

Low Emission Vehicles Contestable Fund - Round 5 Project Descriptions

Charging

1. Foodstuffs New Zealand \$154,240

Charging on! Expanding the South Island Fast Charger Network

In partnership with ChargeNet, Foodstuffs NZ will install four 50kW public fast-chargers at Pak'NSave and New World supermarkets in the South Island, helping to expand coverage of the EV charging network to some key smaller centres in the South Island. The intended locations are Bluff, Kaiapoi, Tapanui, and Dunedin. The project aims to help 'plug the gaps' in the fast charging network by providing free public access to charging in more locations around New Zealand.

2. Foodstuffs New Zealand \$416,000

Charging on! Expanding the North Island Fast Charger Network

In partnership with ChargeNet, Foodstuffs will install seven 50kW and five 25kW public fast chargers at Pak'NSave and New World supermarkets in the North Island, helping to further expand coverage of the EV charging network to key centres in the North Island. The intended locations are Napier, Hamilton, Tauriko (Bay of Plenty), Eastridge and Mt Roskill (Auckland), Manukau, Kilbirnie, Churton Park, Karori, Mana, Island Bay, and Silverstream (Wellington). The project aims to help 'plug the gaps' in the fast charging network by providing free public access to charging in more locations around New Zealand.

3. Meridian Energy Ltd \$62,399

Expanding charging infrastructure through a destination charging solution for businesses

In partnership with other businesses, Meridian will install public charging stations, helping to expand coverage of the electric vehicle charging network to five South Island locations including some of the most popular tourist destinations. The intended locations are Franz Josef Glacier, Aoraki Mount Cook Village, Te Anau, and Christchurch. This is part of a project that aims to help encourage further investment by other businesses into New Zealand's electric vehicle charging network by proving the case for investment.

4. Ngāi Tahu Tourism \$139,000

Ngāi Tahu Tourism EV Charging Network

In partnership with ChargeNet, Ngāi Tahu Tourism plans to install seven public fast-charging stations, helping to expand coverage of the electric vehicle charging network to five of New Zealand's most popular tourist destinations. The proposed locations are Franz Josef Hot Pools, Dart River Adventures Glenorchy, Earth and Sky Takapō (Tekapo), Shotover Jet Queenstown and Hukafalls Jet Taupō. The stations will help fill in key gaps in tourism routes.

5. Chris Harrington \$71,075

Otira Fast Charging Station

Chris Harrington will install a public 50kW fast charger in Otira to open up the Arthur's Pass highway and West Coast region, further expanding coverage in a region popular with tourists. The station will help to fill one of the last key gaps in New Zealand's electric vehicle charging network.

6. Tararua District Council \$50,000

Pahiatua Main Street Upgrade EV Charging Facilities

Tararua District Council will install two public electric vehicle chargers in the Tararua town centre, as part of its main street upgrade project in its communities. The chargers will help to further expand coverage of the electric vehicle charging network in the region.

7. ChargeNet - EV Friendly Rotorua \$132,000

EV-Friendly Rotorua

ChargeNet will install three public 50kW fast chargers at key tourism locations in Rotorua, further expanding coverage of the electric vehicle charging network. The intended locations are Rotorua Airport, Rotorua Skyline, and Rotorua Te Puia, all of which receive significant numbers of visitors each year, and lie on the main routes into and out of Rotorua.

8. Synergy Properties 27 Ltd \$30,178

East Tamaki Rapid Chargers for Public Use

Synergy will install a public rapid charging station in the café carpark of a new commercial precinct in East Tamaki, one of Auckland's fastest-growing residential and commercial areas. The station will be capable of charging two vehicles simultaneously, and allows customers to pay with their credit cards. Situated on a main arterial route, the charging station will be available to a growing residential population and to local and visiting business users.

9. Chargemaster Ltd \$17,602

Garage of the Future

Chargemaster will establish a demonstration site which optimises solar photovoltaic (PV) energy generation, Powerwall home battery storage, and electric vehicle charging at a single location in a rural area prone to electricity outages. The main function of the solar PV system and the Powerwall will be to charge an electric vehicle, and the project will test how resilient the system is during outages, with the data gathered to be used for further analysis.

Electric buses and trucks

10. Foodstuffs New Zealand \$379,600

Transport Electric Logistics Truck Demonstration

Foodstuffs NZ will add four 100% electric trucks to its existing fleet, two each on delivery routes in the North and South Islands. There will be two 6-tonne and two 11-tonne trucks using a standard Isuzu 'glider' cab and chassis fitted with batteries, motor and additional electrics. This will demonstrate to the Foodstuffs business and

wider public the environmental and financial benefits of transitioning to low carbon transport options.

11. AlSCO NZ \$50,126

Testing Heavy EV viability for long haul vehicles in NZ

AlSCO will invest in an electric vehicle freighter as part of an electric vehicle feasibility trial for AlSCO's long haul commercial fleet. The freighter will run daily on the Rotorua/Tauranga and Rotorua/Taupo routes – approximately 286km a day. This will be the first intercity heavy electric vehicle trial in New Zealand. AlSCO will take steps to manage the new technology, allowing an hour's charging at each depot and altered driver hours. The trial will run from July 2019 - July 2020.

12. TR Group \$350,000

General Freight Market EV Exposure

TR Group will purchase three curtainsider freight trucks and make them available for hire to the general freight market. Appropriate charging infrastructure will be installed at its Auckland yard and TR Group will work with customers to build their own. The vehicles will be promoted in the general freight market, enabling the logistics sector to try the technology first-hand at low risk. TR Group will also support development of maintenance resources for the trucks.

13. Ports of Auckland Ltd \$250,000

Ports of Auckland Hydrogen Demonstration Project

As part of its hydrogen fuel demonstration project, Ports of Auckland together with its partners (Auckland Transport, Auckland Council and KiwiRail) will procure hydrogen fuel cell vehicles (EECA funding goes toward one bus and up to three cars) that will be used and tested as part of the wider hydrogen demonstration project in Auckland. The project is reliant on the completion of Ports of Auckland's separately-funded hydrogen plant project, which is expected to be completed in December 2019. The project will be undertaken in collaboration with project partners with each party testing the viability of the fuel cell vehicles for their needs.

14. PPCS \$178,550

Electric rubbish truck to service Wellington City Council housing

PPCS will buy a 10 m³ electric rubbish truck to service Wellington City Council for 40 housing sites, covering 3,000-4,000 residences. Replacing a diesel truck, this will be the first fully electric rubbish truck in Wellington. PPCS sees the electric truck as a major step towards their target of replacing 70% of their fleet of 60 vehicles by 2025, based in locations from Whangarei to Christchurch.

15. ContainerCo (NZL) Ltd \$99,700

Electric Heavy Vehicle for the Movement of Empty Shipping Containers

ContainerCo will introduce an electric heavy vehicle to its logistics terminals in Auckland and Tauranga to move shipping containers to port, rail and customers. These routes operate through dense urban areas during the day with peak traffic. By introducing electric heavy vehicles into this section of the supply chain, ContainerCo

could convert a significant percentage of the container movements in Auckland and Tauranga to electric, reducing noise and emissions.

Electric cars, vans, utes and campervans

16. ORIX New Zealand Limited \$135,451

ORIX NZ EVI

ORIX NZ EVI is a program where businesses with more than 15 ORIX leased cars may have the opportunity to upgrade one of their fleet's vehicles to an electric vehicle at the same lease rate as the fossil fuel equivalent and install a charging unit free of charge to the customer. Integrating electric vehicles into a three-year lease will enable each company to experience and fully evaluate electric vehicles for their organisation. This project will help eliminate many of the barriers faced when incorporating an EV into a fleet.

17. DHL Express (New Zealand) Ltd \$62,685

Electric van pilot in Express Courier industry

DHL Express will purchase three LDV EV80 electric vans to be used as a pilot in the express courier industry. One van will operate from each of the main distribution depots – Auckland, Wellington and Christchurch. A charger will be installed at each depot. The trial is part of DHL's target to pick up and deliver 70% of shipments using clean solutions by 2025. Each van will be driven by a number of drivers, building experience across a range of drivers, and increasing the visibility of electric vehicles in the express courier industry.

18. AlSCO NZ \$87,000

Rethinking a 100-Year-Old Model – AlSCO Explores Electric Delivery Vehicles

AlSCO will run a one-year trial and evaluation of three SEA Electric E4V commercial vans to prove their suitability for the service industry. Vans will operate in Auckland, Wellington, and Christchurch. These highly visible electric vehicles will typically operate five days a week, stopping around 50 times a day. AlSCO operates a fleet of 340 vehicles nationwide, and will use the trial's results in the decision-making for the future replacement of ten vans per year.

19. Sanford Limited \$40,000

Sustainable Seafood Delivery and Public EV Charging Infrastructure, Wynyard Quarter

Sanford will lease an electric delivery van and install a refrigeration unit, for Auckland central city fresh fish deliveries. They will also install a charger in the Wynyard Quarter, which will be publicly available at limited hours. The van will be signwritten to promote that it is an electric vehicle, and Sanford will share its learnings and experience with others in the industry.

20. BUPA Australia & New Zealand \$128,675

BUPA Villages and Care Home Laundry, Fleet and Infrastructure uplift

Bupa would like to reduce emissions as a positive step towards making a sustainable difference for its residents, employees and communities in which it operates. They will purchase three electric vans to replace existing diesel vans at three Bupa sites in Mangere, Blockhouse Bay and Cashmere, and install a publicly available charger at each site. The vans run laundry pick-up and delivery services across 4-6 sites each, travelling up to 100km per day.

21. Ebbett Waikato Ltd \$93,499

Ebbett Volkswagen Loan Car Fleet Replacement

Ebbett Waikato will replace their nine loan-car vehicles (that are offered to customers as short-term replacements if their own vehicles are unavailable for use while being serviced) with 100% electric e-Golfs. Ebbett will install chargers at their premises and commit to this nine car e-Golf loan fleet for at least 2 years. Ebbett expects around 2,500 clients per year to experience the e-Golfs, with expertise and advice available to support them in learning about electric vehicles.

22. WELLS Instruments & Electrical Services Ltd \$80,000

Energy Revenue Metering & Electrical Services. LEV shared fleet

WELLS wishes to provide energy & utility services in the Auckland region with a carbon neutral fleet. They will purchase eight electric vehicles for use by field operatives to complete field service operations. In addition, they will purchase and install a Charge Point management solution for four 7kW chargers, two each at two WELLS offices in business parks in Penrose and Albany, which will be available to the public.

23. JA McCallum & Son Limited \$35,000

McCallums Group to convert their fleet to electric vehicles

JA McCallum & Son's fleet of 14 commercial delivery vehicles cover ground from Bluff to Queenstown and around NZ. Introducing an electric van will enable them to test the viability of electric vehicles for their business. If successful, McCallums intend to electrify their whole fleet within the next five years.

24. Contact Energy and Optifleet \$484,300

Electrifying New Zealand's Commercial & Industrial fleets, second hand EV ownership

Contact Energy and OptiFleet have partnered to help their commercial and industrial customers reduce fleet emissions. They will establish a fund to undertake comprehensive GPS driven fleet utilisation reviews, which will provide the data necessary for clients to streamline their fleets and convert vehicles to low emission vehicles. The project will support large scale charging infrastructure installation.

25. Real Journeys \$167,254

Real Journeys: Electrifying the Journey - EV Stage 1

Real Journeys will start transitioning its fleet through procurement of two Hyundai Konas, and installation of EV charging stations in three locations at Te Anau,

Queenstown and Manapouri, helping to further expand electric vehicle charging and viability in tourism destinations.

26. Skene Holdings Ltd \$125,150

The Pit Stop for Your Electric Vehicle

Pit Stop will purchase a fleet of electric courtesy vehicles for clients to use while their own car is being repaired or serviced, and set up dedicated electric vehicle service bays equipped with necessary tools and equipment for servicing, repairing and charging EVs at 4 Christchurch workshops. They will also set up a mobile flat battery service, capable of charging electric vehicles.

27. Ryman Healthcare Ltd \$117,500

Electric Vehicle (EV) charging station network

Ryman Healthcare will purchase an electric vehicle fleet and install a charging station network to be used by retirement living residents, their families, staff and the broader public who regularly visit their five village facilities in Auckland. With one electric vehicle and two chargers available at each village, Ryman will create a car sharing scheme for the use of residents and staff, reducing the need for individual vehicles and emissions as a result.

28. YMCA Invercargill \$18,000

YMCA - Going green using electric cars "Y-Going Green"

YMCA will procure two second-hand electric vehicles and one charger for its corporate fleet, to be used in delivering community and youth programmes reaching about 500 young people per year. The YMCA is committed to both cutting their carbon emissions and to helping demonstrate the practical actions people can take in their own lives to live more sustainably. They will also integrate the benefits of electric vehicles into their teaching curriculum, passing knowledge on to their students.

29. PPCS - eVans \$208,800

Reducing the carbon footprint in the communities we service

PPCS will purchase ten electric vans to service the cleaning of public toilets within the communities of Wellington, Levin, Porirua and Whangarei. An additional three vehicles will be used to service the general cleaning of the community living within the Wellington Council Housing projects. PPCS will use their electric vans to prove their suitability for the service industry.

Battery technologies and testing

30. VTNZ battery and charging \$26,000

Introducing a reliable EV battery condition test and EV charging infrastructure test in NZ

VTNZ will test the reliability and affordability of a method for testing EV battery condition and/or charging infrastructure performance and safety, helping to advance the knowledge and skills needed to develop an EV battery servicing market in New Zealand. VTNZ will leverage the experience of their parent company in Germany to develop a test for New Zealand conditions. The test would provide the buyer of a second-hand electric vehicle with confidence in battery condition, life expectancy and charging ability and safety.

Technology, billing and apps

31. Vector \$117,000

Vehicle-to-home trial

Vector will install and trial two smart 'vehicle-to-home' chargers and electric vehicle chargers in Piha. The aim of the project will be to test how vehicle-to-home technology can help reduce peak demand and improve customer resilience during power outages. The chargers will be made available to up to 24 customers for one month each over a 12-month period. The project will also gather data about customer behaviour.