

CASE STUDY

Helping CentrePort lead the charge in sustainable operations

Challenge

CentrePort, a key transport hub in Wellington, is transitioning to low-emission, electrified machinery. However, its plan to install multiple 500kW EV chargers was expected to exceed the site's electricity supply capacity, potentially triggering costly infrastructure upgrades.

Solution

To mitigate this, CentrePort explored the installation of an on-site battery energy storage system (BESS) as part of its microgrid strategy. We assessed its economic feasibility, identifying opportunities to stack value through participation in demand-side flexibility markets, as well as from energy arbitrage, power factor correction, reducing peak demand and revenue from excess power exports.

This project is also supported by a grant from Ara Ake, who aim to demonstrate the commercial value of customer-led BESS solutions.

Impact

Our modelling gave CentrePort's Board confidence in the project's viability, highlighting its potential to reduce costs and support sustainability goals. As a result, CentrePort will pilot a 750kW/1,500kWh BESS in 2025.