

Guidance Document

Calculating Emissions in NABERS Energy Rating Reports

Version 1.0 – March 2021



1 Introduction

1.1 Summary

This guidance document has been developed by the National Administrator. It provides guidance on the emissions that appear in NABERS Energy Rating Reports.

The emissions are typically used by NABERS customers for reporting in both voluntary and mandatory schemes.

Emissions displayed in the NABERS Energy Rating Reports are calculated by multiplying the measured energy consumption by the National Greenhouse Accounts (NGA) factors.

Note: This guidance document only refers to the Rating Report and is separate from the emissions factors used to calculate NABERS Energy Star Ratings.

Further information regarding the change of NGA factors used in NABERS Energy Ratings may be found in the [Future of NABERS Energy consultation paper](#).

1.2 Purpose

The purpose of this guidance document is to explain the National Greenhouse Account (NGA) reporting year and the relevant set of NGA factors which are used in the NABERS Energy Rating Report.

2 NGA factors

2.1 What are NGA factors?

NGA factors provide methods that help companies and individuals estimate greenhouse gas emissions.¹

NGA factors are reported by the Commonwealth Government on an annual basis. This means that each reporting year has its own set of NGA factors.

2.2 Which NGA factor has been used in my Rating Report?

From 1 July 2021 onward, NABERS will apply the updated NGA factors on 1 July the following year they are released.



Ratings certified with a rating period start date prior to 1 July 2020 will not be affected.

The NGA factor that will be used in a Rating Report will be based on the NABERS rating period start date. See Table 1 and Figure 1.

The NABERS Energy Rating Report will be updated to identify the reporting year from which the NGA factor has been taken. For example, if the 2020 edition NGA factors have been used, the report will state 'NGA factor 2020 edition'.

Table 1: NGA factors and applicable NABERS rating period start dates

NGA factor		NABERS rating period start date	
Edition	Reporting year	Earliest start date	Latest start date
2020	1 July 2020 to 30 June 2021	1 July 2020	30 June 2021
2021	1 July 2021 to 30 June 2022	1 July 2021	30 June 2022

An example of a current NABERS Energy Rating Report is given in Appendix A.

¹ Source: <https://www.industry.gov.au/data-and-publications/national-greenhouse-accounts-factors>

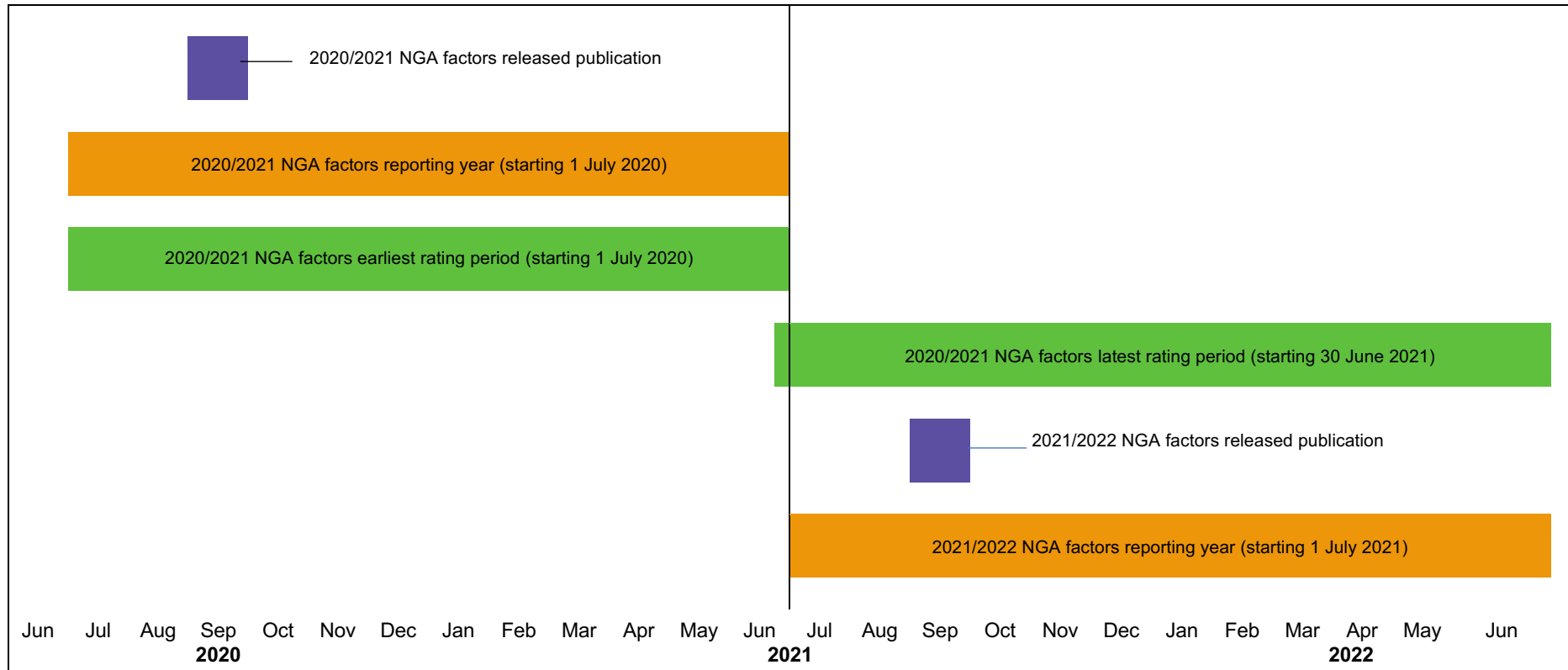


Figure 1: Visual representation of NGA factor rating period start dates

An example of how this is implemented is provided below.

Example:NGA factors (2021):

- a) NGA factors (2021) published on 30 September 2021.
- b) NABERS will apply NGA factors (2021) to ratings certified from 1 July 2022 with a rating period start date of 1 July 2021.

NGA factors (2022):

- c) NGA factors (2022) published on 30 September 2022.
- d) NABERS will apply NGA factors (2022) to ratings certified from 1 July 2023 with a rating period start date of 1 July 2022.



Reminder: This guidance document only refers to the Rating Report and is separate from the emissions factors used to calculate NABERS Energy Star Ratings.

2.3 Why is the rating period start date used to determine which NGA factor applies to the emissions calculation?

The NABERS rating period start date is used to determine the NGA factor reporting period because it:

- a) Provides a clear commencement date for the implementation of NGA factors;
- b) Allows changes to be communicated well in advance of its application; and
- c) Aligns with Commonwealth Government guidance on how to use NGA factors.

2.4 Could some ratings have NGA factors that are more than 18 months old?

Yes, this situation is possible. The most extreme scenario is that an Energy Rating certified with a rating period from 30 June 2021 to 30 June 2022 will use NGA factors (2020) and not NGA factors (2021). NABERS has considered this scenario and notes that because the actual change in emissions factors on a year to year basis is relatively small, it would still be an accurate measurement of emissions for that reporting period.

In addition, this approach aligns with guidance from the Commonwealth Government on how to use the NGA factors.

2.5 Further questions

Please direct any questions regarding the application of NGA factors in NABERS Energy Rating emissions calculations to the NABERS mailbox: nabers@environment.nsw.gov.au

Appendix A – Sample of a current Energy Rating Report

NABERS ENERGY RATING REPORT

This report provides more information about your NABERS Energy rating and greenhouse gas emissions. It explains how the data for your NABERS Energy rating can be used to meet mandatory and voluntary reporting requirements.



These NABERS Energy Rating details are for:

Rating application no.: N12345

Sample Base Building
123 Sample Street
SYDNEY NSW 2000

Rating type: Base Building

Rating area: 983.6 m²

Rated hours: 50.0 hrs/wk

No. of computers: 0

Rated period: 18/06/2019 to 17/06/2020

Rating expiry: 13/08/2021

> Energy consumption details:

Electricity: 99727.5 kWh

GreenPower: 0.0%

Gas: 0.0 MJ

Diesel: 0.0 L

Coal: 0.0 kg

Your rating details

The intensity of your energy is 365 MJ/m² p.a.

①

Your NABERS Energy rating is 4 stars and your greenhouse gas emissions are:

②

Total emissions (scope 1 & 2)

80779 kg CO₂-e p.a.

③

Total emissions (full fuel cycle - scope 1, 2 & 3)

89755 kg CO₂-e p.a.

④

Greenhouse gas intensity (scope 1 & 2)

82 kg CO₂-e/m² p.a.

⑤

Greenhouse gas intensity (full fuel cycle - scope 1, 2 & 3)

91 kg CO₂-e/m² p.a.

⑥

NABERS Energy rating benchmarking factor:

Benchmarking factor

88

⑦



Contact us

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