

CASE STUDY

Supporting Mataura Valley Milk to go fully electric

Challenge

When Mataura Valley Milk (MVM), part of The a2 Milk Company (a2MC), set out to convert its Southland facility into New Zealand's first all-electric dairy plant, several factors had to align: selecting the right boiler, ensuring it had sufficient renewable energy, expanding network capacity, and engaging everyone to work together.

Solution

With a focus on sustainability, MVM selected a High-Pressure Electrode Boiler (HPEB) over a low-pressure one, which would have only reduced MVM's coal usage by 30%.

We collaborated with Transpower to explore network connection options, ensuring MVM had the necessary electrical capacity to operate the boiler.

Together with MVM, we identified additional opportunities to enhance the project's capital structure, access transmission pricing, and minimise energy losses – all of which contributed to the project's commercial viability. With our support, MVM was able to thoroughly evaluate options, make decisions that balanced short and long-term priorities, and negotiate a cost-effective contract for electrical capacity.

Impact

In March 2024, the new boiler was installed, marking the completion of the switch from coal to renewable electricity. This change will reduce CO_2 emissions by approximately 22,000 tonnes each year, equivalent to taking over 9,000 cars off the road.

