

How to use the Performance Gap Assessment Calculator (NSW)

1. What is this Assessment Calculator used for?

1.1 General

The Performance Gap Assessment Calculator is used to calculate the required type and quantity of carbon offsets to be purchased in the following two scenarios:

- 1 A building does not achieve a target NABERS performance rating and the gap between target and actual performance needs to be offset (performance gap).
- 2 A building uses fossil fuels and the emissions from the burning of on-site fossil fuels need to be offset.

1.2 NSW Sustainable Buildings SEPP

From 1 October 2023, as part of the NSW State Environmental Planning Policy (Sustainable Buildings 2022), also known as the Sustainable Buildings SEPP, all large commercial developments will be required to commit to obtaining a minimum NABERS Energy and Water star rating.

The Agreement to Rate contract is signed at the design stage of a building. It assists developers in meeting their requirements under the policy and can be used to combine multiple rating types for the same building.

Upon building completion and assessment, if the NABERS energy rating does not meet the target as defined by the SEPP, the Performance Gap Assessment Calculator is used to determine the quantity of Large-scale Generation Certificates (LGCs) and/or offsets to be purchased.

In New South Wales, legislation requires five years of LGC offsets to be purchased, and ten years of ACCU offsets to be purchased. Target star ratings are hard coded into the NSW version of the calculator.

1.3 How the type and quantity of offsets are determined

The Assessment Calculator will determine which of four scenarios apply for a building:

- A** Building achieves the target star rating and is all electric
 - + Energy Standard has been met: LGC purchases are NOT required
 - + Building is all electric: ACCU purchases are NOT required
- B** Building achieves the target star rating but uses fossil fuels on-site
 - + Energy Standard has been met: LGC purchases are NOT required
 - + Fossil Fuels have been consumed: ACCU purchases ARE required
- C** Building does not achieve the target star rating and is all electric
 - + Energy Standard has NOT been met: LGC purchases ARE required
 - + Building is all electric: ACCU purchases are NOT required
- D** Building does not achieve the target star rating and uses fossil fuels on-site
 - + Energy Standard has NOT been met: LGC purchases ARE required
 - + Fossil Fuels have been consumed: ACCU purchases ARE required

The calculator will then display the resulting quantities of LGC and ACCU purchases required.

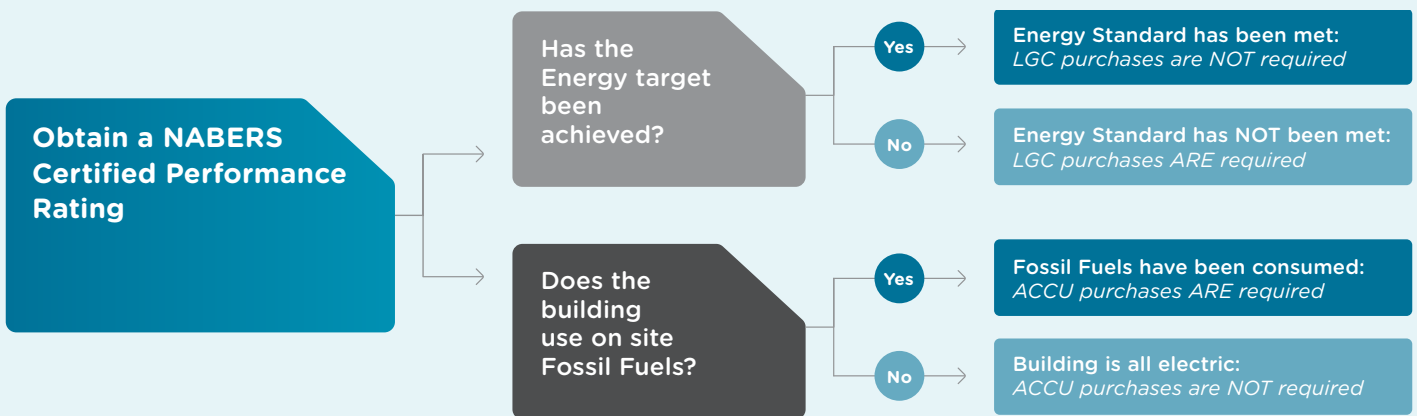


Figure 1. How the type and quantity of offsets are determined

1.4 Assessment Calculator results

The Assessment Calculator accepts inputs from the NABERS Certified Performance Rating to determine the number and type of offsets required for purchase in order to meet requirements. The calculator then determines the type and number of offsets required to be purchased to satisfy legislation. Two results will be generated:

- 1** The Performance Gap is offset with LGCs. This is the difference in benchmarking emissions between the measured consumption in the NABERS rating and the maximum allowed consumption for the target Energy Star for that building type. The gap is converted to an electricity gap in MWh using NGA electricity emissions factor used at the time of the NABERS benchmarking for that building type. The gap is multiplied by 5 (years), then rounded up to the next whole number to determine required LGCs. One LGC equals 1MWh.
- 2** Emissions from natural gas are offset with ACCUs. Gas consumption in MJ is converted to emissions in kgCO₂ using the current year Scope 1,2 & 3 NGA factor for gas. Gas emissions are multiplied by 10 (years) and this value is rounded up to the next whole number to determine required ACCUs. One ACCU equals one tonne of carbon dioxide equivalent (tCO₂-e).



2. Using the Calculator

Step 1: Check the Calculator version

Check your version of the calculator manually by pressing the “Check Version” button.

- + Ensure you have a working internet connection.
- + An error will be displayed if the versions do not match, or if the URL cannot be reached.
- + If you receive a message that your calculator is not the most recent version, download the calculator again from the NABERS website.

Step 2: Enter the Data

Enter the following data into the white cells:

- + The NABERS Performance Rating and Agreement to Rate number.
- + Details of the Assessor who is completing the calculations on behalf of the building owner.
- + The rating period of the Performance Rating.
- + The building details.
- + Building information as stated on the Performance Rating Report.
- + Energy consumption as stated on the Performance Rating Report.

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Step 3: Run the Calculator

Run the calculator by pressing the “Calculate Performance Gap” button.

Calculations will appear in the blue shaded cells, and a statement regarding type and quantity of offsets to be purchased will appear at the top of the report.

Step 4: Printing a Report

If a PDF or paper print of the report is required, press the “Generate PDF” button after the calculation has been run.

| Rating and Agreement Details | | |
|---|--|--|
| Agreement Number NABERS Energy Rating Number | <input type="text"/> | Check Check |
| Assessor Details | | |
| Name Email Phone Date of Report | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | Check Check |
| Rating Period | | |
| Beginning (format DD/MM/YYYY) End | <input type="text"/> <input type="text"/> | Check Rating Period cannot be before 01/07/2020. Please contact National |
| Premises | | |
| Premises Type | <input type="text"/> | Check |
| Building Name Street Address City or Suburb State of Premises Premises postcode | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | Check Check Check Check |
| Energy Consumption | | |
| Electricity (kWh) Gas (MJ) Diesel (L) | <input type="text"/> kWh <input type="text"/> MJ <input type="text"/> L | Check |

Generate PDF

Step 4.

Calculate Performance Gap

Step 3.

Check Version

Step 1.

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