

NEW NZ HOMES PERFORMANCE – WHERE ARE WE AT?

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New Zealand's housing stock under-performance has been reported by various research and education institutes over the years. Less robust information is available on the most recently built houses in terms of key environmental performance indicators. Given this is an investment of some \$5 billion annually which an expected life of perhaps 100+ years with considerable environmental and health consequences, this is concerning. It is critical that we make our housing stock more resilient to prepare us for the challenges we are facing, such as extreme weather events, depleting non renewables, elevated lifetime costs, and an ageing population. If new housing *is* improving, then: by how much, at what rate and in what environmental and financial categories?

BRANZ has implemented a multi-year research program which seeks to change this information gap, by developing a robust environmental measure of NZ's new-build housing stock via the establishment of tailored sustainability indicators – using both existing data collection methods as well as developed new methods. Barriers to achieving better performance are explored and solutions proposed.

Indicators have been established so that they can be used by a wide variety of stakeholders – e.g. policy advisors, building designers and industry educators. They have been grouped into three themes: *resource use* (water use, system durability; affordability and resilience); *industry issues* (capacity; policy and regulatory support); and *health issues* (human comfort and solar access). A benchmark year (2012) has been set as 'Year Zero'. The data survey will be repeated every three years so that longitudinal trends can be determined. Preliminary findings from the first years research will be showcased, focusing on the dual themes of resource use and health issues, specifically thermal comfort and energy efficiency.

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