

Case study – Teys Australia



How one of Australia's major food producers plans to reduce its carbon footprint

Being one of the largest employers in regional Australia brings many social and financial obligations. Chief among them, especially for a major fresh food producer, is to be a good corporate citizen. For Teys Australia, 'doing the right thing' is not optional.

Improving its environmental management has traditionally been difficult for the meat processing industry due to its comparatively large environmental footprint. This was the challenge facing Teys Australia when it decided to invest in additional sustainable operations.

Tey's Australia Wagga Wagga is part of a joint venture between Teys Brothers, a northern based beef processor, and Cargill Incorporated, an international agribusiness and processing company. Teys Australia employs over 4000 people across three states and is Australia's second largest beef producer.

Tey's operates a beef processing plant at Wagga Wagga, which produces premium-grade beef and meat products for retail outlets, hotels and restaurants throughout Australia and around the world. Teys main export markets are Japan, Hong Kong, South Korea, and China. The plant, which employs 650 people, currently processes over 1200 head of cattle per day. ▶

In brief

Tey's Australia knows there are no shortcuts in building a sustainable business. Following their joint venture with Cargill Beef Australia in September 2011, sustainability remains a key focus. In 2008 Cargill Beef Australia joined Sustainability Advantage and today as part of the venture, Teys continues to reduce its environmental footprint.

By taking measures to slash its reliance on fossil fuel energy for refrigeration and heating, increase energy use from renewable sources and improve fresh water efficiency, Teys has:

- saved over 557,000 megajoules of energy per year
- provided the capacity for future generation of electricity and/or steam from captured methane on site
- reduced its demand for natural gas by 10 per cent while reducing greenhouse gas emissions by 27 per cent from the previous year
- cut the company's water use per unit of production by 20 per cent and natural gas use per unit of production by 10 per cent in the nine months to February 2011.



- But meat processing is a resource intensive industry that generally requires large amounts of water and energy to meet the high standards demanded by Australia's food authorities. Teys uses water to feed, clean and cool cattle; electricity for refrigeration and automated internal processes; and natural gas to produce steam.

Joining the Wagga Wagga cluster of businesses in the Sustainability Advantage Program run by the Office of Environment and Heritage is helping Teys to be a catalyst to improve sustainability in the industry.

'We want to manage our environmental impacts as sustainably as possible,' says Charles Hollingworth, Environment, Health and Safety Manager for Teys Australia. 'Our aim is to use less energy and water in our operations, create a more efficient business, and prove sustainability makes good business sense.'

'The Sustainability Advantage Program is a great opportunity for Teys to work with government and other industry stakeholders to improve our business and reduce our environmental footprint.'

Tey's set ambitious targets for its Wagga Wagga beef plant. The company wanted to reduce nutrient levels in waste water; enhance the performance from its waste water treatment system; improve energy efficiency across all plant operations; and increase its capacity to use renewable energy.

Such ambitious targets demand bold tactics.

Tey's has made improvements to its site boilers that are helping to save over 557,000 megajoules worth of natural gas per year.

The company has commenced irrigation to reuse treated wastewater and reduce waste discharged into the sewer. A tallow decanter has also been installed to claim further saleable by-products, produce less waste and save on disposal.

Tey's collects information on energy and water use each month and compares this to previous periods. The company also tracks sustainability metrics through an internal scorecard and reports findings to the senior business management team each week. Weekly usage is compared to aggressive targets set for water, gas and electricity usage. Results above target levels must be explained and incidents of noncompliance are addressed through an internal reporting system.

In the nine months to February 2011 Teys' water use per unit of production fell by 20 per cent and natural gas use per unit of production dropped by 10 per cent.

Tey's is investing \$13 million to upgrade its effluent treatment and install a system to collect and flare methane gas. The company will replace its existing ponds with two new, lined and covered anaerobic ponds each with a volume of 28,000 cubic metres. This will improve the discharge quality of the water to allow for more reuse options on site as well as for irrigation of a lucerne crop on Teys' land.

The upgrade will also allow Teys to capture methane gas previously released to the atmosphere during processing and provide the potential to produce renewable electricity from gas.

Your next step

To find out how your business can join the Sustainability Advantage Program, contact the team:

Email sustainbus@environment.nsw.gov.au
Call 02 8837 6000
Visit environment.nsw.gov.au/sustainbus/sustainabilityadvantage.htm