



Enabling EV mobility for remote workers

The challenge.

Meridian began to investigate electric cars as part of our business fleet over a decade ago, as new technology and solutions have become available, we have stepped up our efforts. Last year we joined EV100 with a commitment to convert our light vehicle passenger business fleet to 100% electric by 2030. At the end of 2019, Meridian's light passenger business fleet was able to reach 80% fully electric, but it was the unique makeup of that last 20% that posed the biggest challenge. These are the vehicles used by rural and remote workers in areas where driving ranges are high and charging limited. For the transition to electric vehicles (EVs) to be successfully implemented in this environment, a solution for home-based charging also needed to be designed.

Why are remote workers difficult to convert to electric?

As New Zealand's leader in supplying rural electricity, Meridian has many people who work from home that travel large distances to support customers who are based in rural locations such as Invercargill, Geraldine and Hawera – the distances that our sales and agricultural managers travel makes the conversion difficult. The solution for how to supply home charging for companies with remote workers wasn't yet available so Meridian needed to design and build the solution. We recognised that the solution needed to consider the safe and practical use of the EV and the home charger, and any electrical or physical constraints that

would be a barrier to installing a pod charger. Any solution also needed to ensure the health, safety and wellbeing of the user, in addition to accurately and seamlessly capturing the power used to charge the company vehicle to enable full reimbursement for our people.

Conversion programme.

Converting the vehicles from internal combustion engine (ICE) to electric vehicles followed the simple and successful formula Meridian used with the rest of our light passenger vehicle fleet's conversion. The ingredients to this formula are understanding your people, gathering and understanding the data, and having access to experts. As with previous conversion areas, the project needed to have buy-in from those ultimately driving the vehicles, a mix of options available to reach the same outcome, and the opportunity to test the journey and experience before scaling up.

A diverse range of people across different functions of our business needed to be engaged with and brought along on the conversion journey. Four AgriBusiness Managers and one Sales Manager from across the country were initially selected to test the journey. They were the first remote workers to receive new electric vehicles, home charging capability and business support. To ensure an easy transition, users kept their ICE vehicles for a four-week period as they became accustomed to driving fully electric.

Fit for purpose – vehicle selection.

Meridian used GPS data to collect and analyse data on vehicle use. From this, Procurement Manager Nick Robillard knew that Meridian would need a vehicle capable of leaving home with 100% charge, travelling up to 250km per day, and needed support from the growing number of public charging stations. The Hyundai Kona 39kw CUV was sourced for this as it was the only vehicle that met the capability, safety, range and financial requirements at the time of deployment.

Installing a home charger for a company electric vehicle.

Installing a charger for company use in a domestic setting requires the same level of precaution and inspection as a commercial location, especially given the vast range of electrical set-ups New Zealand homes have. During installation, and while using the unit, WorkSafe guidelines needed to be followed and WorkSafe issued an addendum in October 2019 that places additional requirements on organisations who intend to have employees charging at home.

To meet Meridian's corporate responsibilities, we choose to fund and own the home charging units. These units are professionally installed and included in our annual maintenance schedule and inspections. This solution ensures that each team member and their family have a charging solution that is safe, certified and easy to use.

Power for the people.

Charging the company vehicle at home means each household sees the cost of recharging on its power bill. We ensured that smart capable chargers were selected to allow us to track electricity usage and vehicle state of charge, all via an app. Coupling this with the kWh price, the app generates an invoice for power use while charging and sends it to the Meridian accounts payable team who then accurately reimburse the team member (using existing company reimbursement processes to keep costs/overheads low).

The results.

Many of the team became quick converts, like AgriBusiness Territory Manager Greg Robertson. Leaders like Greg fed back on the remote fleet programme and are now supporting others on their journey to driving electric and charging at home. Through this six-month programme and ongoing learnings, Meridian has created a scalable template that we can share freely with other sustainably focused companies.

Faster decarbonisation of transport is a key focus for Meridian, for our own fleet and for New Zealand. As a company committed to generating energy from 100% renewable sources, we see accelerating the uptake of electric vehicles as a strong action we can take to contribute towards UN Sustainable Development Goal 13: Climate Action.

If you would like more information on how to facilitate the conversion of your business fleet, please get in touch with us at EVcharging@meridianenergy.co.nz.

