

Australian Government Clean Energy Regulator









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## **Definitions and abbreviations**

Term	Meaning
Department	Department of Climate Change, Energy, the Environment and Water. Federal department who is the policy agency for the NGER Legislation.
Facility	Has the meaning given by section 9 of the NGER Act. For more information on defining a facility under the NGER scheme, see <u>What is a Facility</u> <sup>1</sup> .
kWh	Kilowatt hours
LGC	Large-scale generation certificate
Location-based scope 2 emissions	Scope 2 emissions that are estimated using a location-based approach
Market-based scope 2 emissions	Scope 2 emissions that are estimated using a market-based approach
NGER	National Greenhouse and Energy Reporting
NGER Act	National Greenhouse and Energy Reporting Act 2007
NGER Legislation	The NGER Act, the NGER Regulations and the NGER Measurement Determination
NGER Measurement Determination	National Greenhouse and Energy Reporting (Measurement) Determination 2008
NGER Regulations	National Greenhouse and Energy Reporting Regulations 2008
MWh	Megawatt hours
t CO <sub>2</sub> -e	Tonnes carbon dioxide equivalence

Terms in NGER legislation may have specific meanings within the law. These key words and phrases are normally identified under a heading such as Definitions, Interpretation or Dictionary or in other parts of the document.

For more information on interpreting legislation see <u>Federal Register of Legislation - Understanding</u> <u>Legislation</u><sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> https://cer.gov.au/schemes/national-greenhouse-and-energy-reporting-scheme/assess-your-obligations#what-is-an-nger-facility

<sup>&</sup>lt;sup>2</sup> https://www.legislation.gov.au/help-and-resources/understanding-legislation/reading-legislation



# Disclaimer

The Clean Energy Regulator (CER) developed this guideline to assist entities to comply with their reporting obligations under the <u>National Greenhouse and Energy Reporting Act 2007</u><sup>3</sup> (NGER Act) and associated legislation.

This guideline only applies to the 2024–25 NGER reporting year and should be read in conjunction with the <u>NGER Act</u><sup>4</sup>, <u>National Greenhouse and Energy Regulations 2008</u><sup>5</sup> (NGER Regulations), and <u>National</u> <u>Greenhouse and Energy Reporting (Measurement) Determination 2008</u><sup>6</sup> (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 <u>National Greenhouse and Energy</u> <u>Reporting (NGER) scheme</u><sup>7</sup> at all times. The CER encourages all users of this guidance to seek independent legal advice before taking any action or decision based on this guidance.

The 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 guideline 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, the CER, or an independent auditor, may require the entity to demonstrate that they are compliant with 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.

<sup>&</sup>lt;sup>3</sup> https://www.legislation.gov.au/C2007A00175/latest/versions

<sup>&</sup>lt;sup>4</sup> https://www.legislation.gov.au/C2007A00175/latest/versions

<sup>&</sup>lt;sup>5</sup> https://www.legislation.gov.au/F2008L02230/latest/versions

<sup>&</sup>lt;sup>6</sup> https://www.legislation.gov.au/F2008L02309/latest/versions

<sup>&</sup>lt;sup>7</sup> https://cer.gov.au/schemes/national-greenhouse-and-energy-reporting-scheme



# 2024–25 updates

This guideline has been updated to address the questions we received about reporting market-based scope 2 emissions in 2023–24.

Changes in this document for the 2024–25 reporting year:

- Chapter 2.2: Added an explanation for why it is best practice to report a market-based scope 2 activity for all facilities if you choose to report for a single facility.
- Chapter 2.2.1: Added an example of the contextual information we will pub
- Chapter 2.3: Added an explanation for why you should not compare location-based and market-based scope 2 emissions totals.
- Chapter 3:
  - » Removed information about the location-based scope 2 emissions formula. This information is contained in Chapter 6 of the <u>Estimating emissions and energy from electricity production and</u> <u>consumption guideline</u><sup>8</sup>.
  - » Moved the explanation for the market-based scope 2 emissions formula to Appendix A.
  - » Moved some of the detail from Table 1 (parameters used in the market-based method for scope 2 emissions) to Chapter 4.
- Chapter 3.1: Added information about estimating how many renewable energy certificates (RECs) are required for a facility to have zero market-based scope 2 emissions.
- Chapter 4: Added sections to explain the reporting requirements for each matter to be identified (MTBI) including the evidence you should keep for each MTBI.
- Chapter 4.5: Added information on 'other exemptions' from the RET-liability.
- Chapter 5: Added information about reporting each MTBI in the Emissions and Energy Reporting System (EERS).
- Appendix B: Updated the examples to be relevant for 2024–25 reporting.
- Appendix C: Added an example to show how many renewable energy certificates (RECs) are required for a facility to have zero market-based scope 2 emissions.
- Minor stylistic and formatting changes have also been made to this document.

Read about the changes to the NGER Legislation for the 2024–25 reporting period<sup>9</sup>.

<sup>&</sup>lt;sup>8</sup> https://cer.gov.au/document\_page/estimating-emissions-and-energy-electricity-production-and-consumption-guideline

<sup>&</sup>lt;sup>9</sup> https://cer.gov.au/schemes/national-greenhouse-and-energy-reporting-scheme/report-emissions-andenergy/amendments



# 1. Introduction

## 1.1 Focus of this guideline

This guideline is to help NGER reporters understand the voluntary **market-based** method for estimating scope 2 emissions. Scope 1 and scope 2 emissions are <u>explained on our website</u><sup>10</sup>. This guideline provides

- an overview of the market-based and location-based scope 2 emissions accounting methods
- principles for reporting and a note on data publication
- an explanation of the market-based scope 2 emissions formula
- requirements for reporting each matter to be identified (MTBI)
- an example of entering data into the Emissions and Energy Reporting System (EERS)
- examples that show how to use the market-based formula for scope 2 emissions.

## **1.2** Methods used to estimate scope 2 emissions in the NGER Scheme

Most methods for estimating emissions under the National Greenhouse and Energy Reporting (NGER) Scheme are location-based methods. This means that the emissions are tied to a time and physical location where the greenhouse gas was released into the atmosphere.

Location-based scope 2 emissions methods use an average emissions intensity for grids where the electricity consumption occurs.

Market-based scope 2 emissions methods reflect a company's emissions in the context of its purchases of renewable electricity or products.

Location-based and market-based accounting methods are distinct and complementary approaches for estimating emissions. For scope 2 emissions, they are different ways of accounting for the indirect emissions from the consumption of electricity. Together, these methods provide a more complete picture of emissions from electricity use.

#### Mandatory location-based scope 2 emissions reporting

You **must** report location-based scope 2 emissions if your facility consumes more than 20,000 kWh of purchased, acquired or lost<sup>11</sup> electricity in the reporting year. Scope 2 emissions are estimated under the location-based formula by applying a grid-based emissions factor to the quantity of electricity purchased, acquired or lost from that grid by operation of the facility.

For more information on the requirements for reporting location-based scope 2 emissions, read Chapter 6 of the Estimating emissions and energy from electricity production and consumption guideline<sup>12</sup>.

<sup>&</sup>lt;sup>10</sup> https://cer.gov.au/schemes/national-greenhouse-and-energy-reporting-scheme/about-emissions-and-energy-data/emissions

 <sup>&</sup>lt;sup>11</sup>In this context, 'lost' electricity means line losses from an electricity distribution or transmission facility.
 <sup>12</sup> https://cer.gov.au/document\_page/estimating-emissions-and-energy-electricity-production-and-consumption-guideline



#### Voluntary market-based scope 2 emissions

NGER reporters have the option to report market-based scope 2 emissions *in addition* to reporting mandatory location-based scope 2 emissions. The market-based method allows NGER reporters to reflect their purchases of eligible renewable energy certificates, which are assigned an emissions factor of zero. These purchases incentivise generation of renewable electricity.

The voluntary market-based method for scope 2 emissions (Method B) is described in section 7.4 of the NGER Measurement Determination (Determination).

# 2. Principles for market-based scope 2 emissions reporting

## 2.1 Use the NGER method

If you choose to use the market-based method, you must estimate market-based scope 2 emissions from the operation of the facility under section 7.4 of the Measurement Determination. **Do not** follow a method described in any other scheme that has a market-based scope 2 emissions method, including the discontinued <u>Corporate Emissions Reduction Transparency (CERT) report<sup>13</sup></u>. The requirements for reporting market-based scope 2 emissions under the NGER Scheme are outlined in <u>Chapter 4</u> of this guideline.

## 2.2 Apply the method to all facilities under your operational control

If you choose to use the market-based method, please report market-based scope 2 emissions for *all* facilities within your corporate structure that purchase or acquire electricity. Reporting a market-based scope 2 emissions activity for all facilities under your operational control provides the correct total of market-based emissions for your controlling corporation.

From the 2025–26 reporting year, this will be mandatory.

It is valid to report a market-based scope 2 emissions activity for a facility, even if you do not allocate voluntarily surrendered large scale generation certificates (LGCs) or purchases of GreenPower electricity to the facility.

## 2.2.1 A note on data publication

Each year, the CER is required to publish reported emissions and energy data in line with section 24 of the NGER Act. This includes publication of an <u>additional market-based scope 2 emissions total</u>,<sup>14</sup> where this data is voluntarily reported, for registered corporations above the <u>publication threshold</u><sup>15</sup>.

<sup>&</sup>lt;sup>13</sup> https://cer.gov.au/markets/reports-and-data/corporate-emissions-reduction-transparency-report

<sup>&</sup>lt;sup>14</sup> https://cer.gov.au/markets/reports-and-data/nger-reporting-data-and-registers#corporate-emissions-and-energy-data

<sup>&</sup>lt;sup>15</sup> https://cer.gov.au/schemes/national-greenhouse-and-energy-reporting-scheme/about-emissions-and-energy-data#what-we-publish-data-on



As the intention is for this to be a corporate total, the CER will publish additional, contextual information when not all facilities in the corporate structure have been included.

Organisation name	Identifying details	Does this total cover all facilities that give rise to scope 2 emissions in the corporate group?	Total market-based scope 2 emissions (t CO2-e)
Controlling corporation 1	12 345 678 910	Yes	25,00
Controlling corporation 2	12 345 678 911	No (30% of facilities)	
Controlling corporation purchased or acquired e	1 reported a market-bas electricity. The corporate	ed scope 2 emissions activity for total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub> -e reflects the total of 25,000 t CO <sub>2</sub>	every facility that ne true corporate

Controlling corporation 2 reported a market-based scope 2 emissions activity for 3 out of 10 facilities that purchased or acquired electricity. The corporate total of 0 t CO<sub>2</sub>-e *does not* reflect the true corporate total for Controlling corporation 2.

## 2.3 Don't compare location-based and market-based corporate totals

Care should be taken when interpreting scope 2 emissions data. The location-based and market-based methods for reporting scope 2 emissions each provide important information for understanding Australia's emissions and incentivising investment in renewable energy. The two methods are distinct and are not intended to be compared. Direct comparison between the two totals can give rise to double-counting of renewable generation.

## 2.4 Keep evidence to support your claims

You must keep records relating to all of your NGER reporting, as outlined in section 22 of the <u>NGER Act<sup>16</sup></u>. However, when you use the market-based method to report your scope 2 emissions, there are additional requirements for the evidence you must keep.

As per section 7.4 (5) of the Determination, you must keep evidence for voluntarily surrendered LGCs and purchases of GreenPower electricity.

As part of our report assessment process, we may ask you to provide additional information so we can verify your claims. This information is outlined in <u>Chapter 4</u> of this guideline.

<sup>&</sup>lt;sup>16</sup> https://www.legislation.gov.au/C2007A00175/latest/versions



## 3. Estimating market-based scope 2 emissions in NGER

When using the market-based method to estimate scope 2 emissions from purchased or acquired electricity that was consumed from the operation of a facility during the NGER reporting year, you must use the formula from section 7.4 of the Determination:

 $Y = ((Q - Q_{exempt}) \times (1 - (RPP + JRPP)) + (Q_{exempt} \times (1 - JRPP)) - (REC_{surr} - REC_{onsite}) \times 1000) \times \frac{RMF}{1000}$ 

Variable	Explanation	Units
Y	The estimated market-based scope 2 emissions.	t CO <sub>2</sub> -e
Q	The quantity of electricity purchased or acquired by the facility during the reporting year and consumed from the operation of the facility.	kWh
Qexempt	The quantity of electricity that is exempt from the Renewable Energy Target (RET) liability.	kWh
RECsurr	The number of <b>eligible</b> renewable energy certificates (RECs) voluntarily surrendered in the reporting year. Eligible RECs only include LGCs and purchases of GreenPower electricity.	equivalent to MWh
REC <sub>onsite</sub>	The number of LGCs that have been <i>or will be</i> issued for electricity produced on- site during the reporting year that was consumed from the operation of the facility.	equivalent to MWh
JRPP	The jurisdictional renewable power percentage. The ACT is the only state or territory with a JRPP for the 2024–25 reporting period, which is 79.51% as published in the <u>National Greenhouse Accounts Factors: 2024</u> <sup>17</sup> .	n/a
RPP	The RET renewable power percentage for the applicable period (averaged across the adjacent calendar years) as <u>published by the Clean Energy Regulator</u> <sup>18</sup> . The RPP for 2024–25 is 18.195%.	n/a
RMF	The scope 2 residual mix factor as mentioned in Part 6 of Schedule 1 of the Measurement Determination. The RMF for 2024–25 is 0.81 kg CO <sub>2</sub> -e / kWh. You can <u>read more about how the Department of Climate Change, Energy, the</u> <u>Environment and Water (DCCEEW) calculate the RMF</u> <sup>19</sup> in the National Greenhouse Accounts Factors: 2024 <sup>17</sup> .	kg CO₂-e / kWh

Table 1: Parameters used in the market-based method for scope 2 emissions

<sup>18</sup> https://cer.gov.au/schemes/renewable-energy-target/renewable-energy-target-liability-and-exemptions/renewable-power-percentage

<sup>&</sup>lt;sup>17</sup> https://www.dcceew.gov.au/climate-change/publications/national-greenhouse-accounts-factors-2024

<sup>&</sup>lt;sup>19</sup> https://www.dcceew.gov.au/climate-change/publications/national-greenhouse-accounts-factors-2024



When reporting market-based scope 2 emissions in EERS, you will not directly enter a calculated emissions total. Instead, you will create a market-based scope 2 emissions activity, enter 5 matters to be identified (MTBIs), and then EERS will calculate the market-based scope 2 emissions for you. <u>Chapter 5</u> has more information about entering market-based scope 2 emissions activity in EERS.

You can use the market-based scope 2 emissions formula to estimate emissions for:

- individual facilities
- individual group members
- your entire controlling corporation.

For more information on the market-based scope 2 emission formula, read:

- Appendix A for an explanation of each main part of the formula.
- <u>Appendix B</u> for worked examples.
- <u>Appendix C</u> for information about how many RECs you need to allocate to your NGER facility to report zero tonnes CO<sub>2</sub>-e.

# 4. Requirements for reporting market-based scope 2 emissions

### 4.1 Matters to be identified

There are 4 matters to be identified (MTBIs) that must be reported as per 4.17B(2) of the NGER Regulations. However, the MTBI, RECsurr, is split into 2 parts in EERS:

- **RECsurr\_LGC:** for eligible LGCs that were allocated to the facility.
- **RECsurr\_GreenPower:** for eligible purchases of GreenPower electricity that were allocated to the facility.

This means you need to enter 5 MTBIs for each market-based scope 2 emissions activity in EERS. The reporting requirements for each MTBI are outlined below.

## 4.2 Purchased or acquired electricity (Q)

The MTBI, Q, represents the total quantity of electricity that was purchased or acquired and consumed by your facility during the NGER reporting year. You should report consumption of all electricity purchased or acquired by your facility, whether from the main electricity grid or other sources.

The market-based method is only applicable for purchased or acquired electricity. The market-based method is not applicable for estimating emissions from the loss of electricity that is attributable to electricity transmission or electricity distribution networks.

Your quantity for 'Q' for the market-based activity/s will usually be identical to your quantity for 'Q' for the location-based activity/s for each facility. Reasons the two quantities may be different include:

your location-based activity includes electricity transmission or distribution losses



• you did not report location-based emissions for the facility as the quantity of purchased or acquired electricity is below the threshold of 20,000 kWh mentioned in section 7.1(2) of the NGER Measurement Determination.

#### **Reporting threshold**

Unlike the location-based scope 2 emissions methods, there is no threshold for reporting the consumption of purchased or acquired electricity for the market-based method. This means that you may report a market-based scope 2 emissions activity for a facility that is not required to report location-based scope 2 emissions.

#### **Evidence to keep**

You should keep receipts and electricity bills for purchased electricity. If you decide that your electricity is 'acquired' rather than 'purchased,' we expect you to keep records of the basis for this decision as well as of the quantities acquired. These records should include details of how the electricity was acquired.

If your electricity billing period does not match the NGER reporting year, you have options for how to apportion the electricity consumption. These options are explained in the <u>Reporting energy production and</u> <u>consumption guideline</u><sup>20</sup>. You should use a consistent approach for apportioning electricity consumption when using the market-based and location-based scope 2 emissions methods.

If a purchase of GreenPower electricity is shown on your electricity bill, then you should apportion the GreenPower electricity using the same method you use to apportion purchased or acquired electricity.

## 4.3 Voluntarily surrendered LGCs and GreenPower purchases (RECsurr)

The MTBI, RECsurr, is the number of eligible renewable energy certificates (RECs) voluntarily surrendered in the reporting year that you choose to allocate to your NGER facility. Eligible RECs only include LGCs and purchased GreenPower electricity.

In EERS you will report LGCs and purchases of GreenPower electricity separately.

## 4.3.1 Eligible LGCs allocated to a facility (RECsurr\_LGC)

'RECsurr\_LGC' refers to the number of eligible LGCs that you choose to allocate to the facility.

#### **Eligibility requirements**

You can only allocate LGCs to a facility if the LGCs were voluntarily surrendered through the REC Registry<sup>21</sup> during the reporting year. For the 2024–25 NGER reporting year, LGCs must have been surrendered between 1 July 2024 and 30 June 2025.

The following LGCs are ineligible and may not be used for the market-based method:

 an LGC surrendered to meet a liable entity's obligations for that compliance year under the Renewable Energy (Electricity) Act 2000

 <sup>&</sup>lt;sup>20</sup> https://cer.gov.au/document\_page/reporting-energy-production-and-consumption-guideline
 <sup>21</sup> https://rec-registry.gov.au/rec-registry/app/home



- an incorrectly created or cancelled LGC
- an LGC that has a generation date of more than 36 months prior to the end of the reporting year, noting:
  - » the 'generation date' means the date that the electricity was generated, not the date the LGC was created
  - » for 2024-25, you cannot use an LGC with a generation date prior to July 2022
- an LGC that was voluntarily surrendered outside of the NGER reporting year
- an LGC that has been allocated to another NGER facility for any reporting period.

Surrender of small-scale technology certificates (STCs) or international renewable energy certificates (I-RECs) cannot be reported under the market-based method.

#### Allocating LGCs to a facility

LGCs are typically surrendered in batches in the REC Registry. Each instance of surrender has a unique surrender ID.

You can choose the quantity of eligible LGCs you allocate to each facility. You may:

- allocate zero LGCs to a facility
- allocate LGCs from multiple surrenders to a single facility
- allocate the LGCs from a single surrender to multiple facilities.

You are not required to allocate *all* LGCs from a single surrender ID to facilities under your operational control.

Each eligible LGC can only be claimed once under the market-based scope 2 emissions method. Once an LGC has been allocated to a facility by you or someone else, it cannot be allocated to:

- the same facility in any future reporting period
- any other NGER facility in any reporting period.

We encourage you to be consistent with how you allocate eligible LGC surrenders across other schemes that have a market-based scope 2 emissions method.

#### **Evidence to keep**

You must keep the serial number of any LGCs you allocate to a facility (see section 7.4 (5) of the Determination).

The serial number should include the following information about the **LGC generation** contained in the 'certificate number':

- registered person ID (the ID of the user that creates the LGCs, as recorded in the REC registry)
- accreditation code (of the power station)
- generation month and year (when the electricity was generated).

You should also keep the following evidence for each instance of surrender:

• volume of certificates surrendered



- evidence of surrenders made by a third party on behalf of the corporation if not clearly stated in the comments section in the REC registry
- how many LGCs you have allocated to NGER facilities under your operational control.

If somebody surrenders the LGCs on your behalf, please ask them to write a comment in the free-text field in the REC Registry that states the voluntary surrender was on behalf of your company, including your company name and ABN. Please write your ABN in this format: ABN12345678910.

If the person that surrendered the LGCs on your behalf did not write your company information in the free text field, please ask them to provide you a written statement that the surrender was made on your behalf. This statement should include your company name and ABN, the surrender ID, and the quantity of LGCs surrendered.

#### Request for additional information for RECsurr\_LGC

If you report a non-zero quantity for RECsurr\_LGC, we may ask you to provide evidence for the total number of LGCs you allocated at the controlling corporation level.

This evidence includes:

- the surrender ID
- the total quantity of LGCs that were voluntarily surrendered
- the quantity of LGCs from each surrender that were allocated to a facility under your operational control for the reporting period
- evidence that any third-party surrenders were made on your behalf.

## 4.3.2 Purchases of GreenPower electricity (RECsurr\_GreenPower)

The MTBI, RECsurr\_GreenPower, is for eligible purchases of GreenPower electricity, in MWh equivalent.

#### **Eligibility requirements**

A purchase of GreenPower electricity is eligible if you make the purchase from an <u>accredited GreenPower</u> <u>provider</u><sup>22</sup> before you submit your NGER report.

You should check that your electricity retailer is an accredited GreenPower provider before you report a purchase of GreenPower electricity.

The quantity of GreenPower is usually itemised on your electricity bill. Electricity retailers may label GreenPower purchases differently. If you are unsure if your bill lists a GreenPower purchase, contact your electricity retailer.

<sup>&</sup>lt;sup>22</sup> https://www.greenpower.gov.au/get-greenpower/find-provider



#### **Evidence to keep**

You must keep a receipt for the purchase or a statement confirming the purchase from an accredited GreenPower provider (section 7.4 (5) of the Determination).

#### Request for additional information for RECsurr\_GreenPower

If you report a non-zero quantity for RECsurr\_GreenPower, we may ask you to provide evidence for the quantity of GreenPower electricity you reported at the controlling corporation level. The evidence may be in the form of receipts, electricity invoices or a statement from your GreenPower provider.

Please ask your GreenPower provider for a written statement confirming the total quantity of GreenPower electricity you purchased during the NGER reporting year. It will be easier for you to provide this statement as evidence if you have a lot of individual electricity invoices or receipts.

The statement from your GreenPower provider should include:

- details of your GreenPower provider, including the ABN
- name and ABN of the company that made the purchase
- quantity of GreenPower electricity purchased during the NGER reporting period (MWh is preferable)
- national metering identifiers (NMIs) that relate to the purchase.

# 4.4 LGCs created for electricity produced and consumed on-site (REConsite)

The MTBI, REConsite, is the quantity of LGCs that have, or will be, created for electricity that was generated at your facility in the reporting year and consumed by your facility.

You must report a non-zero quantify of REConsite if you answer 'yes' to all of the following questions, regardless of what you do with the LGCs:

- 1. Do one or more RET-accredited renewable power stations form part of your NGER facility?
- 2. Did the power station/s from question 1 generate electricity during the NGER reporting year?
- 3. Did your NGER facility consume any of the electricity from question 2?
- 4. Have you, or will you, create LGCs for the electricity you consumed at your facility? <u>Read more about</u> <u>creating LGCs</u><sup>23</sup>.

<sup>&</sup>lt;sup>23</sup> https://cer.gov.au/schemes/renewable-energy-target/large-scale-renewable-energy-target/large-scale-generation-certificates/create-large-scale-generation-certificates



You should report the quantity of REConsite so the benefits of the renewable electricity can only be claimed once under the market-based scope 2 emissions method.

#### **Evidence to keep**

You should keep the following evidence:

- The accreditation code of all RET-accredited power stations under the operational control of your Controlling Corporation, matched to NGER facilities.
- The quantity of LGCs that you have created for electricity generated in the reporting year that was:
  - » consumed on-site
  - » exported from your facility.
- The quantity of LGCs you will create for electricity generated in the reporting year that will be:
  - » consumed on-site
  - » exported from your facility.

Best practice is to have electricity meters set up to allow you to accurately measure the quantity of electricity produced on site that was also consumed on-site, and the quantity that was exported from your facility.

#### **Request for additional information for REConsite**

If you report a market-based activity, we may ask you to provide additional information to justify your reported quantity of REConsite for the facility.

This information may include the:

- RET-accreditation code for any power stations that form part of your NGER facility/s
- quantity of LGCs that have or will be created for electricity that was generated at your facility and:
  - > exported from your facility
  - > consumed at your facility.

## 4.5 Electricity exempt from the RET liability (Qexempt)

The MTBI, Qexempt, is the quantity of electricity purchased or acquired by your facility during the reporting year that is consumed by your facility and that is exempt from the Renewable Energy Target (RET) liability.

There are 2 main types of <u>exemptions from the RET liability</u><sup>24</sup>:

<sup>&</sup>lt;sup>24</sup> https://cer.gov.au/schemes/renewable-energy-target/renewable-energy-target-liability-and-exemptions



- Exemption certificates for emissions-intensive trade-exposed (EITE) entities<sup>25</sup>
- Other exemptions for specific scenarios, listed in Table 2 on Relevant acquisitions<sup>26</sup>

#### **Exemption certificates for EITE sites**

If your NGER facility is formed by one or more EITE sites, then you must estimate the quantity of electricity purchased or acquired by the NGER facility during the NGER reporting year that is both consumed by your facility and exempt from the RET liability.

The NGER facility that purchased or acquired electricity that was exempt from the RET liability should report the MTBI, Qexempt. For example, an NGER facility conducting EITE activities that are exempt from the RET liability should be the NGER facility to report Qexempt.

The RET Scheme operates on a calendar year and the NGER Scheme operates on a financial year. Typically, you will have an exemption certificate that covers the first 6 months of the NGER reporting period (July to December) but not the second 6 months (January to June) when you submit your NGER report.

There is no prescribed method to calculate Qexempt within the NGER Legislation. For the 2024–25 NGER reporting you may use the following approach to determine the Qexempt:

- For the **first half of the NGER reporting period**: Use your calendar year 2024 CER-approved electricity use formula and subtract your metering data for January to June 2024 to determine your RET exemption amount.
- For the **second half of the NGER reporting period**: Use your CER-approved electricity use formula for calendar year 2025 and your metering data for January to June 2025 to estimate your RET exemption amount.
- Add the two totals together and convert to kWh.

If you use a different methodology to estimate your Qexempt value, please document the rationale for your approach and provide details of this with your NGER report submission. One way to do this is by submitting the information in a 'basis of preparation' (BoP). Read more about the BoPs in the <u>NGER quick help topics</u><sup>27</sup>.

Exemption certificates are issued in megawatt hours (MWh). Please convert MWh to kilowatt hours (kWh) before entering the quantity in EERS or the <u>market-based scope 2 emissions formula</u>.

#### Other exemptions from the RET liability

Other exemptions from the RET liability that may be relevant for NGER reporters include power station auxiliaries and remote grids with an installed capacity less than 100 MW. For information about situations where an individual or electricity retailer is exempt from the RET liability, read Table 2 on the <u>Relevant</u> acquisitions<sup>28</sup> page on the CER website.

<sup>&</sup>lt;sup>25</sup> https://cer.gov.au/schemes/renewable-energy-target/renewable-energy-target-participants-and-industry/emissions-intensive-trade-exposed-entities

<sup>&</sup>lt;sup>26</sup> https://cer.gov.au/schemes/renewable-energy-target/renewable-energy-target-liability-and-exemptions/relevant-acquisitions

<sup>&</sup>lt;sup>27</sup> https://cer.gov.au/document\_page/nger-quick-help-topics

<sup>&</sup>lt;sup>28</sup> https://cer.gov.au/schemes/renewable-energy-target/renewable-energy-target-liability-and-exemptions/relevant-acquisitions



If some or all of your NGER facility's electricity consumption is exempt from the RET liability, then you should report this quantity of electricity in the MTBI, Qexempt, in your NGER report.

If you are a liable entity under the RET Scheme and exclude, or plan to exclude, electricity in your energy acquisition statement (EAS), then you must report this quantity of electricity under the MTBI, Qexempt, in your NGER report.

If you are unsure how to estimate Qexempt for your NGER facility, <u>contact us</u><sup>29</sup>.

#### **Evidence to keep for Qexempt**

Please keep evidence that supports your reported quantity of Qexempt for both EITE exemption certificates and 'other exemptions'. This may include exemption certificates, metering data and calculations. Please provide this information in a Basis of Preparation when you submit your NGER Report.

#### **Request for additional information for Qexempt**

If you report a market-based scope 2 emissions activity, we may ask you to provide additional information to support your reported quantity of Qexempt.

This may include calculations to support a non-zero quantity of Qexempt.

## 5. Reporting market-based scope 2 emissions in EERS

When reporting market-based scope 2 emissions please create a market-based scope 2 activity for all facilities under your company's operational control that purchase or acquire electricity. You still need to report a separate location-based scope 2 emissions activity for each facility under your operational control that acquires and consumes more than 20,000 kWh of electricity.

### 5.1 Entering market-based scope 2 emissions activity data in EERS

To create a new market-based scope 2 emissions activity in EERS: Select the facility in the corporate structure then click 'Add activity.' Select 'Scope 2 emissions' for the source category and 'Market based method' for the activity as shown in Figure 1.

For more information on adding a new activity, see the EERS navigation guide<sup>30</sup>.

<sup>&</sup>lt;sup>29</sup> https://cer.gov.au/about-us/contact-us

<sup>&</sup>lt;sup>30</sup> https://cer.gov.au/document\_page/emissions-and-energy-reporting-system-navigation-guide



Figure 1: Adding a market-based scope 2 emissions activity on the 'Activity details' page in EERS

Facility 1 Activity details	Save and close Save Cancel
Incomplete (Activity) (2024-2025)	Voluntary Market-based Scope 2 (t CO2-e) 0
Activity Selection	
Activity description	
Source category *	
Scope 2 emissions	×
Source *	
n/a	
Activity •	
Market based method	× v

The MTBIs will load on the 'Activity details' page. The variables used in the <u>market-based scope 2 emissions</u> formula are matched to the MTBI descriptions in EERS in Figure 2. Once you enter the MTBIs, EERS will calculate the market-based scope 2 emissions for the activity and display it in the calculator in the top right corner (shown in Figure 1, above). The calculator will automatically update each time you update an MTBI in the EERS interface.

Figure 2: Matters to be identified (MTBIs) for the market-based scope 2 emissions activity

Matters to be identified (Activity) - Renewable Energy	
Quantity of electricity purchased or acquired from an electricity transmission network or distribution network (kWh) * Q	
	*
Quantity of electricity exempt from Renewable Energy Target (RET) liability (kWh) • Qexempt	
	*
Number of LGC voluntarily surrendered (MWh equivalent) • RECsurr_LGC	
	*
Quantity of GreenPower purchased (MWh) • RECsurr _GreenPower	
	* *
Renewable Energy Certificates that have been or will be issued for electricity produced on-site and consumed from the operation of the facility (MWh) REConsite	•
	*
Save and close Save Co	incel



Pay careful attention to your units when entering MTBIs. Some considerations for each MTBI are shown in Table 2.

Table 2: Considerations when entering MTBIs into EERS

MTBI in EERS	Tips
Q	Enter the total quantity of electricity purchased or acquired by your facility in the NGER reporting year that was consumed by the facility, in kWh.
Q <sub>exempt</sub>	Enter the total quantity of electricity that is exempt from the RET liability in kWh. Exemption certificates state the 'exemption amount' in MWh.
RECsurr_LGC	Enter the number of LGCs that you want to allocate to the facility. 1 LGC is equivalent to 1 MWh of electricity. You may enter this MTBI as a decimal.
RECsurr_GreenPower	Enter the quantity of GreenPower purchased, equivalent to MWh. If your electricity bill or statement states the quantity of purchased electricity in kWh, convert the units to MWh.
REConsite	Enter the quantity of LGCs that have or will be created for electricity that was generated on-site during the reporting year and consumed by your facility, in MWh

#### When reporting market-based scope 2 emissions:

- You do not need to enter the JRPP or RPP into EERS. EERS will use the JRPP for the state or territory that the facility is located in.
- You may create more than one market-based scope 2 activity for each facility. If you do this, the 2 activity totals are added together to produce the facility total.

# 6. More information

Contact CER for more information. Email <u>cer-nger-reporting@cer.gov.au</u> or call 1300 553 542 within Australia.

Read Appendix A, Appendix B and Appendix C for more information on the market-based scope 2 emissions formula, including worked examples.



# Appendix A - Understanding the market-based formula for scope 2 emissions

The market-based method for scope 2 emissions formula subtracts eligible renewable energy purchases from the total quantity of purchased or acquired electricity that is *not* considered renewable. An emissions factor is then applied to the 'residual electricity'. The emissions factor for the market-based formula is the residual mix factor (RMF). More detail on each term is contained in

<u>Table</u>1.



# Appendix B – Worked examples for the market-based Scope 2 emissions formula

Read market-based scope 2 emissions formula and Appendix A for information on the formula.

#### Example 1a – Single facility with purchases of renewable energy

A controlling corporation is responsible for NGER reporting for a facility located in Queensland for the 2024–25 reporting year. During the NGER reporting year the facility consumed 11,000,000 kWh of electricity from the grid (Q = 11,000,000 kWh). It did not generate electricity on-site (REConsite = 0 MWh) and none of the electricity it consumed from the grid was exempt from the Renewable Energy Target liability (Qexempt = 0 MWh). The company purchased and voluntarily surrendered 3,000 LGCs and allocated all LGCs to Facility 1 (RECsurr\_LGC = 3,000 MWh). The company has a receipt from an accredited GreenPower provider for a purchase of 100,000 kWh of GreenPower electricity (RECsurr\_GreenPower = 100 MWh).

Reporter-specific quantities	Default quantities (2024–25)		
• Q = 11,000,000 kWh	• RPP = 18.195% = 0.18195		
• Qexempt = 0 kWh	• JRPP = 0, because the facility is not in the		
• RECsurr_LGC = 3000 MWh	ACT		
• RECsurr_GreenPower = 100 MWh	<ul> <li>RMF = 0.81 kg CO2-e / kWh from Part 6 of Schedule 1 of the NGER Measurement</li> </ul>		
• RECsurr = 3,000 + 100 = 3,100 MWh	Determination		

#### Table 3: Summary of MTBIs and values



$$Y = \left[ \left( Q - Q_{exempt} \right) \times \left( 1 - (RPP + JRPP) \right) + \left( Q_{exempt} \times (1 - JRPP) \right) - (REC_{surr} - REC_{onsite}) \times 1000 \right] \times \frac{RMF}{1000} \\ = \left[ (11,000,000 - 0) \times \left( 1 - (0.18195 + 0) \right) + \left( 0 \times (1 - 0) \right) - (3,100 - 0) \times 1000 \right] \times \frac{0.81}{1,000} \\ = \left[ (11,000,000) \times (0.81805) + (0) - (3,100,000) \right] \times \frac{0.81}{1,000} \\ = \left[ 5,898,550 \right] \times \frac{0.81}{1,000} \\ = 4,778 \text{ t } \text{CO}_2\text{-e}$$

The calculated emissions are rounded to the nearest whole number as per section 1.16 of the NGER Measurement Determination.

#### Example 1b - Single facility with no purchases of renewable energy

If the company with operational control of Facility 1 in Example 2a did not purchase GreenPower electricity or allocate any LGCs to the facility, then RECsurr = 0 MWh and the market-based scope 2 emissions would be:

$$Y = \left[ \left( Q - Q_{exempt} \right) \times \left( 1 - (RPP + JRPP) \right) + \left( Q_{exempt} \times (1 - JRPP) \right) - (REC_{surr} - REC_{onsite}) \times 1000 \right] \times \frac{RMF}{1000} \\ = \left[ (11,000,000 - 0) \times \left( 1 - (0.18195 + 0) \right) + \left( 0 \times (1 - 0) \right) - (0 - 0) \times 1000 \right] \times \frac{0.81}{1000} \\ = 7,289 \text{ t } \text{CO}_2\text{-e}$$

Notes:

- This is a valid estimate of market-based scope 2 emissions for Facility 1, even though no LGCs were allocated and no purchases of GreenPower electricity were made.
- Activity totals are rounded to the nearest whole number as per section 1.16 of the NGER Measurement Determination.



#### Example 2– reporting for 2 facilities

A company has 2 facilities. Facility 1 is in the Australian Capital Territory. Facility 2 is in New South Wales.

During the 2024–25 NGER reporting year Facility 1:

- Purchased and consumed 14,000,000 kWh of electricity from the grid.
- Did not purchase GreenPower electricity from an accredited GreenPower provider.
- Generated 1,000,000 kWh (1,000 MWh) of electricity from on-site renewable electricity sources, for which they created 1,000 LGCs. The facility consumed 600,000 kWh of this electricity and exported 400,000 kWh to the grid. The facility voluntarily surrendered 600 of the 1,000 LGCs to cover the electricity it generated and consumed and sold the remaining 400 LGCs to a third party.

During the NGER reporting year, Facility 2:

- Purchased and consumed a total of 9,000,000 kWh of electricity from the grid, including a purchase of 1,000,000 kWh of GreenPower electricity from an accredited GreenPower provider. 5,000,000 kWh of the total purchased and consumed electricity was exempt from the Renewable Energy Target (RET) liability because the facility was an emissions-intensive trade-exposed (EITE) site.
- Did not generate any on-site renewable electricity.

During the NGER reporting year, the **company**:

- Allocated 600 LGCs that it created from on-site generation to Facility 1.
- Purchased and voluntarily surrendered an additional 4,000 LGCs, of which it chose to allocate:
  - 300 LGCs to Facility 1, and
  - 3,700 LGCs to Facility 2.

All LGCs were correctly created and had a generation date within 36 months before the end of the NGER reporting period. The RPP is 18.195% and the RMF is  $0.81 \text{ kg CO}_2$ -e / kWh for all facilities.



	Facility 1	Facility 2	Controlling corporation	Reporter enters this into EERS?
State emissions attributed to	ACT	NSW	n/a	Yes – Facility details page
Q (kWh)	14,000,000	9,000,000	23,000,000	Yes
Qexempt (kWh)	0	5,000,000	5,000,000	Yes
RECsurr_LGC (MWh)	= 600 + 300 = 900	3,700	4,600	Yes
RECsurr_GreenPo wer (MWh)	0	1,000	1,000	Yes
RECsurr (MWh)	900	4,700	5,600	No
REConsite (MWh)	600*	0	600*	Yes
JRPP (2024–25)	79.51%	0	n/a	No
RPP (2024–25)	18.195%	18.195%	n/a	No
Y (t CO <sub>2</sub> -e)**	17	2,893	2,910	No

The corporate total for market-based scope 2 emissions is 2,910 t CO<sub>2</sub>-e.

#### Notes:

\*REConsite for Facility 1 is 600 and not 1,000 because 600 represents the portion of electricity that was produced on-site and then consumed on-site for which LGCs were created. For more information on REConsite, read <u>Chapter 4.4</u> of this guideline.

\*\*the facility and corporate totals are rounded to the nearest whole number as per section 1.16 of the NGER Measurement Determination



# Appendix C - How many RECs are required for zero marketbased scope 2 emissions?

The corporate total for market-based scope 2 emissions is calculated by summing the facility totals. The facility totals are calculated by summing the individual activities within each facility.

It is possible to allocate more eligible RECs (LGCs or GreenPower purchases) to a facility than is required to reach 0 t  $CO_2$ -e for market-based scope 2 emissions.

If you allocate more RECs to a facility than is required to reach 0 t  $CO_2$ -e for market-based emissions, the formula will calculate a negative value, but the activity value displayed in EERS and your NGER report will be '0' as per section 7.4 (6) of the Determination. This means you allocated more RECs to a facility than were required to reach 0 t  $CO_2$ -e.

When you enter the 5 MTBIs into EERS, the calculated market-based scope 2 emissions are shown in the calculator in the top right corner, as seen in Figure 1.

The below example is for allocation of LGCs. The same applies to purchases of GreenPower electricity, which may also be allocated to facilities.



#### Example 3

A facility based in Western Australia consumes 1,000,000 kWh of non-GreenPower electricity (Q = 1,000,000 kWh, RECsurr\_GreenPower = 0 MWh). It does not create LGCs for the electricity it generates and consumes on-site (REConsite = 0 MWh), and none of its purchased or acquired electricity was exempt from the RET-liability (Qexempt = 0 kWh).

A single market-based scope 2 emissions activity was created for the facility.

The table below shows the difference between the total calculated by the <u>market-based scope 2</u> <u>emissions formula</u> and the activity total calculated by EERS for the 2024-25 reporting year.

Number of LGCs allocated to the	Market-based scope	Notes on the number of LGCs allocated to the	
facility (RECsurr_LGC)	Calculated by the <u>market-based formula</u>	Calculated in EERS and presented in the NGER report*	facility
1,000	-147.4	0	More LGCs were allocated to this facility than were
819	-0.8	0	required to reach 0 t CO <sub>2</sub> -e
818	0.0	0	The exact number of LGCs were allocated that were required to reach 0 t CO <sub>2</sub> -e.
817	0.9	1	Not enough LGCs were allocated to the facility to reach 0 t CO <sub>2</sub> -e

\*Activity totals are rounded to the nearest whole number as per section 1.16 of the NGER Measurement Determination.