TE TARI TIAKI PŪNGAO
ENERGY EFFICIENCY & CONSERVATION AUTHORITY

[redacted]

04 April 2022

Kia Ora [redacted]

Re: Official Information Act request

Thank you for the request you made on 22 March 2022 for information about residential EV charging. Specifically, you requested advice on the "*status of work towards permitting and enabling the powering of domestic property from a resident's EV*".

Vehicle-to-grid (V2G) and vehicle-to-infrastructure (V2I) solutions, though in the early stages of development, have the potential to deliver substantial benefit for New Zealand. Part 6 of the Electricity Industry Participation Code 2010 (Code) already regulates chargers that operate in the V2G or V2I mode and any Standard developed for chargers that operate in this mode would need to comply with both the Code and the Electricity Safety Regulations.

If you are interested in this work, I recommend you reach out to the Electricity Authority directly.

For EECA's part, we regulate a range of products through Minimum Energy Performance Standards (MEPS), Minimum Energy Performance Labels (MEPL) and Vehicle Emissions and Energy Economy Labels.

We are currently exploring whether our energy performance standards and labelling could include requirements related to demand response capability for EV chargers. 'Smart' and efficient EV charging holds the greatest potential to reduce future peak electricity demand in New Zealand and EECA continues to investigate improving the energy performance of private electric vehicle chargers, alongside other agencies.

EECA also provides information and financial incentives to encourage smart energy choices.

EECA's Low Emission Vehicles Contestable Fund has supported a range of projects including the installation and trialling of vehicle-to-home (V2H) and V2G technology. For example, Vector received co-funding to install and trial two smart vehicle-to-home chargers and EV chargers in the seaside village of Piha near Auckland. The aim of this project was to test how this technology can help reduce peak demand and improve customer resilience during power

outages. The project also gathered data about customer behaviour. At this stage, EECA's view is that disaster resilience is the biggest current benefit of this technology.

We have also produced Publicly Available Specifications (PAS) for residential and commercial applications for EV charging, which contain some information about bidirectional charging. You can download it for free at: https://www.standards.govt.nz/get-standards/sponsored-standards/electric-vehicle-ev-chargers-for-residential-use/.

Additionally, a PAS for smart homes is being developed by a technical working group that includes members of the solar, EV charger and appliance industries. We are expecting to consult on the draft PAS this May. If you would like to receive a copy, email star@eeca.govt.nz (and put "Smart Homes PAS consultation registration" in the subject line).

Yours sincerely

[redacted]

Andrew Caseley
Chief Executive