

Building Efficiency:

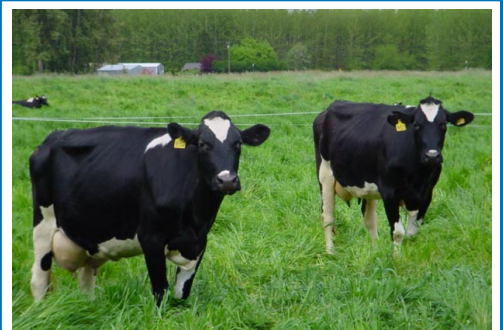
# Commercial Equipment Upgrades

CASE STUDY

## Customer Profile - Looslea Holsteins

Netti and Tony Loos have been in the dairy business for years. They own Looslea Holsteins, an organic dairy near Scappoose.

One of the dairy's biggest energy uses is refrigerating milk. Netti Loos recognized that if she could cool the milk while it was on its way from the cows to the refrigeration tank, she could reduce the energy and cost required to run the tank. Her solution was to pump the milk through a heat exchanger.



Looslea Holsteins produces milk under the Horizon Organics label, and received the 2003 National Exceptional Quality Award.

### Warm milk in, cool milk out

In the heat exchanger, 90° milk passes through one side while 55° wash-down water, on its way up from the well, passes through the other. The milk and water don't mix, but the heat from the milk transfers to the water.

### Rebates, credits make project possible

With guidance from PUD Commercial Energy Services Advisor Tim Lammers, Loos installed the \$2,800 heat exchanger. Based on the energy savings, Looslea Holsteins received a \$1,950 rebate from the PUD and a \$950 Business Energy Tax Credit from the state of Oregon.

The rebates and credits more than paid for the cost of the heat exchanger, making the payback on the investment immediate. Even better, Looslea Holsteins' electric bill is now nearly \$600 lower every year thanks to the energy savings.

#### Project Summary

Measure Cost	\$ 2,800
PUD Rebate	\$ (1,950)
Oregon Tax Credit	\$ (950)
Net Cost	\$ (100)
Annual Energy Cost Savings	\$ 600
Simple Payback	Immediate

"As an organic dairy, sustainability is important to us," said Loos. "This project has helped us to lessen the impact of our dairy farm on the environment by reducing our electric use, and we've saved money in the process."

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