

Hon Pete Hodgson

**Minister of Energy, Minister of Fisheries, Minister of Forestry,
Minister of Research, Science and Technology, Minister for
Crown Research Institutes, Small Business**



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Speech Notes

Better buildings through research

[Opening of the CIB World Building Congress, Michael Fowler Centre, Wellington]

I'm here today on behalf of the Prime Minister, who couldn't make it but wishes you well.

I'd like to welcome all of you who are visitors to New Zealand. You've come to the right place and I hope you enjoy your time here.

Congratulations to BRANZ, particularly to John Duncan, as CIB President, and his team for overseeing the organisation of this Congress.

New Zealand is well aware that the only way to create better buildings is through research and innovation. So I'm pleased, both as Energy Minister and as Science Minister, that this CIB World Building Congress is in New Zealand – the first time, I understand, that it has been held in the southern hemisphere.

The New Zealand Government is keen to lift the level of private sector research and development in this country and I'd like to acknowledge the leadership shown by BRANZ and the building industry in this area.

BRANZ is a unique organisation in that it is owned and governed by the New Zealand building and construction industry. Its primary sources of income are the Building Research Levy paid by the industry, contracted research from public research funds and consulting work.

I know of only two nations in the world where the principal research organisation for the building and construction sector is an industry Board effectively free of Government direction, the other being Belgium.

The combination of independence and industry funding is very important. It means the industry has a sense of ownership of the results, and it means that research and technology transfer is directly aligned to the needs of industry.

The results are very good. New Zealand's unique mix of geology, climate, and social customs often demands distinctive building solutions and we can point to a number of significant achievements.

Here in Wellington there are plenty of examples of the world-leading earthquake engineering and building isolation techniques developed in New Zealand. Our

country sits on the boundary of two tectonic plates and there is a major faultline just a few minutes' walk from this building.

So we have developed considerable research expertise on earthquakes and their effects, and just as well. New Zealanders are key players in the discussions on building codes related to this issue and the names of Professor Bob Park and Tom Paulay are internationally well known in the field.

The work of Dr Bill Robinson and his team on lead-rubber base isolation systems is also known and used internationally.

Te Papa (The Museum of New Zealand) is sitting on 152 of these dampers, which are designed to allow the building to move sideways up to 75 centimetres.

Following the 1995 Kobe earthquake in Japan, a number of buildings in that city have been rebuilt using this technology. It has also been used to retrofit older buildings such as the New Zealand Parliament, which is a source of great comfort to me when I am there.

New Zealand's climate has also demanded distinctive building solutions.

We do not have the extremes of heat and cold found in continental countries, but we do have a high level of humidity. This brings a number of unique challenges in controlling moisture movement through building structures. The work on moisture movement at BRANZ and Victoria University of Wellington is recognised as being of international class in this field.

We are beginning to see some more innovative technologies being developed here in timber construction.

Although New Zealand has an international reputation for successfully growing *Pinus radiata* trees, much of this timber has been used for pulp or exported as dressed timber or logs. Research by the likes of the state-owned Forest Research Institute is resulting in our *radiata* pine being used in multi-storey timber frame structures, and in laminated timber structures such as the Hong Kong Jockey Club.

I believe we need a lot more innovation in this area and more support for it from the forestry industry, but I'm pleased to note the progress so far.

Visitors to New Zealand are often struck by how many of our homes are made of wood and perhaps some of you have noted this around Wellington. One of the consequences of this is that many of our houses, especially the older ones, are very energy inefficient.

Seventy percent of our homes were built before any insulation standards. Many of them are often colder than the World Health Organisation recommends.

The consequences of this for our health, our comfort and our power bills are significant. But a lack of education, information and leadership on energy efficiency in the past means New Zealanders tend not to think about it.

Our attitudes to our homes are, unfortunately, consistent with our inattention to energy waste right across the economy.

My priority as Energy Minister is turning that around.

Last year I announced changes to the New Zealand building code to improve the energy efficiency of houses and commercial buildings. It's kind of embarrassing that it was the first such upgrade of the code since the 1970s.

Last week I launched the first draft of New Zealand's first ever National Energy Efficiency and Conservation Strategy.

The strategy is aimed at improving New Zealand's overall energy efficiency by 20 percent by 2012 and it targets residential and commercial buildings as a key area in which we can make improvements.

Commercial building regulations in New Zealand still have minimal energy performance requirements compared to those in other developed countries. Improving those requirements is important long term, but slow building turnover means most gains will come from improving existing buildings.

The Draft Strategy proposes a 15-year programme to bring all existing buildings to acceptable energy efficiency standards through funding improvement projects, more targeted information and new market incentives.

We want consumers need to raise their expectations of energy efficiency in homes. So we're looking at piloting a home energy rating system as mandatory consumer information in house sales, perhaps something similar to the scheme that operates in the Australian Capital Territory.

Other proposals in the strategy include an energy efficiency upgrade programme for state houses and a continuation and redesign of residential assistance programmes. These include investments in energy saving measures in partnership with organizations such as local government or energy service companies.

This is all about reducing energy bills and making homes and workplaces more comfortable, but it is also about the environmental impact of energy inefficiency – and that means climate change.

New Zealand takes its international obligations on climate change seriously and our energy efficiency focus is part of that commitment. Buildings account for about a fifth of consumer energy use in this country, so energy efficiency innovation in building research is in the national interest in more ways than one.

I wish you well for your Congress, which I see covers a very wide range of topics in building design, performance, management, research, safety and costs, as well as the urban and social contexts of architecture and construction.

Thank you again for your invitation, and your attention.

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