

STRATEGIC ENERGY MANAGEMENT WATER PILOT EXECUTIVE SUMMARY

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I.0 EXECUTIVE SUMMARY

This report summarizes the findings from the Strategic Energy Management (SEM) Water Savings for Commercial and Industrial (C&I) customers pilot, a research and program design project for novel program design and outreach strategies piloted through the Emerging Technologies initiative, the findings from which will be used to inform current and future ComEd Energy Efficiency Program offerings. The pilot set out to study how a customer engaging in SEM can expand their scope to pursue water savings through the SEM delivery process. Participation in the pilot was offered to C&I customers in CLEAResult's ComEd and Nicor Gas jointly sponsored Alumni Cohort, as well as to C&I customers participating in SEM cohorts facilitated by Graphet Data Mining and Cascade Energy. Eight customers participated in the pilot. See Table 1 for full customer site list.

Table 1. Customer Site List

Customer	Description	Location
Bunge Lodgers Croklaan	Food processing - palm oil	Channahon, IL
Concordia University	Private University	River Forest, IL
Elgin School District U-46	K-12 school district	Elgin, IL
Huntley Consolidated School District 158	K-12 school district	Huntley, IL
Mondelez, Inc.	Food processing - chewing gum	Loves Park, IL
Northwest Community Hospital	Hospital	Arlington Heights, IL
South Chicago Packaging	Food processing - animal fat	Chicago, IL
SWD, Inc.	Metal fastener processing	Addison, IL

Overview of Activities

Customers in the SEM Water Pilot participated in a series of activities throughout the program, which also complemented the Alumni Cohort SEM program. Table 2 includes an overview of activities completed during the pilot program year; each element is further detailed in section 3.

Table 2. Pilot Overview

Month	Activity
Aug 2020	Recruiting
Sep 2020	Kickoff Workshop
Oct-Dec 2020	Conduct site water audits
Nov 2020	Create SEM statistical water model(s) to track water savings
Jan-Oct 2021	Install submetering, perform data logging, and engineering calculations
Throughout	Use SEM program and coaching to support implementing water savings
Nov-Dec 2021	Final reporting

Water and Electrical Energy Savings Summary

Table 3 displays the total water and energy savings for the pilot cohort. These energy savings are substantiated by SEM or capital water and electricity projects completed during the pilot program year. Total electricity savings are calculated using the Illinois Technical Reference Manual (TRM) Version 10 "Total Water Energy Factor" formula.

Table 3. Savings Summary

Savings Type	Total Savings
Water (gallons)	62,593,935
Electricity (kWh)	313,596 ¹

¹ Calculation based on the *IL TRM* "Total Water Energy Factor." This factor includes 2,571 kWh/MG for water supply based on Illinois energy intensity data from a 2012 ISAWWA study and 2,439 kWh/MG for wastewater treatment based on national energy intensity use estimates."