



CASE STUDY

Kyneton meatworks makes a smart move to smart metering

A much-misquoted management adage says: "You can't manage what you can't measure."

While this may not be entirely true, many companies are finding it much easier to manage their water consumption if they can measure it. The starting point for many larger operations is a water audit, or a water management action plan (waterMAP), that enables them to:

- Assess their current water use
- Identify inefficiencies and opportunities for water savings
- Prepare an action plan to implement water conservation activities
- Annually report on the implementation of water conservation activities

At the Hardwick Group's meatworks in Kyneton, new smart metering technology is now providing valuable real-time information on water usage. Mark Hardwick says Coliban Water installed the system in December 2007 and the company now has live recording of its water consumption that can be displayed on a computer screen or printed out as a range of graphs and reports.

A transmitter connected to the smart meter means the real-time data is available from the internet via a normal web-browser. Historical data is also stored which allows trends over longer periods to also be identified.

Mark says that previously daily meter readings were being taken manually and recorded in a book, but this was not being regularly analysed. With live feeds and real-time graphs now continuously available, more time can be spent analysing the data, and deciding what action to take, than on collecting it.

The data is now presented graphically and discussed at weekly management meetings, which has helped raise the awareness of water issues across the company.

"The smart metering's got everyone thinking about conserving water," Mark says.

After establishing a consumption baseline on Saturday night, when activity at the works is at a minimum, Hardwicks used data from during the week to identify correlations between increases in water use and increases in production, or other reasons such as warmer weather or dustier days.

This then enabled exceptions, such as suspect leakages, to be identified from the usage data.

"Picking up on leaks has been a big pay-off," he says.

The availability of the new data has also led to some rethinking of work practices and how more can be done with less water. "Our cooling towers are large users of water for refrigeration," Mark says. "So we're looking at re-using water from the towers to wash down areas outside the production lines, like roadways and so on."



Harwicks Meat Works Meter Number 9064059





Low-flow showerheads have also been installed in a new shower block. And new production lines have been designed to capture and re-cycle water initially used to sterilise equipment. Mark says water has become a lot more expensive and smart metering has enabled the company to reduce their consumption significantly. And, because water consumption at the works has fallen, so has the amount of trade waste produced.

There's no doubt that smart metering has been the catalyst for changes in thinking at Hardwicks. "From learning where our water use is, we're trying to become smarter with our processes," Mark says.

waterMAP Assist

The Australian Industry Group (Ai Group) is committed to working with member companies to encourage continuous improvement, resource efficiency, use of recycled water where possible, and reduced usage of drinking water. Ai Group's waterMAP Assist program has provided resources and funding to member companies to assist them implement initiatives contained in waterMAPs and deliver water savings in industry.

Ai Group's waterMAP Assist program provided funding to Coliban Water for the purchase of smart meters for their customers who use more than 50ML per annum.

Further information

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Ai Group's waterMAP Assist program, supported by the Department of Sustainability and Environment (DSE) has enabled Ai Group to work with large industrial water users to identify and implement water savings.