



GREEN STAR – OFFICE V3: APPROACH TO GREENHOUSE GAS EMISSIONS

Date Issued: April 2011

CHANGELOG

Version	Release Date	Description of Changes
1.0	February 2010	Factsheet updated
1.0	April 2011	Rebranded to suite new Green Star® brand

INTRODUCTION

There are two credits within Green Star – Office Design v3 rating tool that directly target greenhouse gas emissions. These credits are the Ene-Conditional Requirement and Ene-1 'Greenhouse Gas Emissions' (Ene-1). Ene-Conditional Requirement must be achieved for the project to be eligible for assessment and certification, whilst Ene-1 rewards predicted 'net zero greenhouse gas emissions in operation' with the maximum 20 points.

To demonstrate compliance with these credits energy modelling is required. There are then two options available to the project team to determine the predicted greenhouse gas emissions resulting from this energy use.

METHOD FOR DETERMINING GREENHOUSE GAS EMISSIONS

There are two steps for determining the greenhouse gas emissions of the project. Please refer to the explanations and diagram below for further details:

Step 1: Determine the predicted energy consumption

The first step in identifying the predicted greenhouse gas emissions is to model the predicted energy consumption of the building. At present, energy modelling must be carried out in accordance with the [NABERS Energy Guide to Building Energy Estimation Modelling](#) (available from www.nabers.com.au).

Step 2: Determine the predicted greenhouse gas emissions resulting from the energy consumption

The project team is then required to choose between the two alternative routes detailed below to establish the greenhouse gas emission resulting from the energy consumption.

Route 1

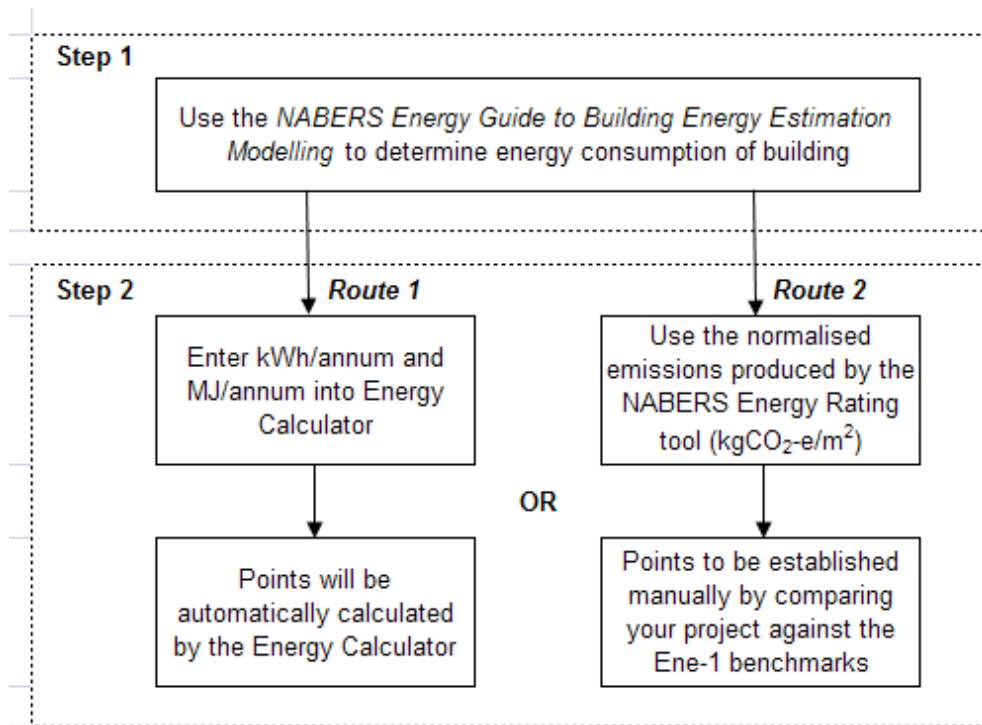
Route 1 requires the project team to enter the predicted energy consumption for electricity (kWh/annum) and gas (MJ/annum), calculated using the NABERS Energy Guide to Building Energy Estimation Modelling, into the Green Star – Office v3 Energy Calculator (Energy Calculator). The data required to be entered in to the white cells of the Energy Calculator include:

1. The location of the building (State);
2. The Net Lettable Area (NLA) of the building; and
3. The total predicted energy consumption of the building for electricity (kWh/annum) and gas (MJ/annum).

The Energy Calculator then calculates the building's predicted greenhouse gas emissions per square metre of NLA ($\text{kgCO}_2\text{-e/m}^2$) and confirms automatically whether Ene-Conditional Requirement has been met and how many points have been achieved in Ene-1.

Route 2

Route 2 requires the project team to use the predicted greenhouse gas emissions ($\text{kgCO}_2\text{-e/m}^2$) figure reported in the NABERS Energy Rating Calculator to demonstrate compliance with Ene-Conditional Requirement and establish how many points the project has achieved in Ene-1.



The answer you get from the Energy Calculator may differ from the answer you get from the NABERS Energy Rating tool and may differ from the emissions in your NABERS Energy Pre-Commitment Agreement. This is as a result of the differences in approach of Green Star and NABERS in normalising for the differences in greenhouse gas coefficients and climates between the states of Australia.