

## Custom Efficiency

for Complex Projects



### Great Western Malting Company

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“The Idaho Power incentive program is an excellent program that helps make energy efficiency projects possible through increased return on investment using their rebate program.”  
— Amy Mercy, Great Western Malting Company plant manager

# Energy Efficiency Upgrades Saves Company Money and Reduces Carbon Emissions

## The Business

Great Western Malting Company (GWM) produces food-grade brewers' malt from barley. GWM originated in 1934 in Vancouver, Washington. The GWM Pocatello plant was built and began production in 1981.

GWM's Pocatello plant produces more than 90,000 metric tons (MT) of malted barley annually. They purchase about 50,000 acres of barley for the plant each year, and the Pocatello facility manufactures enough malt in a single day to produce over 7,000,000 glasses of beer or enough malt in a single year to produce over 8,000,000 kegs of beer.

## The Challenge

This project was targeted for an upgrade-replacement of the plant's

water supply pumping system. The scope of this project was to install two new pumps to replace one of the two existing pumps and use less energy.

By changing the pumping system, GWM would save energy because the steep tanks would fill at a faster rate.

## The Solution

The process-pumping system used two, 1,500 gallon per minute (gpm) pumps to supply the steeping system. A study of the pumping system showed the system used 600 gpm or less 68 percent of the time. By installing a tiered pumping system with 600 gpm, 1,300 gpm, and 2,000 gpm pumps, GWM saved 38 percent of their pumping costs for the steeping system by keeping the pumps in the efficient part of their

pumping curve and operating the pumps only as needed to avoid wasteful pump “deadheading”. The system was programmed to start the pumps based on system demand and to reduce the steepers' fill times.

## The Outcome

Labor and materials for the project totaled \$70,140. Mercy said, “Our system is now more energy-efficient and money has been saved.”

## The Savings

The project's energy savings are the equivalent to the total average energy use of 25 typical Idaho homes per year or the planting of 40 acres of trees. Projections suggested the savings would be 212,000 kilowatt-hours (kWh) per year, but it appears the actual savings

will be closer to 250,000 kWh per year. This project also has allowed the plant to reduce their carbon emissions by 105 MT of carbon dioxide (CO<sub>2</sub>) per year.

## The Bottom Line

Idaho Power's Custom Efficiency program provided the GWM with a \$25,440 incentive for the energy efficiency upgrades. "We understand that we were one of only two Idaho businesses that fully used Idaho Power's rebate allocation in 2006. This project allowed us to repeat that benefit in 2007," Mercy said.

GWM's strategy is to optimize all areas of plant operations through continuous improvement combined with capital expenditure to reduce plant overhead

costs and strive for manufacturing excellence for the benefit of their shareholders, customers, and company.

If you are looking for similar energy-saving success for your business, Idaho Power can help. Idaho Power offers a complete suite of energy efficiency programs for commercial and industrial businesses. The Custom Efficiency program assists large commercial and industrial customers in identifying and paying for energy efficiency improvements. Easy Upgrades offers incentives of up to \$100,000 for energy-saving retrofits within existing commercial and industrial buildings. The Building Efficiency program offers incentives of up to \$100,000 per project to offset part of additional capital

expenses for more efficient lighting designs, cooling systems, controls, and building shells in new commercial and industrial construction projects. FlexPeak Management, a demand-response program, offers commercial and industrial customers recurring payments for reducing a set amount of electricity consumption in response to Idaho Power's peak demand and other system needs.

Go to [www.idahopower.com/business](http://www.idahopower.com/business) or call 208-388-5624 for more information on how Idaho Power can help you save energy and money.

This success story was produced in cooperation with, and approval from, Idaho Power customer GWM.