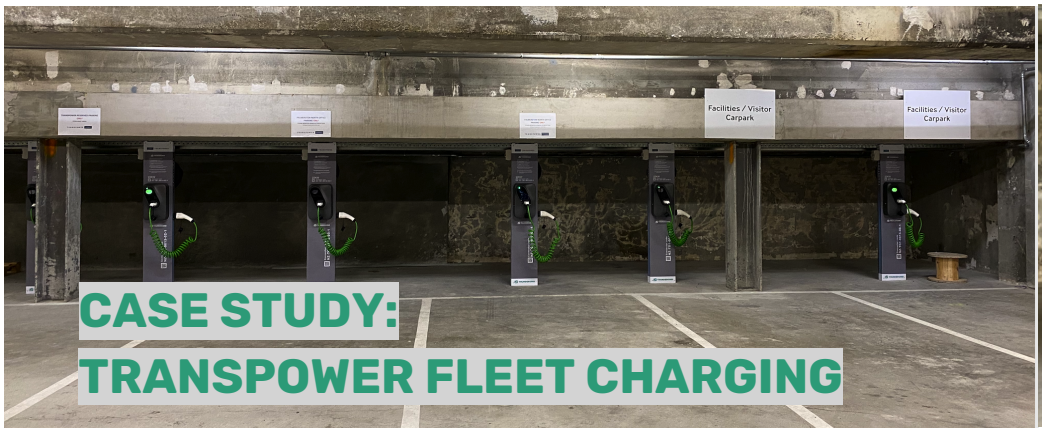

CASE STUDY: TRANSPOWER FLEET CHARGING

When you run the national high voltage transmission network across New Zealand, you naturally want to ensure whatever infrastructure you put in to charge your growing Electric Vehicle fleet doesn't strain the national grid (and your facilities).

In early 2020, Transpower installed 12 Thundergrid charge stations supplied by Eco Geek Co across both their Wellington Headquarters and Christchurch facilities.

Key criteria for their charging infrastructure included **smart, communicating chargers with both local dynamic load management** - to fit within their facilities power limits - as well as the **ability to respond to national demand control.**

The Christchurch and Wellington facilities needed to ensure they could allow multiple EVs in the fleet to recharge at one time as fast as possible, without exceeding any fused limits within the building. They needed a way to keep the lights on without risking fuse trips, higher bills or having to invest in large power capacity upgrades.

> *"We were introduced to the team at Eco Geek who were able to work-in with our electrical designers to integrate a smart fleet charging system that modulates charging spread around both grid conditions, and other electrical loads in the building. The touch screen chargers are easy for staff to use and we can easily control access and download charging reports. The team at Eco Geek even helped with signage design, training, and onsite commissioning of the systems making life easy." – Richard McKeogh, Transpower Facilities Manager.*

Clustered Charging. A unique feature of the Thundergrid chargers are that they are clustered together for local power control and use a sensor to monitor the active power load of the entire facility the chargers are connected with. The chargers also listen to each user's charging needs and priorities and adjusts to suit, without overwhelming local power supply limits. They can even detect excess solar energy to convert it to a transport fuel onsite.

Charger management. Fleet or facility managers have access to a portal where they can manage their fleet of charge stations, grant access RFID's to new users and download charging reports.

> *"We are also looking at the technology to integrate electric vehicles into the grid via the Thundergrid platform. The platform also offers app-based billing if we wanted to charge for using our EV charging network."*

Insights and data. Thundergrid's e-mobility software platform also provides Transpower with monthly data and insights into utilisation so they can gain a better understanding of the energy consumption, and discover the avoided CO2-e they are making. This data helps paint a picture of what is possible for their fleet in the future, the impact EVs will have on their business, and also paint a clearer picture of the impact EV's will have on the national grid.

Looking for EV charging infrastructure within your facility or network that is future-proof and ensures electrical capacity will not be exceeded as your EV fleet grows? Get in touch for a no obligation friendly chat with an Eco Geek on **(04) 392 8842**. Email **info@thundergrid.net** or visit **thundergrid.net**