

MATAURA VALLEY MILK High Pressure Electric Boiler (HPEB) Project

The Mataura Valley Milk (MVM) facility in Southland will be fully electrified, substantially reducing CO₂ emissions involved in powering the plant, in a collaboration involving the shareholders of MVM and co-funded by the Energy Efficiency and Conservation Authority (EECA).

MVM is a world-class dairy based nutritional facility located in the heart of Southland, New Zealand. The a2 Milk Company (a2MC) recently acquired a 75% stake in MVM alongside China Animal Husbandry Group (CAHG), which remains a 25% shareholder. The first major asset investment for the newly formed venture between a2MC and CAHG will be the ambitious conversion of the MVM site to full electrification.

New Zealand's first High Pressure Electrode Boiler (HPEB) will replace all current coal-fired heat duties on the MVM site, making it 100% electrified. HPEB is a clean and renewable energy alternative, that will reduce carbon emissions by approximately 22,000 tCO2e p.a. We have partnered with Meridian who is Aotearoa's largest 100% renewable energy generator — certifying that the electricity we use is matched with electricity generated by Meridian from wind, water and/or sun.

David Bortolussi, Managing Director and CEO, The a2 Milk Company, said, "As a New Zealand-based company, I am proud we are supporting Mataura Valley Milk with this project to make a genuine impact on reducing emissions in the region. This exciting project reflects The a2 Milk Company's strong commitment to high standards of environmental sustainability."

Despite coal being a more cost-effective way of creating the large volumes of process heat required to turn fresh milk into powder, HPEB technology has now advanced at scale, allowing this environmental sustainability initiative to be a first for New Zealand. Initially designed to support energy generation in Europe, the high pressure (high temperature) electrode boiler is manufactured to rigorous standards. The HPEB process is safe, reliable and flexible, producing good quality steam, making it ideal for New Zealand nutritional milk powder manufacturing applications.

Bernard May, CEO, Mataura Valley Milk, said "Climate change is one of the dairy industry's biggest challenges. The environmental investment in converting to a cleaner, greener energy source at MVM, located in the beautiful Southland region of New Zealand, is an impactful step forward".

GIDI funding

MVM has been approved for \$5m in co-funding from the Government Investment in Decarbonising Industry (GIDI) Fund, which is administered by EECA (the Energy Efficiency and Conservation Authority). The GIDI Fund was established in 2020, and is part of the Government's Covid Response and Recovery Fund, which aims to drive economic stimulus and job creation through decarbonisation projects.



Project Partners

Mataura Valley Milk proudly partnered with the following organisations to make the electrode boiler a reality.







EECA has supported MVM with energy efficiency projects since MVM's inception. MVM has taken part in EECA's Energy Management Program (EMP), Energy Transition Accelerator program (ETA), and most recently the Government Investment in Decarbonisation for Industry (GIDI).

www.eeca.govt.nz

Aurecon has supported MVM through the EECA Energy Transition Accelerator (ETA) and subsequent GIDI round 2 application to bring the project to this point. Sitting on the ETA panel, Aurecon provides technical, financial and carbon related expertise and strategic decision support for industrial clients as they transition away from fossil fuels.

www.aurecongroup.com

We have partnered with Meridian who is Aotearoa's largest 100% renewable energy generator. Meridian also operates Manapouri – New Zealand's largest hydro station. Meridian's Certified Renewable Energy Product (CRE) completely changes the carbon reporting and offsetting game for New Zealand businesses, which we are utilising on this project.

www.meridianenergy.co.nz