

# Performance roadmap

Buildings need to be warm, dry, healthy and zero carbon, but how do we evaluate whether a design will meet these requirements? A BRANZ project aims to develop a roadmap that comes up with the answer.

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**CURRENTLY**, a range of different building performance tools are available to measure aspects of a building such as thermal and energy performance, moisture risk and the building's carbon footprint.

However, these tools compartmentalise buildings into various aspects rather than evaluating them as an inter-related system. For example, if you increase thermal performance, what impact does this have on moisture risk and embodied carbon?

These different building performance tools are often underpinned by a number of different data sources, which makes consistency of evaluation a real problem. Additionally, as New Zealand works towards meeting its zero-carbon emissions targets, do we need to change the metrics for performance?

## Roadmap to online solution

The BRANZ Roadmap project will bring key stakeholders together to work towards an online solution for measuring building performance - possibly drawing on existing tools and data. The endpoint would ideally

be a solution aligning with design and consenting workflows.

The roadmap will outline where we are aiming to get to and by when and will identify the metrics, tools, methodologies and data needed to support a shift to warm, dry, healthy, zero-carbon new houses.

## Working with stakeholders

Phase 1 of the project surveys designers and architects on their experience using existing building performance tools and what a future solution might encompass.

Phase 2 involves workshops with key stakeholders to coordinate our vision and efforts. The stakeholder groups include MBIE, local government agencies and architects and designers.

## Preparing for the future

The workshop sessions will consider these questions:

- How do we want to evaluate building performance in the future?
- Over what timeframe might this be staged and what might this look like?

- What is in scope - thermal performance, energy efficiency, embodied carbon, operational carbon, moisture risk, other?
- What are the key attributes needed to provide rigour, robustness and consistency?
- What criteria and metrics will we use?
- Do we want one tool/system or are several acceptable?
- If there are several, how do we ensure they are interoperable and fit with existing design workflows?
- What are the key attributes that will be necessary so architects and designers can use the tool?
- If used for consenting, what information and data would be necessary for consent officers?
- What underlying data will be needed to underpin such a system and in what format?
- How would the needs of government agencies be met?
- How would the needs of architects, designers and their clients be catered for? ◀

**For more** ▶ For further information, contact Jonquil Brooks, Roadmap project manager at [jonquil.brooks@branz.co.nz](mailto:jonquil.brooks@branz.co.nz).