

# CowTime

## CASE STUDY



## Excessive energy

Alistair Adams believes excessive energy is being used in the family's 55-unit rotary dairy in Western Victoria. It's so excessive that he plans to cut hot water use to about a third of current use. And he expects spin-off benefits such as cutting the cost of chemicals used in plant cleaning.

Alistair and his partner, Andrea dairy with Alistair's parents Graham and Anne Adams. Last season their 620-cow herd produced 3.6 million litres.

Alistair was keen to save energy so he ran the dairy through CowTime's Energy Monitor tool. He also attended CowTime's 2006 Shed Shake-up *Watts 'n' your dairy*.

"The Energy Monitor gave us an idea of how our energy use compared to similar dairies. This is the first time we've been able to do that," said Alistair.

The Adams' dairy rated close-to-average on two of the three main energy indicators - energy use (kwh/volume of milk) and volume of hot water used. Electricity use was very low at \$20/cow/year.

Despite the good results, Alistair is confident major gains can be made. One of the first steps is to create a plan of ideas, and to identify priorities.

Topping the list are solar hot water panels and wash water recycling.

### Government subsidies

The main driver behind starting with solar heating was a government subsidy which covered almost half the cost of the panels.

"It's definitely worth looking into subsidies. Often they are not widely promoted. In our case the subsidy made the difference between going ahead or not," said Alistair.

### Wash water recycling

Wash water recycling is high on the list because Alistair believes it has great potential to cut running costs in the dairy.

"We'll be looking at reducing the amount of hot water and chemicals we use, so the saving is a double whammy," he said.

Alistair plans to change the plant cleaning routine to include a cold cycle and reduce hot water use.

Combined, Alistair believes the solar panels, wash water recycling and cold wash cycle will enable him to replace an existing 1200L hot water service with an industrial 300L stainless steel system.

"The stainless steel will allow us to run recycled wash water through the hot water tank without corrosion," he said.

### CowTime's Energy Monitor

Alistair is looking forward to using the Energy Monitor again in the future, to see what impact the changes have had.

"The 15 minutes it takes to use the Energy Monitor was well worth the effort. There are lots of tips for saving energy and money, and many can be done at very little cost," he said.

Simple things like maintaining the plate cooler, can make a big difference. Find out how energy efficient your dairy is. Run your dairy through CowTime's Energy Monitor (see box for details).



CowTime is proudly supported by Dairy Australia, DPI VIC, DPI QLD Sustainability Victoria and the University of Melbourne.

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### Did you know?

- most farms use far more energy than they need and could save at least half their energy use
- some farmers use four times the energy that others use to harvest the same amount of milk
- water heating and milk cooling account for 80% of energy used in the dairy (based on research conducted for SEAV/Bonlac)

### How energy efficient is your dairy?

- use CowTime's Energy Monitor to find out how energy efficient your dairy is, and get tips to save energy
- log on to [www.cowtime.com.au](http://www.cowtime.com.au) and click on the Energy Monitor icon or,
- phone 03 5624 2221 and we'll fax you an Energy Monitor form

