New Zealand
Architecture Awards
2026

He Korowai Tiaki
Protecting Our Futures

Guidance to New Zealand Architecture Awards Programme Sustainability Questions

December 2025

Te Kāhui Whaihanga
New Zealand Institute of Architects

Introduction

Te Kāhui Whaihanga New Zealand Institute of Architects is strengthening the sustainability data requirements for the 2026 Regional and New Zealand Architecture Awards, aligning these with awards programmes in the UK and Australia, affirming the NZIA's commitment to climate-responsive design, and grounding the Awards in the principle of rangatiratanga.

Architects are called on to demonstrate leadership, responsibility, and informed decision-making in their entries for these Awards, and ensure that their work actively contributes to Aotearoa New Zealand's low-carbon future and responds to the escalating climate and biodiversity emergency.

As architects, there is a responsibility to embed embodied- and operational-carbon assessments into design processes and to make energy modelling standard practice. While assembling this information may initially appear challenging, an expanding range of tools and resources is available to support members in preparing and presenting robust performance data.

These updated questions for 2026 support Jurors in assessing how projects demonstrate ethical, environmentally responsible practice—minimising harm while strengthening interconnected ecological systems through design excellence. They are grounded in the principle of kaitiakitanga (guardianship), recognising our responsibility to protect and restore the natural world as we respond to climate change, biodiversity loss, and pollution. The aim is to establish a robust framework that will continue to evolve in future years.

As a support for our members, the NZIA has developed a range of resources to help practices build confidence in carbon assessment and energy modelling. The **Demystifying Carbon** series includes webinars, workshops, and online materials that introduce tools for calculating a building's carbon footprint. In addition, we are also running a dedicated webinar series on **The Importance of Energy Modelling** to help members upskill in predictive energy modelling and better understand building performance in design.

We expect by next year we will have a roadmap to begin to introduce incremental changes to the sustainability requirements, aiming for the eventual submission of operational energy, potable water use figures, upfront carbon, embodied carbon and eventually Whole-of-Life Carbon.

Read on to see the questions you will need to complete when submitting your project. Some information is mandatory. However, if a mandatory field does not apply to your project or was not part of the design process, please enter '0' (Zero) where a number is required, or 'NA' (Not Applicable) where a description is required. For example, a planning or urban design project may be unable to supply some mandatory data due to the nature of its typology.

As with last year's entries, all entrants will be required to answer every sustainability question unless it is explicitly marked as optional. We strongly encourage teams to provide supporting sustainability information to strengthen their submission. Entrants are encouraged to include embodied and operational carbon assessments — whether modelled or measured - alongside thermal modelling outputs and any other relevant evidence that demonstrates the project's performance.

Our Awards team and Sustainability Advisor are on hand to help guide you through the process so if you have any questions related to the awards process please contact **awards@nzia.co.nz** and if you have questions relating to the sustainability questions, please contact **rmacintyre@nzia.co.nz**

Sustainability Questions

* = It is mandatory to answer this question

Project Metrics

*Please refer to the separate **How to Enter** document that explains these questions.*

Project Description

2.0 Briefly describe the project, identifying the client's brief and explain the design response. *

- **If applicable, describe how the project contributes to its community or the wellbeing of Aotearoa ***
- **Describe the project's site and context ***
- **Identify any planning or other constraints ***
- **Briefly explain the material selection and method of construction ***

(Max 500 words)

2.1 Outline the drivers, concepts, and performance of the building in terms of environmental sustainability. * (Max. 150 words)

Guidance Questions: Has sustainability been a key driver of the architectural concept, building form, construction, systems, and building use? Were there any special project objectives, challenges, or constraints? Describe any measured sustainability outcomes (performance measures are requested later). Does the design consider climate change adaptation or resilience (e.g. future weather, flood risk, overheating risk)? Are there any innovations in sustainable construction?

Measurements and Pūnaha Pungao Energy Systems

3.0 Has the building been energy modelled? *

Energy modelling during the design stages is important to verify the performance of buildings. To find out more about energy modelling tools **click here**.

If you answer yes the following series of nested questions will appear.

3.1 Predicted space heating demand (Units: kWh/m²/y) *

This metric indicates how much energy the building is expected to use for space heating each year, normalised per square metre. A low heating demand reflects an efficient building envelope, good thermal performance, and reduced operational carbon over the building's life. Providing this value helps assess the building's overall energy performance, compare it against best-practice benchmarks, and understand how well the design supports winter comfort with minimal energy use. Entrants should supply the modelled annual heating demand only.

3.2 Predicted space cooling demand (Units: kWh/m²/y) *

This metric represents the amount of energy the building is expected to use for space cooling each year, normalised per square metre. With overheating risk increasing, a low cooling demand indicates effective design in managing solar gain, internal loads, and summer comfort. Providing this value allows assessment of the building's energy

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performance, comparison with best-practice standards, and an understanding of how well the design minimises the need for active cooling. Entrants should supply the modelled annual cooling demand only.

3.3 Total predicted energy use (Units: kWh/m²/y) *

This is the total annual predicted regulated and unregulated energy use (measured in kilowatt-hours per square metre per year based on the gross internal area (GIA) of the building).

4.0 Has one full year of energy use been collected? *

Collecting at least one full year of actual (in-use) energy data is essential for understanding how the building performs once occupied. Measured energy use provides a reality check against design predictions, highlights any performance gaps, and helps assess the effectiveness of the building's systems, envelope, and controls. It also enables more accurate benchmarking across projects. Entrants should indicate whether a complete 12-month dataset has been gathered.

If you answer yes the following nested questions will appear.

4.1 What is the Treated Floor Area (Units: m²)? *

Treated Floor Area refers to the total internal floor area of a building that is actively heated or cooled. It excludes unconditioned spaces like garages, attics, or storage areas unless they are climate-controlled.

4.2 What is the actual energy use (Units: kWh/m²/y)? *

This is the total annual gross operational energy use (measured in kilowatt-hours per metre squared per year based on the gross internal area (GIA) of the building) taken from measured data. Figures should reflect gross energy use and therefore should include energy used on-site from any on-site renewables. The measurement should be taken from energy meter readings (or energy bills + PV meter) for the building over a year, so that both winter and summer seasons feature in the calculation.

5.0 Is the building 100% electric? *

Designing buildings to be 100% electric, and phasing out gas, is vital for reducing carbon emissions, improving energy efficiency, and fostering a sustainable and resilient energy future in Aotearoa. (A building can still be considered 100% electric if a low emissions wood burner is present in rural areas).

6.0 Does the project incorporate on-site renewable energy generation? *

If you answer yes the following nested question will appear.

6.1 On-site renewable energy generation (Units: kWh/yr) *

Actual annual on-site renewable energy generation does not include heat pumps.

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Whakapapa of Building Materials and Processes

7.0 Describe the strategies used in the building's design to reduce embodied carbon, and if relevant explain the methodology used to calculate and verify the carbon footprint. Include key assumptions, tools, and data sources where relevant. * (Max. 150 words)

8.0 Was a lifecycle assessment for carbon undertaken (LCA)? *

An LCA is a method of assessing the environmental impacts associated with all stages of a building's life, from raw material extraction to processing, manufacture, distribution, use, repair, maintenance and end-of-life treatment (MBIE, 2020). To find out more about Lifecycle Assessments **click here**.

If you answer 'yes' the following series of nested questions will appear.

8.1 What is the estimated embodied carbon (Whole-of-life)? (Units: kgCO2e/m²) *

This is the embodied carbon figure for the whole building (Gross Floor Area), typically modules A1-A5, B1-B5 (excl. B6, B7) & C1-C4 and D (Whole-of-life). Scope is to align with the MBIE Whole-of-Life Embodied Carbon Assessment Technical Methodology February 2022.

8.2 What is the estimated upfront embodied carbon (Modules A1-A5)? (Units: kgCO2e/m²) *

Upfront Carbon is the carbon emissions caused by the production of materials, transport of materials to the construction site and construction of the building(s), prior to the building(s) being occupied (modules A1-A5). Only gross emissions are declared, excluding removals.

8.3 What is the estimated sequestered biogenic carbon, if calculated? (Units: kgCO2e/m²) *

Note stored biogenic carbon (in timber or other natural materials) can be reported separately: this should be a negative value equivalent to the material quantity for that element x GWP biogenic factor as reported under A1-A3 in an EN 15804+A2 compliant EPD or from the calculated Life Cycle Assessment.

8.4 Is the National Embodied Carbon Repository for Construction the data source for the LCA?*

The National Embodied Carbon Repository for Construction, developed by Masterspec and Construction Information Ltd (CIL) in collaboration with BRANZ, is a free-to-use resource designed to support low-carbon design and informed specification decisions. Ensuring data consistency across projects is essential for effective benchmarking and industry-wide comparisons, which are critical to achieving Net-Zero carbon targets by 2050. From November 2025 the National Embodied Carbon Repository for Construction database will replace the BRANZ CO_2NSTRUCT database.

Sustainability Questions

Kaitiakitanga, Protection of Papatūānuku & Ecological Systems

9.0 Explain key ecological strategies. (Max. 150 words, optional)

Guidance questions: Does the scheme significantly enhance biodiversity, increase green infrastructure or create opportunities for productive growing spaces (e.g. local food production)? Were considerations made for biophilic design? Does the scheme entail removal of trees and what measures have been taken to mitigate for any loss? Does the scheme create, restore or include provision to protect and enhance habitats? If yes, how is this safeguarded for future years? What are the key indoor and outdoor water use reduction strategies? **Please click here for further information.**

10.0 Has potable water use been measured? *

If you answer yes the following nested question will appear.

10.1 Potable water use (Units: l/person/day) *

This is the total annual drinking water used on site, measured in litres per person per day (l/person/day).

The following question will only appear for projects entering the Housing—Multi Unit, Commercial Architecture, Education, Public Architecture, or Planning and Urban Design categories.

Enhancing the Mauri and Wellbeing of People and Culture

11.0 Explain key social and cultural sustainability strategies. (Max. 150 words, optional)

Guidance questions: How does the project support community wellbeing, equity, or accessibility? How were mana whenua engaged in the design process? Does the project reflect Te Aranga Design Principles or other kaupapa Māori frameworks?

Supporting Sustainability Information

11.0/12.0

Provide any other supporting information relating to the building specification and the sustainability data. (Max. 100 words, optional)

Please include sustainability certifications achieved e.g. Homestar, Greenstar, Living Building Challenge, Passivhaus etc. Provide any additional sustainability information about the project that may interest the jury that is not addressed in other questions.