

Carbon Positive – new buildings

Points Available: 1 point

Aim

To recognise assets that are on a leadership path to a carbon positive built environment.

Rating Tool Eligibility

Green Star – Design & As Built v1 or later

Why is this Innovation Challenge Important?

With the release of the Australian Government's National Carbon Offset Standard for Buildings (*the standard*), industry has agreed and adopted a clear definition of carbon neutrality for buildings in operation. The standard addresses the full scope of emissions; scope 1 (on-site emissions), scope 2 (emissions from electricity consumption) and scope 3 (such as emissions from water, wastewater, waste and transport).

This Innovation Challenge aims to reward assets that seek and achieve carbon neutral building certification through a best practice pathway and then go beyond their contribution. An asset that achieves the Carbon Positive Innovation Credit would demonstrate highly efficient whole buildings, powered by renewables; that are responsible for their embodied carbon; and that contribute more than their share. GBCA considers this a leadership path to a carbon positive built environment.

The challenge has three goals:

- Ensure ongoing carbon neutral certification of buildings
- Create demand for carbon neutral whole buildings and enhance collaboration between tenants and building owners
- Address all emissions in the building and fitout.

Compliance Requirements

The following point is available in this challenge:

Carbon Neutral Ready	<p>It is a conditional requirement that:</p> <ul style="list-style-type: none"> At least 1 point for 'Powered by renewables' Innovation Challenge be achieved; At least 1 point for 'Responsible carbon impacts' Innovation Challenge be achieved;
Commitment to Carbon Neutral Certification	<p>a minimum requirement that:</p> <ul style="list-style-type: none"> the building has registered for whole building carbon neutral certification against the National Carbon Offset Standard for Buildings at the time of As built submission and commits to achieve this within 18 months of As built certification.³ The predicted remaining emissions (scope 1 & 3, as a commitment to 100% powered by renewable electricity is a conditional requirement) included in the National Carbon Offset Standard for Buildings are calculated using the Green Star – Performance calculators or similar calculation methods and purchase and retire offsets to cover these emissions for the first three years, to cover the period until the building achieves carbon neutral certification.¹
Carbon Positive	1 point is available where both the following carbon neutral whole building and additional emissions offsets conditions are met:
Carbon neutral whole buildings	<ul style="list-style-type: none"> All tenants are contractually required to contribute to a whole building carbon neutral certification against the National Carbon Offset Standard for Buildings.² the building has registered for whole building carbon neutral certification against the National Carbon Offset Standard for Buildings at the time of As Built submission and commits to achieve this within 18 months of As built certification.³ the building owner commits to annually achieve whole building Carbon Neutral Building Certification for 6 consecutive years after initial certification.
Additional emissions offsets	<p>There is an additional purchase of either:</p> <ul style="list-style-type: none"> offsets to the amount of 10% of the total embodied carbon emissions as calculated in the 'Responsible carbon impacts' Innovation Challenge (in addition to the offsets purchased for the responsible carbon impacts innovation challenge – i.e. total offset purchase equals 110% of the materials impacts); or Emissions from predicted transport impacts from transport relevant to the base building have been calculated and offsets have been purchased and retired for the first three years and information on methodology is provided to GBCA.⁴

Guidance

Footnotes from Compliance Requirements:

1: The emissions can be calculated using the greenhouse gas emissions calculator provided by GBCA. Offsets must be eligible with the [National Carbon Offset Standard for Buildings](#).

2: Where the building will be owned and occupied by the same entity a commitment from management to support agreement to share data related to electricity use; purchase renewable electricity for the tenancy electricity use; or achieve [National Carbon Offset Standard for Organisations](#) certification.

3: The [National Carbon Offset Standard for Buildings](#) provides a list of eligible offset units that have been assessed as meeting offset integrity principles, designed to ensure that eligible offset units represent genuine and credible emission reductions.

4: Under the rules of the NCOS for Buildings, transport emissions are considered relevant to include in a building's carbon account, but are not yet mandatory to include. GBCA encourages projects attempting this innovation point to consider calculating and purchasing offsets to cover transport emissions as part of the 'Purchase offsets for additional emissions' requirements.

Alternative Compliance Methods

A technical question may be submitted to the Green Building Council of Australia (GBCA) when an applicant wishes to propose an alternative yet equivalent method of meeting the Compliance or Documentation Requirements. Any technical questions submitted for this Innovation Challenge will be processed as free-of-charge.

Documentation Requirements

Design review / As Built submission

Provide the **Submission Template** outlining how the project has achieved the Innovation Challenge requirements. The Submission Template also enables project teams to provide feedback on the Innovation Challenge to inform future developments.

In addition to information provided in other credits, provide documentation to support the claims made within the Submission Template. This may include:

	Design review	As built submission
Conditional Requirement Carbon Neutral Ready	<p>Reference to evidence of attainment of</p> <ul style="list-style-type: none"> At least 1 point achieved for 'Powered by renewables' Innovation Challenge; At least 1 point achieved for 'Responsible carbon impacts' Innovation Challenge. 	<p>Reference to evidence of attainment of:</p> <ul style="list-style-type: none"> At least 1 point achieved for 'Powered by renewables' Innovation Challenge; At least 1 point achieved for 'Responsible carbon impacts' Innovation Challenge
Minimum requirement Commitment to carbon neutral certification	<ul style="list-style-type: none"> Signed commitment by the building owner to purchase the expected quantity of National Carbon Offset Standard eligible offsets to cover the modelled emissions from refrigerants, water, wastewater, waste and transport (optional) for the first three years of operation. Electricity emissions must be covered by 100% renewable electricity commitments as a conditional requirement. Completed Greenhouse gas, Potable Water, Operational Waste and Refrigerant Impacts calculators that demonstrate ancillary emissions. 	<ul style="list-style-type: none"> Any updates to the Greenhouse gas, Potable Water, Operational Waste and Refrigerant Impacts calculators and final calculation of total ancillary emissions. A copy of any offset certificates equal to the total ancillary emissions modelled. Confirmation that the offsets provided meet the National Carbon Offset Standard for Buildings. Evidence that the offsets have been retired for the relevant asset for the relevant time period by the time of the claim. Evidence of retirement could include screenshots of the relevant offset registry or the transaction receipt showing retirement. Evidence of registration for carbon neutral certification as part of Green Star – Performance registration.
Carbon Positive		
Carbon neutral whole buildings	<ul style="list-style-type: none"> Evidence of leasing contract requirements to ensure all tenants and the owner have the mechanisms in place to work together to achieve whole building certification against the National Carbon Offset Standard for Buildings. Signed commitment by building owner to achieve carbon neutral certification within 18 months of As built certification and to maintain certification for 6 consecutive years after initial certification. 	<ul style="list-style-type: none"> Evidence of leasing contract requirements to ensure all tenants and the owner have the mechanisms in place to work together to achieve whole building certification against the National Carbon Offset Standard for Buildings. Evidence of registration for whole building carbon neutral certification against the National Carbon Offset Standard for Buildings Signed commitment by building owner to achieve carbon neutral certification within 18 months of As built certification and to maintain certification for 6 consecutive years after initial certification.

	Design review	As built submission
Purchase offsets for additional emissions	<ul style="list-style-type: none"> • Signed commitment by building owner and evidence of a strategy to 'go beyond' 100% carbon neutral either through an <ul style="list-style-type: none"> ○ additional 10% total embodied carbon emissions <i>or</i> ○ Including and purchasing offsets to cover the predicted transport impacts from the whole building for three years. • Signed commitment to purchase the expected quantity of National Carbon Offset Standard eligible offsets to cover the additional modelled emissions. 	<ul style="list-style-type: none"> • Final calculations of additional offset contribution from embodied carbon emissions or transport • A copy of any offset certificates equal to emissions for 10% embodied energy or transport emissions modelled. Confirmation that the offsets provided are eligible with the National Carbon Offset Standard for Buildings. Evidence that the offsets have been retired for the relevant asset for this innovation challenge – and for building operations, the relevant time period by the time of the claim.