

## Conditionally approved projects – Round Four Low Emission Vehicles Contestable Fund

### Charging

**1. ChargeNet NZ Ltd \$65,500**

Supporting North Canterbury Transport Infrastructure Recovery

ChargeNet's Alpine Pacific Route project will install two 50 kW DC fast chargers at Ward and Cheviot on SH1 between Christchurch and Blenheim. These chargers will support NZTA's objective of at least one public fast charge station located every 75 km on the state highway system. Currently there is only one at Kaikoura on the 310 km route between Blenheim and Christchurch.

**2. ChargeNet NZ Ltd \$164,500**

Southern Scenic Route

A regional partnership between Venture Southland (Invercargill City, Southland District and Gore District councils), local lines company Powernet and ChargeNet will see the establishment of a dedicated electrified Southern Scenic tourist route, with seven 25KW EV charger units at Owaka, Papatowai, Waikawa, Tokanui, Riverton, Tuatapere and Manapouri and one 50KW unit at Te Anau.

**3. NZ Bus Ltd \$763,668**

Depot charging infrastructure for a fleet of pure electric buses

NZ Bus will install charging infrastructure at two bus depots to support a significant fleet of over 50 pure battery electric buses. The electric buses will be rolled out by converting the old Wellington trolley buses. With night-time charging, the project will deliver lower emissions while avoiding peak electricity prices and distribution network congestion. The high visibility electric buses will operate out of the Karori and Kilbirnie depots, and are expected to be on the road from January 2019.

**4. Electra Ltd \$245,000**

Nine fast chargers in five strategic towns north of Wellington

A trans-regional partnership comprising electricity lines company Electra Ltd, Horowhenua and Kapiti Coast District Councils, and ChargeNet NZ Ltd will install nine fast chargers in five towns through the Kapiti and Horowhenua regions. This project will improve availability of EV fast chargers for local and transitioning users in an area which is experiencing rapid growth in demand.

**5. The Lines Company Ltd \$130,000**

Three advanced charge-managed fast chargers in partnership with local District Councils

A King Country collaboration between The Lines Company and the Ruapehu and Otorohanga District Councils will see deployment of three cloud-connected metered fast chargers in Ohakune, Taumarunui Railway Station and Otorohanga. The payment system will use standard payment cards, providing convenient access to fast charging for district council and Department of Conservation vehicles as well as the general public.

**6. Quest Apartment Hotels (NZ) Ltd \$147,550**

Advanced multi-charger systems across Quest Hotels and Apartments

Twenty nine of Quest's long and short term stay apartment complexes throughout New Zealand will be fitted with forty 7kW AC chargers based on an advanced multi-charger platform and billing system. Quest wants to demonstrate the viability of smart metering for application to EV charging at multi-tenanted sites. Technology company Embrium will supply the chargers and provide its GoodMeasure smart metering and billing platform.

**Electric Vans**

**7. New Zealand Post \$100,425**

Electrification of the Rural Post Network

New Zealand Post and one of its contractors, Grant Bagshaw Limited, will partner to prove the suitability of electric vans for use on a rural post delivery network. Three Nissan e-NV200 vans will operate in the Katikati region for a period of 12 months, providing experience and data for building the EV business case for the 600 vehicles currently in operation in the Rural Post fleet.

**8. Toi Ohomai Institute of Technology \$48,972**

Intercity EV passenger service with a large tertiary organisation

Toi Ohomai Institute of Technology will connect their Tauranga and Rotorua campuses with two electric 7-seater vans for staff, with charging infrastructure at each campus. In line with its desire to be a sustainable organisation, the Institute will share its learnings on total cost modelling for ownership of EVs, looking at a variety of factors including environmental, health, running and maintenance costs, and safety as compared with a conventional fleet.

**9. Sustaining Hawke's Bay Trust \$13,000**

Electric van for Environment Centre Hawke's Bay

The Environment Centre Hawke's Bay will purchase an EV van for operational use, achieving both sustainability aims and demonstrating the suitability of EVs for light commercial use. The van will be sign-written with high visibility messages about the nature of the van and its significance in the Environment Centre's efforts to improve sustainability. The van will be used for visits to schools, for E-waste collection and to support and raise awareness at zero waste clean-up events.

**10. Christchurch City Council \$43,470**

Parks Maintenance Team Vehicle

The Christchurch City Council has set a target to be net carbon neutral by 2030 for Council activities. As part of this the Council is demonstrating leadership in the parks maintenance sector to deploy an electric van for its newly re-established central city parks maintenance team. The Council will consider rolling out more battery electric parks maintenance vehicles if the project is successful.

**11. Kaibosh Food Rescue \$69,999**

## Electrification of vehicle fleet for Kaibosh, NZ's Leading Food Rescue Organisation

Kaibosh the food rescue charity will replace its old trucks with 2 new electric vans, for daily food rescue and redistribution runs in Wellington and Lower Hutt. Kaibosh's sustainability focus means they will share their experience to practically showcase electric vehicles being used for everyday logistics.

### **12. Jucy Group Ltd \$365,000**

#### Exploring New Zealand with a tiny carbon footprint

Jucy Group is collaborating with a group of tertiary institutions to design lightweight fit-out options and other range extension initiatives to maximise the range for electric vans used in the tourism industry. Jucy will purchase and fit out 10 fully electric camper vans for this project, which will provide options for both domestic and international tourists to experience New Zealand's environment leaving only tiny carbon footprints.

## **Car Share**

### **13. Cityhop Ltd \$326,809**

#### Electric Car Share in Auckland

Cityhop, New Zealand's first car share operator, plans to provide over 3,000 business and personal members access to a Low Emissions Vehicle, and encourage new users to try electric. The project will initially add 20 LEVs to their existing car share scheme, converting some of their most popular locations to electric, and adding electric vehicles to the selection elsewhere. At one of the locations, North Shore Hospital, the Cityhop LEVs will replace some of the hospital's pool vehicles, and will also be available to the public after hours and at weekends.

## **Electric Trucks**

### **14. WEL Services Ltd \$255,000**

#### 10 Tonne Truck Conversion

WEL Services will convert an internal combustion engine truck to an electric vehicle with an elevated work platform for line maintenance work. The converted truck's electric motor and 200kWh battery system will be powerful enough to operate the elevated work platform, eliminating the need to run the engine continuously. This project will use the previously funded electric conversion facility at Waste Management Ltd, and demonstrate the viability of converting heavy vehicles to LEVs and running ancillary equipment.

### **15. Eastland Port Ltd \$177,000**

#### New Zealand's first all-electric water truck

Gisborne-based Eastland Port Ltd will purchase a heavy electric truck to tow a water trailer which will be used to suppress dust in the port and log yard sites across the town. An innovative application of electric technology, this project is another demonstration of the suitability of electric trucks for specialised tasks.

### **16. Countdown Supermarkets \$387,500**

#### Fully Electric Delivery Vehicles for Countdown Online Home Delivery Services

Countdown will soon start delivering online orders in busy urban areas of Auckland, Wellington and Christchurch using five fully electric temperature controlled distribution trucks. The project will cut down noise around their online delivery depots, and eliminate around 135,000 kg of CO2 emissions annually. If the project is successful, Countdown's ambition is to convert, where practicable, some of the existing online delivery fleet to electric drivetrains and reduce its environmental footprint.

## Technology

### **17. New Zealand Post \$61,150**

#### Impact assessment of EV Chargers on NZ Post buildings' electrical infrastructure

NZ Post will produce a practical checklist for companies to assess the likely impact of installing EV chargers on building electrical infrastructure and energy costs. To do this, they will commission energy specialists and electrical contractors to undertake an EV charger installation feasibility study of NZ Post buildings at two sites. The study will examine both TOU and non-TOU electricity supply tariffs, and will provide in-depth analysis to share with other building owners. One rapid DC and six medium speed AC chargers will also be installed at the two sites.

## Buses

### **18. Shore Trips and Tours \$134,250**

#### Electric Vehicles for Cruise Ship Shore Excursions

Cruise ship passengers will soon be visiting Te Puia and Hobbiton by electric coach from Tauranga when a 25-30 seat tour coach starts operation. Shore Trips and Tours will deploy chargers at their depot and the two tourism destinations to charge the bus, with potential for this infrastructure to be available to other operators. With the tourism sector's current growth, this project will help lead the way for other operators to follow suit.

### **19. Tranzit Group Ltd \$367,000**

#### A fully electric bus on high patronage routes in Palmerston North

Palmerston North will see the first provincial electric bus operation in NZ, with Tranzit Group's new fully electric bus operating on busy urban roads in the region, including the Massey campus shuttle run. The bus will operate for a full day following overnight charging at the depot, taking advantage of lower night rates. The Massey University route has the potential to reach over one million passengers, and learnings will be valuable for demonstration to other operators.