Energy Reduction at Chobani

How ICIS enabled Chobani to reduce Energy and Emissions

The Facility

Chobani is one of the largest yogurt manufacturers in the USA, having the largest yogurt manufacturing facility in the world located at their Idaho facility. Chobani have the ICIS platform installed at all of their locations in the USA and Australia. The Idaho facility is a state of the art processing campus that also provides distribution across the USA for both their dairy and non-dairy based products produced there.

The Challenge

Chobani required a sustainability solution that would enable them to identify, monitor and target the largest energy consumers at their facilities, and engage in energy reduction projects to reduce their overall consumption and carbon emissions. This solution needed to be scalable and available to deploy across the organisation as a whole. Due to the size of the sites and the quantity of equipment within the facility to be monitored, the cost of a traditional metered energy monitoring system was deemed unfeasible after a design study. Management needed an alternative to the traditional approach of energy management and process performance review, and so turned to ICIS for support with our patented virtual metering sustainability software platform.

Chobani had a corporate requirement to achieve the following:

- Identify significant Energy Users and Energy Flow at the facilities
- Track equipment performance, batch processing and energy usage
- Continuously monitor, review and track energy and savings opportunities
- Integration of energy and performance data to SAP

The Solution

In order to achieve their goals, Chobani engaged with ICIS in order to utilise our sustainability solution to provide the necessary information and analytical tools that would enable them to quickly and efficiently implement their energy reduction and plant performance program. The ICIS platform was deployed and integrated with their Wonderware Historian to collect data from disparate data sources such as the Process Control System, BMS, and standalone OEM units.

 With the unique ICIS technology, Chobani could:

- Build complete energy maps for all WAGES from a building level right down to the process equipment
- Modal the production process, map equipment performance characteristics and build cycle time reports with batch energy data
- Backfill energy data from existing data sources such as local SCADA terminals
- Grow the system modularly, allowing for the targeted analysis and review of specific energy users
- Integrate data to SAP for managerial dashboards and site reporting

By utilising our approach in leveraging the Wonderware historian for ICIS virtual metering on equipment and process energy flow the facility gained an understanding of their usage and profile over a short period of time covering a number of weeks. The ICIS platform quickly identified users, processes and operational activities that could be changed simply and efficiently to kick off the reduction and performance improvement program.

The Projects

Using the information provided by the ICIS platform, Chobani could confidently propose a number of energy and process improvement projects ranging from large scale capital expenditure ones to free system and work practice changes.

A small example of some of the proposed projects are:

- Chiller Optimisation :   Estimated saving over ~$300K/Year
- Process Improvement: Estimated saving over ~$200K/Year

This sample list of projects gives an idea of the potential savings made possible by utilising the ICIS platform to present the facilities performance information and costs to management in justifying projects.

icis Sustainability Solutions

The Results

The results achieved by Chobani show clearly the benefits of using the ICIS platform as opposed to a traditional metering solution.

- A reduction of over 60% in capital expenditure by using ICIS in comparison to alternative systems
- Zero plant downtime for the installation and configuration of the ICIS platform
- Identification of energy users and projects within weeks of the ICIS deployment
- ICIS identified inefficient processes, operational activities and equipment that was using excessive energy and underperforming in cycle time analysis investigations

The ICIS platform now provides Chobani with a targeted analysis toolset that is easily expanded upon. Weekly energy usage reports and baseline information is generated that enables management to keep an active view on the facility which they now incorporate into their standard facility business meetings.

The Future

Chobani will continue to utilise and expand the ICIS platform at all of their facilities and are now on target to achieve their energy reduction targets through the implementation of various projects. Additional stages will be for the continued expansion of the solution across the facilities to allow for the complete analysis of the organisation and sites that are expanding. The ICIS platform has provided a greater understanding of energy usage and the costs associated with it for the facility. Chobani continues to strive in its continuous improvement programs through the use of various standards and will now be targeting itself with achieving **ISO 50001** certification for energy management, with the ICIS platform acting as its driving force behind the monitoring and analysis required to achieve this goal.

About Us

ICIS have been providing sustainability software solutions since 2007 and are the market leaders in virtual metering technology. For further details visit www.icissofware.com

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Contact Information

Sales:
sales@icissoftware.com

Customer Service:
support@icissoftware.com

Web:
http://www.icissoftware.com

General Enquires:
info@icissoftware.com

Head Quarters:
ICIS Ltd.
Chase House
City Junction Business Park
Malahide Road
Dublin 17   Telephone: +353-1-6873742
Ireland   Fax: +353-1-8771425