

# Crafting a carbon-neutral future for beverage manufacturing

Discover Suntory Oceania's greenfield sustainable journey



The heating and cooling solutions at Suntory Oceania's facility have allowed our client to operate its plant as carbon neutral (Scope 1 and 2), set new industry standards, and inspired community-wide environmental stewardship.

Imagine a world where your favourite beverages promise exceptional quality and embody a deep commitment to sustainability. This is the future we have created with Suntory Oceania. To achieve the ambition of being carbon neutral from Day 1, Suntory Oceania embarked on an innovative journey to establish its beverage packaging into a model of sustainability. Our collaboration involved developing a shared sustainability mission, exploring possible avenues and realising this vision.

In the quest for the most effective solutions, several paths were considered. After minimising energy consumption through various technology and operational strategies, the team then evaluated various process heat technologies, including heat pumps, electrode boilers, and biomass boilers. We identified the optimal combination for this site and application: a biomass hot water boiler with Organic Rankine Cycle (ORC) generator for heating. This tailored cutting-edge solution was not only aimed at reducing emissions but also designed to set a new sustainability standard for the industry.



The facility is now in operation, with the capacity to produce over 20 million cases per annum. The biomass boiler, ORC generator and installation of 7,000 solar panels represent significant strides toward achieving net zero Scope 1 emissions, due to the innovative approach to process heat and green energy that is being produced. Suntory Oceania offset the power shortfall through a Green Energy PPA with Queensland's CleanCo to abate Scope 2 emissions. The outcome of the facility has been transformative: substantial reductions in Scope 1 & 2 emissions, setting a precedent for sustainability in the beverage industry, as well as inspiring similar initiatives across communities.

This venture with Suntory Oceania is emblematic of our collective capacity to create sustainable futures. By optimising energy usage, and actively investing in sustainable technology, we have created a green legacy. Together, Suntory Oceania and Beca have redefined industry standards, demonstrating the power of innovation and shared goals.

### Key highlights

Biomass hot water solution - eliminates steam trap losses, and removes the need for chemical treatment

Exceptional refrigeration efficiency achieved through a centrifugal chiller and optimised control solution

ORC generator captures waste heat from the boiler to generate power

Biomass derived from local sawmill offcuts



### Key statistics

**100%** carbon neutral

**18%** reduction in energy use compared to baseline (standard efficiency improvements)

**100%** green energy

**7,000** solar panels

