

Who cares about water and energy?

BRANZ research into water and energy use in commercial buildings found factors such as whether the building is owner-occupied or tenanted have a big impact.

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A COMMERCIAL building's design, materials and plant are important drivers of resource use, along with the ways building owners, property and building managers and occupants use and prioritise resource efficiency. Hence, solutions to poor energy and water efficiency and over-consumption vary and involve many stakeholders.

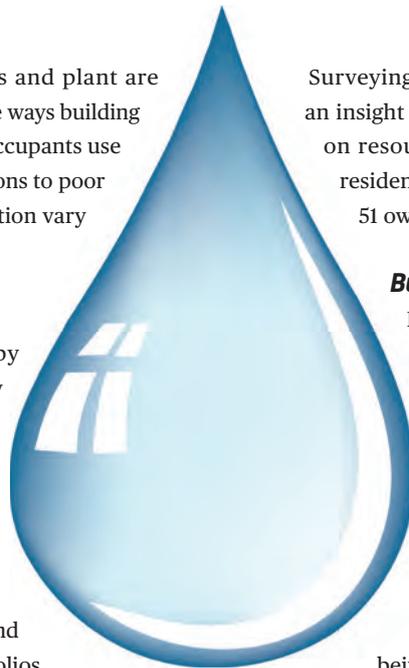
Owners have varying priorities

To understand the persistent resistance by building owners to take up resource efficiency measures, the Building Energy End-Use Study (BEES) explored the different expectations and priorities that stakeholders give to resource efficiency.

Early research by BEES suggested that New Zealand building owners fall into three categories:

- Property investors who tend to use property and building managers to manage property portfolios.
- Building owners who largely self-manage their property portfolios.
- Owner-occupiers with very different views of what they want out of building ownership.

While property investors want buildings with strong income potential and investment returns, building owners and owner-occupiers are do-it-yourselfers who want to reduce costs and have undemanding tenants and a steady income stream.



Surveying building owners in these categories provides an insight into how much owners recognise, value and act on resource efficiency. The surveys involved 109 non-residential building owners and property managers and 51 owner-occupiers.

Building owners and property managers

Most building owners and property managers attempt to provide for their clients' expectations and priorities.

A substantial proportion of building owners (57.7%) believe that their tenants give a high priority to reducing energy costs, although only 29.9% consider their tenants give a similar priority to reducing water costs.

Fewer building owners believe tenants give a high priority to energy efficiency (43.6%) or to being seen as an energy-conscious business (33.3%).

Even fewer property managers (25% or less) believe that their building owners and tenants give a high priority to:

- energy cost reduction
- increasing energy efficiency
- reputation as an energy-conscious business.

Little management or monitoring

The number of building owners and property managers who believe that water resource management is a high priority to their ➤

clients is even smaller. This is unsurprising, as only 45.8% monitor the energy performance of their buildings and 39.4% monitor water performance. When energy and water monitoring is undertaken, it is at a basic level:

- Most (70.6%) do not undertake formal resource audits.
- Two-thirds of building owners and property managers have no person responsible for managing resource consumption.
- About 65% benchmark building performance and consumption.

Only a few non-residential buildings are likely to be subject to any of the well established means by which resource use performance is assessed. The implications for the stock are significant. These 109 building owners and property managers alone own 1,090 non-residential buildings and manage 823 non-residential properties. Out of those 1,913 buildings, fewer than 600 have ever been subject to a resource audit. Moreover:

- less than a quarter (23.9%) of building owners or property managers set targets for energy or water use reductions
- a little more than a quarter (26.6%) of building owners or property managers provide information to staff or tenants about ways to reduce energy or water use
- only 18.3% have established formal policies around energy or water use for the buildings they own or to shape their property-management practices.

Owner-occupiers less likely to audit energy use

For owner-occupiers, the performance of the building they own and occupy impacts directly on their own use of the building.

Most of the owner-occupiers who participated in BEES and agreed to further surveying are sole occupants in the building they own. A substantial minority (39.2%), however, have one or more tenants.

Just less than a third of owner-occupiers were in single-level buildings. The largest single group (37.3%) was in two-level buildings. Just over half were in buildings 3,500 m² or less, while 21.6% were in buildings 650-1,499 m².

Consistent with earlier qualitative work, these owner-occupiers are less likely than other building owners and property managers to believe their tenants give high priority to energy and water resource use issues.

While most (51%) owner-occupiers report monitoring energy use and 29.4% report monitoring water use, they have a lower prevalence of formal resource audits, benchmarking or having someone responsible for managing resource consumption than other building owners and property managers. Less than 6% of owner-occupiers report benchmarking energy use, and only 13.7% report undertaking formal energy audits. Less than 6% undertake formal water audits. They do, however, report taking fairly basic actions to reduce energy consumption, typically the installation of a limited range of products such as energy-efficient light bulbs.

Keener to monitor business energy use

When owner-occupiers do address energy and water-use issues, they typically implement changes in their own business rather than across the whole building. As an example, nine owner-occupiers report monitoring the energy use in the building, but 17 report monitoring their own energy use (see Table 1).

Lack of awareness and inertia

BEES research shows persistent under-awareness and inertia by building owners, owner-occupiers and property managers. This suggests that resource efficiency improvement is most likely through building resource-efficient non-residential stock and by incorporating efficient systems when buildings are retrofitted.

Ensuring New Zealand’s non-residential buildings do not consume more resource than New Zealand can sustain means recognising that not only are buildings different but also that tenants and building owners can not be treated the same.

Building owners are a diverse mix of organisations and individuals, with some needs in common including:

- cost-effective technical solutions for new builds and retrofits
- cost-effective and easily managed operational systems for different building types and the diverse interests and capacities of building investors, managers and owners
- credible and tailored value cases. ◀

Table 1

OWNER-OCCUPIERS’ ACTIONS FOR ENERGY MANAGEMENT

ACTION	OWN BUSINESS	WHOLE BUILDING
Monitor energy use	17	9
Set targets for energy reductions	6	2
Provide information to occupants on energy use	4	4
Establish formal energy management policy	3	2
Have a person responsible for energy management	5	4
Do formal energy audits	2	4
Benchmark energy use	0	2
Dedicate a budget for energy management	2	2
Install energy-saving technologies	11	12