

Borton Fruit

At a glance

Borton Fruit

Yakima, Washington

Projects:

Borton Fruit has completed several wattsmart Business projects across all of its facilities since 1994 – compressed air, refrigeration and lighting. Because of these projects, Borton Fruit is saving a total of nearly 12.2 million kilowatt-hours in electricity and \$686,000 in energy costs annually.

Recent controlled atmosphere refrigeration energy savings:

\$25,000 (457,650 kwh/year)

Project cost:

\$113,300 before incentives
\$ 67,980 incentive payments

\$ 45,320 after incentives

Simple payback:

4.5 years before incentives
1.8 years after incentives

Other benefits:

- Premium fruit quality during storage
- Reduced operating costs

Energy consultant:

Cascade Energy



Borton Fruit is realizing significant savings from refrigeration and other energy upgrades at its Yakima Valley operation. Pictured are Toby Freeman, Pacific Power corporate account manager (left) and Malcolm Hanks, Borton Fruit engineer.

Fruit company makes efficiency a core practice

Headquartered in Yakima, Washington, Borton Fruit is a premium grower, packer and shipper of world-famous apples, pears and cherries.

For years the fourth-generation family business has taken advantage of Pacific Power's energy efficiency programs to help reduce the energy use of refrigeration, compressed air, lighting and other equipment, lower costs and improve production processes.

"Working with Pacific Power, we became very aware of how many dollars could be saved by paying attention to our energy usage," said Malcolm Hanks, engineer at Borton Fruit. "Any time it becomes obvious there's an energy-saving opportunity, it's a 'no-brainer' that we're going to work with them again."

"Working with Pacific Power, we became very aware of how many dollars could be saved by paying attention to our energy usage. Any time it becomes obvious there's an energy-saving opportunity, it's a 'no-brainer' that we're going to work with them again."

Malcolm Hanks
Engineer
Borton Fruit

Upgrades save energy, enhance quality

The company recently added 36 controlled atmosphere rooms to its facility in Zillah, Washington. Fruit grown in the Columbia Basin and Snake River area is shipped to this facility after it's picked and stored in the CA rooms for up to 10 months.

As part of its latest project through Pacific Power's wattsmart® Business program, Borton Fruit received technical assistance from Cascade Energy to implement energy efficiency measures for the CA rooms' refrigeration system.

continued



“The computer system gives our refrigeration operators great information and history. We get improved process control and the ability to optimize energy usage.”

Malcolm Hanks
Engineer
Borton Fruit

Hanks explained, “The whole idea behind controlled atmosphere is we’re putting the fruit to ‘sleep’ so it doesn’t mature too fast. If the oxygen level is too low or carbon dioxide levels too high or the room is too cold, it causes issues depending on the variety. The goal is to take good care of the fruit – it needs to be in its premier condition for selling when we open the room.”

The energy-saving measures included installing variable frequency drives on condenser and evaporator fans, as well on a 300 horsepower screw compressor. Upgrades were also made to the computer control system for the equipment. Borton Fruit has 1,750 horsepower of compressors providing refrigeration at its facility in Zillah.

“The computer system gives our refrigeration operators great information and history. We get improved process control and the ability to optimize energy usage,” said Hanks. “And if something gets out of set point, or there’s an issue going on, the system is tied into a phone dialer and the operator very quickly gets notified.”

Savings blossom

Borton Fruit’s recent refrigeration system upgrades received nearly \$67,980 in Pacific Power wattsmart incentives, slicing the project’s simple payback from 4 1/2 to less than two years. The improvements are saving the company 457,650 kilowatt-hours in electricity and more than \$25,000 in energy costs per year.

Since 1994, energy efficiency projects implemented through Pacific Power programs have saved Borton Fruit across all of its facilities a total of more than 12.2 million kwh in electricity and \$686,000 in energy costs annually.

Hanks noted Pacific Power’s wattsmart program helps all customers in the long term. “If we’re using less energy, Pacific Power doesn’t have to build so many power plants. It’s a win-win.”

About Pacific Power’s wattsmart programs

Pacific Power offers a variety of options to help our commercial, industrial and agricultural customers in Washington and California build energy efficiency into new construction and retrofit projects. The wattsmart programs offer technical expertise and cash incentives for lighting, HVAC, industrial processes and more.

Let us help you get started

For more information on how we can assist your facility:

- Visit bewattsmart.com and inquire online.
- Email wattsmartbusiness@pacificpower.net.
- Call us toll free at **1-800-222-4335**.

Because there are requirements to qualify for an incentive, it is important to call us **before** you start your project.

bewattsmart.com



Let’s turn the answers on.