We.EV'S EV ROLLOUT

EV transformation made easy with We.EV

WE.EV IS HELPING BUSINESSES, LIKE WAIKATO-BASED LIVESTOCK IMPROVEMENT CORPORATION(LIC), GET FUTURE-READY WITH THEIR ELECTRIC VEHICLE (EV) CHARGING INFRASTRUCTURE TO HELP SHAPE A BETTER, MORE RENEWABLE FUTURE.

We've seized the opportunity to lead the way in supporting businesses to transition their fleets by designing and installing the charging and monitoring infrastructure needed to not only keep cars on the road, but to also manage both the cost and the demand on our Waikato community's infrastructure.

With greater access to EVs in New Zealand, the number of businesses choosing to switch to electric fleets in the Waikato and beyond, is accelerating. WEL expects to see more than 50,000 EVs in the Waikato by 2030, which means the infrastructure needs to keep pace.

WHAT WAS THE ISSUE?

Based in the Waikato, Livestock Improvement Corporation (LIC) is a herd improvement and agri-technology co-operative that empowers farmers through the delivery of optimised genetics and technology solutions.

LIC already had 13 chargers available to them – but none of them were able to provide 'live' or relevant data, which meant usage analysis was difficult. LIC wanted to expand their existing system to over 50 chargers, so before starting any design work, WEL analysed the existing onsite electrical infrastructure and usage during peak electricity usage in winter.

WEL found that their existing electrical infrastructure could only support an additional six chargers. To install any more would have meant significant network upgrades costing hundreds of thousands of dollars – and take around 6-9 months. Plan A wasn't going to work so Plan B was needed.

HOW DID WE SOLVE IT?

Working together, we designed an alternative smart charging solution. This new infrastructure could charge over 50 vehicles, each with over 100km of range, on a typical winter's day. Smart controls ensured that the power was shared and could never exceed the capacity of the supply to site. This allowed us to maximise the utilisation of current network connections and electrical infrastructure without unnecessary additional investment for LIC.

WHAT WAS THE RESULT?

The result meant 24 new AC Wallbox chargers were supplied by Transnet, and installed by Alpha Electrical. The infrastructure for a further 26 AC chargers was also installed to future proof the installation. While a 60kW DC charger for fleet and visitors, meant easy priority charging.

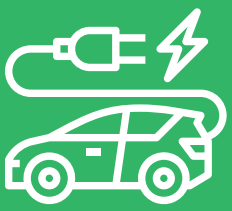
We.EV as part of their service offering, carry out onsite infrastructure analysis and reporting back to the customer. This provides the customer with a starting point on which to make capital investment decisions for EV fleet transition and charging infrastructure requirements.

We.EV have completed equivalent analysis and reports for the University of Waikato, Waikato Regional Council and Waipa District Council, among others.

Charged and ready

With LIC's support, We.EV project managed LIC's EV transformation from analysis to commissioning one of the largest projects-to-date for the team.

Our experience in charger installation meant we could look ahead for a solution that would last – optimising electricity consumption with dynamic load control, ensuring compliance, and utilising other factors like procurement, quality, lifespan and usability.



WHERE THE RUBBER HITS THE ROAD

While it's still early days, the results for LIC have been impressive so far.

In partnership with We.EV, LIC will continue monitoring EV uptake within the organisation so they can support their users on the journey of transitioning their fleet to a more sustainable solution.

06 Chargers – Capacity for installing new unmanaged chargers

50 AC chargers infrastructure capacity

24 AC Chargers and 1 DC Charger installed in Stage 1

$150k Estimated savings through avoided network connection upgrade