



Australian Government
Department of Climate Change



National Greenhouse and Energy Reporting Guidelines

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National Greenhouse and Energy Reporting Guidelines

Contents

Introduction	1
The purpose of these Reporting Guidelines	1
How to use these guidelines	1
The National Greenhouse and Energy Reporting Act	3
Relationship between these guidelines and other support materials	4
The Greenhouse and Energy Data Officer: administrative arrangements	4

1 Determining participation	5
1.1 The reporting thresholds	6
1.2 Defining the corporate group	7
1.3 Defining a facility	9
1.4 Operational control	15
1.5 Facility thresholds	18
1.6 Corporate thresholds	19
1.7 The NGERs Calculator	20

2 Registration	21
2.1 Who must apply for registration?	21
2.2 Voluntary registration for greenhouse gas projects	21
2.3 How to apply for registration	21
2.4 When to apply for registration	22
2.5 After applying for registration	22
2.6 The National Greenhouse and Energy Register	22
2.7 Data security	22

3 Reporting obligations	23
3.1 Principles of greenhouse gas and energy reporting	23
3.2 Understanding reporting obligations	23
3.3 Checklist item A: which facilities do I report?	25
3.4 Checklist item B: identifying greenhouse gas emissions and energy sources for a facility	27
3.5 Checklist item C: facility-specific reporting requirements	30
3.6 Checklist item D: provide a report to the Greenhouse and Energy Data Officer	34
3.7 If a registered corporation's group meets no threshold in a year	34
3.8 Reporting contextual data	35
3.9 Reporting on greenhouse gas projects	35
3.10 External audit and compliance	35

4 Record keeping	37
4.1 The type of information	37
4.2 How to keep records	38

5 Deregistration	39
5.1 Why, how and when a company would be deregistered	39

Appendixes	41
Appendix A Reportable fuels and energy commodities: Schedule 1 of the Regulations	41
Appendix B ANZSIC industry sectors: Schedule 2 of the Regulations	44
Shortened forms	47

Introduction



The purpose of these Reporting Guidelines

The purpose of the National Greenhouse and Energy Reporting Guidelines is to help corporations understand their obligations under the *National Greenhouse and Energy Reporting Act 2007* (the Act).

How to use these guidelines

The guidelines outline each of the steps corporations need to take in order to apply for registration and report under the Act. Specifically, the guidelines cover the following:

- Chapter 1—‘Determining participation’—provides guidance on whether a corporation needs to apply for registration by considering concepts such as corporate groups, facilities, operational control, and how emissions of greenhouse gases, energy production and energy consumption apply to the thresholds.
- Chapter 2—‘Registration’—outlines how and when controlling corporations should apply for registration.
- Chapter 3—‘Reporting obligations’—explains a registered corporation’s reporting obligations under the Act and discusses concepts such as sub-facility reporting, materiality and incidental greenhouse gas emissions and energy.
- Chapter 4—‘Record keeping’—discusses the principles of record keeping, including the form of records and how long records should be kept.
- Chapter 5—‘Deregistration’—outlines how and when controlling corporations should apply for deregistration.
- The appendixes provide details of reportable fuels and energy commodities and ANZSIC codes and classifications.

Practical examples are also used throughout the guidelines in order to explain complex or difficult requirements or potential circumstances.

The purpose of these Reporting Guidelines

How to use the guidelines

The National Greenhouse and Energy Reporting Act

The relationship between these guidelines and other support materials

The National Greenhouse and Energy Data Officer: administrative arrangements

National Greenhouse Energy Reporting Guidelines

Refer for details about data required in the report— e.g. emissions and energy sources and emissions factors

National Greenhouse and Energy Reporting (Measurement) Technical Guidelines

Refer for details about how to enter the data into the report

OSCAR online training materials

Step 1:
DETERMINING PARTICIPATION

1 Is the corporation required to report?

Step 2:
REGISTRATION

2 How does a corporation register?

Step 3:
REPORTING OBLIGATIONS

3 What information is a registered corporation required to report?

Step 4:
RECORD KEEPING

4 What records is the corporation required to keep?

Step 5:
DEREGISTRATION

5 How and why is a corporation deregistered?

Appendixes

The National Greenhouse and Energy Reporting Act

The *National Greenhouse and Energy Reporting Act 2007* establishes a national framework for corporations to report greenhouse gas emissions and energy consumption and production from 1 July 2008. The Act makes registration and reporting mandatory for corporations whose energy production, energy use or greenhouse gas emissions meet specified thresholds.

Section 3 of the National Greenhouse and Energy Reporting Act defines the object of the Act:

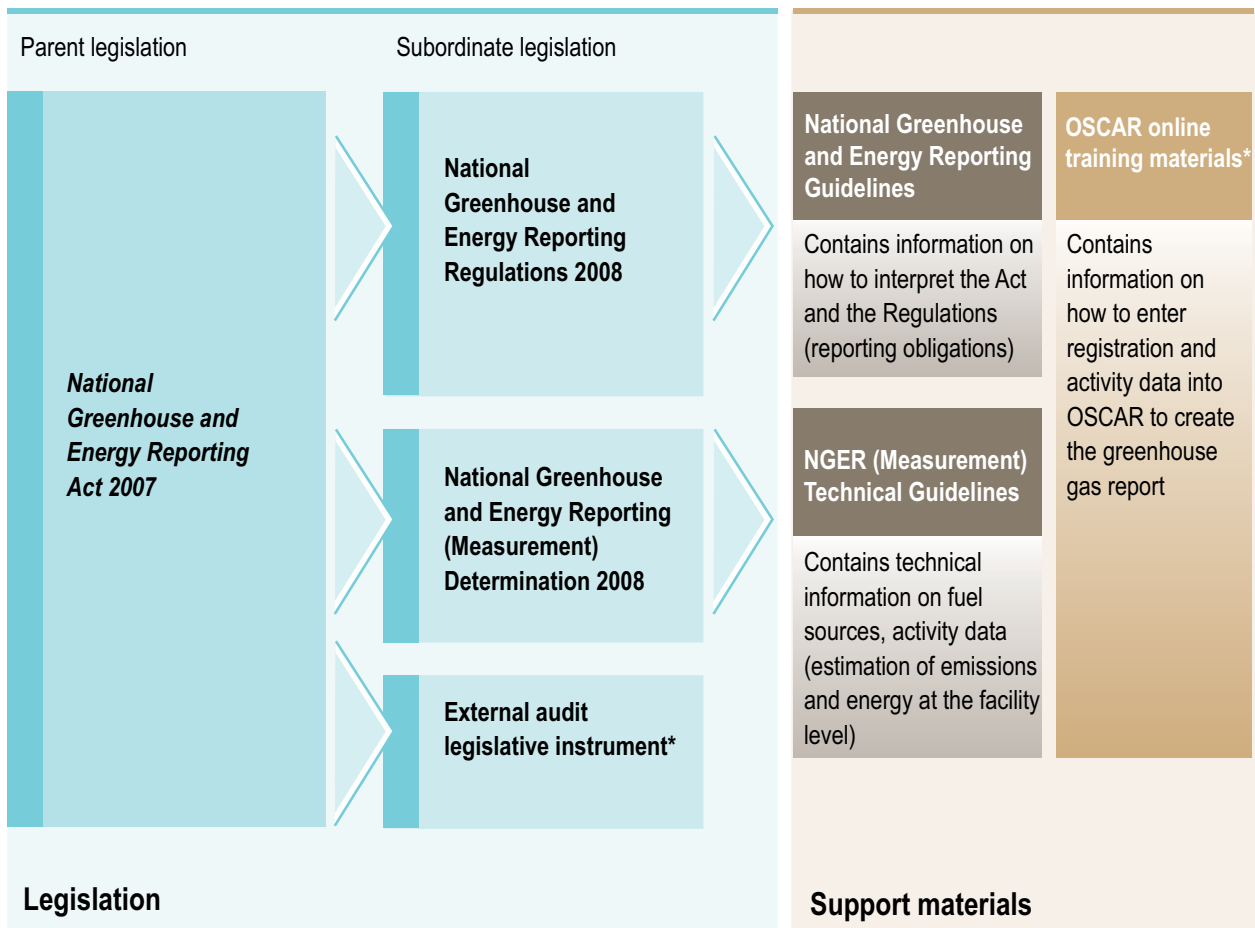
The object of this Act is to introduce a single national reporting framework for the reporting and dissemination of information related to greenhouse gas emissions, greenhouse gas projects, energy consumption and energy production of corporations to:

- a. underpin the introduction of an emissions trading scheme in the future; and
- b. inform government policy formulation and the Australian public; and
- c. meet Australia's international reporting obligations; and
- d. assist Commonwealth, State and Territory government programs and activities; and
- e. avoid the duplication of similar reporting requirements in the States and Territories.

The Act is administered by the Australian Government Department of Climate Change. The Act establishes the statutory position of the Greenhouse and Energy Data Officer, within the Department of Climate Change, to carry out certain regulatory functions.

A number of pieces of subordinate legislation sit under the Act, providing greater detail about corporations' obligations. The figure below illustrates how the legislation and support materials fit together. An electronic version of the Act and the subordinate legislation is available at www.comlaw.gov.au.

The legislative framework, the Reporting Guidelines and other supporting materials



*The external audit legislative instrument and the OSCAR online training materials will be developed during the first reporting year (2008–09).

Relationship between these guidelines and other support materials

These Reporting Guidelines should be used in conjunction with the following:

- the National Greenhouse and Energy Reporting (Measurement) Technical Guidelines—referred to as the NGER Technical Guidelines
- the Online System for Comprehensive Activity Reporting, or OSCAR, training material.

The NGER Technical Guidelines contain information that reporters need in order to measure and report on greenhouse gas emissions and energy use and production at a facility and cover the energy, industrial process, fugitive and waste emission sectors. They are based on the National Greenhouse and Energy Reporting (Measurement) Determination 2008 and, like these Reporting Guidelines, help explain the legislative requirements for reporters. The NGER Technical Guidelines supersede the Technical Guidelines Discussion Paper that was released in February 2008.

OSCAR is a tool used for reporting greenhouse gas emissions and energy data under the Act; it has the ability to calculate greenhouse gas emissions from activity data submitted in reports.

OSCAR uses default emissions factors. Alternatively, reporters can elect to provide their own emissions factors or emissions estimates, although only the methods for calculating emissions and energy prescribed in the National Greenhouse Energy Reporting (Measurement) Determination 2008 can be used. Further information about different calculation approaches is provided in the NGER Technical Guidelines.

Reporters are given access to OSCAR, including logon and password details, once they are registered by the Greenhouse and Energy Data Officer. OSCAR is currently being reconfigured to meet the reporting requirements of the National Greenhouse and Energy Reporting System.

The Reporting Guidelines are designed to help corporations understand the legislation and determine whether they are required to apply for registration and what they must report under the Act. The NGER Technical Guidelines are designed to help corporations understand the legislation in relation to how to calculate facility-level data under the Act. The OSCAR online training material explains how to submit data using the online tool.

Note that these Reporting Guidelines, the NGER Technical Guidelines and the OSCAR training materials are not legislation or 'law': they provide guidance only.

The Greenhouse and Energy Data Officer: administrative arrangements

The Greenhouse and Energy Data Officer performs many of the regulatory tasks under the Act, including the following:

- management of the National Greenhouse and Energy Register
- monitoring compliance and enforcing the legislation
- arranging for external auditing to be carried out
- registering and deregistering corporations for reporting.

The GEDO will also provide capacity-building materials and communicate policy interpretation to help corporations comply.

1 Determining participation



From 1 July 2008 all controlling corporations must apply for registration with the Greenhouse and Energy Data Officer if their corporate group emits greenhouse gases or produces or consumes energy at or above the specified thresholds¹ for a financial (reporting) year.

The following questions should be considered when determining whether a corporation is required to apply for registration—that is, to participate:

- What are the National Greenhouse and Energy Reporting thresholds?
- What is a controlling corporation?
- How is a controlling corporation’s group defined?
- What is a facility?
- Who has operational control of a facility?
- How do the thresholds apply to a controlling corporation’s group?

This chapter describes the information that is needed if a corporation is to answer these questions and determine whether it must participate. Figure 1.1 outlines this decision-making process.

The reporting thresholds

Defining the corporate group

Defining a facility

Operational control

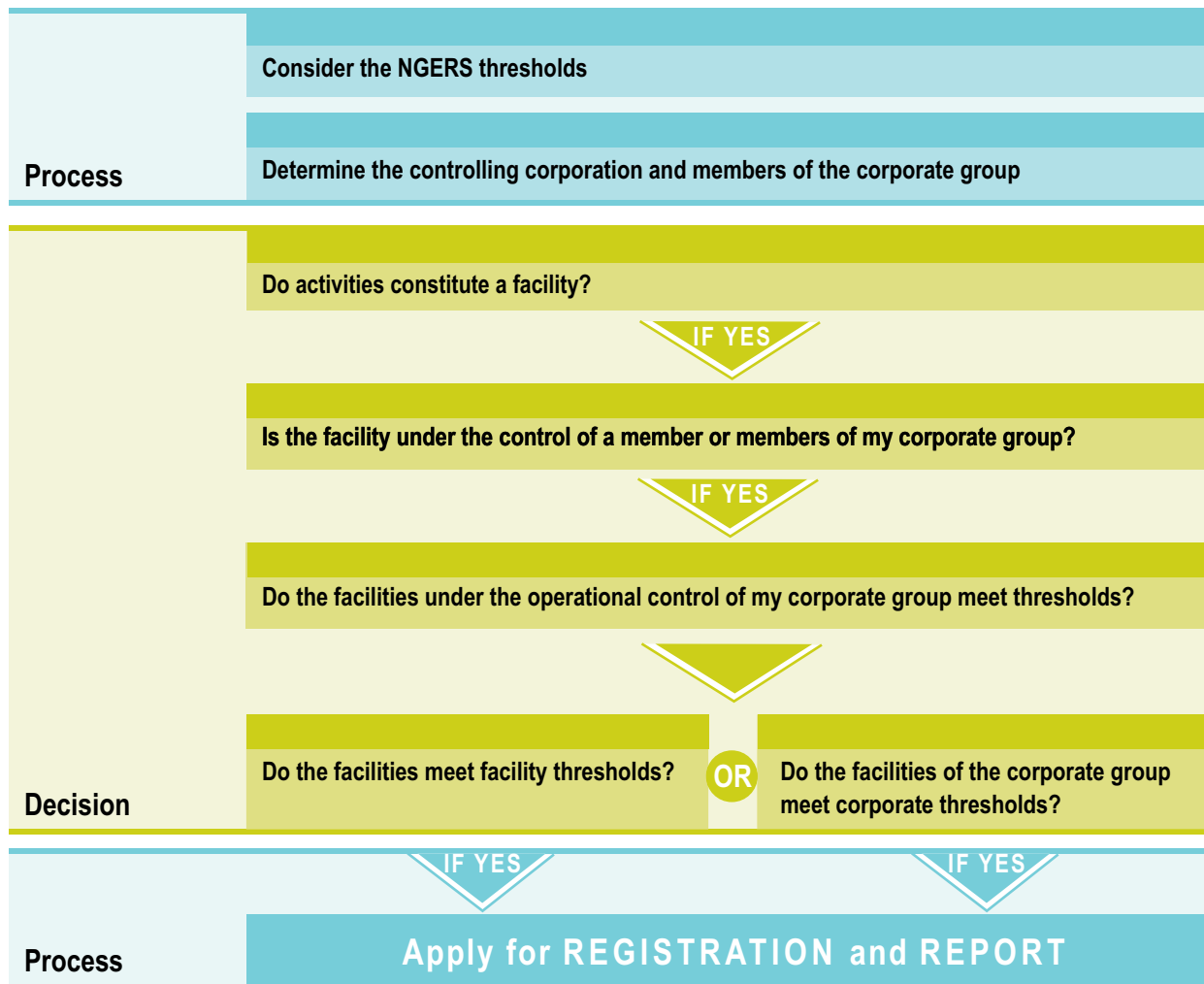
Facility thresholds

Corporate thresholds

The NGERs Calculator

1 The thresholds, specified under the Act, are based on independent modelling and analysis and extensive consultation with Australian corporations and state and territory governments. They have been set to maximise coverage of emissions and energy while avoiding impacts on small business. They will also ensure that all corporations likely to be covered by the future Australian emissions trading scheme are captured in the first reporting period, 2008–09. Lower thresholds apply for 2009–10 and 2010–11, which will give new reporters time to understand the reporting requirements and establish their own reporting systems.

Figure 1.1: Determining participation: processes and decisions



1.1 The reporting thresholds

There are two levels of thresholds at which corporations are required to apply for registration and report—facility thresholds and corporate thresholds. When a controlling corporation’s group meets a facility or corporate threshold, the controlling corporation must apply for registration and report its greenhouse gas emissions and energy data to the Greenhouse and Energy Data Officer. Figure 1.2 shows the thresholds and the due dates for applying for registration and reporting.

1.1.1 Carbon dioxide equivalence

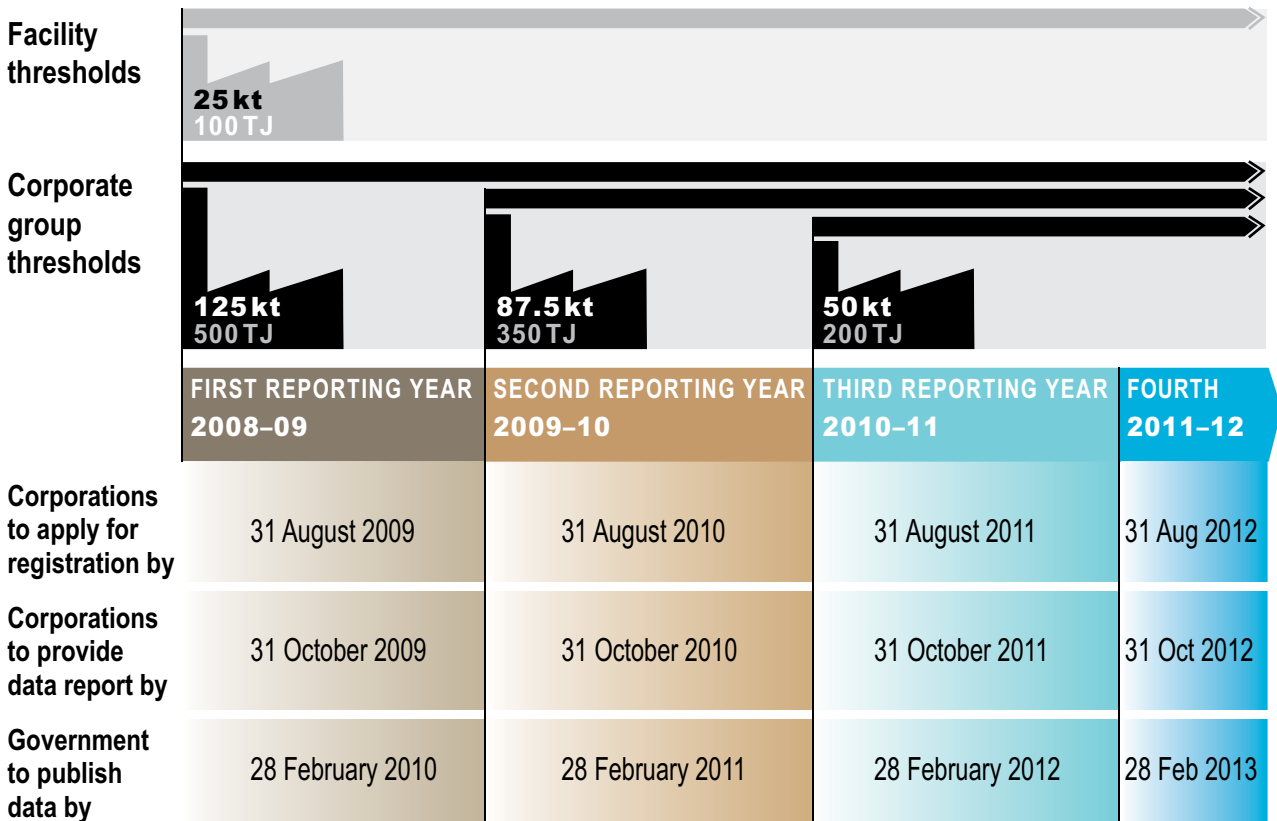
Greenhouse gases can be measured in carbon dioxide equivalents. Carbon dioxide equivalence, or CO₂-e, is estimated by multiplying the amount of a gas by the global warming potential of the gas.

1.1.2 Global warming potential

Global warming potential (GWP) is a measure of how much a given mass of greenhouse gas is estimated to contribute to global warming. It is a relative scale that compares a gas with the same mass of carbon dioxide and is calculated over a specific time interval.

Emissions factors and methods, as described in the Determination, take the GWP of different gases into account. More information on GWP values and how they are used with prescribed methods for calculating greenhouse gas emissions is provided in the NGER Technical Guidelines. GWPs are also factored into OSCAR and are automatically applied to convert greenhouse gas emissions to carbon dioxide equivalents.

Figure 1.2: The National Greenhouse and Energy Reporting thresholds for facilities and corporations



Notes: TJ = terajoule (10^{12} joules) of energy consumed or produced; kt = kilotonne (10^6 kilograms) CO₂-e equivalent of greenhouse gases emitted. Conversion factors: Energy—1 terajoule = 1000 gigajoules, 1 gigajoule = 1000 megajoules, 1 megajoule = 1000 kilojoules, 1 kilojoule = 1000 joules; CO₂-e emissions—1 kilotonne = 1000 tonnes, 1 tonne = 1000 kilograms.

1.2 Defining the corporate group

1.2.1 Controlling corporation

The principal obligations under the Act apply to ‘controlling corporations’. A controlling corporation is a constitutional corporation that does not have a holding company in Australia; it is generally the corporation at the top of the corporate hierarchy in Australia. Foreign corporations may also be controlling corporations.

1.2.2 Constitutional corporation

Under paragraph 51(xx) of the Australian Constitution, the Australian Parliament has power to make laws with respect to foreign corporations and trading or financial corporations formed within the limits of the Commonwealth. These corporations are known as ‘constitutional corporations’.

Organisations in doubt about their status as a constitutional corporation should consider seeking legal advice.

Organisations for which legal application of the principle of a constitutional corporation is not well established (such as incorporated government agencies) should consider keeping greenhouse gas emissions and energy records as appropriate and apply for registration under the Act if a threshold is met or likely to be met.

Current coverage of the Act to constitutional corporations in no way pre-empts or precludes the possible coverage of an emissions trading scheme.

1.2.3 Members of a controlling corporation's group

A controlling corporation's group may include the following members, in addition to the controlling corporation itself:

- subsidiaries
- joint ventures
- partnerships.

Note, however, that there are some further issues to consider when determining whether a particular subsidiary, joint venture or partnership is a member of a given controlling corporation's group, as discussed below.

1.2.4 A subsidiary

Under the Act a 'subsidiary' has the same meaning as that expressed in s. 46 of the *Corporations Act 2001*. Any subsidiary under the Corporations Act would be considered part of the controlling corporation's group.

Section 46 of the *Corporations Act 2001*:

A body corporate (in this section called the **first body**) is a subsidiary of another body corporate if, and only if:

- a. the other body:
 - i. controls the composition of the first body's board; or
 - ii. is in a position to cast, or control the casting of, more than one-half of the maximum number of votes that might be cast at a general meeting of the first body; or
 - iii. holds more than one-half of the issued share capital of the first body (excluding any part of that issued share capital that carries no right to participate beyond a specified amount in a distribution of either profits or capital); or
- b. the first body is a subsidiary of a subsidiary of the other body.

1.2.5 Joint ventures and partnerships

The information in this section has now been updated.

Please refer to the [Supplementary Guidelines - Joint ventures](#)

(<http://www.climatechange.gov.au/en/government/initiatives/national-greenhouse-energy-reporting/~media/publications/greenhouse-report/NGER-supplementary-guidelines-pdf.ashx>)

1.3 Defining a facility

Under the Act, corporations registered by the Greenhouse and Energy Data Officer are required to report all greenhouse gas emissions, energy production and energy consumption from facilities under the operational control of the registered corporation or a member of its group. Defining a 'facility' and determining a facility's boundaries are therefore central to reporting under the Act. In some cases, greenhouse gas emissions, energy production and energy consumption data from the operation of facilities may be provided by a member of the registered corporation's group.

The following four criteria can be used in determining if an activity or series of activities forms a facility under the Act:

1. Activities must produce greenhouse gas emissions or produce or consume energy.
2. Activities are part of a production process.
3. Activities occur at a 'single site'.
4. Activities are attributable to a single industry sector.

1.3.1 One: activities that produce greenhouse gas emissions or produce or consume energy

To satisfy the first requirement for a facility, the activities attributed to the facility must produce greenhouse gas emissions or produce or consume energy.

Greenhouse gas emissions

For the purposes of the Act 'emissions' means the release of greenhouse gases into the atmosphere. This covers direct releases of greenhouse gases (scope 1 emissions) and certain indirect releases of greenhouse gases (scope 2 emissions).

'Emissions' are defined in r. 2.23:

Emissions of greenhouse gas, in relation to a facility, means the release of greenhouse gas into the atmosphere as a direct result of 1 of the following:

- a. an activity, or series of activities (including ancillary activities) that constitute the facility (**scope 1 emissions**)
- b. 1 or more activities that generate electricity, heating, cooling or steam that is consumed by the facility but that do not form part of the facility (**scope 2 emissions**).

Table 1.1 shows the greenhouse gases that must be reported under the Act.

Table 1.1: Greenhouse gases that must be reported under the Act

Gas	Chemical formula	Gas	Chemical formula
Carbon dioxide	CO ₂	HFC-41	CH ₃ F
HFC-125	C ₂ H ₂ F ₅	HFC-43-10mee	C ₅ H ₂ F ₁₀
HFC-134	C ₂ H ₂ F ₄ (CHF ₂ CHF ₂)	Methane	CH ₄
HFC-134a	C ₂ H ₂ F ₄ (CH ₂ FCF ₃)	Nitrous oxide	N ₂ O
HFC-143	C ₂ H ₃ F ₃ (CHF ₂ CH ₂ F)	Perfluorobutane	C ₄ F ₁₀
HFC-143a	C ₂ H ₃ F ₃ (CF ₃ CH ₃)	Perfluorocyclobutane	c-C ₄ F ₈
HFC-152a	C ₂ H ₄ F ₂ (CH ₃ CHF ₂)	Perfluoroethane (hexafluoroethane)	C ₂ F ₆
HFC-227ea	C ₃ HF ₇	Perfluorohexane	C ₆ F ₁₄
HFC-23	CHF ₃	Perfluoromethane (tetrafluoromethane)	CF ₄
HFC-236fa	C ₃ H ₂ F ₆	Perfluoropentane	C ₅ F ₁₂
HFC-245ca	C ₃ H ₃ F ₅	Perfluoropropane	C ₃ F ₈
HFC-32	CH ₂ F ₂	Sulphur hexafluoride	SF ₆

Corporations can also voluntarily report on other greenhouse gas emissions: only those in Table 1.1, which are taken directly from the Act, are mandatory.

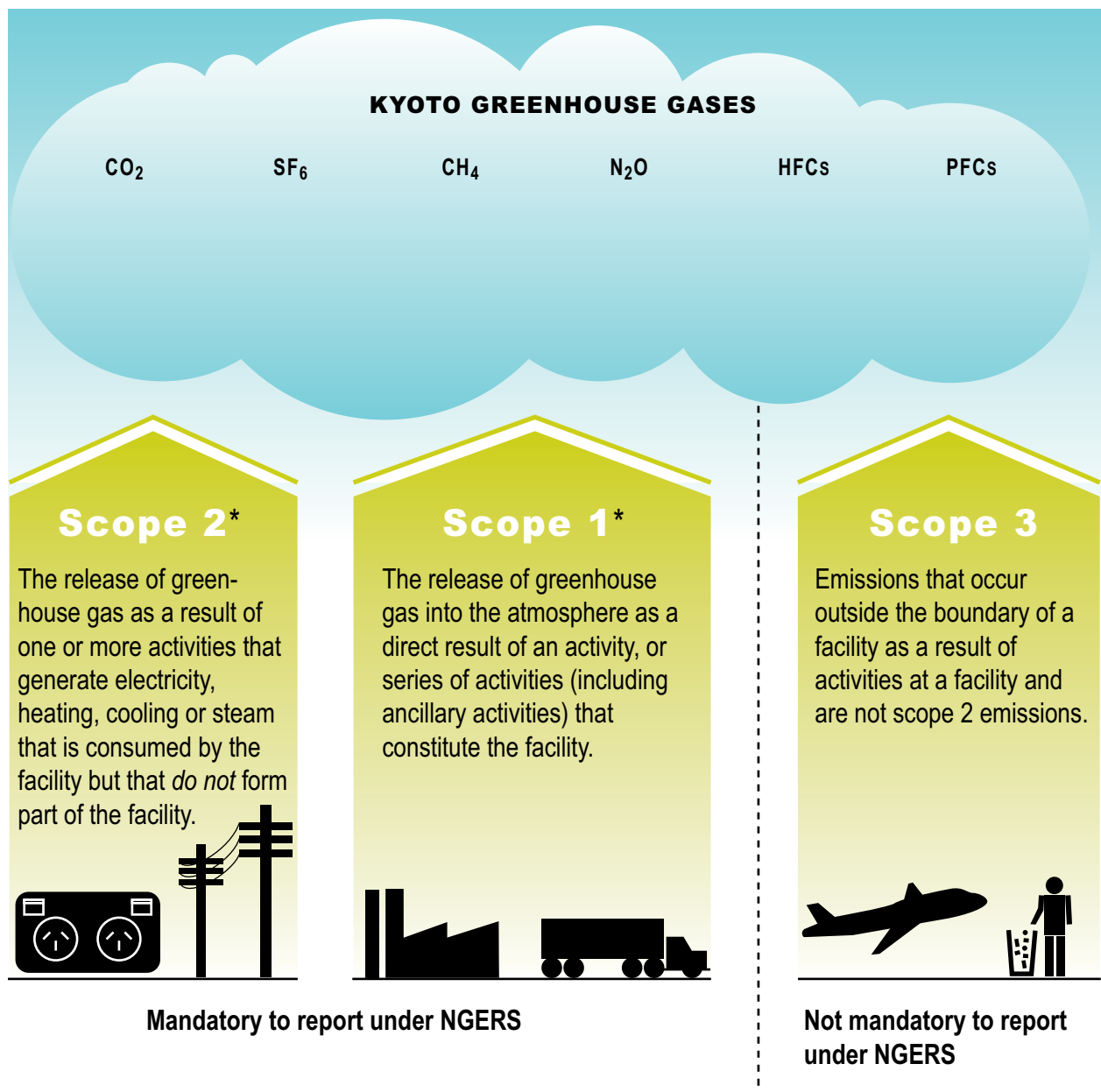
The terms 'scope 1', 'scope 2' and 'scope 3' are well known and used in a number of Australian and international programs and standards. They are defined by the World Resource Institute and the World Business Council for Sustainable Development in the *Greenhouse Gas Protocol: a corporate accounting and reporting standard* (known simply as the Greenhouse Gas Protocol) and the International Organization for Standardization's Standard for Greenhouse Gases—Part 1: specification with guidance at the organisational level for quantification and reporting of greenhouse gas emissions and removals (ISO 14064-1).

Scope 3 emissions, which are not defined in the NGER legislation because reporting them is not mandatory, are greenhouse gas emissions (other than scope 2 emissions) that are generated in the wider economy as a consequence of a facility's activities but that are physically produced by another facility.

A 'source' means a source of emissions.

Figure 1.3 shows examples of scope 1, 2 and 3 greenhouse gas emissions. In this example scope 1 emissions are produced by activities at or attributed to the facility, such as an industrial process, or transport activities that are attributed to this facility. The scope 2 emissions for this facility are consumption of electricity that has been produced at another site (not forming part of the facility). Employees' business travel on a commercial airline or waste that is treated or stored off-site might be examples of scope 3 emissions.

Figure 1.3: Scope 1, 2 and 3 greenhouse gas emissions: examples



* The definitions of scope 1 and scope 2 emissions are summarised from r. 2.23.

Energy production

‘Energy production’ is defined in r. 2.23:

Production of energy, in relation to a facility, means any one of the following:

- a. the extraction or capture of energy from natural sources for final consumption by or from the operation of the facility or for use other than in operation of the facility;
- b. the manufacture of energy by the conversion of energy from one form to another form for final consumption by or from the operation of the facility or for use other than in the operation of the facility.

Energy consumption

‘Energy consumption’ is defined in r. 2.23:

Consumption of energy, in relation to a facility, means the use or disposal of energy from the operation of the facility including own-use and losses in extraction, production and transmission.

1.3.2 Two: activities that are part of a single production process

An activity or a series of activities forms part of a single undertaking or enterprise if it produces one or more products or services (the primary production process) at a site. For example, the primary production process might be the manufacture of steel. This would involve a number of activities (iron pelleting, processing through a blast furnace, coke manufacture and steel milling) that contribute to the manufacture of a product (steel) or products (steel rail gauge, steel girders, and so on) for sale in the market.

Other production processes—activities occurring at a particular site but that are separate processes—would also be considered part of a single facility if they are under the overall control of the same corporation.

To be considered separate facilities, the other production processes must be under the overall control of a corporation other than the one responsible for the primary production process and produce products or services for a purpose external to the primary production process—that is, they are not used solely in the primary production process.

A corporation will have overall control of an activity or series of activities if it has the authority to introduce and implement operating, environmental, or health and safety policies for the activity. If more than one corporation satisfies this criterion, the one with the greatest authority for operating and environmental policies will have overall control of the activity. This concept is in line with the definition of ‘operational control’ under the Act.

Regulation 2.14 defines the concept of ‘overall control’:

1. A corporation has **overall control** in relation to an activity or series of activities (including ancillary activities) if the corporation has the authority to introduce and implement any or all of the following for the activity or series of activities:
 - a. operating policies;
 - b. health and safety policies;
 - c. environmental policies.
2. If more than 1 corporation could satisfy subregulation (1) at any 1 time, then the corporation that has the greatest authority to introduce and implement the policies mentioned in paragraphs (1) (a) and (c) is taken, for the purposes of these Regulations, to have **overall control** in relation to the activity or series of activities (including ancillary activities).

‘Overall control’ is a concept used to identify the corporation that has operational control of activities or a series of activities. ‘Operational control’ is a concept used to identify which controlling corporation (or member of the controlling corporation’s group) has control of the facility in question—see Section 1.4.

1.3.3 Three: activities occurring at a single site

A 'single site' is defined in r. 1.03:

single site means a single physical area that can include a series of geographical locations in close proximity to one another.

Activities occurring at a single site would usually be considered part of a single facility; the exception to this is if the activities form an entirely separate production process that is controlled by a separate corporation.

A corporation will also be able to attribute to a site some activities that occur away from that site. These activities are called 'listed' activities.

Listed activities are defined in r. 1.03:

listed activity means an activity of 1 of the following kinds:

- a. record keeping;
- b. communication;
- c. purchasing materials or equipment;
- d. managing the employment, training and payment of employees;
- e. storage (including warehousing) of materials or equipment;
- f. transport of persons or goods of a kind not covered by regulation 2.19;
- g. sales promotion;
- h. cleaning and maintaining buildings and other structures;
- i. maintenance of equipment;
- j. security and surveillance

For a corporation to attribute listed activities to a site, the listed activities must satisfy the requirements set out in rr. 2.17 and 2.18.

Exceptions to the single site criteria

There are two areas where the single site criteria for facilities do not apply—networks and transport.

Networks. Regulation 2.20 defines how networks are treated in relation to the single site criteria. Network facilities for electricity, gas, water, sewerage and telecommunications can cross significant distances, but they can be reported as a single facility. Table 1.2 shows the industry sectors that are reported as 'networks' rather than 'sites'.

Table 1.2: Industry sectors exempt from the 'single site' criteria

Industry sector	ANZSIC code
Electricity transmission	262
Electricity distribution	263
Gas supply	270
Water supply, sewerage and drainage services	281
Telecommunications services	580

If a network facility for one of these industry sectors crosses a state or territory border, reporting will need to be separate for each jurisdiction. For example, if a telecommunications services facility spans the South Australia–Victoria border, the greenhouse gas emissions and energy for the two states will be reported on a pro rata basis.

Transport. Regulation 2.19 defines how transport industry sectors are treated in relation to the single site criteria. When an activity or series of activities is attributable to a specified transport industry sector (see Table 1.3) different criteria apply. In these cases, rather than the transport facility being attributed to a single address, it must be attributed to a state or territory. This is because of the non-stationary nature of transport.

Table 1.3: Transport industry sectors

Sector	ANZSIC code
Air and space transport	490
Postal and courier pick-up and delivery services	510
Rail freight transport	471
Rail passenger transport	472
Road freight transport	461
Road passenger transport	462
Scenic and sightseeing transport	501
Waste collection services	291
Water freight transport	481
Water passenger transport	482

In order to be classified as a transport activity that can be reported by state and territory, the activity or series of activities must be the principle activity as defined in r. 2.19 (4):

In this regulation, **principal activity** in relation to a series of activities, means the activity in the series of activities that:

- a. results in the production of a product or service that is produced for sale on the market; and
- b. produces the most value for the series out of any activities in the series.

The transport activity is attributable to a state or territory by the location of fuel purchases.

1.3.4 Four: being attributable to a single industry sector

A single undertaking or enterprise needs to be attributable to an industry sector.

Section 9(3) of the Act states, ‘For the purposes of paragraph (1)(a), the activity or activities constituting the undertaking or enterprise must not be attributable to more than one industry sector’.

The corporation with operational control at a facility must determine the principal activity of the facility and attribute that activity to an industry sector. This applies when a facility accommodates a series of activities. As mentioned, the ‘principal activity’ is defined as the activity that results in the creation of a product or service for sale on the market and that produces the greatest value of all the activities in the series. ‘Industry sector’ refers to the industry classifications and codes listed in the 2006 Australian New Zealand Standard Industry Classification, or ANZSIC, a widely accepted system for classifying industry activities. Four ‘levels’ are used—division, subdivision, group and class.

Each division is assigned a letter, and each subdivision, group and class is assigned a number—two digits for a subdivision, three for a group and four for a class (see Table 1.4). A division is the broadest description of an activity; a class is the most detailed description.

Table 1.4: ANZSIC classification: an example

Division	Subdivision	Group	Class
Manufacturing	Transport and equipment manufacturing	Motor vehicle and motor vehicle part manufacturing	Other motor vehicle parts manufacturing
C	23	231	2319

The appropriate industry sector description is generally to the three-digit level. Using the example in Table 1.4, greenhouse gas emissions and energy associated with the primary productive activity would be reported against ‘231—Motor vehicle and motor vehicle part manufacturing’.

Schedule 2 of the Regulations determines the industry sectors (see Appendix B here).

If a facility’s principal activity changes for a period of two years or more, the corporation with operational control is required to determine the new principal activity and report greenhouse gas emissions and energy against this industry sector. Regulation 4.31 contains further detail about changes to the industry sector.

1.3.5 Declaration of a facility by the Greenhouse and Energy Data Officer

In certain circumstances the Greenhouse and Energy Data Officer can declare an activity or series of activities to be a facility. In making this determination the GEDO would take account of the provisions of the Act.

Further information about the process of applying for declaration of a facility will be made available on the website (www.climatechange.gov.au/reporting).

1.3.6 Activities in the Exclusive Economic Zone

Generally, activities in the Exclusive Economic Zone are not included under the Act. An exception applies to oil and gas extraction activities or a series of oil or gas extraction activities. These types of activities must be reported if the applicable thresholds and other provisions (ss. 6(2) and 9(1)) of the Act are met.

1.3.7 Facility example

Figure 1.4 provides an example of determining whether activities constitute a facility. The example would likely be classified as a facility because it satisfies the four conditions described at the beginning of Section 1.3.

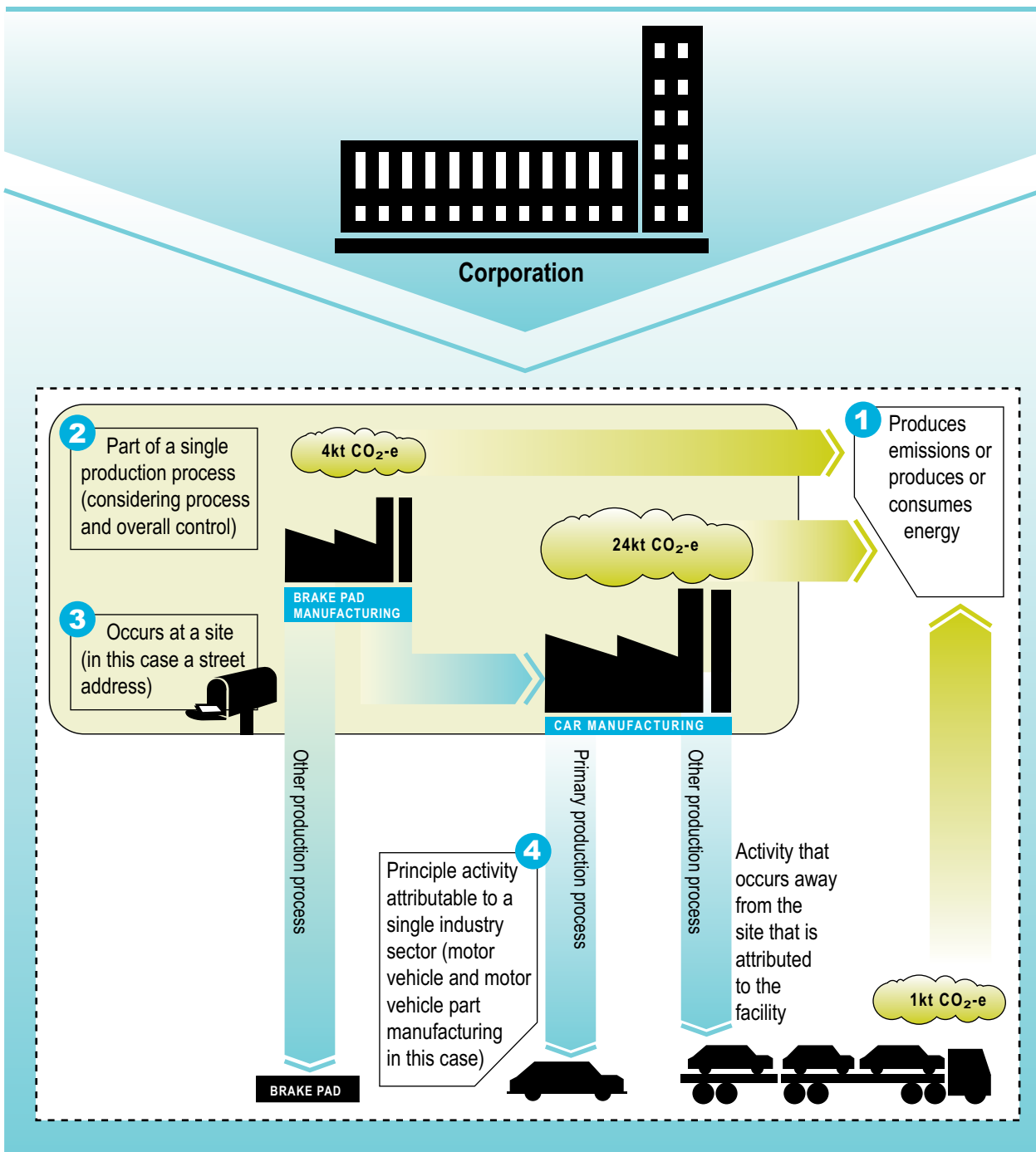
One: The activities from the facility produce greenhouse gas emissions or produce or consume energy. The manufacturing process and other activities attributed to the facility in Figure 1.4 produce greenhouse gas emissions (29 kt CO₂-e) and consume energy.

Two: The activities are part of a single production process. In the example the principle activity is ‘motor vehicle and motor vehicle part manufacturing’. Other production processes that occur at the facility, in this case the manufacture of brake pads, are considered part of the same facility because the manufacture of brake pads is under the overall control of the controlling corporation that has operational control over the entire facility.

Three: The activities occur at a single site, in this case the street address, and the principle activity does not come under the transport or network industry sectors described in Tables 1.2 and 1.3.

Four: the principal activity is attributable to a single industry sector. The greenhouse gas emissions and energy production and consumption for this facility are reported against the ‘motor vehicle and motor vehicle part manufacturing’ industry sector, ANZSIC 231. In this example motor vehicle manufacturing is the activity that results in the creation of a product or service for sale on the market and that produces the greatest value of all the activities in the series.

Figure 1.4: Determining whether activities constitute a facility: an example



1.4 Operational control

The question of whether a member of a controlling corporation's group has 'operational control' over individual facilities is central to determining mandatory reporting obligations.

Obligations under the Act are based on which members have operational control over facilities that meet a facility threshold or that contribute to meeting a corporate-level threshold.

The concept of operational control is used for allocating responsibility for reporting energy and greenhouse gas emissions data of individual facilities. The concept is used in international reporting standards such as ISO14064 (AS ISO14064) and the Greenhouse Gas Protocol.

Section 11 of the Act defines 'operational control':

1. A controlling corporation or another member of the corporation's group has operational control over a facility if:
 - a. it has the authority to introduce and implement any or all of the following for the facility:
 - i. operating policies;
 - ii. health and safety policies;
 - iii. environmental policies;and meets the requirements of the regulations; or
 - b. the Greenhouse and Energy Data Officer declares the corporation or member to have operational control of the facility under section 55.
2. Paragraph (1)(a) does not apply if a declaration of a kind referred to in paragraph (1)(b) is in force.
3. For the purposes of this Act, only one such corporation or member can have operational control over a facility at any one time.
4. If more than one such corporation or member could satisfy paragraph (1)(a) at any one time, then the corporation or member that has the greatest authority to introduce and implement the policies mentioned in subparagraphs (1)(a)(i) and (iii) is taken, for the purposes of this Act, to have operational control over the facility.

1.4.1 Determining whether a corporation has operational control

A corporation² is considered to have operational control over a facility if the member has authority to introduce and implement operating, health and safety, and environmental policies. Only one corporation can have operational control over a facility at any time.

If there is uncertainty about which corporation has operational control over a facility, the corporation deemed to have operational control will be the one with the greatest authority to introduce and implement operating and environmental policies.

The decision rule consists of two parts — authority to introduce policies and authority to implement policies. In determining 'greatest authority', where there is uncertainty, the decision rule is limited to operational and environmental policies: it does not include health and safety policies.

Among the circumstances in which operational control can be difficult to establish are when there are third party managers or operators of facilities and when contractors and subcontractors are present at a facility.

Third party managers or operators

If a third party is contracted to manage or operate a facility on behalf of the owner, it is expected that authority to introduce policies will be shared between the owner and the manager or operator according to conditions specified in the contract between the parties. The greatest authority to introduce policies is thus dependent on the contractual relationship between the parties.

In some circumstances the greatest authority will rest with the facility manager as the corporation with day-to-day on-site managerial responsibility. This is, however, balanced against the ability to introduce operating and environmental policies, which can sometimes rest with the owner.

An example of operational control in practice is contract mining in which the owner of the mine has contracted a company to run the mine site. The owner and the manager might have equivalent capacity to introduce policies, but the manager implements all the policies without input from the owner. In this situation the manager would probably be considered to have operational control.

² When discussing operational control, 'corporation' may also mean a joint venture or partnership.

Contractors and subcontractors

The controlling corporation for a corporation deemed to have operational control over a facility that meets a facility threshold is responsible for reporting *all* greenhouse gas emissions and energy data associated with that facility—including greenhouse gas emissions from and energy used and produced by the activities of contractors and subcontractors. That is, the corporation with operational control is responsible for collecting contractor data and incorporating the data in its own report.

1.4.2 The Greenhouse and Energy Data Officer and operational control

Corporations often have complex contractual arrangements. If there is any uncertainty or disagreement about the operational control of a facility, legal advice should be obtained.

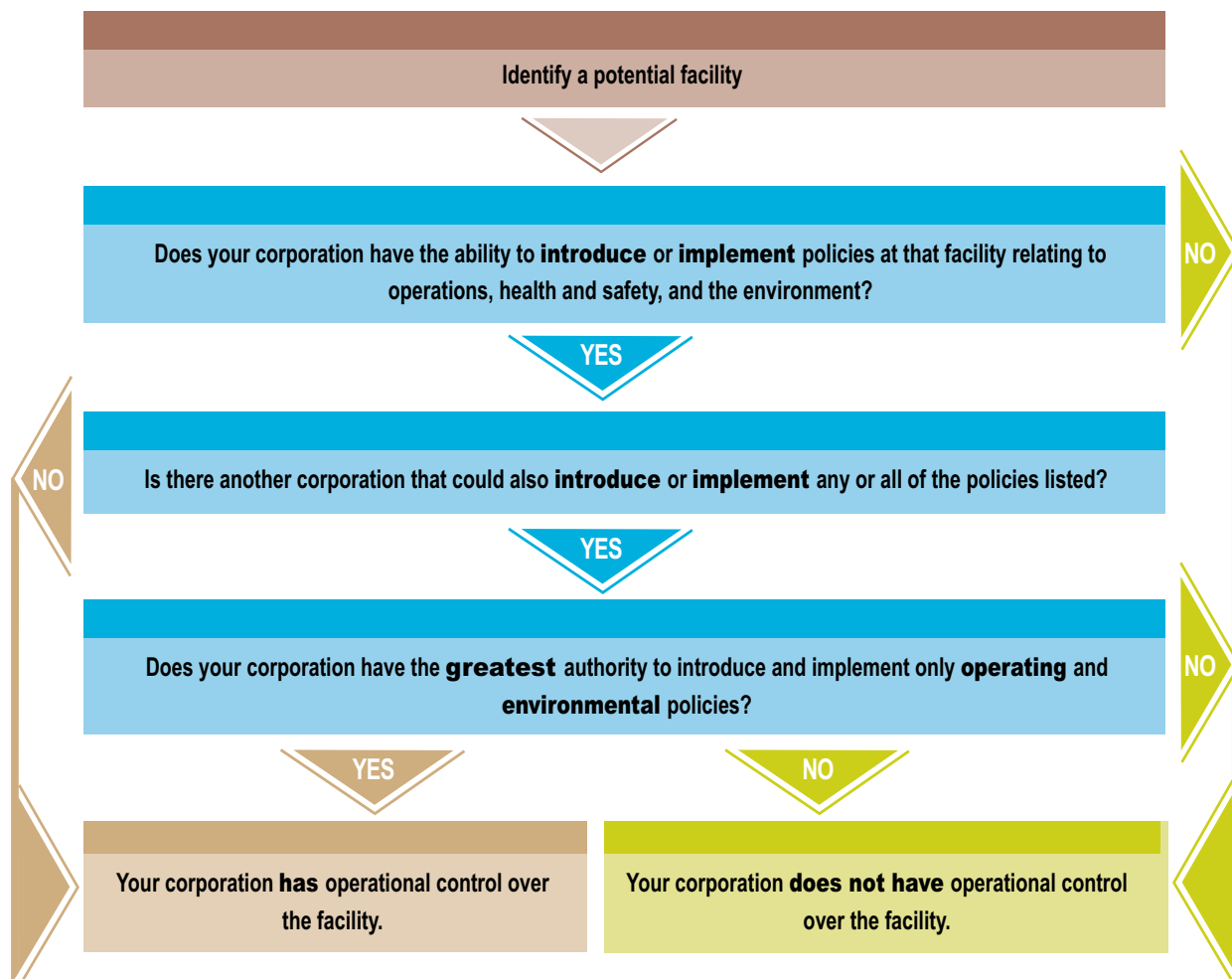
The Greenhouse and Energy Data Officer is able to make determinations in relation to operational control in line with the Act, either in response to an application from a corporation or at its own initiative. Further information about the process of applying for declaration of operational control will be made available at www.climatechange.gov.au/reporting.

Figure 1.5 provides general guidance on how to determine who has operational control over a facility.

1.4.3 Further information about operational control

The Greenhouse and Energy Data Officer may provide further information about operational control and how it applies in certain situations. These products will be provided separately from these Reporting Guidelines. Further detail will be made available at www.climatechange.gov.au/reporting.

Figure 1.5: Determining operational control: a guide



1.5 Facility thresholds

Once the activities constituting a facility have been identified and operational control determined, corporations need to determine whether the facility meets a facility-level threshold.

Controlling corporations will be required to apply for registration with the Greenhouse and Energy Data Officer if a member of their group has operational control of a facility that emits 25 kilotonnes of CO₂-e or more or produces or consumes 100 terajoules of energy or more in a financial year. These thresholds do not change over time.

1.5.1 Determining whether a facility meets the thresholds

There are three types of facility thresholds:

- greenhouse gas emissions of 25 kilotonnes of CO₂-e
- energy production of 100 terajoules
- energy consumption of 100 terajoules.

If any one of these thresholds is met the controlling corporation is required to apply for registration and report all greenhouse gas emissions, energy produced and energy consumed.

Greenhouse gas emissions

All scope 1 and scope 2 greenhouse gas emissions from a facility should be included when determining whether the greenhouse gas emissions threshold is met.

A facility's greenhouse gas emissions are aggregated from the various sources in a facility. For example, if a small coal mine emitted 20 kilotonnes CO₂-e of methane in the form of fugitive emissions during the mining process and the CO₂-e emissions from the diesel consumed by equipment amounted to 6 kilotonnes, the total for the facility would be 26 kilotonnes of CO₂-e, which would exceed the facility-level greenhouse gas emissions threshold.

Energy production

If the energy produced by a facility amounts to 100 terajoules or more the controlling corporation of the member with operational control of the facility is required to apply for registration.

Energy produced and energy consumed are not aggregated. For example, if the energy contained in coal³ mined from a very small mining facility was 90 terajoules a year and the facility consumed 15 terajoules of energy a year (in the form of automotive diesel for mining equipment) from mining activities, the facility-level threshold for energy production would not be met.

Energy consumption

If the energy consumed by a facility is greater than or equal to 100 terajoules the controlling corporation of the member with operational control of the facility is required to apply for registration. For example, 100 terajoules of diesel consumed plus 10 terajoules of electricity consumed amounts to 110 terajoules, which means the facility meets the energy consumption threshold. Table 1.5 shows how a facility's activities could meet the facility-level threshold.

Table 1.5: Exceeding the facility thresholds: an example

Fuel consumed	Amount	Value meeting threshold	Threshold component met
Electricity	24 000 MWh	25.6 kilotonnes CO ₂ -e	Facility: greenhouse gas emissions
Automotive diesel	2 590 000 litres	100 terajoules	Facility: energy consumption

If a facility does not meet greenhouse gas emission or energy consumption or production thresholds and corporate thresholds are not met, the controlling corporation is not obliged to apply for registration or to report.

³ In the NGERs Technical Guidelines black coal combusted for electricity in New South Wales contains 22.5 gigajoules of energy per tonne. Using this default energy content, 4000 tonnes of coal would produce 90 terajoules of energy (4000 x 22.5GJ = 90 000 GJ, or 90 TJ).

Pro rata thresholds

If a member of a controlling corporation's group has operational control of a facility for only part of a year—by purchase, sale or commission of a facility, for example—the thresholds are to be calculated pro rata to reflect this. The threshold that would apply is defined by the following formula:

Amount of threshold that would otherwise apply x (number of control days/number of days in the year)

For example, if a corporation purchases a facility on 1 June 2009, the facility-level threshold for the facility for the 2008–09 reporting year would be 2.05 kilotonnes of CO₂-e: $25 \text{ kt CO}_2\text{-e} \times (30/365) = 2.05$

1.6 Corporate thresholds

Corporate thresholds decrease progressively in phases during the first three years of the reporting system, beginning on 1 July 2008.

A corporate group will meet the corporate threshold for the 2008–09 financial year if facilities under the operational control of group members emit 125 kilotonnes CO₂-e or more of greenhouse gases or produce or consume 500 terajoules or more of energy during that year.

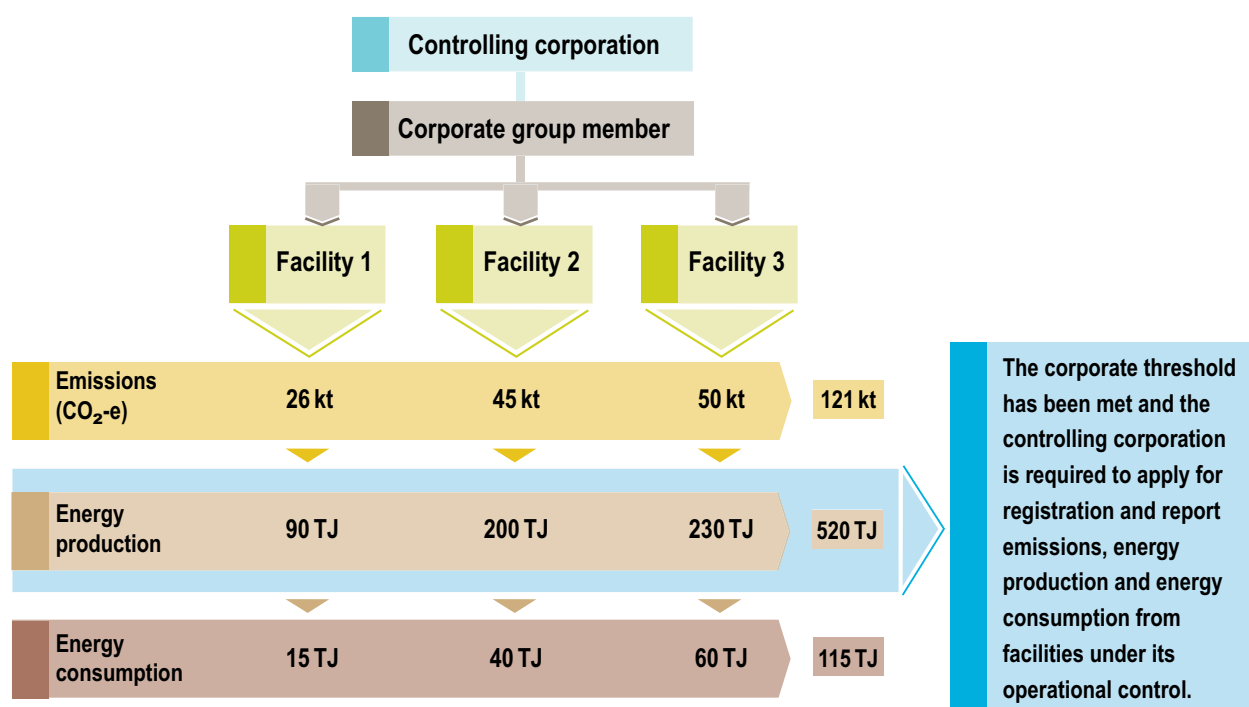
As Figure 1.2 shows, the thresholds for 2009–10 are 87.5 kilotonnes CO₂-e of greenhouse gases and 350 terajoules of energy. For 2010–11 they are 50 kilotonnes CO₂-e of greenhouse gases and 200 terajoules of energy.

1.6.1 Calculating greenhouse gas emissions and energy consumption and production

In order to determine whether a corporation will meet the thresholds, greenhouse gas emissions and energy production and consumption for each facility under the operational control of the corporate group are aggregated.

As noted, the corporate thresholds for 2008–09 are 125 kilotonnes CO₂-e of greenhouse gases and 500 terajoules of energy produced or consumed. Figure 1.6 shows how a corporate group's greenhouse gas emissions and energy production and consumption can be calculated.

Figure 1.6: Calculating greenhouse gas emissions and energy: a corporation



Note: In this example all three facilities individually meet the facility greenhouse gas emissions threshold of 25 kilotonnes of CO₂-e, and facilities 2 and 3 also individually meet the facility threshold for energy production, 100 terajoules. Because corporate energy production thresholds have been met, all greenhouse gas emissions and energy consumption must be reported from members of the corporate group, not only energy production.

Table 1.6 provides another example of amounts of fuel types used that might meet the corporate thresholds.

Table 1.6: Energy amounts and thresholds: a corporate example

Fuel type	Amount	Amount in terajoules	Threshold component met
Electricity consumption	139 000 000 kWh	500.4 terajoules (equates to 124.60 kt CO ₂ -e)	Corporate: 2008–09 (energy consumption only)
Brown coal consumption (electricity NSW)	52 000 tonnes	530 terajoules	Corporate: 2008–09 (energy consumption)

Note: Figures taken from NGERs Calculator. In this example the corporation is situated in New South Wales.

When deciding whether a corporation should apply for registration under the Act, it is essential to include both scope 1 and scope 2 greenhouse gas emissions. As noted, scope 3 emissions do not need to be included when estimating greenhouse gas emissions against the thresholds.

1.7 The NGERs Calculator

When corporations have determined operational control and the facilities, activities and associated greenhouse gas emissions and energy they are responsible for, the data can be entered into the NGERs Calculator to help determine whether they have met a facility or corporate threshold.

The calculator and a user manual can be found at www.climatechange.gov.au/reporting.

2 Registration



2.1 Who must apply for registration?

If a controlling corporation’s group meets a greenhouse or energy threshold (see Chapter 1), the controlling corporation is legally obliged to apply for registration under s. 12 of the Act.

2.2 Voluntary registration for greenhouse gas projects

Section 14 of the Act provides for a controlling corporation to voluntarily apply for registration with the Greenhouse and Energy Data Officer if it or a member of its group is involved in or proposes to be involved in a greenhouse gas project. The rules associated with greenhouse gas projects will be detailed separately from these guidelines.

2.3 How to apply for registration

To apply for registration, a controlling corporation’s chief executive officer, or equivalent, must sign an application form that provides basic information about the corporation and its group.

Before applying for registration it is essential to know which subsidiaries, joint ventures and partnerships are members of the corporate group and which are not, as discussed in Chapter 1.

For this reason participants in a joint venture or partners in a partnership are encouraged to nominate an entity responsible for the joint venture or partnership before registration applications are made. Doing so will clarify the boundaries of the corporate group and reduce duplication by ensuring that only one controlling corporation applies and reports for each joint venture or partnership.

Once the members of the corporate group have been identified, corporations can prepare an application via the website, at www.climatechange.gov.au/reporting. Using the checklist from the website will help ensure that all necessary information is on hand when preparing the application form.

Once complete, the application form should be printed, signed by the chief executive officer and sent to the Greenhouse and Energy Data Officer by the due date.

Who must apply for registration?

Voluntary registration for greenhouse gas projects

How to apply for registration

When to apply for registration

After applying for registration

The National Greenhouse and Energy Register

Data security

The registration process: a summary

1. Identify the members of the corporate group and nominate an entity responsible for joint ventures or partnerships, if applicable.
2. Prepare a registration application via www.climatechange.gov.au/reporting.
3. Print the form, have the chief executive officer sign it, then send it to the Greenhouse and Energy Data Officer by email or post before the due date.

2.4 When to apply for registration

Controlling corporations must apply for registration by the 31 August after the financial year in which a threshold is met. This means the first due date for a registration application is 31 August 2009; that is for thresholds met in the financial year 1 July 2008 to 30 June 2009. The penalty for failure to apply for registration is 2000 penalty units, which equates to \$220 000 at 1 July 2008. An additional civil penalty might also be incurred for each day after the due date that a controlling corporation fails to apply for registration.

The obligation to apply relates to the financial year in which a threshold is met, as of 1 July 2008. Thresholds do not relate to financial years before 1 July 2008, and registered corporations do not need to re-apply for registration each year.

Controlling corporations are encouraged to apply early and can do so from 1 July 2008. This will minimise the corporation's risk of missing the due date, help with planning for capacity building, and maximise the time available for using the online reporting tool, OSCAR.

2.5 After applying for registration

Once the Greenhouse and Energy Data Officer has received a signed registration application form, the form will be checked to ensure that all the necessary information is provided. Registration is complete when the GEDO adds the controlling corporation's name to the National Greenhouse and Energy Register. This process is important because most of the legal obligations under the Act apply specifically to registered corporations. For example, registered corporations are obliged to provide annual greenhouse and energy reports to the GEDO. The GEDO will notify controlling corporations of the outcome of their application.

Corporations remain registered unless they apply for deregistration, their application for deregistration has been approved by the GEDO and their name has been removed from the Register. (See Chapter 5 for information about deregistration.)

2.6 The National Greenhouse and Energy Register

The GEDO will develop and maintain the National Greenhouse and Energy Register, which will contain information about registered corporations, in keeping with s. 16 of the Act and r. 3.04. All information on the Register may be made publicly available.

2.6.1 Requests that information not be published

If a corporation considers its greenhouse gas emissions and energy data are commercially sensitive—that is, if it is thought the data could reveal trade secrets or diminish commercial value in connection with a facility, technology or corporate initiative—it can ask the GEDO under s. 25 of the Act that the information not be published. Forms will be made available at www.climatechange.gov.au/reporting to assist corporations in this process.

2.7 Data security

The security of corporate data— including data reported at the facility level and not for public disclosure—is vital to the integrity of the National Greenhouse and Energy Reporting System. Sections 23, 26 and 27 of the Act make strict provisions about data security and include penalties for inappropriate data release.

3 Reporting obligations



This chapter explains the reporting obligations under the Act. It does not explain the technical detail of how to calculate greenhouse gas emissions and energy or develop inventories. Corporations must meet the requirements of the National Greenhouse and Energy Reporting (Measurement) Determination 2008 in order to comply with the technical aspects of reporting. This chapter deals solely with ‘what is reportable’ by the controlling corporation or members of the corporate group.

3.1 Principles of greenhouse gas and energy reporting

The Determination sets out the following general principles for measuring emissions:

- a. **Transparency.** Emission estimates must be documented and verifiable.
- b. **Comparability.** Emission estimates using a particular method and produced by a registered corporation in an industry sector must be comparable with emission estimates produced by similar corporations in that industry sector using the same method and consistent with the emission estimates published by the Department of Climate Change in the National Greenhouse Accounts.
- c. **Accuracy.** Having regard to the availability of reasonable resources by a registered corporation and the requirements of the Determination, uncertainties in emission estimates must be minimised and any estimates must neither be over nor under estimates of the true values at a 95 per cent confidence level.
- d. **Completeness.** All identifiable emission sources within the energy, industrial process and waste sectors as identified by the *National Inventory Report* must be accounted for.

Estimates of greenhouse gas emissions and energy production and consumption are to be prepared in accordance with these principles.

3.2 Understanding reporting obligations

The key to understanding the obligations imposed by the Act is understanding the concepts of a corporate group and a facility and then identifying which facilities come under the operational control of members of the corporate group. The next step is to decide whether facilities are likely to meet the greenhouse gas emissions or energy production or consumption thresholds. These concepts are dealt with in Chapter 1. If a corporation’s group meets or is likely to meet the thresholds, the controlling corporation should apply for registration, as discussed in Chapter 2. Corporations then need to measure their greenhouse gas emissions and their energy production and consumption in a financial year and report the data to the GEDO.

Principles of greenhouse gas and energy reporting

Understanding reporting obligations

Checklist item A: which facilities do I report?

Checklist item B: identifying greenhouse gas emissions and energy sources for a facility

Checklist item C: facility-specific reporting requirements

Checklist item D: provide a report to the Greenhouse and Energy Data Officer

If a registered corporation’s group meets no threshold in a year

Reporting contextual data

Reporting on greenhouse gas projects

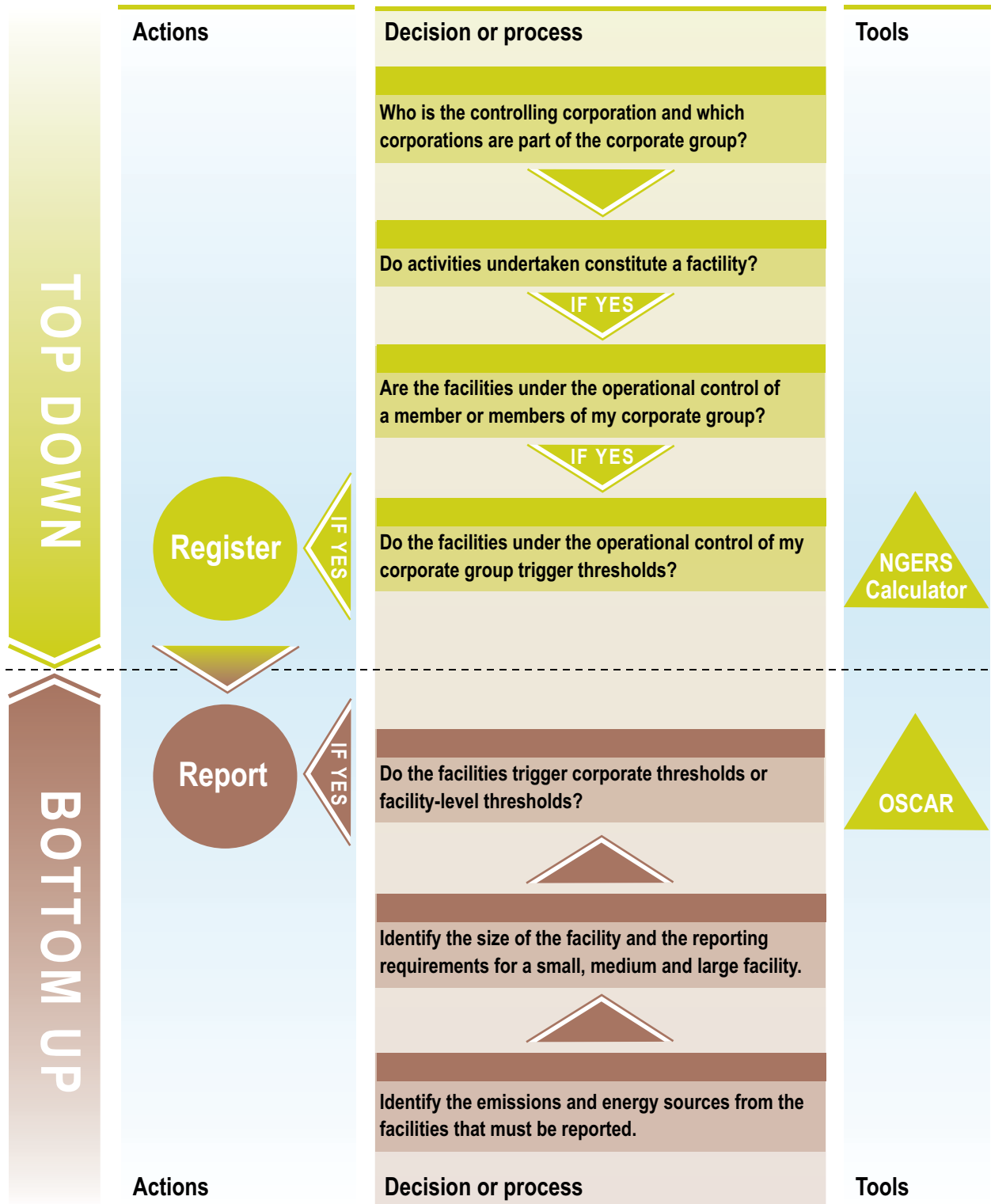
External audit and compliance

To determine whether it must participate, a corporation can adopt a top-down approach, starting with identifying the controlling corporation. Once it has determined that participation is likely to be necessary, it can then adopt a bottom-up approach to collecting data and understanding its reporting requirements. Starting at the facility level, the corporation should do the following, in accordance with the following checklist items:

- a. Determine which facilities should be reported, on the basis of facility or corporate thresholds being met.
- b. Identify the greenhouse gas emissions and energy sources from the facilities that must be reported.
- c. Determine the facility’s size—small, medium or large—and the specific reporting requirements for each size.
- d. Provide a report to the Greenhouse and Energy Data Officer.

Figure 3.1 shows the decision-making processes, actions, resources and tools that can be used by corporations to determine whether to participate and, if so, to understand their reporting obligations and apply to register.

Figure 3.1: Reporting under the Act: the decision-making process



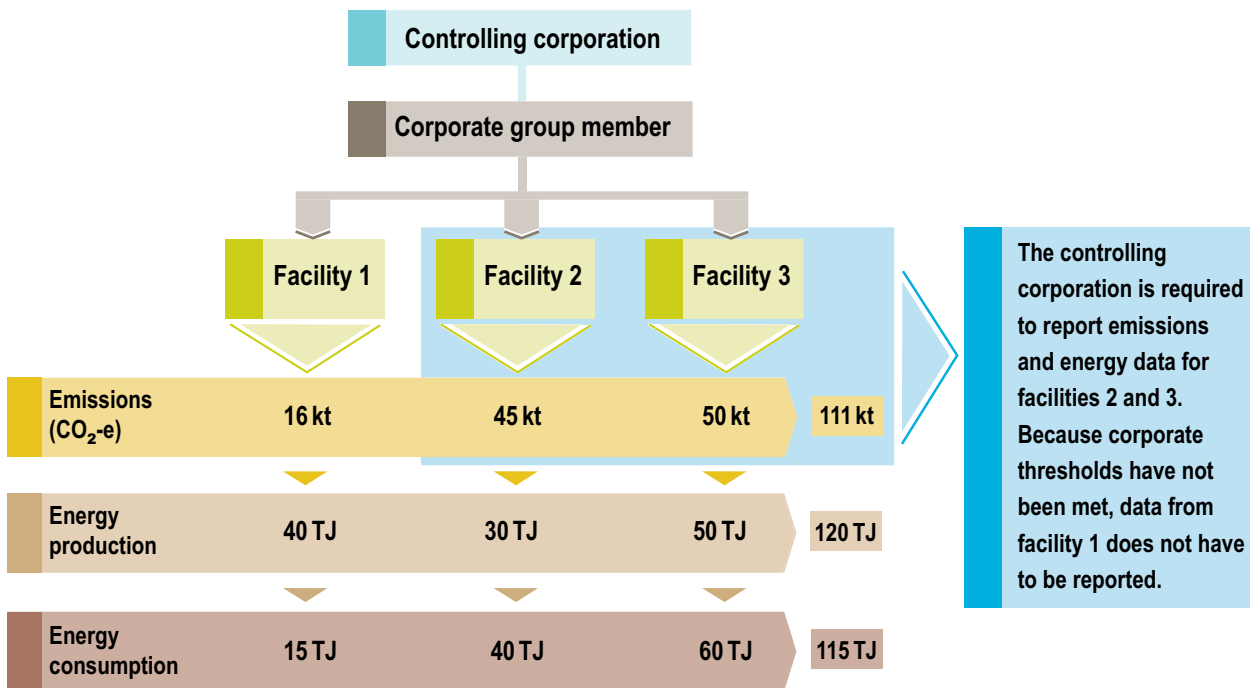
3.3 Checklist item A: which facilities do I report?

Different reporting obligations apply to corporations that meet facility or corporate thresholds. In all cases, however, the fundamental reporting unit under the Act is a facility.

3.3.1 Facility thresholds

Corporations need only report greenhouse gas emissions and energy data for facilities when the facility thresholds, but not the corporate thresholds, are met, as shown in Figure 3.2.

Figure 3.2: Reporting against facility thresholds



3.3.2 Corporate thresholds

If a corporate group meets a corporate threshold the controlling corporation is required to report on all facilities under the operational control of members of the corporate group; this includes facilities that meet a facility threshold and those that do not. The report must present greenhouse gas emissions and energy data for *all* facilities⁴ under the operational control of the controlling corporation and members of its group. Figure 3.3 provides an example of this.

When a corporate threshold has been met data can be aggregated from certain facilities that are under the facility-level thresholds. See Section 3.5.2, item C5, for details.

Grouping by subsidiary or business unit

If it is obliged to report, a controlling corporation will be able to elect to provide data aggregated by subsidiary or business unit. If a corporation opts for business unit reporting it will need to clearly identify its business units when developing the structures for reporting in OSCAR.

The option of reporting by business unit is available to reduce the reporting burden and in recognition that some corporations have pre-existing systems designed for reporting by business unit rather than by subsidiary. This concept applies, however, only for grouping data when reporting: the legislation does not recognise the business unit as a legal entity in connection with operational control or for determining whether a threshold is met.

For any given facility, a report must still identify the member that has operational control over that facility, as well as the data being attributed to a business unit.

Figure 3.4 shows examples of the controlling corporation's group arranged by subsidiary or business unit.

4 Subject to materiality—see Section 3.5.3.

Figure 3.3: Reporting against corporate thresholds

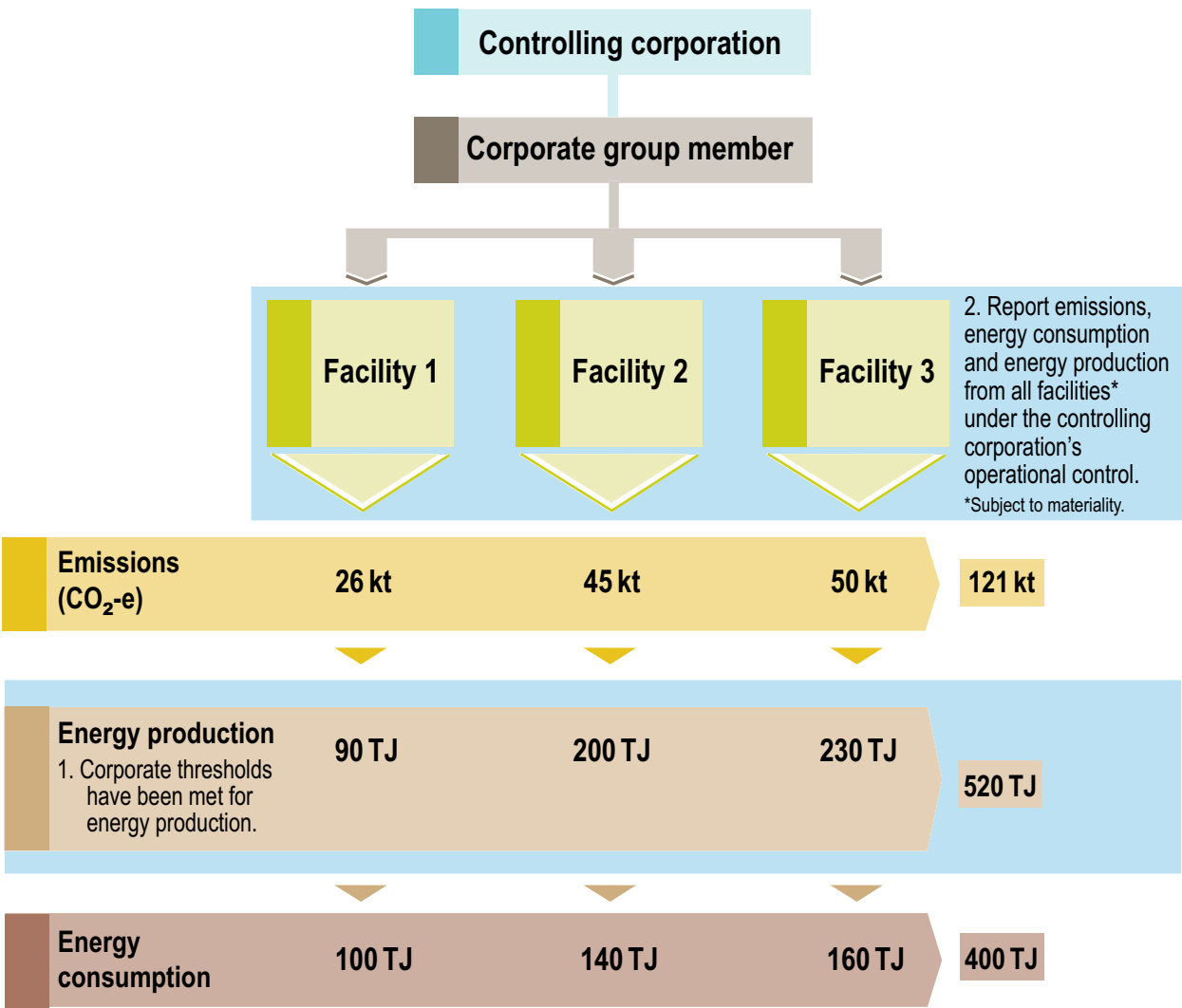
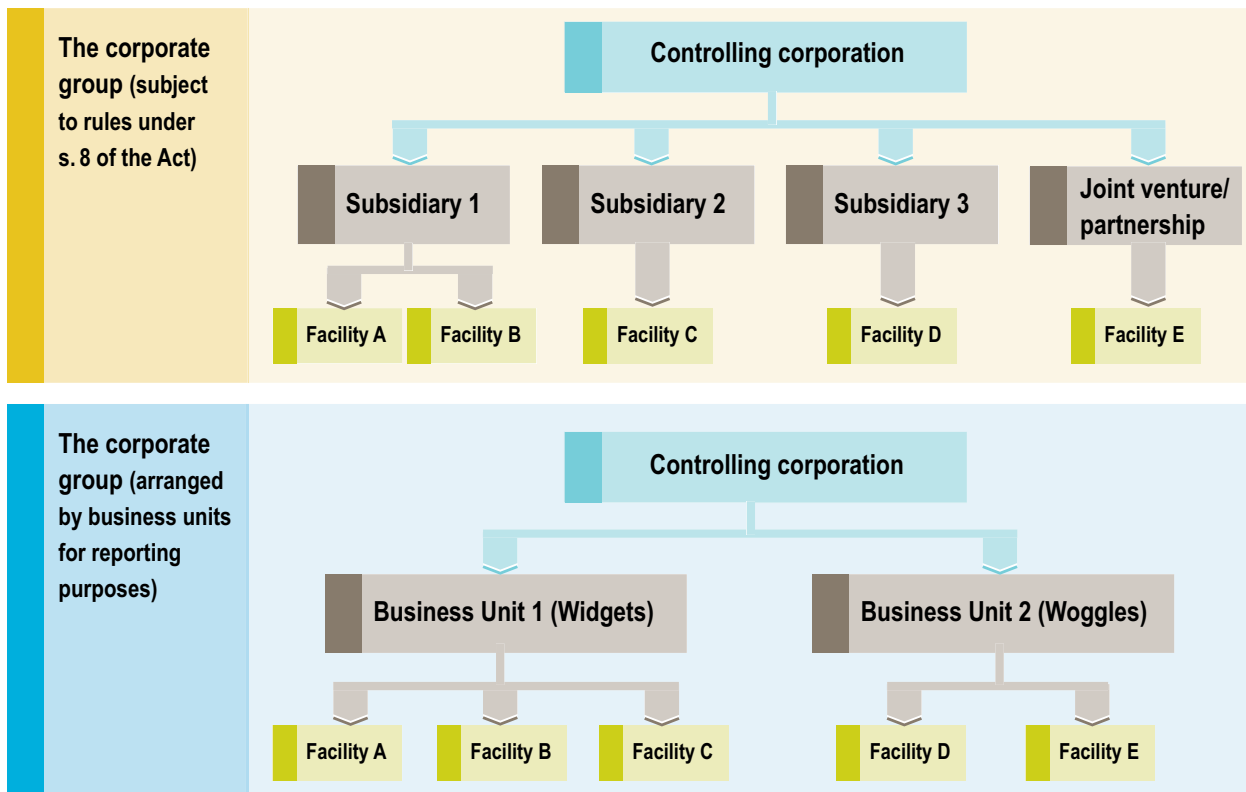


Figure 3.4 The corporate group, by subsidiary or business unit



3.4 Checklist item B: identifying greenhouse gas emissions and energy sources for a facility

After identifying facilities, the next step is to identify greenhouse gas emissions and energy sources within those facilities. Corporations should collect the following data from facilities they control:

- the energy consumed⁵, by energy type—see Appendix A
- the energy produced⁶, by energy type— see Appendix A
- the activity data for greenhouse gas emissions, by source.⁷ The data needs to cover the following sources:
 - energy, which includes greenhouse gas emissions arising from the combustion of fossil fuels to produce stationary energy and for transport purposes
 - industrial processes, which includes the consumption of synthetic gases
 - fugitive emissions
 - waste.

Energy and greenhouse gas emissions are not required to be reported by equipment type, only energy type, unless otherwise stated in the National Greenhouse and Energy (Measurement) Determination 2008. Table 3.1 provides examples of likely greenhouse gas emissions sources for activities in some different industry sectors.

5 The energy consumed in units, as described in the National Greenhouse and Energy (Measurement) Determination 2008.

6 The energy consumed in units, as described in the National Greenhouse and Energy (Measurement) Determination 2008.

7 Non-energy emissions from agriculture and land use change are not reportable.

Table 3.1: Possible greenhouse gas emissions sources from different types of activities: examples

ANZSIC no.	ANZSIC category	Stationary energy	Transport	Fugitives	Industrial processes*	Waste
26	Electricity	X	x		x	
1701	Petroleum refining	X	x	X	x	
06	Coal mining	X	x	X	x	
07	Oil and gas extraction	X	x	X	x	
27	Gas supply	X	x	X	x	
211	Iron and steel manufacturing	X	x		X	
213	Basic non-ferrous metal manufacturing	X	x		X	
	Petroleum and coal products nec	X	x		X	
18	Basic chemical manufacturing	X	x		X	X
14,15	Pulp, paper and print	X	x		x	X
11, 12	Food, beverages, tobacco manufacturing	X	x		X	X
08, 09, 10	All other mining	X	x		X	
201	Glass and glass product manufacturing	X	x		X	
202	Ceramic product manufacturing	X	x		X	
203	Cement, lime, plaster and concrete product manufacturing	X	x		X	
209	Non-metallic mineral product manufacturing nec	X	x		X	
13	Textile, clothing, footwear and leather manufacturing	X	x		x	
212	Other metal manufacturing	X	x		x	
214	Machinery and equipment manufacturing	X	x		x	
Div E	Construction	X	x		x	
Div F-S	Services	X	x		X	
Div A	Agriculture, forestry, fishing	X	x		x	
65-67	Other transport, services and storage	X	X		X	

* Including synthetic gas consumption. nec = Not elsewhere classified. X = Likely to be a major source of greenhouse gas emissions. x = Likely to be a minor source of greenhouse gas emissions.

3.4.1 Item B1: transport energy sources

As noted in Section 1.3, different facility rules apply when the principal activity of a facility is attributable to the transport sector. Instead of the transport facility being attributed to a single address, it is attributed to a state or territory. This is because of the non-stationary nature of transport.

For reporting purposes, the state or territory in which fuel is purchased is deemed to always be the state or territory the fuel is consumed in, even though in practice the fuel might be consumed elsewhere. For example, if a truck is filled up at a depot in Victoria and half of its journey occurs in New South Wales, the greenhouse gas emissions and energy associated with the fuel purchased in Victoria would be reported against the transport facility attributed to Victoria.

Ancillary activities for the transport sector are attributed to the transport facility in the same state. For example, energy and greenhouse gas emissions from a depot or warehouse in Victoria would be attributed to the Victorian transport facility.

Table 3.2 shows the type of information that should be reported for transport facilities.

Table 3.2: Reporting for transport facilities: examples

Example	Industry sector	Automotive diesel consumed (litres)	Energy consumed electricity (kWh)
Facility A—Victoria	461—Road freight transport	2 770 000	5000
Facility B—New South Wales	461—Road freight transport	2 900 000	8000

3.4.2 Item B2: estimating greenhouse gas emissions and energy

The National Greenhouse and Energy Reporting (Measurement) Determination 2008 outlines four methods that can be used to estimate greenhouse gas emissions and energy produced or consumed. Corporations are required to report on which methods they are using. Broadly, the four methods are as follows:

- method 1—the default methods, derived directly from the methods used for the National Greenhouse Accounts and the same as those used in OSCAR
- method 2—a facility-specific method using industry sampling and Australian or international standards listed in the Determination or equivalent for analysis
- method 3—a facility-specific method using Australian or international standards listed in the Determination or equivalent standards for both sampling and analysis of fuels and raw materials. Method 3 is very similar to method 2, but it requires reporters to comply with Australian or equivalent documentary standards for sampling
- method 4—direct monitoring of emission systems, on either a continuous or a periodic basis.

3.4.3 Item B3: estimating incidental greenhouse gas emissions and energy

Incidental greenhouse gas emissions and energy are small sources of greenhouse gas emissions or energy at a facility. The different requirements for these sources can reduce the burden and cost of reporting data for small greenhouse gas emissions and energy sources, which might be difficult or costly to obtain.

If greenhouse gas emissions or energy from a facility are considered incidental, the corporation can estimate the amounts using a method of its own choosing. Incidental greenhouse gas emissions must be separated by source; energy produced or consumed must be divided by energy type, as listed in the Regulations and in Appendix A here.

Two other conditions also apply:

- Greenhouse gas emissions and energy points may be treated as ‘incidental’ only if more accurate estimation is difficult or expensive.
- The data is not otherwise required for reporting in another government program.

Table 3.3 shows the upper limits for amounts of greenhouse gas emissions or energy that may be considered incidental. These limits are maximum amounts for single sources or aggregated sources.

Table 3.3: Emissions and energy amounts that can be considered incidental: upper limits

Emissions and energy from within the facility	Emissions (CO ₂ e)	Energy consumed	Energy produced
Actual amount from an individual source	3 kt	15 TJ	15 TJ
Percentage of facility totals from an individual source	0.5%	0.5%	0.5%
Actual amount from sources that can be aggregated	12 kt	60 TJ	60 TJ
Percentage of facility totals that can be aggregated	2%	2%	2%

Note: Incidental greenhouse gas emissions are bound by whichever is the lesser of the percentage and the actual amount.

The principles of transparency, comparability, accuracy⁸ and completeness, as described in Section 3.1, should be adhered to when estimating incidental emissions.

⁸ Further guidance about accuracy and estimating incidental emissions is provided in the NGER Technical Guidelines.

3.5 Checklist item C: facility-specific reporting requirements

Depending on the size of the facility, corporations might need to aggregate or disaggregate data. Aggregation can help to make reporting on small facilities easier.

There are three types of facility:

- large facilities—25 kilotonnes or more of CO₂-e or 100 or more terajoules
- medium facilities—greater than 3 kilotonnes CO₂-e or 15 terajoules and less than 25 kilotonnes of CO₂-e or 100 terajoules
- small facilities—3 kilotonnes or less of CO₂-e or 15 terajoules or less.

Facilities meeting a facility-level threshold are subject to the most detailed reporting requirements.

The legislation does not define large, medium and small facilities at any stage, but ‘separating’ facilities like this is a useful way to assess the reporting requirements for different facilities.

3.5.1 Large facilities

For the purposes of reporting, large facilities are those that emit 25 kilotonnes CO₂-e or more of greenhouse gas or produce or consume 100 terajoules or more of energy in a year. In order to gain meaningful statistics, greenhouse gas emissions and energy data from some facilities must be identified separately or reported at a sub-facility level.

Item C1: facilities generating electricity on site. Corporations operating a facility with on-site electricity generation are required to report all greenhouse gas emissions and energy production and consumption in the same manner as any other facility. The corporation is required to separately identify the amounts of fuel used (energy consumed) by the generator.⁹

The Determination prescribes the methods to be used to determine how fuel use is measured and refers to the *Allocation of Emissions from a Combined Heat and Power (CHP) Plant Guide to Calculation Worksheets* (September 2006, v1.0) issued by the World Resource Institute and World Business Council for Sustainable Development.

The corporation must also identify the amount of the electricity that was during the reporting year:

- produced for use in the facility
- produced for use outside the facility.

This information is used for the energy statistics and to help understand the fuel and greenhouse gas emissions mix of grid electricity.

Item C2: facilities that cross state or territory borders. If a pipeline, transmission and distribution activity or other network crosses state or territory borders, corporations must report data for the entire facility, in the same manner as for any other facility. The pipeline or network data should then be disaggregated by state or territory and the greenhouse gas emissions and energy associated with each state or territory reported pro rata.

Item C3: major contractors at facilities. Emissions and energy from major contractors at a facility are to be identified if the contractors’ activities emit 25 kilotonnes or more of CO₂-e or consume or produce 100 terajoules or more of energy. Again, greenhouse gas emissions and energy from the entire facility should be reported initially by the controlling corporation with operational control over the facility, with major contractor greenhouse gas emissions and energy identified separately but attributed to the industry sector the facility data are reported against. Major contractors are to be identified by their ABN (Australian Business Number).

Contractors’ activities at a facility that emits less than 25 kilotonnes of CO₂-e or consumes or produces less than 100 terajoules of energy are not to be identified separately. They are reportable by the corporate group member with operational control over that facility. The greenhouse gas emissions and energy from the contractor’s activities are reported against (attributed to) the industry sector the facility reports against—rather than construction or any other contractor activity.

⁹ The additional data item is required only for a generator that has the capacity to produce 30 megawatts of electricity and produces more than 30 gigawatt-hours of electricity.

Item C4: vertically integrated production processes. If a corporation has operational control over a vertically integrated production process at more than one site, it can report in one of two ways:

- as a facility at each separate physical location at which the vertically integrated process occurs

or

- as a group of facilities for the entire vertically integrated production process. Essentially, greenhouse gas emissions and energy are aggregated and the facilities are reported as one.

Vertical integration. Vertical integration occurs when the output of one stage of production becomes an input for the next stage and the output of the final stage is sold on the market. The different stages of the production process can take place at one physical location or at multiple locations.

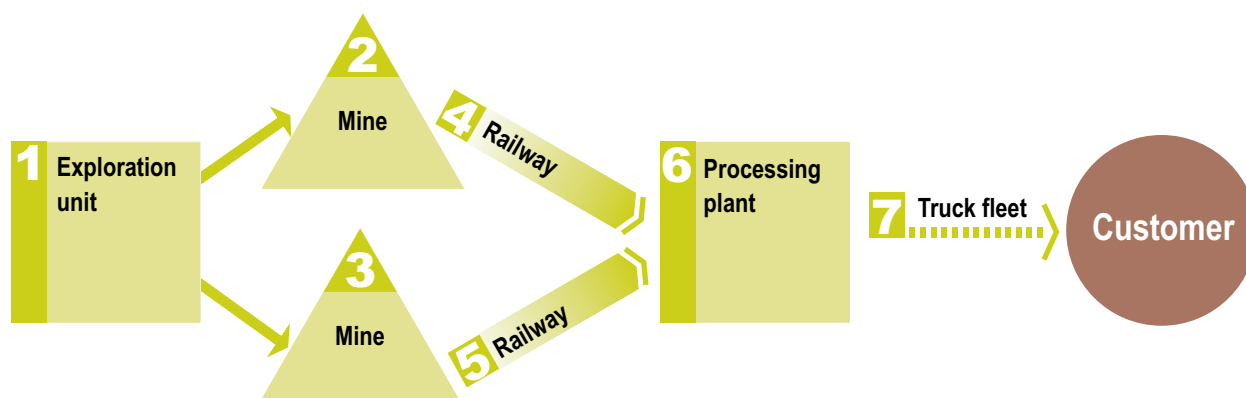
Outputs from an earlier stage of production in a vertically integrated facility can also be sold on the market, although those outputs must not account for the highest value for that facility.

A steel manufacturer may be an example of vertical integration if the operator of the steel mill also operates the mine the raw product is obtained from, the transport network used to transport raw material to the steel mill or to customers (for example, a rail network or a truck fleet) or any intermediate processing plants or export facilities. Similarly, a wine manufacturer might be vertically integrated if it also operates vineyards, trucks to transport grapes to the winery, a distribution network or wine wholesaling or retailing businesses.

Where facilities are grouped by the entire vertically integrated production process, information from facilities that are classified into different ANZSIC divisions must be separately apportioned, or estimated, and reported.

Figure 3.5 demonstrates how facilities may be grouped for reporting by ANZSIC division.

Figure 3.5 The vertically integrated facility: an example



Each facility illustrated has been aggregated for reporting purposes by Corporation XYZ into a vertically integrated production process. Each individual facility may be classified as follows:

- Facility 1 (Exploration unit) is classified into ANZSIC code 101, Exploration, which falls within ANZSIC Division B.
- Facilities 2 and 3 (mine sites) are classified into ANZSIC code 80, Metal ore mining, Division B.
- Facilities 4 and 5 (private rail network) are classified into ANZSIC code 471, Rail freight transport, Division I.
- Facility 6 (processing plant) is classified into ANZSIC code 21, Primary metal and metal product manufacturing, Division C.
- Facility 7 (truck fleet) is classified into ANZSIC code 461, Road freight transport, Division I.

The facilities shown in Figure 3.5 have been grouped for reporting by Corporation XYZ because they form a vertically integrated production process. Corporation XYZ may report aggregate data for all seven facilities. As a secondary step Corporation XYZ must separate, or apportion, reported data according to ANZSIC divisions. Hence:

- Data for the exploration unit (facility 1, Division B) and mines (facilities 2 and 3, Division B) can be grouped because the facilities are in the same division. That is, data for both mines may be reported as an aggregate under Division B.
- Data for the rail network (facilities 4 and 5, Division I) and truck fleet (facility 6, Division I) can be grouped because the facilities are in the same division.
- Data for the steel mill (facility 6, Division C) are separately identified.

Aggregation of facilities that form a vertically integrated production process may be chosen in order to reduce the administrative costs of separate monitoring and measurement frameworks for sites that are intrinsically linked within a corporation's business structure. Although separate reporting of data at the ANZSIC division level is required for statistical and policy-making purposes, it is intended to minimise the regulatory burden by allowing disaggregation to division level to be done using estimates. Appendix B shows the ANZSIC divisions and industry sectors.

3.5.2 Medium facilities

Medium facilities—facilities that emit between 3 and 25 kilotonnes of CO₂-e or produce or consume between 15 and 100 terajoules of energy (non-inclusive)—may be aggregated.

Item C1: facilities generating electricity on site. Item C1 can apply to medium facilities. If so, see Section 3.5.1 for details.

Item C2: facilities that cross state or territory borders. Item C2 can apply to medium facilities. If so, see Section 3.5.1 for details.

Item C3: major contractors at facilities. Item C3 does not apply to medium facilities.

Item C4: vertically integrated production processes. Item C4 can apply to medium facilities. If so, see Section 3.5.1 for details.

Item C5: reporting aggregated amounts from facilities. If a controlling corporation has met corporate thresholds it can aggregate greenhouse gas emissions and energy data from facilities under its operational control that do not meet a facility threshold (25 kilotonnes of CO₂-e and 100 terajoules of energy). The facility data can be aggregated only to the state and territory level, and only facilities with the same ANZSIC industry code can be aggregated.

A controlling corporation is required to provide the facility name (or other identification) and the street address or addresses or any relevant description of the physical location for facilities that are aggregated.

Aggregated data from facilities that do not meet the facility-level threshold can be reported by subsidiary or business unit, or both.

3.5.3 Small facilities

A small facility is one that emits 3 kilotonnes or less of CO₂-e or consumes or produces 15 terajoules or less of energy. Because small facilities can be spread across many locations, and because data can be difficult or costly to acquire, the concept of materiality has been introduced for reporting.

Materiality. In the context of greenhouse gas reporting, 'materiality' refers to the material impact of greenhouse gas emissions measurements on the overall greenhouse gas emissions inventory of a facility or corporation. The materiality concept is often used in financial reporting.

Items C1, C2 and C3. Items C1, C2 and C3 do not apply to small facilities.

Item C4: vertically integrated production processes. Item C4 can apply to small facilities if items C5 and C6 are not applied. If so, see Section 3.5.1 for details.

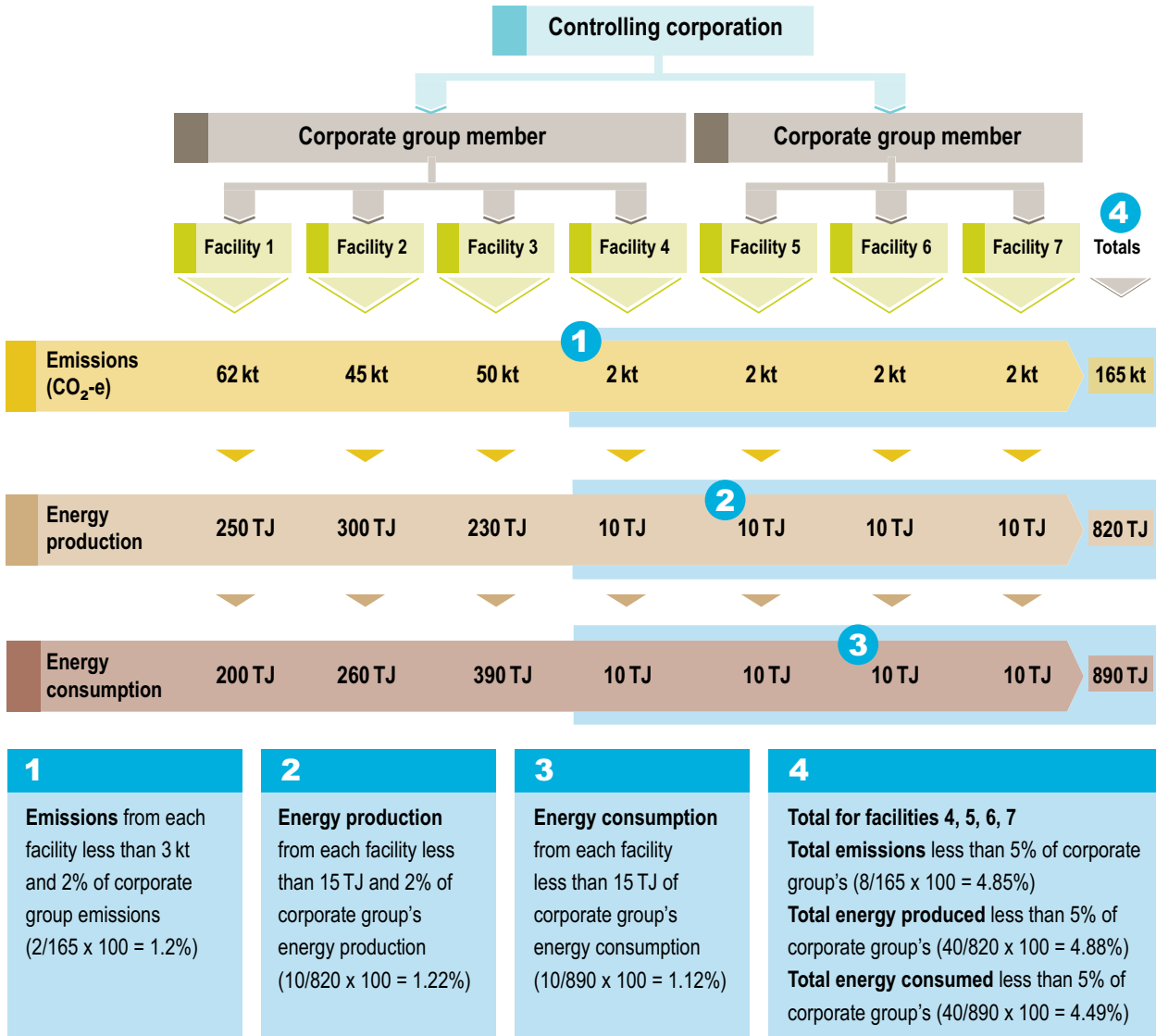
Item C5: reporting aggregated amounts from facilities. Item C5 can apply to small facilities if item C6 is not applied. If so, see Section 3.5.2 for details.

Item C6: reporting small facilities as a percentage. Controlling corporations are not required to report greenhouse gas emissions and energy data from very small facilities or facilities that make only a very small contribution to the corporation's greenhouse gas emissions profile. Instead of having to measure and report actual data, a corporation can make an estimate of the greenhouse gas emissions as a percentage of the corporate group's total greenhouse gas emissions.¹⁰ If the following thresholds are not met, a controlling corporation can decide to report greenhouse gas emissions as estimated percentages from facilities that:

¹⁰ A corporation can use its own methods to estimate emissions and energy from an 'immaterial facility', but it must state how the estimates were made.

- account for less than 2 per cent of the corporate group's total greenhouse gas emissions or energy inventory¹¹
- emit 3 kilotonnes CO₂-e or less of greenhouse gases
- produce 15 terajoules or less of energy
- consume 15 terajoules or less of energy
- in aggregate—that is, for all facilities for which estimation is used—account for no more than 5 per cent of the corporate group's greenhouse gas emissions or energy inventory.

Figure 3.6 The criteria for materiality: an example



In the example shown in Figure 3.6 the corporation might decide to estimate the greenhouse gas emissions from facilities 4, 5, 6 and 7 as 4.9 per cent of the corporate group's greenhouse gas emissions inventory. Similarly, energy production might be estimated as 4.9 per cent and energy consumption as 4.5 per cent of the corporate group's total energy production and consumption, using its own estimation methods. Again, the principles of transparency, comparability, accuracy¹² and completeness must be considered.

11 In this instance 'inventory' means the total greenhouse gas emissions and energy reported by the entire corporate group.

12 Further guidance about accuracy and estimating incidental emissions is provided in the NGER Technical Guidelines.

3.5.4 Specific reporting requirements: a summary

Table 3.4 provides a summary of specific reporting requirements according to the size of the facility—small, medium or large.

Table 3.4: Additional reporting requirements, by size of facility

Requirement	Item (reference)	Size of facility		
		Large	Medium	Small
On-site electricity generation	C1 (3.5.1)	X	X	–
Crossing state and territory borders	C2 (3.5.1)	X	X	–
Major contractor	C3 (3.5.1)	X	–	–
Vertically integrated production processes	C4 (3.5.1)	X	X	X ^a
Aggregating data	C5 (3.5.2)	–	X	X ^b
Reporting a facility as a percentage	C6 (3.5.3)	–	–	

X = Additional reporting requirement might apply. a = Only if items C5 or C6 are not applied. b = Only if item C6 is not applied.

3.6 Checklist item D: provide a report to the Greenhouse and Energy Data Officer

It is proposed that emissions and energy reports will be required to be lodged on OSCAR (the Online System for Comprehensive Activity Reporting), which is already being used for reporting under Greenhouse Challenge Plus, a voluntary emissions and energy reporting program. The system is being reconfigured to meet the requirements of the National Greenhouse and Energy Reporting System and will be available for registered corporations to enter greenhouse gas emissions and energy data during the first reporting period (ending 30 June 2009).

Corporations will be given access to OSCAR, including logon and password details, after they are registered by the Greenhouse and Energy Data Officer. Information about OSCAR is available at www.climatechange.gov.au/reporting.

Further information and training materials will be provided during the first reporting year to help corporations enter their greenhouse gas emissions and energy reports in OSCAR.

3.6.1 The reporting year

A registered corporation is required to report greenhouse gas emissions and energy for the financial year during which it first meets a threshold.

The controlling corporation must provide a report to the Greenhouse and Energy Data Officer for every year after the year the thresholds are first met until the registered corporation is deregistered.

If a registered corporation or a member of its corporate group has operational control of a facility for part of the year—for example, when a facility is purchased or sold during the reporting year—the report need cover only that part of the year during which the corporation or corporate group member has operational control.

3.7 If a registered corporation's group meets no threshold in a year

All registered corporations must provide an annual greenhouse and energy report to the Greenhouse and Energy Data Officer. If, however, a registered corporation's group fails to meet a threshold for a particular financial year, the report does not need to include greenhouse gas emissions and energy data (see r. 4.02).

3.8 Reporting contextual data

It is envisaged that corporations will be able to provide contextual data voluntarily and separately from the scope 1 and scope 2 greenhouse gas emissions and energy data required for mandatory reporting. Contextual data may be disclosed on a website alongside the greenhouse gas emissions and energy data reported, subject to further work in this area.

Details about specific data types to be reported as contextual data under the Act—including the reporting methodology and the data format—will be finalised during 2008 in consultation with a public disclosure focus group. This process will be closely aligned to the design of the public data interface on which the first greenhouse gas emissions and energy data reported under the National Greenhouse and Energy Reporting Act will be disclosed, by the end of February 2009.

Contextual data. Contextual data could be voluntarily reported to provide context for a corporation's mandatory reporting. Examples of contextual data are as follows:

- details of greenhouse gas emissions intensity—for example, CO₂-e per unit of output or energy per unit of production
- explanatory statements—for example, '3000 cubic metres of liquefied natural gas were vented due to off-specification gas entering the network'.

Note that this is a guide only: details about the reporting of contextual data are yet to be confirmed.

3.9 Reporting on greenhouse gas projects

The Regulations and associated guidance for greenhouse gas projects are to be finalised during 2008–09.

3.10 External audit and compliance

External audit is central to assessing the compliance of registered corporations. An external audit can be carried out in one of two ways:

- If the Greenhouse and Energy Data Officer has reasonable grounds to suspect that a registered corporation has not met, is not meeting or proposes not to meet its obligations under the legislation, the GEDO can compel the corporation to be audited (s. 73 of the Act). Upon receiving a written notice from the GEDO, a corporation may appoint an external auditor of its own choice (unless the GEDO has specified a particular external auditor in the notice) to carry out the audit. The cost of the audit will be borne by the corporation.¹³
- Alternatively, the GEDO may arrange for an external audit to be carried out in the absence of suspicion of non-compliance, as part of a broader compliance strategy (s. 74 of the Act). By written notice from the GEDO, a corporation will be notified of a decision that the GEDO will appoint an external auditor to carry out an audit of the corporation's compliance. In this instance the cost of the audit will be borne by the GEDO.

In both cases the matters, or 'areas', to be audited will be specified in the written notice issued by the GEDO.

A legislative instrument, outlining requirements for external auditors conducting audits and preparing audit reports under s. 75 of the Act, is being developed. The instrument will not create reporting or record-keeping obligations for registered corporations: such obligations are already established by the Act and the Regulations.

Regulations specifying the necessary expertise and qualifications of external auditors are also being developed. The external auditor Regulations, the external audit legislative instrument and associated guidelines will comprise an external audit 'legislative package' that is planned to be finalised during the second half of 2008, after stakeholder consultation.

Auditing: a summary. NGERs external auditors may check a corporation's compliance with the legislation (the Act, the Regulations and other instruments) and report their findings to the Greenhouse and Energy Data Officer. Corporations may be audited only in terms of their compliance with the requirements of the legislation.

¹³ The costs of the external audit will be borne by the registered corporation because s. 73 of the Act imposes on the registered corporation the obligation to appoint an external auditor and to arrange for an external audit to be carried out.

4 Record keeping



To comply with the provisions of the Act, a registered corporation is required to keep records detailing the greenhouse and energy-related activities of members of its group, including facilities where appropriate. Corporations are encouraged to keep appropriate records from 1 July 2008.

4.1 The type of information

Records of activities must contain information that will provide to the Greenhouse and Energy Data Officer adequate evidence of a registered corporation's compliance with the legislation. This includes information that can be used to verify the relevance, completeness, consistency, transparency and accuracy of reported data during an external audit.

Although the information to be kept in records is a matter for individual corporations, details of the calculation and data analysis methods used for greenhouse gas emissions and energy production and consumption should be recorded, including the following:

- a list of all sources monitored
- the activity data used for calculation of 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.

When facility-specific emissions factors are used, records should document the monitoring methods used and the results from the development of these emissions factors, as well as information such as biomass fractions and oxidisation or conversion factors.

The Greenhouse Gas Protocol describes other records that might be kept in order to maintain a high-quality, easily auditable greenhouse gas inventory.

The type of information

How to keep records

4.2 How to keep records

Records can be kept on paper or in electronic form. They should, however, be stored in a format that is accessible to the Greenhouse and Energy Data Officer or external auditors if required.

Corporations can consult AS ISO 15489 (the Australian and international standard for record management) for guidance about record-keeping processes.

Registered corporations are required to keep records for seven years from the end of the reporting year in which the activities recorded took place. This means that records for the 2008–09 reporting year should be kept until the end of 2015–16.



5 Deregistration



5.1 Why, how and when a company would be deregistered

Why, how and when a company would be deregistered

A registered corporation can apply for deregistration if it is unlikely to meet a threshold for three successive financial (reporting) years.

Deregistration means that the Greenhouse and Energy Data Officer removes a controlling corporation's name from the Register, relieving the corporation of its legal responsibility to provide greenhouse and energy reports.

The process for deregistration is similar to that for registration. The registered corporation must make an application for deregistration, providing information about itself and its group, as well as the reasons why it is not likely to meet the thresholds.

There are many possible reasons why a registered corporation's group might not meet a threshold when it has in the past. For example, changes to the corporate group's structure or practices or the selling of assets could lead to long-term reductions in the levels of greenhouse gas emissions and energy consumption and production.

In order to deregister a registered corporation the GEDO must be satisfied that the corporate group is not likely to meet a threshold for three successive financial years, starting with the financial year in which the corporation applies for deregistration.

As well as explaining why its group is unlikely to meet a threshold in the relevant financial years, the registered corporation must provide supporting documentation, such as observed data and forward estimates of energy consumption, energy production, greenhouse gas emissions and any relevant related activities.

The GEDO will notify a corporation of the outcome of its application for deregistration. The corporation ceases to be registered when the GEDO has removed its name from the Register. The information on the website will also be updated.

If a registered corporation is deregistered but the corporation's group meets a threshold in a subsequent year, the corporation must re-apply for registration.



Appendix A Reportable fuels and energy commodities: Schedule 1 of the Regulations

Item	Fuels and other energy commodities
Solid fossil fuels and coal based products	
1	Black coal (other than that used to produce coke)
2	Brown coal
3	Coking coal
4	Brown coal briquettes
5	Coke oven coke
6	Coal tar
7	Solid fossil fuels other than those mentioned in items 1 to 5
Fuels derived from recycled materials	
8	Industrial materials and tyres that are derived from fossil fuels, if recycled and combusted to produce heat or electricity
9	Non-biomass municipal materials, if recycled and combusted to produce heat or electricity
Primary solid biomass fuels	
10	Dry wood
11	Green and air dried wood
12	Sulphite lyes
13	Bagasse
14	Biomass municipal and industrial materials, if recycled and combusted to produce heat or electricity
15	Charcoal
16	Primary solid biomass fuels other than those mentioned in items 10 to 15

Item	Fuels and other energy commodities
Gaseous fossil fuels	
17	Natural gas if distributed in a pipeline
18	Coal seam methane that is captured for combustion
19	Coal mine waste gas that is captured for combustion
20	Compressed natural gas
21	Unprocessed natural gas
22	Ethane
23	Coke oven gas
24	Blast furnace gas
25	Town gas
26	Liquefied natural gas
27	Gaseous fossil fuels other than those mentioned in items 17 to 26
Biogas captured for combustion	
28	Landfill biogas that is captured for combustion
29	Sludge biogas that is captured for combustion
30	A biogas that is captured for combustion, other than those mentioned in items 28 to 29
Petroleum based oils and petroleum based greases	
31	Petroleum based oils (other than petroleum based oils used as fuel)
32	Petroleum based greases
Petroleum based products other than petroleum based oils and petroleum based greases	
33	Crude oil including crude oil condensates
34	Other natural gas liquids
35	Gasoline (other than for use as fuel in an aircraft)
36	Gasoline for use as fuel in an aircraft
37	Kerosene (other than for use as fuel in an aircraft)
38	Kerosene for use as fuel in an aircraft
39	Heating oil
40	Diesel oil
41	Fuel oil
42	Liquefied aromatic hydrocarbons
43	Solvents if mineral turpentine or white spirits
44	Liquefied petroleum gas
45	Naphtha
46	Petroleum coke
47	Refinery gas and liquids
48	Refinery coke
49	Bitumen
50	Waxes
51	Petroleum based products other than: <ul style="list-style-type: none"> a. petroleum based oils and petroleum based greases mentioned in items 31 to 32 b. petroleum based products mentioned in items 33 to 50

Item	Fuels and other energy commodities
Biofuels	
52	Biodiesel
53	Ethanol for use as a fuel in an internal combustion engine
54	Biofuels other than those mentioned in items 52 to 53
Petrochemical feedstock	
55	Carbon black if used as a petrochemical feedstock
56	Ethylene if used as a petrochemical feedstock
57	Petrochemical feedstock other than those mentioned in items 55 to 56
Energy commodities	
58	Sulphur
59	Solar energy for electricity generation
60	Wind energy for electricity generation
61	Water energy for electricity generation
62	Geothermal energy for electricity generation
63	Uranium
64	Hydrogen
65	Electricity
66	Energy commodities other than those mentioned in items 58 to 65 and in the form of steam, compressed air or waste gas acquired either to produce heat or for another purpose

Appendix B ANZSIC industry sectors: Schedule 2 of the Regulations

ANZSIC code	ANZSIC industry classification	ANZSIC code	ANZSIC industry classification
Division A Agriculture, forestry and fishing		Division C Manufacturing <i>continued</i>	
01	Agriculture	152	Converted paper product manufacturing
02	Aquaculture	161	Printing and printing support services
03	Forestry and logging	162	Reproduction of recorded media
04	Fishing, hunting and trapping	170	Petroleum and coal product manufacturing
05	Agriculture, forestry and fishing support services	181	Basic chemical manufacturing
Division B Mining		182	Basic polymer manufacturing
060	Coal mining	183	Fertiliser and pesticide manufacturing
070	Oil and gas extraction	184	Pharmaceutical and medicinal product manufacturing
080	Metal ore mining	185	Cleaning compound and toiletry preparation manufacturing
091	Construction material mining	189	Other basic chemical product manufacturing
099	Other non-metallic mineral mining and quarrying	191	Polymer product manufacturing
101	Exploration	192	Natural rubber product manufacturing
109	Other mining support services	201	Glass and glass product manufacturing
Division C Manufacturing		202	Ceramic product manufacturing
111	Meat and meat product manufacturing	203	Cement, lime, plaster and concrete product manufacturing
112	Seafood processing	209	Other non-metallic mineral product manufacturing
113	Dairy product manufacturing	211	Basic ferrous metal manufacturing
114	Fruit and vegetable processing	212	Basic ferrous product manufacturing
115	Oil and fat manufacturing	213	Basic non-ferrous metal manufacturing
116	Grain mill and cereal product manufacturing	214	Basic non-ferrous metal product manufacturing
117	Bakery product manufacturing	221	Iron and steel forging
118	Sugar confectionary manufacturing	222	Structural product manufacturing
119	Other food product manufacturing	223	Metal container manufacturing
121	Beverage manufacturing	224	Sheet metal product manufacturing (except metal structural and container products)
122	Cigarette and tobacco product manufacturing	229	Other fabricated metal product manufacturing
131	Textile manufacturing	231	Motor vehicle and motor vehicle part manufacturing
132	Leather tanning, fur dressing, and leather product manufacturing	239	Other transport equipment manufacturing
133	Textile product manufacturing	241	Professional and scientific equipment manufacturing
134	Knitted product manufacturing	242	Computer and electronic equipment manufacturing
135	Clothing and footwear manufacturing	243	Electrical equipment manufacturing
141	Log sawmilling and timber dressing	244	Domestic appliance manufacturing
149	Other wood product manufacturing		
151	Pulp, paper and paperboard manufacturing		

ANZSIC code	ANZSIC industry classification
Division C Manufacturing <i>continued</i>	
245	Pump, compressor, heating and ventilation equipment manufacturing
246	Specialised machinery and equipment manufacturing
249	Other machinery and equipment manufacturing
251	Furniture manufacturing
259	Other manufacturing
Division D Electricity, gas, water and waste services	
261	Electricity generation
262	Electricity transmission
263	Electricity distribution
264	On-selling electricity and electricity market operation
270	Gas supply
281	Water supply, sewerage and drainage services
291	Waste collection services
292	Waste treatment, disposal and remediation services
Division E Construction	
301	Residential building construction
302	Non-residential building construction
310	Heavy and civil engineering construction
32	Construction services
Division F Wholesale trade	
331	Agricultural product wholesaling
332	Mineral, metal and chemical wholesaling
333	Timber and hardware goods wholesaling
341	Specialised industrial machinery and equipment wholesaling
349	Other machinery and equipment wholesaling
350	Motor vehicle and motor vehicle parts wholesaling
360	Grocery, liquor and tobacco product wholesaling
371	Textile, clothing and footwear wholesaling
372	Pharmaceutical and toiletry goods wholesaling
373	Furniture, floor covering and other goods wholesaling
380	Commission-based wholesaling

ANZSIC code	ANZSIC industry classification
Division G Retail trade	
391	Motor vehicle retailing
392	Motor vehicle parts and tyre retailing
400	Fuel retailing
411	Supermarket and grocery stores
412	Specialised food retailing
421	Furniture, floor coverings, houseware and textile goods retailing
422	Electrical and electronic goods retailing
423	Hardware, building and garden supplies retailing
424	Recreational goods retailing
425	Clothing, footwear and personal accessory retailing
426	Department stores
427	Pharmaceutical and other store-based retailing
431	Non-store retailing
432	Retail commission-based buying and/or selling
Division H Accommodation and food services	
440	Accommodation
451	Cafes, restaurants and takeaway food services
452	Pubs, taverns and bars
453	Clubs (hospitality)
Division I Transport, postal and warehousing	
461	Road freight transport
462	Road passenger transport
471	Rail freight transport
472	Rail passenger transport
481	Water freight transport
482	Water passenger transport
490	Air and space transport
501	Scenic and sightseeing transport
502	Pipeline and other transport
510	Postal and courier pick-up and delivery services
521	Water transport support services
522	Airport operations and other air transport support services
529	Other transport support services
530	Warehousing and storage services

ANZSIC code	ANZSIC industry classification
Division J Information media and telecommunications	
541	Newspaper, periodical, book and directory publishing
542	Software publishing
55	Motion picture and sound recording activities
561	Radio broadcasting
562	Television broadcasting
570	Internet publishing and broadcasting
580	Telecommunications services
591	Internet service providers and web search portals
592	Data processing, web hosting and electronic information storage services
601	Libraries and archives
602	Other information services
Division K Financial and insurance services	
621	Central banking
622	Depository financial intermediation
623	Non-depository financing
624	Financial asset investing
63	Insurance and superannuation funds
641	Auxiliary finance and investment services
642	Auxiliary insurance services
Division L Rental, hiring and real estate services	
661	Motor vehicle and transport equipment rental and hiring
662	Farm animal and bloodstock leasing
663	Other goods and equipment rental and hiring
664	Non-financial intangible assets (except copyrights) leasing
671	Property operators
672	Real estate services
Division M Professional, scientific and technical services	
691	Scientific research services
692	Architectural, engineering and technical services
693	Legal and accounting services
694	Advertising services
695	Market research and statistical services
696	Management and related consulting services
697	Veterinary services
699	Other professional, scientific and technical services
700	Computer system design and related services

ANZSIC code	ANZSIC industry classification
Division N Administrative and support services	
721	Employment services
722	Travel agency and tour arrangement services
729	Other administrative services
731	Building cleaning, pest control and gardening services
732	Packaging services
Division O Public administration and safety	
751	Central government administration
752	State government administration
753	Local government administration
754	Justice
755	Government representation
760	Defence
771	Public order and safety services
772	Regulatory services
Division P Education and training	
80	Preschool and school education
810	Tertiary education
821	Adult, community and other education
822	Educational support services
Division Q Health care and social assistance	
840	Hospitals
85	Medical and other health care services
860	Residential care services
871	Child care services
879	Other social assistance services
Division R Arts and recreation services	
891	Museum operation
892	Parks and gardens operations
900	Creative and performing arts activities
911	Sports and physical recreation activities
912	Horse and dog racing activities
913	Amusement and other recreation activities
920	Gambling activities

ANZSIC code ANZSIC industry classification	
Division S	Other services
941	Automotive repair and maintenance
942	Machinery and equipment repair and maintenance
949	Other repair and maintenance
951	Personal care services
952	Funeral, crematorium and cemetery services
953	Other personal services
954	Religious services
955	Civic, professional and other interest group services
96	Private households employing staff and undifferentiated goods-and-service-producing activities of households for own use

Note: Divisions do not constitute industry sectors. They are used here simply as a means of separating industry sectors for convenience.

Shortened forms

ANZSIC	Australian and New Zealand Standard Industrial Classification
AS	Australian Standard
CEO	chief executive officer
CO ₂ -e	carbon dioxide equivalent
GEDO	Greenhouse and Energy Data Officer
GWP	global warming potential
HFC	hydrofluorocarbon
ISO	International Organization for Standardization
kt	kilotonne (10 ⁶ kilograms)
kWh	kilowatt-hour
MW	megawatt
NGERS	National Greenhouse and Energy Reporting System
OSCAR	Online System for Comprehensive Activity Reporting
PFC	perfluorocarbon
TJ	terajoule (10 ¹² joules)

