



## ***Structural timber building award*** *Green Party – smarter greener economics*

### **An award to ensure forestry is our next high value export sector**

The Green Party in Government will put \$1 million towards the cost of the first 10-storey or higher New Zealand building constructed with structural timber.

The aim of this initiative is to kick-start the use of structural timber in our building industry. This will add more value to our wood production while making construction more environmentally sustainable.

### **The race to develop smart, green building products**

Structural timber is a relatively new construction technique for tall buildings. It uses wood materials including cross laminated timber, laminated veneer lumber, and glued laminated timber in place of the concrete and steel that are typically used for the load-bearing elements of high-rise buildings. The world's tallest structural timber building is a 10-storey apartment complex in Melbourne, built in 2012 at a cost of A\$11 million.

Structural timber has the potential to add significant value to our timber production, which has seen rapid simplification under this National Government. In the past five years our exports of raw logs have surged, while the local sawmilling and wood manufacturing industry has lost 4,000 jobs.

Rather than sending increasing amounts of low value-added raw logs overseas, the Green Party will encourage new technologies to be developed – such as structural timber – that will add value to our wood production and create good green jobs in New Zealand.

The concrete and steel that make up the structural elements of traditional high-rise buildings produce large amounts of greenhouse pollution during their manufacture. Timber, in contrast, is a carbon-sink. The Melbourne timber building produced 1,400 less tonnes of CO<sub>2</sub> than an equivalent concrete and steel building.

Widespread adoption of structural timber in the building industry has the potential to substantially reduce the climate change impact of our construction industry.

### **Lighter, stronger, safer in an earthquake**

Using structural timber reduces the weight of buildings, makes construction easier, and improves their earthquake resilience.

After extensive testing in the University of Canterbury engineering laboratories, the world's first multistoried post-tensioned timber building was constructed at the Nelson Marlborough Institute of Technology in 2007. Ten similar multi-storey buildings have since been built in

New Zealand with structural timber, the tallest being the six-storey St Elmo Courts building currently under construction in Christchurch. This building will be built to 180 per cent of the earthquake building code.

The University of Canterbury has led research in the area of structural timber and developed some valuable intellectual property. However, the barrier to widespread adoption of the technology for taller buildings is unfamiliarity with the new technology by designers and architects.

### **Part of a package of forestry initiatives**

A simple cash incentive to complete the first tall structural timber building in New Zealand will help speed up the necessary development of experience and skill in the building industry, providing a proof of concept to potential developers.

This award is similar to a fund set up by the Canadian Wood Council to showcase the technical advancements, environmental benefits, and viability of wood buildings. It has established a C\$5 million pool available for one or more projects to offset the additional cost of design work required with a new material like structural timber.

The Green Party's structural timber award policy is part of a wider package of forestry sector policies that will be announced in the lead up to this year's election.



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