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NGER technical reporting information

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Disclaimer

This guideline has been developed by the Clean Energy Regulator (CER) to assist entities to comply with their reporting obligations under the *National Greenhouse and Energy Reporting Act 2007*[1] (NGER Act) and associated legislation.

This guidance only applies to the 2025–26 NGER reporting year and should be read in conjunction with the NGER Act, National Greenhouse and Energy Regulations 2008[2] (NGER Regulations), and National Greenhouse and Energy Reporting (Measurement) Determination 2008[3] (NGER Measurement Determination), as in force for this reporting period. These laws and their interpretation are subject to change, which may affect the accuracy of the information contained in the guideline.

The guidance provided in this document is not exhaustive, nor does it consider all circumstances applicable to all entities. This guidance is not intended to comprehensively deal with its subject area, and it is not a substitute for independent legal advice. Although entities are not bound to follow the guidance provided in this document, they must ensure they meet their obligations under the National Greenhouse and Energy Reporting (NGER) Scheme[4] at all times. CER encourages all users of this guidance to seek independent legal advice before taking any action or decision on the basis of this guidance.

CER and the Australian Government will not be liable for any loss or damage from any cause (including negligence) whether arising directly, incidentally or as consequential loss, out of or in connection with, any use of this guidance or reliance on it, for any purpose.

If an entity chooses to meet their obligations under the NGER Scheme in a manner that is inconsistent with the guidance provided in this document, CER, or an independent auditor, may require the entity to demonstrate that they are compliant with the requirements of the NGER Act, NGER Regulations, and/or the NGER Measurement Determination. Entities are responsible for determining their obligations under the law and for applying the law to their individual circumstances.

[1] https://www.legislation.gov.au/Series/C2007A00175
[2] https://www.legislation.gov.au/Series/F2008L0223
[3] https://www.legislation.gov.au/Series/F2008L02309
[4] https://cer.gov.au/schemes/national-greenhouse-and-energy-reporting-scheme

Purpose

The purpose of this guideline is to provide technical reporting information which is not covered in the NGER sector-specific or activity-based guidelines. It includes topics for the oil and gas sector and reporting facility location information. Many of the topics covered in this guideline are frequent reporter questions.

If after consulting this and your sector-specific guideline you still have outstanding questions, contact us on 1300 553 542 or cer-nger-reporting@cer.gov.au.

NGER technical reporting information

Nomination of energy commodity for liquefied petroleum gas (LPG)

When reporting liquefied petroleum gas (LPG), you must nominate whether it is a primary or a secondary fuel.

Purchased LPG (item 44 in schedule 1 of the NGER Regulations) is a secondary fuel. When LPG is consumed at the same facility where it was produced, the LPG is considered a primary fuel.

Read Determining if a fuel is primary or secondary for more information.

Reporting E10 in EERS

E10 is a common blended fuel produced by blending up to 10 per cent ethanol with gasoline.

Under section 1.8 of the National Greenhouse and Energy Reporting (Measurement) Determination 2008[5] (NGER Measurement Determination) a blended fuel is a fuel that is a blend of fossil and biogenic carbon fuels. For example, E10 is a blend of gasoline (fossil fuel) and up to 10 per cent ethanol (biogenic carbon fuel).

Examples of biogenic carbon fuels under the NGER legislation are listed in items 10—16; 28—30 and 52—54 of Schedule 1 of the NGER Regulations.

The NGER legislation does not define fossil fuels. However, taking the ordinary meaning of the term, a fossil fuel is a carbon-based fuel from fossil hydrocarbon deposits including coal, oil and natural gas.

E10 is not a listed fuel type under the NGER Regulations, therefore E10 is not reported in EERS. Rather, when E10 is consumed, the components that make up E10 need to be reported. When reporting these components, you will need to provide additional information about the blended fuel, in the form of matters to be identified (MTBIs).

Example—reporting greenhouse gas emissions and energy consumption from combustion of E10

A facility purchases 10,000 litres of E10 for use in a transport facility. Using the product specifications provided by the manufacturer, it is determined that the E10 is made up of 7% ethanol and 93% gasoline.

Therefore, the purchased E10 contains 700 litres of ethanol and 9,300 litres of gasoline. The purchased E10 is used to fuel fleet cars for the corporations, meaning that the fuel is combusted for use in an internal combustion engine.

As both the ethanol and gasoline are listed fuels, the corporation with operational control of the facility must report the greenhouse gas emissions and energy consumption from the combustion of:

- ethanol (item 53—ethanol for use in an internal combustion engine, Schedule 1 of the NGER Regulations)
- gasoline (item 35—gasoline (other than for use as fuel in an aircraft, Schedule 1 of the NGER Regulations) as consumed by combustion).

[5] https://www.legislation.gov.au/Series/F2008L02309

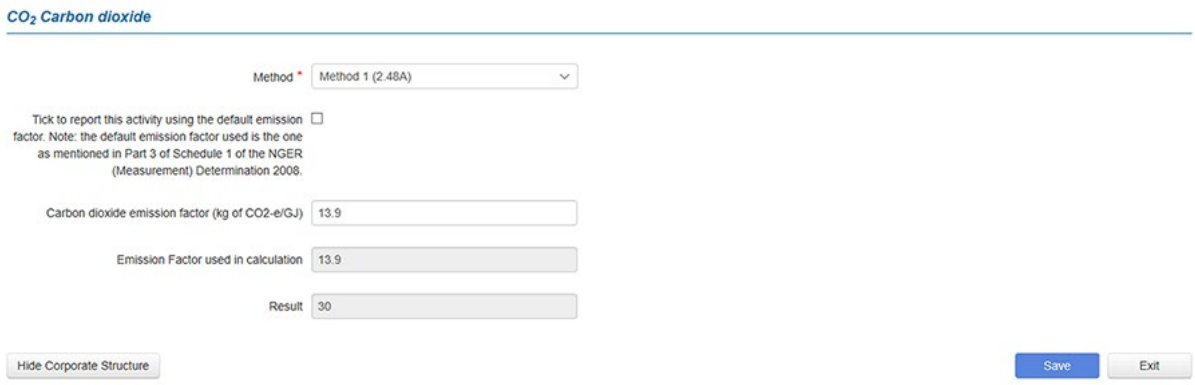
A separate activity must be reported for each fuel. For each activity, the corporation needs to check the box in EERS specifying "Is the fuel combusted in this activity part of a blend?" and provide the following additional data as MTBIs:

- The section under Part 2.6 used to determine the amounts of each kind of fuel in a blended fuel
    - » In this case, for both activities, the MTBI must be entered as 'Section 2.67 Blended liquid fuels', which permits adopting the manufacturer's determination.
- The amount of each type of fuel
    - » In this case, for both activities, the MTBI must be entered as 9.3 kL of gasoline and 0.7 kL of ethanol. Adding this data as an MTBI for both activities does not change the emissions or energy totals for the facility but rather provides context for the composition of the blend used.

Read the reporting blended fuels, other fuel mixes, bitumen and explosives guideline[6] for more information on the reporting of E10 and other blended fuels.

The CO_2 emission factors for petroleum-based oils and petroleum-based greases when used as lubricants

EERS requires reporters to specify the carbon dioxide emissions factor when entering activity data for petroleum-based oils and greases when used as lubricants, as shown below.



The carbon dioxide emission factor refers to the amount of carbon dioxide emitted per unit of fuel. Part 3 of Schedule 1 in the NGER Measurement Determination provides a default emission factor of:

- 13.9 (kg CO_2-e/GJ) for the combustion of petroleum-based oils for stationary or transport energy purposes
- 3.5 (kg CO_2-e/GJ) for the combustion of petroleum-based greases for stationary or transport energy purposes.

Alternatively, a site-specific carbon dioxide emissions factor can be used in accordance with Method 1 under section 2.48A(2) of the NGER Measurement Determination, or Method 2 or 3 under sections 2.48B and 2.48C respectively.

[6] https://cer.gov.au/document_page/reporting-blended-fuels-other-fuel-mixes-bitumen-and-explosives-guideline

The ANZSIC codes for oil and gas activities

In accordance with 4.04A(2)(g) of the NGER Regulations, the activities constituting the facility must be attributed to an industry sector. This is done using the ANZSIC industry classification codes.

The activity type constituting the principal activity of the facility determines the industry sector. A reporter should determine the ANZSIC code of the facility by comparing the principal activity at the facility with the list of ANZSIC industry classifications in Schedule 2 of the NGER Regulations.

Principal activity is defined in NGER Regulation 4.31:

> ***Principal activity***, in relation to a facility, means the activity that:
> (a) results in the production of a product or service that is produced for sale on the market
> (b) produces the most value for the facility out of any of the activities forming part of the facility.

Where to report appraisal and development activities associated with oil or gas wells

Oil or gas exploration and development involves carrying out activities with the purpose of finding and appraising natural underground oil and gas accumulations.

The CER considers that oil or gas exploration may include:

- conducting geochemical, geological, or geophysical surveys
- drilling wells
- well completions
- well workovers
- drilling mud degassing
- carrying out testing in relation to a well
- venting and flaring associated with oil or gas exploration activities
- taking samples for chemical or other analysis for exploration purposes.

Fugitive emissions from appraisal and development activities should be reported in EERS as the emissions source 'Oil or gas exploration and development—flaring' or 'Oil or gas exploration and development (other than flaring)'', as appropriate, using methods detailed under Division 3.3.2 of the NGER Measurement Determination.

Where water is pumped from wells during exploration and development activities, emissions from this source should be reported as the emissions source 'Produced water from oil and gas exploration and development, crude oil production, natural gas production or natural gas gathering and boosting (other than emissions that are vented or flared)' using methods detailed under Division 3.3.6D of the NGER (Measurement) Determination.

Reporting crude oil and natural gas condensates

1.03 of the NGER Regulations includes the following definitions related to condensates, which have been changed as of the 2021–22 reporting period:

- **crude oil** includes field condensates

- **field condensate** means a mixture of lower molecular weight hydrocarbons that are recovered from an oil or gas field at surface separation facilities at or near the field
- **plant condensate** means liquid separated in a processing plant from a gaseous hydrocarbon stream by condensation, other than liquefied petroleum gas.

The list of fuel types in Schedule 1 of the NGER Regulations includes 'Crude oil' as item 33, and 'Plant condensate and other natural gas liquids not covered by another item in this table' as item 34. Energy production or consumption of condensates should be reported as one of these items, as appropriate.

The meaning of ‘tonnes of flared gas' when estimating emissions from oil and gas flaring activities

Emissions released from gas flared during oil and gas flaring activities can be estimated using Method 1, 2, 2A or 3. The 'tonnes of flared gas' and 'tonnes of flared crude oil and liquids' referred to under Method 1 is the total waste gas stream (in tonnes) to pass through the flare during the year, not just the hydrocarbon component of the fuel. This includes any inert gases in the waste gas stream.

Methods 2 and 3 allow the total quantity of hydrocarbons within the waste gas stream to be determined and the calculation of facility specific emission factors.

The requirements for reporting energy consumption associated with oil and gas venting, flaring and leakage activities

As disposal and loss of energy is considered to be consumption of energy (under 2.26 of NGER Regulations), it is necessary to report the energy content of fuels that are disposed of or lost through fugitive emissions activities, including venting, flaring or leakage activities, where the energy consumed is a fuel listed in Schedule 1 of the NGER Regulations.

When flaring emission sources and activities are entered into the EERS, a reporter will be required to select the type of fuel and quantity of gas flared. When a fuel type is selected, a reporter will then be required to enter the energy content factor associated with the fuel. This may be the default energy content factor associated with the fuel (from Schedule 1 of the NGER Measurement Determination) or a facility-specific energy content factor.

EERS will automatically calculate the energy consumption associated with the quantity of the selected fuel type. The energy consumption will be categorised in the NGER report as 'energy consumed by means of combustion for purposes other than producing electricity, producing a chemical or metal product, or for transport'.

When energy is consumed through venting or leakage, the energy consumption must be reported in EERS through a separate activity from the venting or leakage emissions activity.

Please note where production of a fuel type occurs at a facility, any quantity of that fuel type consumed at the facility through venting, flaring or leakage activities should be included in the reported quantity of fuel type produced.

Reporting equipment or component use

Many of the 'matters to be identified' for the new 2021–22 oil and gas sources require reporting of the number and average hours of operation for particular 'types of equipment' or 'types of components'. In cases

where equipment or components are used for multiple reportable activities, reporters must do one of the following:

- report all hours against one of the activities
- distribute the total hours across the different sources.

If you are distributing the hours, you must keep records describing how you determined how the usage should be split.

It is important that all hours, and therefore emissions, are included but not counted twice.

Reporting average hours of operation of equipment or components

'Average hours of operation of equipment (or component) type X' is to be interpreted as the average number of hours a given equipment or component type is operated over the entire NGER reporting year. Do not include hours when equipment or components may be used for non-NGER reportable activities or not in use due to maintenance or other reasons.

What you should do if your emissions are counted twice

The fugitive emissions sources for oil and gas added from the 2021–22 reporting year have the potential to cause emissions to be double counted. The sources are designed to comprehensively cover the emissions from a facility. Your activities may meet the definition of multiple source categories. In this case, the emissions from these activities should only be reported once under a single source, to avoid double counting.

Reporters should assign the emissions to a single source and record their reasoning in their basis of preparation documents. CER expects that these assignments are consistent between reporting years. If there is a change in how the emissions are assigned to a source, CER expects that this decision is recorded for record keeping purposes as per section 22 of the NGER Act.

Avoid non-compliance with NGER legislation by using a Basis of Preparation (BoP)

As per section 22 of the NGER Act, a registered corporation must keep records that:

- allow it to report accurately under the NGER Act
- enable the CER to ascertain whether the corporation has complied with its obligations under the NGER Act.

Your records must be kept in a form that is easily and quickly accessible for inspection and audit. You must keep the records for 5 years from the end of the financial year in which the relevant activity took place.

An Executive Officer (EO) must approve the NGER report that is submitted to the CER. The EO must also confirm that the NGER report has been prepared in accordance with the NGER legislation and that the general principles have been appropriately applied. It is up to you to determine the appropriate processes and internal controls to ensure that a compliant report is submitted on time and supported by adequate records. The processes should be documented and repeatable.

A Basis of Preparation (BoP) records the methodology by which an NGER report has been prepared. The use of a BoP gives you the ability to provide assurance over the data reported to the CER and minimises the likelihood of non-compliance with the record keeping requirements of the NGER Act.

While the structure of your BoP depends on your individual circumstances, a typical BoP would include your justifications and explanations of:

- assessment of operational control (including contractors)
- facility boundaries
- reportable activities and associated emissions and energy sources
- method selection and how you met the requirements of the method
- the sampling strategy for methods that involve sampling, including how the strategy:
  - » meets standards for duration and frequency to enable reliable estimates
  - » addresses bias, especially relating to under or over-stating emissions when compared to the likely true value
- quality assurance and review processes, including:
  - » written procedures
  - » adjustments made for changes in legislation
- key personnel roles and responsibilities, such as those involved in the activities and producing the report (including consultants and experts)
- record keeping.

We encourage you to submit your BoP (or summary) with each year's NGER report to clarify your key assumptions and decisions.

Submitting additional documents to support your NGER report submission is particularly helpful when the NGER data submitted in EERS does not tell the full story. For example, there may be a significant reduction in emissions from a particular source compared to the previous year, which may be explained by a three-month shut down for maintenance or a temporary shut down due to a natural disaster.

The submission of a BoP with an NGER report will reduce the need for us to contact you to clarify the information included in your NGER report.

How to report scope 2 emissions if your electricity invoice includes 'unaccounted for energy'

Read section 6.1.4 of the Estimating emissions and energy from electricity production and consumption guideline[7] for more information on reporting scope 2 emissions if your invoice includes 'unaccounted for energy'.

[7] https://cer.gov.au/document_page/estimating-emissions-and-energy-electricity-generation-transmission-and-distribution-sectors

Simulated Natural Gas

Simulated Natural Gas (SNG), also known as 'Synthetic Natural Gas', is a mixture of vaporised 'liquefied petroleum gas' (LPG) and compressed air. SNG cannot be considered a 'blended fuel' because air is not a biogenic carbon fuel. SNG cannot be considered a 'fuel mix' because air is not a fossil fuel.

SNG is not separately listed as a fuel under NGER legislation. SNG can be categorised under Schedule 1 of NGER Regulations as '27 - Gaseous fossil fuels other than those mentioned in item 17 to 26'. The energy content and emission factor for this fuel is listed in Schedule 1 of the NGER Measurement Determination. When reporting the energy quantity of SNG, the reporter must consider the entire volume of air and LPG present.

To report the production and use of SNG, a reporter should include the following:

- energy consumed (without combustion) of the quantity of LPG used to make SNG during the reporting year
- energy production of '27 - Gaseous fossil fuels other than those mentioned in item 17 to 26' as a Secondary fuel during the reporting year. Estimate the energy of the SNG either in GJ, or cubic meters in accordance with industry practice
- energy consumed (with or without combustion) of the SNG consumed during the reporting year. The measurement criteria available are dependent on how the SNG was acquired.

If the quantity of SNG has been acquired:

- without a commercial transaction, it must be estimated using measurement criteria AAA or BBB
- through a commercial transaction then measurement criterion A, AA, or AAA must be used.

See Division 2.3.6—Measurement of quantity of gaseous fuels in the NGER Measurement Determination for more information.

Production variable reporting for Safeguard facilities

Production variable quantities must be reported for a financial year where a facility:

- has scope 1 covered emissions[8] (tCO_2-e) that exceed the Safeguard threshold of 100,000 tCO_2-e in a financial year
- has an multi-year monitoring period[9] covering the relevant financial year
- is an 'eligible facility' as defined under section 58B of the Safeguard Rule[10]

Production variable quantities do not need to be reported for a financial year if where a facility:

- has scope 1 covered emissions that do not exceed the safeguard threshold
- is not an 'eligible facility' as defined under section 58B of the Safeguard Rule
- is part of a facility aggregate

[8] https://cer.gov.au/schemes/safeguard-mechanism#covered-emissions
[9] https://cer.gov.au/schemes/safeguard-mechanism/managing-excess-emissions#apply-for-a-multi-year-monitoring-period
[10] https://www.legislation.gov.au/F2015L01637/latest/versions

- is a grid-connected electricity generator and the principal activity of the facility is electricity generation (ANZSIC code 261).

Production variable quantities are used to calculate a Safeguard facility's baseline emissions number[11] for the financial year, or part of a financial year if applicable.

Production variable quantities must be measured consistently with the requirements of each production variable in Schedule 1 of the Safeguard Rule.

Production variables will be pre-filled based on production variables reported on in the previous financial year.

If there was no production of a production variable in a financial year enter zero.

If you need to add a production variable for a Safeguard facility:

- and the facility produced a production variable(s) from 2017-18 to 2021-22 and does not have an emissions-intensity determination[12] – add that production variable(s) in the form and select 'historical' production variable type.

  A production variable is 'historical' if it was produced by the facility during any of the historical financial years (that is, 2017–18 to 2021–22) and it was not non-commercial production for any historical financial year.

  Non-commercial production involves production where the product is not produced for sale but is only produced in the course of testing and pilot activities. Examples include production where the facility is in exploration phase, plant commissioning, piloting or testing of a new product.
- and the facility did not produce a production variable(s) from 2017–18 to 2021–22 but commenced production in 2023–24 – add that production variable(s) in the form and select 'new' production variable type.
- and the facility is a landfill facility – select the 'NLCH4' production variable and then provide the quantity.

Further information on production variables including determining if a production variable is applicable to your facility, product specifications and measurement requirements can be found in Schedule 1 of the Safeguard Rule[13] and the Safeguard Mechanism Document[14].

[11] https://cer.gov.au/schemes/safeguard-mechanism/safeguard-baselines
[12] https://cer.gov.au/schemes/safeguard-mechanism/safeguard-baselines#standard-baseline
[13] https://www.legislation.gov.au/F2015L01637/latest/versions
[14] https://www.dcceew.gov.au/climate-change/publications/safeguard-mechanism-document

Administrative information

Correctly report facility location information in EERS

A corporation's NGER report must include specific identifying information for a facility as per 4.04A(2)(a) to (h) of the NGER Regulations. Identifying information includes location information such as address, latitude and longitude and the state or territory in which the facility is located. You should enter accurate location information to ensure compliant reporting. Accurate location information also assists data users with analysis of the NGER data set.

Facility location information is automatically rolled over into your EERS workspace each year. We request that facility location information is reviewed each year to maintain its accuracy.

Facility location information you must provide in your NGER report

There are different requirements for the location information that must be reported by facilities, depending on the facility's Australian and New Zealand Standard Industrial Classification (ANZSIC) code. The requirements are outlined in 4.04A(2)(a) to (h) of the NGER Regulations and summarised in Table 1 below.

Table 1: Location information that you must submit for your facility

	Transport Facility (2.19 (3) of the NGER Regulations)	**Network or Pipeline Facility (2.20(2) of the NGER Regulations)**	**Multi-site cement facility**	**Other**
ANZSIC code	291, 461, 462, 471, 472, 481, 482, 490, 501, 510	262, 263, 270, 281, 502, 580	203	Any other ANZSIC code not listed for transport or network or pipeline
Address (if any)	Yes	Yes	Yes	Yes
Latitude and longitude	No	No	No	Yes
State – in which facility is located	No	Yes - may be located in more than one state or territory	Yes - may be located in more than one state or territory	No
State – to which activities constituting facility are attributable	Yes - refer to 2.19(2) of the NGER Regulations	No	Yes - refer to 4.28A(2) of the NGER Regulations	Yes - refer to 2.19(2) of the NGER Regulations
Location and activity description	A brief description of your facility's location, activities and a state or territory designation must be provided in EERS if your facility: • is a transport, network or pipeline, or multi-site cement facility • is not a 'single site' facility (refer to 1.03 of the NGER Regulations) • does not have an Australian street address.			No

Confirming the latitude and longitude for a facility

Latitude and longitude coordinates (coordinates) for a facility must be provided in decimal degrees in EERS. EERS accepts input to six decimal places, but you are only required to provide precision to 3 decimal places. This is consistent with the formats used in internet and portable GPS tools commonly available in Australia.

Coordinates can be reported in EERS by either:

- selecting an address from the list in the address search bar will automatically populate the coordinates fields (precision to 6 decimal places)
- typing directly into the coordinates text fields (precision to 3 decimal places required)
- clicking on the interactive map will place a coordinates pin (location pin) and automatically populate the coordinates fields (precision to 6 decimal places).

If the latitude and longitude fields have been automatically populated, please confirm that this corresponds to the location of the facility. We expect the location pin to be placed as accurately as possible.

If you need to adjust the location of the pin, you can type directly into the coordinates fields.

Converting to decimal degrees

A street address can be converted to coordinates in decimal degrees using the Latitude and Longitude Finder at LatLong.net[15].

A conversion calculator from degrees, minutes and seconds to decimal degrees is also available through LatLong.

Tidying up your EERS workspace

EERS prefills any facility and activity descriptions that were present in your NGER report for the preceding reporting period.

To simplify reporting against your corporate structure, you are encouraged to remove facilities and activities that no longer apply to your operations. Removal of historical facilities and activities makes navigation easier and will reduce the time it takes to prepare your report.

Refer to the EERS navigation guide[16] for instructions on how to edit your corporate structure.

[15] https://www.latlong.net/
[16] https://cer.gov.au/document_page/emissions-and-energy-reporting-system-navigation-guide