



Unilever

Henderson, Nev., Ice Cream Plant

Winner: Outstanding Dairy Processing & Manufacturing Sustainability

Plants Put Sustainable Living Plan Into Action

At Unilever, sustainability is a corporatewide way of doing business. In 2010, Unilever unveiled its Sustainable Living Plan, with goals to reduce three outputs by 50 percent by 2020: greenhouse gas (GHG) emissions, water use associated with consumer use of their products and waste associated with disposal of their products.

The plan has inspired Unilever plants worldwide, including the Unilever Ice Cream Plant in Henderson, Nev. The plant manufactures ice cream products under brand names including Ben & Jerry's®, Breyers®, Good Humor®, Klondike® and Popsicle® for distribution throughout North America. It has more than 450 employees and has been in operation for 30-plus years.

Plant managers followed a measured approach: Allocate resources, identify potential projects, follow through on implementation and conduct post-installation verification of results. The return on investment went beyond economic and environmental impacts to improving quality of work for employees.

Through the implementation of technology, the Henderson plant has reduced electricity use by 13 percent, natural gas use by 16 percent and water consumption by more than 1.1 million gallons per year. It is just one example of Unilever's corporate commitment in action.

Best Practices

1 Systems Upgrades

Summary

The plant enlisted energy experts to review the facility's major energy users in order to develop specific projects to reduce energy. The plant implemented new, automated sequencing for its refrigeration and compressed air systems, and addressed opportunities to improve energy use for water heating systems.

Key benefits

The systems upgrades implemented by Unilever have increased refrigeration system efficiency by 13.5 percent, reduced compressed air system energy use by more than 20 percent and recovered heat equal to one-sixth of the facility's 2009 natural gas use rate. These upgrades reduced electricity usage by 13 percent and natural gas use by 16 percent.



2 Waste Water System Improvements

Summary

Unilever used a combination of waste water system improvements, including removing waste before it enters the water system.

Key benefits

The plant's water system improvements have reduced water consumption by more than 1.1 million gallons per year, reduced the strain on local water resources, improved the quality of waste water returned to the municipal water treatment facility and provided solid wastes for animal feed. They also resulted in improved air quality around the plant's waste water pond and in the nearby residential neighborhood.

3 Utility Monitoring

Summary

Unilever installed a utility monitoring system for electric, gas, water and production, which provides the capability to track key performance indicators for future project identification and further improvements.

Key benefits

A utility monitoring system tracked how new practices directly impacted energy use in specific areas. That information was then used to track additional benefits, such as reductions in maintenance costs. The monitoring system could pinpoint detailed variations in energy and water use so that each improvement practice could be evaluated.

With its focus on energy efficiency and water conservation, the Unilever Ice Cream Plant in Henderson has emerged as a model to other plants around the country.

The team at the Unilever Henderson plant learned several key lessons during these projects:

- Energy savings provide a positive return for the company when implemented successfully.
- Energy-saving projects involve many areas of the plant and are most successful with high-level support and a company champion who overcomes hurdles as they arise.
- Sustainability efforts have the best success when concrete measurements are taken and compared with relevant benchmarks.

These key lessons have been documented and shared with other dairy industry businesses through public programs, internal best practice communications and third-party contractors. The plant has future plans to maintain, improve and build on its commitment to suitability in order to reach its 2020 goals.



The Sustainability Awards are part of the U.S. Dairy Sustainability Commitment, an industrywide effort to measure and improve the economic, environmental and social sustainability of the dairy industry. The award program recognizes dairy farms, businesses and collaborative partnerships for their contributions to healthy people, healthy products and a healthy planet and showcases that sustainability makes good business sense. An independent panel of judges evaluate all nominations based on the program's or project's results as measured by triple-bottom-line success – economic, environmental and social. For more information, please visit USDairy.com/Sustainability/Awards.