



Simply Energy
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Simply Group



Energy Reduction Strategy

Case Study

**Real time controls plus
wholesale pricing**

It's all taken care of.



Energy Reduction Strategy

Cold Storage Nelson

The Issue

Electricity is a major cost for Cold Storage Nelson (CSN), one of New Zealand's largest cold storage logistics providers, who wanted to reduce energy consumption and costs. In 2009, CSN's CEO Alister Morison appointed Simply Energy to jointly implement a strategy to cut its electricity costs over a four year period.

As part of the solution, recognised at the 2014 EECA Awards, CSN became the first non-Transpower connected consumer to purchase electricity directly from New Zealand's wholesale spot market.

The Solution

CSN and Simply Energy delivered a three-pronged strategy:

1. A detailed programme of capital investment in energy efficient plant
2. Implementing automated controls to align cold store loadings with real-time energy prices
3. Initiating direct wholesale electricity market purchasing, with Simply Energy providing ongoing wholesale reconciliation, billing and code compliance services, and also managing a hedge book.

The Outcome

By 2013 CSN had lowered overall electricity use 20% from its 2009 figure, to approximately 12 GWh per annum. Even more importantly, the company also reduced energy consumption by 30% on a product throughput basis due to an increase in storage capacity.

The energy savings were worth over \$250,000 per annum. Importantly, process improvements and resulting focus on innovation mean the savings will continue over time. The new operating model and commercial structure is replicable, now being rolled out to a newly acquired cold store in Christchurch.

"Engineering-based projects drive energy efficiencies to a degree but typically don't go far enough," says Alister Morison.

"We've established an innovative commercial structure that interacts with the wholesale spot market and automatically controls demand in response to pricing signals. We benefit financially, have a greater insight into energy use and can align real energy demand and cost with inventory levels."

New systems measure energy demand against wholesale spot prices and network charges, automatically load shedding when costs are higher.



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Cold Storage Nelson

This real time management of energy improves CSN's competitiveness which is able to more accurately control the energy levels required to effectively store products - without compromising quality or wasting energy.

Judges in the energy management category at 2014 EECA Awards, described the results as:

"An innovative approach to a blend of supply and demand side initiatives. It's both cost-effective and easily replicated, opening up new technical solutions in the market."

Electricity Market Innovation

"Simply Energy's value as a partner comes from its expertise and authority to act in the market," says Alister Morison. "To make the model work we needed an independent Retail Market Participant with the licenses, systems and processes to reconcile and settle back into the wholesale electricity market."

"Successfully introducing the new commercial structure required a close and trusted working relationship. Simply Energy created additional opportunities for CSN's benefit, unconstrained by the parameters of original contract," he adds.

The experience in creating a structure allowing direct wholesale market participation together with real time controls has created a new solution for Simply Energy that will be used with other industrial energy clients.



Energy Reduction Strategy

Cold Storage Nelson / Snapshot

**4 year
plan**

2009 Simply Energy appointed to jointly implement a strategy to cut CSNs electricity costs over a four year period

**20%
reduction**

by 2013 CSN had lowered overall electricity use 20% from its 2009 figure, to approximately 12 GWh per annum

**30%
reduction**

also reduced energy consumption by 30% on a product throughput basis

**\$250,000
savings p/a**

energy savings were over \$250,000 p/a, savings will continue over time with process improvements and focus on innovation

**client
solutions**