

## Measuring the energy performance improvement

# Monitoring and Targeting Energy usage without the need of metering infrastructure

## ICIS Virtual Metering provides the most dynamic and cost effective approach to M&T for Manufacturing Facilities

### The Performance Monitoring Roadblock

Traditional energy monitoring and targeting involves the deployment of physical metering components and their related infrastructure for each WAGES energy type. This process can lead to a negative or delayed approach in implementing a performance improvement program with monitoring at its core, due to the perceived large capital costs and low ROI.

### The ICIS Solution

Utilising existing Automation data from process control and building management systems in conjunction with ICIS technology removes these barriers to measurement. By leveraging process data energy consuming devices, energy maps and usage profiles can be built, with the performance and improvements benchmarked and monitored without the installation of a single piece of hardware.

### The Project Experience

Utilising ICIS technology various clients have adopted our virtual metering approach to great success, using it to target high energy users and track improvement changes:

**Pfizer Ireland:** saved over €500K in metering infrastructure for a facility and were able to identify operational changes to their BMS and Process Systems within a matter of weeks. Backfilling energy data from their control systems provided the baseline of usage that the facility could use to target performance improvements. Utilising ICIS technology these changes could be tracked and managed without any production downtime yielding savings of over 10% in various areas of the business.

**GSK UK:** saved over €600K in metering infrastructure for a facility and were able to track and monitor downstream energy consuming devices like never before. Making the link between manufacturing processes and energy

usage enabled them to review its process scheduling and operations, plus provide the necessary data to justify capital improvement projects such as drive control and chilling optimisation.

**Chobani USA:** saved over \$1M in metering infrastructure for a number of their facilities. Leveraging ICIS technology they now baseline their dairy processes from facility level down to equipment level, which enables them to compare multiple site performances to each other from a corporate level and monitor the improvement of production processes and utility usage with a goal of 5-10% reduction over the next year.



### The ICIS Virtual Metering Approach

- Savings of up to 60% on traditional monitoring and targeting solutions
- The Removal of metering hardware
- Zero Manufacturing Downtime
- Backfill & Baseline Energy Data
- Utilise Existing Infrastructure
- Create the link between production and energy usage

### Key Learning

“Through the use of ICIS virtual metering technology manufacturers can confidently measure and target the energy consumption of all devices without the need of affecting the production process or investing in expensive hardware”

Des Cooling

**icis**

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