy of emissions estimates after the Scheme has begun, where the benefits to the efficiency of the Scheme outweigh the compliance costs of implementing more accurate monitoring methods. The Government will engage with affected industries in determining minimum methodologies to be used for estimating certain emission sources.

Policy position 7.15

Staged increases in the accuracy of emissions estimates over time will be pursued by imposing increasing minimum methodologies for certain sources, where the benefits to the efficiency of the Scheme outweigh the compliance costs of implementing more accurate monitoring methods.

The responsible Minister will use existing powers under the *National Greenhouse and Energy Reporting Act 2007* to set minimum estimation methodologies. The Minister will consult with affected parties on the implementation costs and on the adequacy of notice before imposing new minimum standards for emissions estimation methodologies for a source or activity.

Open-cut coal mines

While technologies exist to accurately measure fugitive emissions from underground coal mines, measurement methodologies for estimating emissions from open-cut coal mines are comparatively less developed.

In submissions to the Green Paper, the coal mining industry expressed concern that the default methods currently available for measuring fugitive emissions from open-cut coal mines would disadvantage some mines. In particular, the Australian Coal Association submitted:

> It is recognised both here and overseas that the reliability of existing open-cut greenhouse gas emissions estimation is very low. (Submission 530, p. 7)

In submissions to the Green Paper, both Xstrata and the Australian Coal Association argued that to address potential competitive and economic neutrality issues, coverage of fugitive emissions from underground and open-cut coal mines should be delayed until after technical methodological issues relating to open-cut coal mines have been resolved (Australian Coal Association, Submission 530, p. 13; Xstrata, Submission 593, p. 15). As discussed in Chapter 6 the Government does not support the exclusion of fugitive emissions from coal mines, because delaying their coverage would impose a greater share of the costs of reducing Australia's emissions on other covered sectors. Moreover, there does not appear to be a strong case for delaying coverage of fugitive emissions from coal mines on the basis of measurement issues, since open-cut mines will have the option of using a number of methods to estimate emissions, either an internationally approved default emissions factor approach, or the site specific-methodologies in the NGER Measurement Determination (see Chapter 6).

A number of submissions also noted the significant progress that the industry is making towards the refinement of higher order methodologies for the measurement of fugitive emissions from open-cut coal mines. Xstrata noted:

> Industry has been proactively addressing this knowledge gap by working with the research community to develop an alternative estimation methodology for open cut mines. The coal industry through the Australian Coal Association has also sought to develop an ongoing dialogue with government to address the practicality of covering fugitive emissions from coal mining under the ETS. The "higher" order methodology to estimate fugitive emissions being developed by industry is not yet available for implementation and will need to be peer reviewed and accredited by government before it can be implemented or audited under the NGERs. (Submission 593, p. 15)

The Australian Government supports giving priority to refining higher order methods before the Scheme begins.

The NGER Measurement Determination currently provides for the use of site specific emission estimation methodologies via the sampling of fugitive gases arising from specific mines sites based on NGERS Methods 2 and 3. These methods currently provide alternative methods for estimation of emissions from open-cut coal mines where default estimation methods do not accurately reflect the specific characteristics of a given mine site.

While the NGER Measurement Determination currently provides for these site-specific methods, further work is continuing under the Australian Coal Association Research Program to provide input to the Government for the development of guidance on the application of the methods to open-cut mines sites, to be consistent with the requirements of the determination. The Government welcomes this work and to this end has developed a working group to work in conjunction with the industry to further refine these methods before the Scheme begins.

Following the completion of this work and the commencement of the Scheme, the Government will work with the industry to determine whether a minimum methodology standard should be imposed on all entities reporting fugitive emissions from open-cut coal mines.

Other sectors

In the Green Paper, the Government also sought comments on its preference to undertake investigations into the scope for setting minimum methodologies for estimating emissions from a number of other emissions sources, including:

- the combustion of coal in circumstances other than electricity generation
- the combustion of natural gas in circumstances other than electricity generation
- the disposal of solid waste at landfill sites.

In addition to being used in electricity generation, coal is consumed directly by a number of large industrial emitters, such as the iron and steel, non-ferrous metal and cement industries. Given the size of these industrial operations and the variation in the carbon content of coal from different sources, the Government indicated in the Green Paper that the benefits to the Scheme of increased accuracy of reporting by those sources may outweigh the additional costs of using more accurate estimation methods.

Natural gas is also consumed in large volumes by industries other than those involved in electricity generation. In the Green Paper, the Government sought comments on the possible alignment of methodologies for the reporting of natural gas consumption across electricity generation and non-generation uses. However, the Government noted a number of issues to be resolved in relation to the availability of data including the composition of gas within specific transmission and distribution pipelines, the extent and reliability of gas composition analyses across Australia, possible problems associated with disclosing commercial information, an appropriate threshold, and the implementation costs of such an approach.

Relatively few submissions commented directly on proposals to investigate mandated higher order methods for the estimation of emissions from the combustion of coal and natural gas in circumstances other than electricity generation. Once the Scheme begins, the Government will engage with major consumers of coal and natural gas to investigate the scope for setting minimum measurement standards to bring emissions measurement into line with that required in the electricity generation sector.

Submissions on the future development of emissions estimation methodologies were received from the waste sector. These submissions and the Government's approach to estimating emissions from this sector is discussed above in section 7.3.1.

In accordance with the Government's preference in the Green Paper, the Government will engage with entities reporting emissions from all of the above sources to investigate setting minimum methodologies for their estimation, following the commencement of the Scheme.

Policy position 7.16

Additional sources will be investigated for the possible imposition of minimum standards for emissions estimation methodologies soon after the Scheme begins, but not in the first two years of the Scheme. The Government will give priority to considering the following sectors for possible inclusion following the commencement of the Scheme:

- emissions from coal use (non-electricity, such as steel production)
- emissions from solid waste deposited at landfills
- natural gas combustion emissions (non-electricity)
- fugitive emissions from open-cut coal mines.

7.3.3 Methodologies for upstream fuel liabilities

As proposed in Chapter 6, maximal Scheme coverage is a key element in lowering the overall cost to the Australian economy of achieving emissions reductions. Broad coverage can be achieved by covering not only as many sources of emissions as practicable but also as many of the emissions from each source as is feasible. For some emissions sources, close to complete coverage can be achieved by applying Scheme obligations both to large direct emitters and to upstream fuel suppliers for emissions from small emitters. For example, Scheme obligations for emissions from coal combustion could be applied to both large coal users and coal mines for emissions from small coal users, such as household barbecues.

Liquids, solids and gaseous fuels

As described in Chapter 6, certain fuel suppliers will be obliged to surrender permits for emissions to be released from fuels they supply to entities who do not hold an Obligation Transfer Number (OTN) under the Scheme. Under these arrangements, in addition to being liable for the direct emissions they produce as a result of their own operations, upstream entities who supply fuels to entities without an OTN will also be liable for the emissions to be released from those fuels when they are combusted by downstream users in those fuels. Information regarding the operation of OTNs under the Scheme, and entities who will be required and entitled to obtain an OTN is set in Chapter 6.

Noting the special nature of upstream arrangements and the need to align the reporting of fuel quantities supplied to end users with fuel excise and customs duty, the Government expressed the following preferred position in the Green Paper.

Green Paper position

Further consultation and analysis would be undertaken to establish appropriate reporting requirements and emissions estimation methodologies relating to the obligations of upstream fuel suppliers under the scheme.

Noting the importance of other existing reporting regimes, the Green Paper also expressed the Government's preference that the Scheme utilise related provisions in other Australian Government schemes, such as the fuel excise and customs duty arrangements for liquid fuels, to minimise compliance burdens.

To give effect to this approach, upstream suppliers of coal, gas and liquid fuels will be required to measure and report the quantity of, and in some cases the emissions to arise from the combustion of, fuels they sell to downstream entities. Chapter 6 discusses situations where downstream users of fuels can take on direct liability for emissions arising from the combustion of certain fuels through the operation of an OTN granted by the Scheme regulator. Given these arrangements, in addition to obligations to report on their direct emissions, fuel suppliers will be required to report at least two additional sets of information to the Scheme regulator:

- quantities of fuels (such as coal, natural gas, liquid fuels) supplied to, or purchased from, entities holding an OTN

- quantities of fuels and emissions associated with quantities of fuels supplied to entities not holding an OTN.

Fuel suppliers will be required to apply national average emission factors to fuel quantities supplied to entities that do not have an OTN to reach an estimation of their obligations under the Scheme.

Submissions from upstream fuel suppliers generally supported the alignment of reporting methodologies for measuring fuel quantities with methodologies and guidances issued by the Australian Taxation Office and the Australian Customs Service relating to the measurement of quantities of liquid fuels subject to excise and customs duties. The Australian Institute of Petroleum, for example, stated:

> AIP strongly supports the need for the CPRS reporting rules to incorporate the relevant parts of the fuel excise legislation and Regulations etc., as well as the equivalent parts of the Customs legislation and Regulations. (Submission 673, p. 29)

To streamline reporting for liable entities, legislation introducing the Scheme will amend the NGER legislation to best use Australian Taxation Office methodologies and guidances relating to measuring quantities of liquid fuels subject to excise and customs duties. Entities that currently measure and report information to the Government under the above provisions will be able to use the same methods and practices to report emissions information to the Scheme regulator.

In relation to the upstream supply of natural gas and coal, the NGER Measurement Determination currently provides detailed standards around the measurement of quantities of gaseous and solid fuels (divisions 2.2.5 and 2.3.6). These provisions will be used to expand the determination to provide for the reporting of quantities of solid and gaseous fuels supplied for the purposes of the Scheme.

While utilising these provisions for the estimation of fuel supplied will streamline reporting between the two regimes, upstream liable entities will need to apply national average emission factors set out under the NGER Measurement Determination to supplied volumes to report their obligations under the Scheme. These emissions will then be reported to the Scheme regulator through the Government's Online System for Comprehensive Activity Reporting (OSCAR).

Because the end use that fuels are put to affects the combustion process, the NGER Measurement Determination provides detailed emission factors for each end use. An example of this is outlined in the table below.

Table 7.1: Differences in emissions factors by end use

End use	kg CO_2-e/GJ for CO_2 carbon dioxide	kg CO2-e/GJ for CH_4 methane	kg CO2-e/GJ for N_2O nitrous oxide	Total kg CO2-e/GJ carbon dioxide
Natural gas used in heavy duty vehicles	51.2	2.1	0.3	53.6
Natural gas used in light duty vehicles	51.2	5.5	0.3	57.0

In most cases, upstream suppliers will not be able to definitively determine the end use that a fuel will be put to. Therefore, national average emission factors will be used to determine emissions to be released from the combustion of the supplied fuels. Upstream fuel suppliers generally supported the application of average emission factors across uses, because it would provide certainty, a level playing field, and simplify their reporting (Australian Institute of Petroleum, Submission 673).

A small number of stakeholders argued that different emission factors could be applied to quantities of fuel supplied, depending on the end use that the fuel was likely to be put to. While in theory such an approach may lead to more accurate reporting, it would also require detailed tracing of the final uses of quantities supplied by upstream entities, significantly increasing the complexity of the Scheme and imposing more onerous reporting obligations on upstream liable entities.

Given that upstream suppliers will not be able to definitively determine the end use that a fuel will be put to, an average factor, that reflects the weighted average of overall national uses, is most appropriate to provide certainty and a level playing field for upstream entities. Accordingly, the NGER Measurement Determination will be amended to include a national average factor across all uses of a particular fuel to be used in converting fuel quantities into emissions estimates that will give rise to obligations under the Scheme.

By contrast, where an entity opts to take on liability for emissions arising from fuels supplied by an upstream fuel supplier under an OTN (see Chapter 6), the entity will know the exact use that the fuel will be put to. In such cases, it is sensible for entities receiving fuel under an OTN and combusting that fuel to use point source emissions factors to estimate emissions as this will most accurately reflect emissions arising from an activity.

Importers of synthetic greenhouse gases

To streamline reporting for liable entities, legislation implementing the Scheme will amend the NGER legislation to use the monitoring and measurement methodologies currently used by importers of synthetic greenhouse gases into Australia set out in section 46 of the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* and regulation 900 of the Regulations made pursuant to that Act.

For the purposes of the Scheme, imported synthetic greenhouse gases will be considered to be emitted at the point of import or manufacture (see Chapter 6). To meet their reporting obligations under the Scheme, importers and manufacturers, like other upstream liable entities, will be required to apply emissions factors set out in the NGER Measurement Determination to the quantities of synthetic greenhouse gases imported into, or manufactured in, Australia, and to report this emissions number.

Policy position 7.17

The NGER legislation will be amended to implement reporting obligations and methodologies for upstream entities that will have obligations under the Scheme.

Legislation implementing the Scheme will amend the NGER legislation to best utilise:

- methodologies and guidance issued by the Australian Tax Office and the Australian Customs Service relating to the measurement of quantities of liquid fuels subject to excise and customs duty;
- section 46 of the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* and regulation 900 of the Regulations dealing with quantities of synthetic greenhouse gases imported into, and manufactured in, Australia.

The NGER Measurement Determination will be amended to provide national average emission factors to be applied to measured quantities of fuels to be reported under the Scheme, to help determine the obligations of upstream liable entities.

7.3.4 Notification of changes to methodologies

As the emission estimation methodologies underpinning NGERS and the operation of the Scheme are based on international standards, it is likely that the Government will need to periodically amend these methodologies in accordance with changes occurring at the international level. Noting this likelihood, the Government's preferred position in the Green Paper was to provide five years notice before making significant changes to methodologies available for reporting under the Scheme.

Green Paper position

Consistent with adjustments to the scheme trajectory, five years notice would be given before major revisions of emissions estimation methodologies that affect the majority of stakeholders.

Submissions to the Green Paper welcomed the Government's commitment to provide notice to reporting entities of changes in reporting methodologies under the Scheme. Changes made at the international level, such as those to global warming potentials of greenhouse gases, are intimately bound up with other key decisions in relation to the Scheme caps and trajectory. Consequently, these changes will be implemented into the Scheme methodologies following five years notice.

The first of these changes is most likely to occur in 2012–13 at the end of the current Kyoto commitment period and the beginning of the next phase of international commitments. At this juncture it is very likely that a new international agreement on targets for the next phase of emissions reductions will update the global warming potentials of the gases covered by those targets to take account of updated science. It will be important to use any updated warming potentials to estimate the emissions covered under the Scheme to ensure that the Scheme achieves one of its goals, that of reducing Australia's emissions in line with its international commitments. If these changes were not made, the Government would bear the cost of changes to the international accounting rules that tightened Australia's emissions constraint. Conversely, if changes to the international accounting rules that relaxed Australia's emissions constraint were not adopted under the Scheme, the economic cost of the Scheme would be higher than necessary.

Policy position 7.18

Significant revisions to emissions estimation methodologies that affect the majority of stakeholders, such as amendments to global warming potentials of certain gases, or the inclusion of new gases, will be implemented after five years notice.

The Government is providing notice now that, if necessary, global warming potentials for gases covered under the Scheme will be revised at the beginning of the next commitment period (2013) to align with those agreed at the international level for the purposes of determining Australia's national emissions obligations.

7.3.5 Consistency of data over time

As outlined in section 7.3.1, some sectors will be required to adopt particular methodologies as a minimum standard for reporting emissions from certain sources under the Scheme. For all other sources, the Government expressed the preference in the Green Paper that entities be free to make their own judgments in balancing the costs of using the higher methods against the benefits of potentially improved emission estimates.

Notwithstanding this overarching principle, the Government also expressed the preference that where an entity has elected to use a higher method for a particular emissions source than required under the Scheme, that methodology would be the minimum standard to apply to that source for that entity for a period of four years. The Government set out its preferred position in the Green Paper as follows.

Green Paper position

Noting the four classes of methodologies available for the National Greenhouse and Energy Reporting System, where an entity has elected to use Method 2 or above for a particular source, that methodology would be the minimum standard for that entity for a period of four years.

The scheme regulator may grant exceptions to this rule in (some) circumstances.

The Government took this position for a number of reasons. First, there is a need to limit the extent to which a liable entity under the Scheme can shift between methodologies on a regular basis, giving rise to different emissions obligations under the Scheme without any change in emissions or activity.

Second, frequent methodological changes could cause monitoring and assurance challenges for the Scheme, instability in total measured emissions, and unforeseen financial implications for third-party investors who rely on the stability of estimation methodologies. Without regulation, such effects could challenge the transparency and fairness of the Scheme.

Submissions did not oppose the need to have consistent and stable emissions reporting methodologies over a number of years. Therefore this position is confirmed under the Scheme.

Policy position 7.19

Where an entity has elected to use Method 2 or above for a particular emission source, that methodology will be the minimum standard for that source, for that entity, for a period of four years.

7.3.6 Documentation and records

Entities will be required to keep records of activities to show that emissions reports have been compiled accurately and to enable auditing of those reports. Section 22 of the NGER Act sets out the current requirements for entities and individuals in relation to record keeping. The NGER Technical Guidelines provide some further guidance. In the Green Paper, the Government expressed its preference for record-keeping and documentation requirements under the Scheme to be those set out in the NGER Act to streamline compliance under the Scheme.

Green Paper position

Provisions relating to documentation and record keeping under the scheme would be based on those set out for the National Greenhouse and Energy Reporting System.

Relatively few submissions commented on the record-keeping requirements under NGERS or the Scheme, implying a preference for the alignment of record-keeping obligations. Although the information to be kept in records is a matter for individual corporations, details of the calculation and data analysis methods used for the estimation of greenhouse gas emissions

and energy production and consumption should be recorded. To help entities identify the types of information that would substantiate their emissions statements to the Scheme regulator, the NGER Reporting Guidelines provides the following guidance on information that should be recorded:

- a list of all sources monitored
- the activity data used for calculating greenhouse gas emissions for each source, categorised by process and fuel or material type
- documentary evidence relating to calculations—for example, receipts, invoices and details of payment methods
- documentation of the methods used for greenhouse gas emissions and energy estimations
- documents justifying selection of the monitoring methods chosen
- documentation of the collection process for activity data for a facility and its sources
- records supporting business decisions, especially for high-risk areas relating to reporting coverage and accuracy.

The NGER Reporting Guidelines also reference AS ISO 15489 (the Australian and international standard for record management) for guidance on record-keeping processes.

The NGER Act currently requires records to be kept for seven years from the end of the reporting year in which the activities took place. In line with obligations under the taxation system, legislation implementing the Scheme would amend the NGER Act to require records to be kept for five years from the end of the reporting year in which the activities took place.

Policy position 7.20

Provisions relating to documentation and record keeping under the Scheme would be those set out under the NGER Act.

Entities with reporting obligations under the Scheme will be required to keep records for five years to substantiate emissions reports submitted to the Scheme regulator.

7.4 Reporting

Reporting of emissions information to the Scheme regulator will be a key underpinning element of the Scheme. To minimise compliance burdens for entities with obligations under the Scheme, in the Green Paper the Government committed to aligning reporting requirements with existing frameworks wherever possible.

NGERS requires the annual submission of emissions reports by 31 October each year following the completion of the compliance period on 30 June. In the Green Paper, the Government proposed that reporting under NGERS and the Scheme be aligned to minimise compliance costs for entities with obligations under the Scheme. The Government also

expressed a preference for OSCAR, currently in place for reporting under NGERS, to be the repository for reported emissions under the Scheme.

Green Paper position

A single report would be sufficient to satisfy an entity's obligations under both the National Greenhouse and Energy Reporting System and the Carbon Pollution Reduction Scheme, with reports to be submitted by 31 October each year.

Stakeholders strongly supported the Government's preferred position for a single report to meet obligations under both the Scheme and NGERS (Origin Energy, Submission 815, p. 49). As obligations under the Scheme will generally be a subset of NGER's reporting requirements, Scheme liabilities will generally be able to be determined via the submission of a consolidated set of emissions data to the Government.

7.4.1 Frequency of reporting

A number of submissions to the Green Paper argued that under the Scheme emissions should be reported quarterly or half-yearly to ensure that the permit market receives a steady stream of price-sensitive information throughout the year. For example, ESAA, Westpac, the Australian Banker's Association and the wider financial sector argued that reporting more often than once a year would increase the stability of the permit market and avoid the price volatility that was observed in the early years of the European Union Emissions Trading Scheme. However, these stakeholders also generally acknowledged that more frequent reporting would impose an additional compliance burden on liable entities.

Recognising this, a number of other submissions suggested that the quarterly reporting of un-audited data by liable entities would strike an acceptable balance between the timeliness of information and compliance costs (Australian Stock Exchange, Submission 811, p. 13).

In contrast, a number of submissions from reporting entities strongly opposed more frequent reporting under the Scheme on the basis that it would add significantly to the administration costs of the Scheme (APPEA, Submission 834, p. 29).

The Government recognises that more frequent reporting of emissions data will result in greater stability and efficiency in the permit market and that compliance costs need to be kept as low as possible for entities with obligations under the Scheme. In considering price volatility and parallels with the European Union Emissions Trading Scheme, the Government also notes that other elements of the Carbon Pollution Reduction Scheme, such as the ability for participants to bank permits between compliance periods, will reduce the risk of significant price shocks. The Government has also considered the number of existing sources of information that will be available to inform the market without imposing compliance costs on reporting entities to undertake reporting more frequently than once a year.

To ensure that the market has a steady flow of information, the Department of Climate Change will make publicly available quarterly updates of emissions from each sector through the National Greenhouse Accounts. This will provide the market with frequent aggregate emissions information and help participants to make judgments about the size of permit

demand, without increasing reporting and compliance burdens on industry. These updates will provide emissions information derived using proxy information available throughout the year.

A number of other proxy information sources will also be available to the market throughout the year. Some of these sources are shown in the table below.

Table 7.2: Market information sources

Source	Information	Timing
ASX: Periodic reporting of financial information	Financial liabilities accruing under the Scheme	Six-monthly
National Electricity Market Management Company (NEMMCO)	Electricity generation data (by generator)	Half-hourly
Australian Petroleum Statistics (by subscription)	Sales, production, imports, exports of petroleum products	Monthly

Subject to the clarification of international accounting rules by the International Accounting Standards Board, under the ASX Listing Rules many of Australia's largest emitters will be required to report their accrued financial obligations under the Scheme as part of their half-yearly reporting obligations.[2] The exact nature of the accounting treatment for accrued Scheme obligations is yet to be determined by the International Accounting Standards Board (see Chapter 14). This information will provide the market with information on the expected Scheme obligations for some of Australia's largest emitters at six-monthly intervals throughout the year.

The ASX Listing Rules also provide for continuous disclosure of a listed entity's material business risks. Under these rules, listed entities would also be obliged to communicate to the market any material events or risks arising from their Scheme liabilities.

Another proxy information source is half-hourly data published by the National Electricity Market Management Company (NEMMCO) on the amount of electricity generated by participants in the National Electricity Market. NEMMCO publishes electricity generation (in megawatt-hours) on a generator-by-generator basis. Combined with assumptions about emissions intensity of different types of generators, this information will provide a strong indication of emissions arising from the electricity generation sector throughout the year.

Throughout the year, the market will also have access to information in relation to the consumption of petroleum products in the economy through monthly issues of *Australian Petroleum Statistics*, available on subscription from the Australian Government Department of Resources, Energy and Tourism. The data will enable users to track the consumption and emissions (when combined with proxy emission factors) associated with transport fuels throughout the year.

Mindful of the need to lower compliance costs for liable entities and the availability of other information sources to the market throughout the year, in the initial years of the Scheme the Government will not impose a requirement for reporting more frequently than once a year. However, the Government will consider moving to more frequent reporting following initial experience with the Scheme.

Policy position 7.21

A single emissions report will satisfy an entity's obligations under both the National Greenhouse and Energy Reporting System and the Carbon Pollution Reduction Scheme. Reports for each reporting period will be required to be submitted by 31 October following each financial year.

The Government will consider the need to require entities to report emissions more frequently than annually following initial experience with the Scheme.

7.4.2 Publication of data

The Green Paper also discussed the level of emissions information to be made publicly available following the reporting of this information to the Government. Noting the need to provide detailed information to inform the market while limiting public disclosure of commercially sensitive data, the Government sought comments from stakeholders on whether the Scheme regulator should publish emissions information at the facility level.

Green Paper position

As soon as feasible after reports are submitted, the Government would publish on the internet emissions obligations under the scheme, the types of assessment methodologies used and any uncertainty estimates reported by liable entities.

Some stakeholders supported the publication of detailed emissions information at the facility level to ensure that the market had a consistent set of detailed information about the liabilities of each entity under the Scheme (Investor Group on Climate Change, Submission 697, p. 4; Australian Conservation Foundation, Submission 809, p. 40). Noting that information regarding the emissions of electricity generators could be determined from electricity generation data published by NEMMCO, ESAA argued that to improve market transparency and forecasting of supply and demand for permits, emissions data should be published at the facility level for all liable entities.

Against this, a number of submissions strongly opposed disclosing commercially sensitive information, noting that this might be a consequence of publishing emissions information at the facility level (APPEA, Submission 834, p. 29).

Some in the financial sector supported the view that emissions data need not be disaggregated to lower levels, as supply and demand information at the sectoral level will provide sufficient detail for ongoing market analysis and price forecasting (Westpac Banking Corporation, Submission 695, p. 7).

As noted in the Green Paper, the Government believes publication of facility-level data would deliver efficiency dividends by providing the market with more detailed information about the structure and nature of an entity's obligations under the Scheme. That said, the Government also recognises that public disclosure of some commercially sensitive data may cause concerns for some entities.

Therefore, the Scheme regulator will not publish emissions information at the facility level but will publish emissions information consistent with the level of disclosure set out under the NGER Act, as soon as practicable after submission to the Scheme regulator, including:

- total emissions reported by all liable entities
- annual emissions reported by each liable entity
- the types of estimation methodologies used, and uncertainty estimates reported by liable entities.

The Government may review this level of publication based on the initial experience of the Scheme. A comprehensive listing of the information to be published by the Scheme regulator is set out in Chapter 8.

Policy position 7.22

The Scheme regulator will publish emissions obligations under the Scheme, the types of estimation methodologies used and any uncertainty estimates reported by liable entities on the internet as soon as is feasible after reports are submitted.

The Government will publish this information for liable entities, consistent with the level of disclosure set out under the NGER Act, rather than at the facility level.

The Government may review this level of publication based on the initial experience of the Scheme.

7.4.3 Aligning financial and emissions reporting

In the Green Paper, the Government expressed a preference to further investigate the alignment of financial and emissions reporting over time to streamline reporting for entities that have obligations in both areas.

Green Paper position

The Government would investigate further the scope to align financial and emissions reporting and audit systems.

The Government proposed a reporting regime under the Scheme that would align the timing of financial and emissions reporting for entities that have obligations in both areas. For example, under section 319 of the *Corporations Act 2001*, certain entities must lodge financial statements with the Australian Securities and Investments Commission (ASIC) within three or four months after their balance date, depending on how they are classified. For most entities reporting on a 30 June financial year basis, this will significantly align with the final date for emissions reporting under the Scheme of 31 October, following each financial year. These common timelines will mean that most liable entities will be able to prepare both statements at the same time with respect to the same periods, and for this information to be communicated to the market in a consolidated fashion.

The Government is also seeking to align auditing and assurance of emissions data for reporting entities. For example, where an audit of an entity's emissions data is completed for the purposes of the Scheme and is in compliance with Australian Auditing Standards, this may also be used to inform the audit of an entity's financial statements.

In relation to disclosure, Australia's corporate disclosure framework currently consists of requirements for entities to report both financial and non-financial information. Under the Corporations Act, approximately 30,000 of the 1.6 million companies in Australia are required to prepare financial statements in accordance with accounting standards and a directors' report containing a range of non-financial information.

Australia's approach to the preparation of non-financial information in the directors' report is to establish general reporting principles rather than to mandate reporting on specific subjects. Such an approach helps to minimise the reporting burden on business and encourages entities to report on relevant issues.

This principles-based approach is reflected in the disclosure requirements for the contents of a directors' report. These qualitative disclosures are designed to capture the key issues for an entity's business. This may include reporting on particular environmental issues, for example emissions trading, but only where they are of material importance to the entity and its business.

Earlier this year, the Government announced a review of non-financial disclosures as part of a broader review of the Australian financial reporting framework. Australia's principles-based approach to non-financial reporting is already consistent with the inclusion of information on emissions in the directors' report. Strategies to clarify and further emphasise non-financial disclosures are being considered by the Australian Government Treasury as part of its review of non-financial disclosures.

Policy position 7.23

A common reporting timeline between financial and Scheme reporting will mean that most liable entities will be able to prepare financial and emissions reports at the same time with respect to the same periods, and for this information to be communicated to the market in a consolidated fashion.

In relation to disclosure, Australia's principles-based approach to non-financial reporting currently allows for the disclosure of information on emissions in directors' reports. Strategies to clarify and further emphasise non-financial disclosures are currently being considered by the Australian Government Treasury.

7.5 Audit

A credible Scheme will help drive efficient investment decisions and emissions reductions throughout the economy. The audit regime supporting the Scheme will be important in achieving market confidence in reported emissions data and in ensuring the credibility of the Scheme.

In the Green Paper, the Government discussed various options for audit and assurance of emissions information reported under the Scheme, including:

- assurance provided by independent third-party practitioners on a mandatory basis before the submission of an entity's emissions report
- self-assurance by entities, supported by a retrospective audit regime managed by the Government.

Recognising a tension between the benefits of highly assured emissions data and compliance costs for reporting entities, the Green Paper proposed that at the commencement of the Scheme only the largest emitters (those with obligations under the Scheme of 125,000 tonnes of CO_2-e or more) would be required to have their emissions reports audited before submitting them to the Scheme regulator.

Green Paper position

Large emitters (those with obligations under the scheme of 125 000 tonnes of carbon dioxide equivalent or more) would be required to have their annual emissions reports assured by an independent accredited third party prior to their submission. The Government would consider the need to extend this requirement on the basis of initial experience, developments relating to international linking and the compliance burdens likely to be placed on small entities.

The scheme regulator would have powers to conduct assurance audits using a risk-based approach for all emissions reports submitted under the scheme, as is the current approach under the National Greenhouse and Energy Reporting System. The scheme regulator would also have the power to review an annual emissions report for up to four years after its submission, except in the case of fraud, in which case the period would be unlimited.

Submissions generally supported the need for a strong audit framework to assure the quality of emission reports submitted under the Scheme. Chevron Australia stated:

> Chevron supports the Government's proposal that annual emissions reports be assured by an independent accredited third party prior to submitting the reports to government. Our experience in other environmental markets has shown that independent assurance contributes credibility of the market. (Submission 716, p. 27)

BP Australia stated:

> BP supports initial mandatory third party assurance for large users. (Submission 355, p. 9)

Some stakeholders did not agree that audit of emissions reports should be conducted by independent third parties before their submission to the Government under the Scheme. For example, both ESAA and APPEA argued that a self-assurance model would minimise compliance costs for liable entities. ESAA stated:

> To ensure accurate reporting, emissions should be subject to periodic audits and third party assurance should only be required on an exception basis, where the scheme

> regulator has reason to suspect the self assurance approach has failed for an entity. (Submission 715, p. 16)

The Government is conscious of the need to reduce compliance costs for liable entities wherever possible under the Scheme. However, as discussed in the Green Paper, the Government considers that the integrity of emissions data is critical to the credibility of the Scheme, especially in the early years of the Scheme when the credibility of the Scheme is being established and the capacity of industries to report emissions is less mature. The European Union Emissions Trading Scheme requires all entities to have their emissions reports verified prior to acceptance by the Scheme regulator.

The Government's position is that the audit of emissions reports from large emitters by an independent third party before their submission to the Scheme regulator will provide a high level of market confidence that reported data is complete and accurate, increasing the integrity and efficiency of the Scheme. Such an approach would also establish the integrity of emissions estimates internationally and increase the Scheme's ability to link with other Schemes in the future. Alternatively, while a self-assurance model would reduce compliance costs for liable entities, it could risk the credibility of the Scheme through reduced market confidence in data underpinning the demand for permits.

A number of stakeholders (KPMG, Submission 545; Group of 100, Submission 797) also noted that many entities are likely to have their underlying emissions data audited independently of the Scheme as a result of including the financial implications of Scheme liabilities in their financial statements. In these cases, any additional costs for complying with the audit requirements of the Scheme will be low.

For these reasons, the Government confirms that those entities with obligations under the Scheme for greenhouse gas emissions of 125,000 tonnes of carbon dioxide equivalent or more will be required to have their annual emissions reports audited by an independent third party prior to their submission to the Scheme regulator. These audits would be required to encompass emissions information relating to the calculation of an entity's liability under the Scheme, but not be required to extend to information reported to the regulator under NGERS, which does not relate to the entity's obligation under the Scheme. As discussed in the Green Paper, the Government will consider the need to extend this requirement on the basis of initial experience, developments relating to international linking and the compliance burdens likely to be placed on liable parties, particularly smaller emitters.

As discussed in the Green Paper, the Scheme regulator would also have powers to review annual emissions reports and amend entities' obligations under the Scheme for up to four years after the reporting date for the relevant compliance year. However, in cases of suspected fraud this period would be unlimited. The Scheme regulator would conduct, or require these audits to be conducted, using either a risk management approach or on suspicion of non-compliance as envisaged under sections 73 and 74 of the NGER Act.

These periods of review are broadly consistent with amendment periods under current business tax provisions for entities with complex affairs. Generic enforcement provisions that would apply under the Scheme are discussed in Section 7.6.

Policy position 7.24

Large emitters (those with obligations under the Scheme for greenhouse gas emissions of 125,000 tonnes of carbon dioxide equivalent or more) will be required to have their annual emissions reports audited by an independent third party before submitting them to the Scheme regulator. The Government will consider the need to extend this requirement on the basis of initial experience, developments relating to international linking and the compliance burdens on small entities.

The Scheme regulator will conduct, or require the appointment of external auditors to conduct, external audits using either a risk management approach or on suspicion of non-compliance.

7.5.1 Audit standards and guidelines

A strong reporting and audit regime needs to be underpinned by clear audit standards and guidelines.

Consistent with the Government's general approach that NGERS provide the basis for monitoring, reporting and auditing under the Scheme, in the Green Paper the Government expressed a preference for audit of emissions information under the Scheme to be conducted in accordance with guidelines to be made under the NGER Act. This position would ensure a single audit regime for emissions reports under NGERS and the Scheme.

Green Paper position

Assurance under the Carbon Pollution Reduction Scheme would be carried out in accordance with guidelines made under the *National Greenhouse and Energy Reporting Act 2007* using standards produced by the Australian Government's Auditing and Assurance Standards Board.

The Auditing and Assurance Standards Board (AUASB) already has in place a standard that can be applied to non-financial reporting, which is based on international standards. This standard is ASAE 3000 *Assurance engagements other than audits or reviews of historical financial information*. The ASAE 3000 addresses matters such as ethics, quality control, planning requirements, using the work of an expert, obtaining evidence, documentation, and preparation of assurance reports.

The AUASB has also recently issued 'Standard on Assurance Engagements ASAE 3100 *Compliance engagements*'. This standard references ASAE 3000 both in its mandatory provisions and explanatory guidance notes.

In addition to the above, other standards that could be referenced in the NGERS guidelines include:

- ISO 14064–3:2006 *Greenhouse gases—Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions*

- ISO 19011:2002(E) *Guidelines for quality and/or environmental management systems auditing*
- The International Standard on Related Services (ISRS) 4400 *Engagements to perform agreed-upon procedures regarding financial information*
- The former AUASB standard AUS 904 *Engagements to perform agreed-upon procedures*.

A number of stakeholders from the accounting and audit sector supported the Government's preferred position that audits under the Scheme be conducted accordance with guidelines made under the *National Greenhouse and Energy Reporting Act 2007* and using standards produced by the AUASB. These stakeholders supported the use of standards developed by the AUASB as it would assist in aligning reporting under the Scheme with reporting under the established financial framework (KPMG, Submission 545, p. 28; Ernst & Young, Submission 879, p. 5).

Some stakeholders (for example, Protiviti, Submission 649; Origin Energy, Submission 815) suggested that standards to be used for assurance of emissions under NGERS and the Scheme should not be limited to those developed by the AUASB, and should recognise acceptable standards developed by other bodies such as the International Organization for Standardization.

The Government is currently considering submissions provided in response to a detailed public consultation paper on these issues, entitled *National Greenhouse and Energy Reporting Act 2007 and Carbon Pollution Reduction Scheme—external audit consultation paper*, released by the Department of Climate Change in October 2008 and available on its website www.climatechange.com.au. In this paper, the Government sought further stakeholder input on possible standards for the conduct of emissions audits and options for using existing frameworks for recognition of auditors. Before finalising audit guidelines under the NGER Act, the Government will consider submissions on the paper with a view to developing audit guidelines to be made under the NGER Act in early 2009.

Policy position 7.25

Audits under the Carbon Pollution Reduction Scheme will be carried out in accordance with guidelines made under the *National Greenhouse and Energy Reporting Act 2007*. The Government will finalise the standards (if any) to be referenced in these guidelines after considering submissions made in response to its public consultation paper, *National Greenhouse and Energy Reporting Act 2007 and Carbon Pollution Reduction Scheme—external audit consultation paper*.

7.5.2 Auditor expertise and qualifications

In addition to developing relevant guidelines, the Government's preference in the Green Paper was to establish an accreditation system for auditors, the form and nature of which would be determined following further consultation with the industry.

Green Paper position

All third-party assurance providers would be accredited to ensure the development of a pool of properly trained and qualified providers. The form and nature of accreditation (including whether it is conducted by the Government or by a non-government body) would be determined after further consultation, with a view to lowering compliance costs.

A number of submissions highlighted concerns around the availability of resources to meet the demand for audit services arising from the Scheme. For example, Boral stated:

> Whatever process is eventually agreed for assurance and verification, it must be consistent with the ability of the market to provide that service in a timely, and cost-effective manner. (Submission 595, p. 8)

Origin Energy stated:

> We urge the government to work with the auditing industry to ensure sufficient resources are in place to meet the anticipated audit demand for NGER/CPRS. (Submission 815, p. 51)

The Government recognises that the development of a large pool of skilled emissions auditors is critical to support the Scheme, and especially to smooth the Scheme's introduction. The Government also recognises the link between the required skills and expertise of accredited auditors under the Scheme and the availability of audit resources in the marketplace. For example, a narrower specification of the expertise required to undertake emissions audits under the Scheme may mean that fewer resources would be available in the market to meet demand. Nevertheless, the expertise and quality of audit professionals will be integral to establishing the credibility of emissions data, and therefore the credibility of the Scheme.

Audit resources available in the market place are expected to grow strongly in response to the commencement of the first NGERS reporting year on 1 July 2008, and in anticipation of the upcoming audit requirements for the Scheme. International audit resources, such as those servicing the European Emissions Trading Scheme, are also likely to be available to be utilised in the Australian context given the different compliance timelines for both Schemes.

Some stakeholder submissions indicated a preference for more broadly defined auditor requirements, reflecting the view that there may be a variety of professions that are able to conduct an emissions audit, for instance engineering firms (for example, JAS-ANZ, Submission 434; Association of Consulting Engineers Australia, Submission 690, and the International Emissions Union Trading Association, Submission 658). Meanwhile other stakeholders, particularly those from the finance and accounting sectors, indicated that similar qualifications for audit practitioners and registration requirements as provided in the *Corporations Act 2001* and regulated by ASIC, would be desirable in order to ensure the integrity of the audit system (KPMG, Submission 545).

Policy position 7.26

All third-party emissions auditors will be registered to ensure the development of a pool of properly trained and qualified providers. The form and nature of registration (including whether it is conducted by the Government or a non-government body) will be finalised following the consideration of submissions in response to the public consultation paper *National Greenhouse and Energy Reporting Act 2007 and Carbon Pollution Reduction Scheme—external audit paper*.

7.6 Compliance and enforcement

To comply with their obligations under the Scheme, liable entities will have to surrender, for each financial year, a number of permits equal to their annual emissions under the Scheme. The Scheme regulator will have a range of compliance, investigative and enforcement powers and a range of mechanisms to respond proportionately to non-compliance with the Scheme. This section outlines how a liable entity will meet its obligations and the enforcement provisions that will be important to ensure that the Scheme achieves its objectives.

7.6.1 Compliance year

In the Green Paper the Government discussed whether the Scheme should operate on the basis of an Australian financial year or a calendar year. Noting that NGERS has already commenced operation on a financial year basis consistent with Australia's international reporting under the Kyoto Protocol, the Green Paper set out the Government's preference for the Scheme to operate on the basis of an Australian financial year.

Green Paper position

The scheme would operate on a financial-year basis.

Submissions generally supported the operation of the Scheme on an Australian financial year basis to be consistent with the NGERS compliance year. A small number of stakeholders raised the issue of alternative compliance years under the Scheme to align with their reporting obligations in other regimes.

The Government also noted in the Green Paper that there would be technical constraints in changing from the NGERS financial year approach, given that the current reporting year began in July 2008. Therefore, the Scheme will operate on an Australian financial year basis.

A number of submissions requested that the Government clarify the start date for the Scheme to provide certainty regarding the commencement of the Scheme. Recognising this, the Government confirms that the Scheme will commence operation on 1 July 2010.

Policy position 7.27

The Scheme will operate on an Australian financial-year basis, commencing on 1 July 2010.

7.6.2 Eligible compliance permits

Only eligible compliance permits can be surrendered to meet an entity's obligations under the Scheme. Eligible compliance permits include both carbon pollution permits issued by the Scheme regulator, and eligible international units.

Chapter 11 discusses and finalises the Government's positions in relation to the acceptance of eligible international units and other permits acceptable under the Scheme. The types of eligible compliance permits that will be accepted from the commencement of the Scheme are set out below.

Policy position 7.28

The types of eligible compliance permits that will be accepted from the commencement of the Scheme are:

- carbon pollution permits
- certified emission reduction units (except temporary and long-term certified emission reduction units)
- emission reduction units
- removal units.

7.6.3 Compliance timeline

To comply with their obligations under the Scheme, liable entities must:

- register as a reporting entity under NGERS
- report covered emissions to the Scheme regulator by 31 October each year following the reporting year
- surrender eligible compliance permits by 15 December.

In the Green Paper, the Government set out its preferred approach to managing the compliance process timeline following the end of the compliance year under the Scheme.

Green Paper position

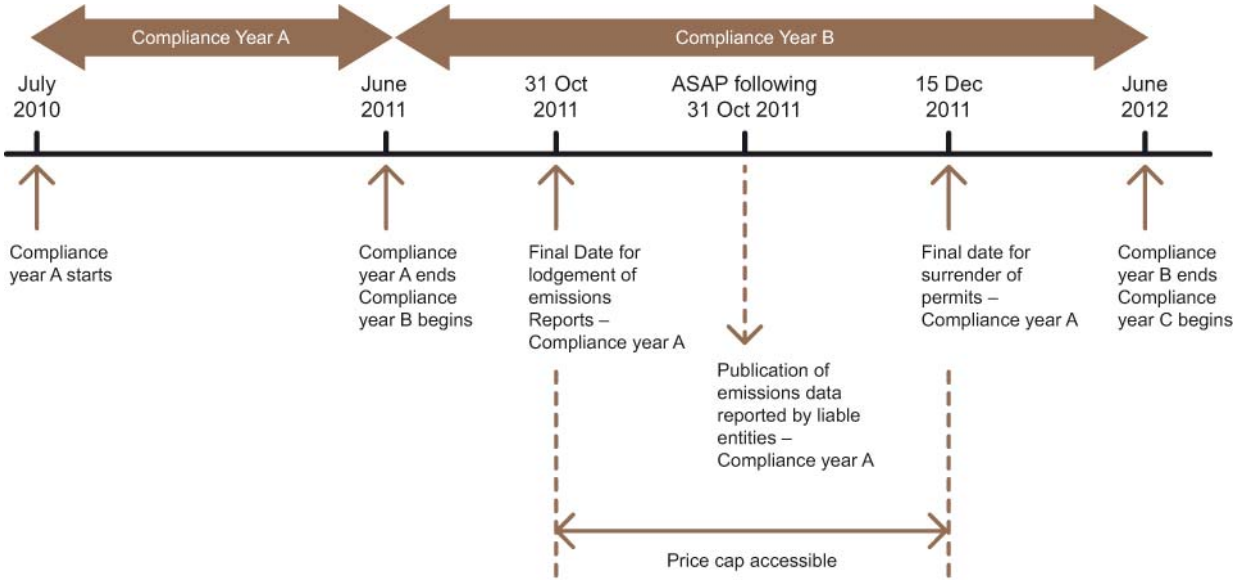
The final date for the annual surrender of eligible compliance permits would be a fixed time after the final date for emissions reporting. At scheme commencement, this period would be six weeks.

In the Green Paper, the Government expressed a preference for a period of six weeks after the final date for emissions reporting, before the final date for the surrender of permits. Few stakeholders commented directly on the surrender timetable set out in the Green Paper.

The Government proposed the six week timeframe in the Green Paper to allow enough time for the Scheme regulator to collate emissions reports for publication, review audit reports, and for liable entities to access the permit market to acquire permits to meet their obligations under the Scheme.

An entity's permit obligation under the Scheme will be the total of their liable emissions for the relevant compliance year. Entities will be required to report their emissions to the Scheme regulator by 31 October each year. Entities will then have to surrender eligible compliance permits to match their emissions for the relevant year by 15 December. This process will give liable entities time to access the permit market and price cap arrangements described in Chapter 8 (the purchase of emission permits from the Scheme regulator at a fixed price), before the final date for surrender under the Scheme.

The following diagram provides a simple overview of the key dates in the compliance process for liable entities:



In the event that a liable entity fails to lodge an emissions report with the Scheme regulator for a given compliance year, or the Scheme regulator has reason to believe that a lodged report is inaccurate, the Scheme regulator will have the power to assess an entity's emissions for a given compliance year and require the surrender of the correct number of compliance permits. Where the Scheme regulator issues such an assessment, the liable entity would be advised of the timeframe within which it is required to surrender the correct number of permits. If an entity disagrees with an assessment made by the Scheme regulator, the liable entity will be able to apply for a review of that assessment. In the first instance, the Scheme regulator will undertake an internal review of the assessment, and if not satisfied with the outcome, the liable entity will be able to apply for review of the regulator's decision by the Administrative Appeals Tribunal.

In the Green Paper, the Government proposed to allow entities the option of surrendering permits throughout the year to meet their end-of-year obligations. However, the Government also emphasised that to ensure the integrity of the surrender process, once a permit had been surrendered by an entity, it would not be able to be 'revived' or re-used under the Scheme.

If an entity surrenders more permits than required to meet its obligation in a compliance year, subject to any banking limitations that would otherwise apply, the permits would be carried over to help meet the entity's obligation in the next compliance year. Under all circumstances, permits, once surrendered, will not be able to be 'revived' from their surrendered status for the purpose of holding or transfer.

Policy position 7.29

Liable entities will be required to report emissions to the Scheme regulator by 31 October each year following the reporting (financial) year.

The final date for the annual surrender of permits for an entity will be 15 December each year.

Liable entities will be permitted to surrender permits at any time before the annual surrender deadline to meet their end-of-year obligations.

If an entity surrenders more permits than required to meet its obligation in a compliance year, these permits will be carried over to help meet the entity's obligation in the next compliance year. Under all circumstances, permits, once surrendered, will not be able to be 'revived' from their surrendered status for the purpose of holding or transfer.

7.6.4 Enforcement

Effective enforcement arrangements will be vital to achieving the objectives of the Scheme. Non-compliance with obligations (be it misreporting or failure to surrender permits) could bring the Scheme into disrepute and undermine its environmental integrity.

A broad outline of possible approaches to compliance and enforcement is provided in this section.

In the Green Paper, the Government suggested that the Scheme regulator should be given a range of investigative and enforcement powers and a range of mechanisms to respond proportionately to non-compliance with the Scheme.

Green Paper position

The scheme regulator would be given a range of compliance investigative and enforcement powers, and a broad range of mechanisms to respond proportionately to non-compliance under the scheme.

The scheme regulator would be able to exchange information with the Australian Government, state and territory governments, and international regulators.

Compliance and enforcement provisions, including penalties, would be finalised over the remainder of 2008.

Relatively few submissions addressed the proposed enforcement regime. A number of submissions referred to the need for clear regulatory roles and powers, recognition of the compliance cost of obligations and a robust compliance and enforcement regime to underpin confidence in the Scheme. Several stakeholders, including Engineers Australia (Submission 322) the Investment and Financial Services Association (Submission 338) and Origin Energy (Submission 815), supported the preferred position. Several other stakeholders, including Westpac, noted that they are looking forward to receiving additional information on this aspect of the Scheme.

The Scheme regulator will have a range of investigative and enforcement powers, and a range of mechanisms to respond proportionately to non-compliance with the Scheme, including civil penalty and criminal provisions. The Scheme regulator will also have information gathering and monitoring powers of a kind which is appropriate for this type of regulator function.

A penalty for non-compliance will be imposed on liable entities if they fail to surrender sufficient permits. To be effective, this penalty will need to be significantly above the cost of compliance under the Scheme. The penalty under the Scheme will comprise both an administrative (financial) penalty and a continuing obligation to surrender compliance permits for any permit shortfall.

The administrative penalty will be:

(i) an amount prescribed in regulations for the relevant compliance year; and

(ii) if no amount is prescribed, or the regulations are disallowed, an amount equal to the benchmark average auction price for permits auctioned in the previous financial year, plus 10 per cent (this amount will also be the maximum amount that could be prescribed under (i) above).

Failure to pay this penalty will result in a debt to the Commonwealth. In addition, interest will accrue on this debt and shortfalls will be published. The penalty will not apply if an assessment is successfully challenged.

In addition to paying the administrative penalty for non-compliance under the Scheme, the obligation to surrender the required number of permits will continue under a 'make good' provision, with these permits to be surrendered in the next compliance year. The compliance status of liable entities will also be published by the Scheme regulator to encourage compliance under the Scheme.

Exposure draft legislation setting out the Scheme will include other penalty provisions to ensure the integrity of the Scheme.

Policy position 7.30

The Scheme regulator will have a range of compliance, investigative and enforcement powers and a range of mechanisms, including civil penalty and criminal provisions, to respond proportionately to non-compliance with the Scheme.

An administrative penalty will be imposed on liable entities if they fail to surrender sufficient permits. The penalty will be:

(i) an amount prescribed in the regulations for the relevant compliance year; and

(ii) if no amount is prescribed, or the regulations are disallowed, an amount equal to the benchmark average auction price for permits auctioned in the previous financial year, plus 10 per cent (and this amount will also be the maximum amount that could be prescribed under (i) above).

In addition to the administrative penalty, the obligation to surrender permits to meet any shortfall will continue under a 'make-good' requirement, with permits to be surrendered in the next compliance year.

7.6.5 Voluntary surrender

The Government proposed in the Green Paper that the voluntary surrender of permits should be allowed under the Scheme to allow parties to contribute to stronger national climate change mitigation, regardless of whether they have obligations under the Scheme. In making this proposal, the Government noted that voluntary surrender would reduce the number of permits available to liable entities to meet their obligations and would raise the price of permits, but that this action was a reflection of the legitimate value placed on voluntary surrender. The Government expressed the following preference in the Green Paper.

Green Paper position

Any entity or individual would be allowed to voluntarily surrender permits regardless of whether they have obligations under the scheme.

While some submissions supported the Government's preference to allow voluntary surrender, some submissions (Climate Friendly, Submission 62) requested that the Government clarify the relationship between the Scheme and the voluntary market; for example, they wanted to know how the Government would treat permits that had been voluntarily surrendered by a holder.

The Green Paper did not consider how the Government would treat permits that had been voluntarily surrendered; specifically, it did not consider whether the voluntary surrender of a permit would be tied to an obligation on the Government to 'cancel' an eligible international unit. The Green Paper indicated, however, that carbon pollution permits would be nominally backed at the national level by eligible international units, but would not be explicitly tied to eligible international units.

In addition, the Green Paper did not address whether or what types of eligible international units could be voluntarily surrendered under the Scheme, or how they would be treated by the Government. How the Government treats permits voluntarily surrendered under the Scheme will determine if the surrendered permits will contribute to Australia's obligations under the Kyoto Protocol.

The Kyoto Protocol allows for the voluntary 'cancellation' of Kyoto units. Once an eligible international unit has been put into the voluntary cancellation account it cannot be removed or swapped with a different permit. Unlike an eligible international unit that is put into the retirement account, an eligible international unit that is put into the voluntary cancellation account cannot count towards discharge of Australia's obligations under Article 3 of the Kyoto Protocol. Voluntary cancellation is therefore a way of increasing Australia's contribution to the global mitigation effort, beyond the commitment agreed to in international negotiations.

To give effect to the Government's preference in the Green Paper and to provide clarity to voluntary market participants, where an entity voluntarily surrenders any type of eligible international unit in the national registry, that unit will be cancelled by the Scheme regulator and not used by the Australian Government to meet its international obligations under the Kyoto Protocol. Further, when a carbon pollution permit is voluntarily surrendered under the Scheme, the Government will cancel a Kyoto unit before the end of the Kyoto True-up period. These approaches will ensure that the voluntary surrender of either a carbon pollution permit or an eligible international unit will increase Australia's contribution to the global mitigation effort, above and beyond the commitment agreed to in international negotiations.

In the Green Paper, the Government did not outline whether there would be any limits on the ability for permit holders to voluntarily surrender carbon pollution permits or eligible international units. A small number of submissions suggested that government commitments to accept voluntary surrender of permits under these terms could create additional scarcity in the Australian permit market, raising permit prices and compliance costs for other liable entities (ESAA, Submission 715).

Demand for voluntary surrender is likely to be driven by private firms or non-government organisations which would like to encourage more abatement than the Scheme trajectory will achieve. The demand for voluntary surrender of these permits is likely to be price sensitive, with the number of permits voluntarily surrendered under the Scheme reducing as the permit price rises.

For these reasons, the Government believes that concerns raised in submissions do not provide sufficient justification for preventing voluntary surrender of permits from leading to real abatement, as intended by those who may wish to voluntarily surrender carbon pollution permits or eligible international units. Therefore, the Government will not impose any quantitative restriction on voluntary surrender at this time.

Finally, the Scheme will not initially allow for the voluntary surrender of permits other than carbon pollution permits or eligible international units. This approach would exclude the voluntary surrender of permits that form the currency of other domestic or regional emissions trading Schemes such as European emissions allowances (EUAs) or New Zealand units (NZUs).

For further information regarding offsets and the Scheme, see Chapter 6.

Policy position 7.31

Any entity or individual will be allowed to voluntarily surrender carbon pollution permits or eligible international units regardless of whether they have obligations under the Scheme.

Where an entity voluntarily surrenders an eligible international unit in the national registry, that permit will be cancelled and not used by the Australian Government to meet its international obligations under the Kyoto Protocol.

Where an entity voluntarily surrenders a carbon pollution permit, the Government will cancel an eligible international unit held by the Government by the end of the Kyoto true-up period.

No quantitative limit will be imposed on voluntary surrender at this time.

Permits other than carbon pollution permits and eligible international units will not be accepted for voluntary surrender.

7.7 National registry

A national registry will be established to track the ownership of eligible compliance permits under the Scheme and to manage their surrender and cancellation. The registry would be used by a range of parties, including liable entities, brokers and the public, to hold, transfer and surrender permits and to view public information.

Online access to the registry will enable companies and individuals holding an account to use the registry to perform a number of functions under the Scheme, including:

- receiving carbon pollution permits purchased at primary auctions or via allocation
- transferring carbon pollution permits or eligible international units to other account holders
- surrendering eligible compliance permits where they have obligations to do so under the Scheme
- voluntarily surrendering carbon pollution permits or eligible international units.

The national registry will also facilitate the management of Australia's holdings of eligible international units. It will perform important functions to ensure that Australia meets its obligations under the Kyoto Protocol, such as the accurate accounting of issuance, holding, transfer, acquisition, cancellation and retirement of eligible international units (that is,

emission reduction units, certified emission reductions, assigned amount units and removal units). Appendix C provides further details on those operations.

7.7.1 Timing

The Government will complete technical work on the establishment of the national registry by the end of 2008, following detailed testing with the United Nations Framework Convention on Climate Change (UNFCCC) international transaction log. While technical work on the registry will be complete by the end of 2008, Australia will not be able to participate in international emissions trading until it has satisfied specific eligibility criteria (see Appendix C).

From mid 2009, private entities will be able to apply to the Government to open accounts in the national registry to take receipt of, and transfer, eligible international units that entities purchase from the international carbon market.

The registry will then need to be developed and tested throughout 2009 to incorporate the issuance and management of carbon pollution permits and other functions to underpin the operation of the Scheme. Development and testing will be completed before the first auction of carbon pollution permits in early 2010.

Once legislation establishing the Scheme comes into force, the registry will be administered by the Scheme regulator. Until that time, the registry will be managed by the Australian Government Department of Climate Change.

7.7.2 Opening an account

To hold a carbon pollution permit or an eligible international unit, companies and individuals will need to open an account in the registry. To open an account, companies and individuals will have to apply to the Government (providing relevant information to establish their identity) and to pay any relevant fees.

All legal and natural persons (for example, companies and individuals) will be able to hold accounts in the registry, regardless of whether they have obligations under the Scheme, subject only to the verification of their identity and measures to prevent criminal activity. Entities that have obligations under the Scheme must open an account in the registry in order to acquire and surrender eligible compliance permits under the Scheme.

7.7.3 Transaction of permits

The Scheme regulator will issue all carbon pollution permits under the Scheme. Some of these permits will be auctioned and, in limited cases, allocated to participants (see Chapters 12 and 13). Entities that acquire eligible international units or carbon pollution permits (via auction or allocation) will be free to hold or sell those permits to other entities holding an account in the registry. Each permit will be identified and tracked using a unique identification number allocated to it by the registry and transferred electronically between account holders. While the registry will act as a mechanism for the transfer of permits, it will not facilitate payment or contracts for transfers, which will occur outside the registry.

The registry will keep a record of all transactions and permit holdings of each account holder and will be the ultimate source of proof of ownership of permits under the Scheme. The registry will not track the trading of subsidiary instruments such as futures contracts or subsidiary interests that may be traded in relation to eligible compliance permits. The registry would only be required to log any transfer of legal title that results from the creation and trade of these instruments. Furthermore, the registry will not record charges held over permits as security against another debt.

7.7.4 Reporting and disclosure of information

Internally, one of the registry's main reporting functions will be to generate compliance reports for the Scheme regulator, following the final date for surrender of permits for a given compliance period. The reports will indicate which entities have surrendered enough permits to meet their obligations under the Scheme and which entities have a shortfall.

The registry will also be an important source of information to increase the efficiency of the permit market and the transparency of the Scheme. To fulfil these goals, the registry will generate the following information for publication by the Scheme regulator as soon as practicable following the final surrender date for each compliance year:

- the total number of permits issued under the price cap arrangements (see Chapter 8)
- the total number of permits banked and borrowed
- the total number and type of eligible compliance permits surrendered under the Scheme and total permit shortfalls (if any)
- the number and type of eligible compliance permits surrendered by each liable entity
- permit shortfalls for each liable entity (if any), including the amount of any shortfall, the proportion of any shortfall relative to that entity's obligations for that compliance year and information relating to the payment of any administrative penalties
- each liable entity's compliance status under the Scheme.

The registry would also publish information on the status of Australia's commitment period reserve holdings, and procedures that would apply should Australia breach the commitment period reserve set out under the Kyoto Protocol (see Chapter 11 and Appendix C for further information regarding the commitment period reserve).

As part of Australia's obligations under the Kyoto Protocol, the Scheme regulator will also be required to publish some information held in the national registry in relation to the number and type of eligible international units held in the national registry. The information that must be published in accordance with Australia's Kyoto Protocol obligations is set out in Appendix C and includes the names and contact details of entities holding accounts in the national registry and the total quantity of eligible international units held, transferred, cancelled or retired in the national registry.

Policy position 7.32

To hold a carbon pollution permit or an eligible international unit, companies and individuals will need to open an account in the registry.

To open an account, companies and individuals will have to apply to the Government (providing relevant information to establish their identity) and pay any relevant fees.

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1 World Resources Institute, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), 2004, p. 17. For example, financial control usually exists if the company has the right to the majority of benefits of the operation, however these rights are conveyed. Similarly, a company is considered to financially control an operation if it retains the majority risks and rewards of ownership of the operation's assets.

2 ASX Listing Rule 4.1—Periodic Disclosure. http://www.asx.com.au/supervision/rules_guidance/listing_rules1.htm.