

# Tesla battery packs so dangerous that they have to be stored outside under proposed new rules

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PATRICK FALLON/REUTERS

There are concerns about the amount of energy the battery packs contain.



ALEXANDRA NELSON/STUFF

Houses and schools around New Zealand are opting for solar power systems with battery back-up.

A new proposed battery safety standard would stop the installation of solar power systems' battery packs, which have been described as the "future of energy".

Consultation is open on the standard, which would ban lithium ion batteries inside a dwelling, under the eaves of a house or within a metre of it. Installed beyond that distance, the batteries would have to be in a fireproof enclosure.

Companies such as Vector are promoting battery packs, such as Tesla's Powerwall, as part of solar energy systems.

Solar panels make energy which is then stored in the Powerwall and used when solar power is not being created. The Powerwall can also be charged from mains power in off-peak times.

The technology is also being installed in schools.

But Allan Miller, former director of the Electric Power Engineering Centre, at the University of Canterbury, said the batteries are a fire hazard.

"There's no getting around the fact that the batteries store a lot of energy."

However, there are believed to be no known house fires caused by home-installed lithium ion batteries.

Putting them outside in a purpose-built enclosure would add at least \$1000 to the cost of installation, he said.

"The irony is that you can drive into the garage with your electric vehicle and most have a battery that's three times the size of the Tesla Powerwall. And you can drive into a garage with a 60L tank of petrol."

The standard would not apply retrospectively, so any installations before it came into force would be allowed to remain.

A Ministry of Business, Innovation and Employment spokeswoman said Standards Australia was responsible for managing the development of the standard.

"Standards New Zealand does not comment on the content of draft standards, given that our role is to manage the process of development, and we therefore do not have the technical expertise to be able to comment on content issues. Please note that given that the standard is at draft stage, the content could change before being finalised."

She said the draft was open for comment until April 15.

Tesla lithium ion batteries come from unsafe labor conditions, explode for no reason, become more dangerous over time as the lithium dendrites expand and the chemistry breaks down, release poison gas when they "go thermal" and come from political corruption and Elon Musk's bribery of public officials.