



Summary

ComEd initially designed the Energy Usage Data System (EUDS) to help building owners and operators accumulate data to benchmark their facilities. Six years later, property managers are using the flexible tool to see how their multifamily buildings are performing, and EUDS is supporting a Chicago benchmarking ordinance.

Company Profile

Commonwealth Edison (ComEd) is a unit of Chicago-based Exelon Corporation, which serves approximately 6.6 million customers. ComEd provides electric service to approximately 3.8 million customers across Northern Illinois, or 70% of the state's population.

Contact

Kevin Bricknell
Energy Data Services
Program Manager
(630) 437-3118
kevin.bricknell@ComEd.com

ComEd's energy efficiency tool for C&I customers supports Chicago's benchmarking ordinance

ComEd's nationally-recognized energy efficiency program for commercial buildings, the Energy Usage Data System (EUDS), has become the gold standard tool for helping increase large building energy and water efficiency in Chicago.

The EUDS, used in conjunction with the U.S. Environmental Protection Agency (EPA) Portfolio Manager, allows building owners and operators to monitor and verify the energy usage of entire buildings. They can verify energy performance and benchmark their usage with comparable buildings. The EUDS tool gives them the information they need to plan for improvements and energy efficiency upgrades.

More than five years after ComEd presented its C&I customers with this unique tool to help them lower costs, the city of Chicago enacted an energy benchmarking ordinance for buildings 50,000 square feet and larger.

The flexible tool also has spread from commercial applications to the multifamily residential market, giving apartment owners and property managers an in-depth understanding of how their buildings are performing.

To relieve building owners and operators of the cumbersome process of accumulating data to benchmark their facilities, in June 2008 ComEd began providing the online tool to measure whole building kWh usage information. Building owners, operators and managers can now compare their buildings' energy performance to that of similar buildings throughout the United States.

The EUDS provides building data from ComEd's billing system and works in combination with the ENERGY STAR online energy management and tracking tool, Portfolio Manager. Portfolio Manager is a free online system for tracking energy and water use and rating the energy performance of buildings.

Benchmark ratings are calculated on a 1-to-100 scale for assessing a building's physical attributes, operating characteristics, location and monthly energy consumption. Buildings that score 75 or higher and maintain a healthy indoor environment are eligible to receive the ENERGY STAR building certification.

EUDS users can view the aggregate energy usage data of commercial, multifamily and industrial buildings and learn:

- Number of tenants that reside in the building
- Whole-building energy usage data per month
- Energy performance ratings through Portfolio Manager

The EUDS is part of ComEd's Smart Ideas® programs, a portfolio of residential and commercial energy efficiency and demand response programs. Launched in 2008, Smart Ideas is funded by rate payers via a line item that appears on customer bills.

The energy usage data tool was presented strictly as a service to customers. "We see it as the gateway to energy efficiency," said Energy Data Services program manager Kevin Bricknell. "Part of this portfolio of programs was to develop a way for these building owners and operators to gain access to whole building energy usage data in an easy way."

Created specifically for C&I customers, EUDS is also now being used as a benchmarking tool for use in multifamily buildings. "That was not its intended use originally, but it has the flexibility and the functionality to expand its use to multifamily," Bricknell said.

EUDS results help customers select energy efficient options

Benchmarking energy usage benefits building owners in many ways, allowing them to:

- Establish a baseline energy performance rating for each property.
- Set goals.
- Prioritize investments.
- Measure and verify financial and environmental improvements.
- Identify lessons learned and apply them across a portfolio.
- Earn recognition for environmental and operational excellence from Energy Star, the Building Owners and Managers Association (BOMA) and other groups.

Using the EUDS in conjunction with Portfolio Manager, customers can:

- Track multiple energy and water meters.
- Benchmark facilities relative to past performance.
- View improvements in weather-normalized source energy.
- Monitor energy and water costs.
- Verify building energy performance.
- Determine energy performance ratings.

Customers with 500 kW of load and above may enroll through their ComEd account manager to start using the online tool. Those below 500 kW may sign up online or through the Energy Data Services team.

The EUDS provides building data, which automatically loads into Portfolio Manager for benchmarking against similar buildings.

Additional features of the tool allow customers to:

- Enter a portfolio of commercial buildings.
- Retrieve automated, end-to-end data and reporting.
- Export usage data for input into Portfolio Manager.
- Secure system and data transmission.
- Create one-time and recurring data requests.
- Determine energy performance ratings.
- Benchmark energy use against other multi-tenant commercial buildings.

“We've seen a huge upgrowth in the use of this tool, to the tune of about 5,000%. Prior to June 2008, we benchmarked about 70 buildings compared to the current 3,700. We've had tremendous growth.”

FYI

Over the past six years, 760 building managers have accessed EUDS and benchmarked more than 3,700 buildings. ComEd has received more than 40,000 data requests.

Customers are encouraged to benchmark their facilities, pinpoint areas in need of efficiency upgrades and take advantage of ComEd's menu of energy efficiency programs. "We encourage them to take a look at the rebate programs we offer ... or make low-cost/no-cost operational changes," Bricknell said.

ComEd collaborated with one of its IT vendors, Calico Energy Services in Bellevue, Wash., to develop the EUDS tool. ComEd and Calico also worked with the EPA's IT group on the interface of data into Portfolio Manager.

As the software developer, Calico Energy Services provides continuing technical support and recently updated the EUDS to work with the latest version of Portfolio Manager. Mad Dash Inc. provides administrative support.

The EUDS was designed to be easy to use and very intuitive for the customer. "Because of our collaboration with the EPA ... the platform is designed for seamless integration of data into the EPA's Portfolio Manager, so the customer needs to set those two systems up to talk with one another. Once they are set up, after the meters are read each month the data automatically flows into Portfolio Manager," Bricknell explained.

The tool extracts the data from the ComEd billing system. This includes kWh information from all the meters, customers and tenants within a specific building based on premise address. All the energy usage is aggregated to provide one monthly number, which is used to benchmark the building in Portfolio Manager.

EUDS supports city of Chicago energy benchmarking ordinance

ComEd's Energy Usage Data System supports the recently enacted ordinance by the city of Chicago. In September 2013, the city enacted an energy benchmarking ordinance for buildings 50,000 square feet and larger, requiring owners and operators to benchmark their facilities using Portfolio Manager. "Recently, we have been involved in partnering with the EPA, the city of Chicago, the Midwest Energy Efficiency Alliance, the U.S. Green Building Council, the DOE and others to provide customers with access to the tool so they can benchmark their facilities to comply with the ordinance," Bricknell noted.

Bricknell considers customer empowerment to be the program's most critical feature. "Our system was built in a way that empowers customers to pull their own data. We give them access to the tool and they receive a unique user name and password that's encrypted for data privacy purposes," he said.

"The customer initially needs 12 months of data to benchmark, but the idea is to continue benchmarking. That's also part of the new city of Chicago ordinance. They want customers to continue benchmarking, so our tool is designed to accommodate that," noted Bricknell.

Although not designed for multifamily applications, the EUDS has found its way into this market. Condo associations, large apartment buildings and others are starting to benchmark their energy use across the country, Bricknell said.

“Property management companies for these buildings on a national level need a way to benchmark,” Bricknell said. “During meetings in Washington, D.C. last fall, I met with people from Housing and Urban Development, the financial community, software developers, utilities and government officials. There was a lot of interest in our tool for use by owners and operators of multifamily buildings.”

Even with national attention and inclusion in the Chicago benchmarking ordinance, program leaders still struggle to increase customer awareness of the tool. “That’s the number one challenge,” said Bricknell.

At the same time, the ComEd team continues to look for ways to make it easy for customers to begin using the tool. “We’ve streamlined our enrollment forms to help customers gain access to their data,” he added.

“It’s fine that you provide customers with a tool they can use themselves,” Bricknell said, “but I think the critical point is to educate them on how to do this. We spend a lot of time and effort not only on increasing awareness of the tool but more importantly teaching customers how to use the tool and addressing any related questions they may have. The whole area of customer support is very important for ComEd.”

Awareness initiatives include traditional marketing such as bill inserts, online newsletters and the newly redesigned website, packed with benchmarking information. Online training, webinars and account managers contribute to education efforts. “The city of Chicago now has its own website and call center to support the benchmarking ordinance and has included links to the ComEd site for greater awareness,” Bricknell said. “We’ve participated in a number of customer training workshops in collaboration with the EPA, city of Chicago, U.S. Green Building Council and Midwest Energy Efficiency Alliance.”

Over the past six years, 760 building managers have accessed the tool and benchmarked more than 3,700 buildings. ComEd has received more than 40,000 data requests. “We’ve seen a huge upgrowth in the use of this tool, to the tune of about 5,000%,” Bricknell noted. “Prior to June 2008, we benchmarked about 70 buildings compared to the current 3,700. We’ve had tremendous growth.”

“Every year the entire portfolio has established goals,” Bricknell explained. “The MWh savings goal goes up incrementally each year. This program supports those goals, which are measured by the portfolio, not necessarily from the Energy Usage Data System.”

Chartwell Inc. is an information provider serving the utility industry with research reports, newsletters, conferences and other products. This report is subject to all copyright and intellectual property laws. No part of this electronic publication may be reproduced, stored in a retrieval system beyond the purchaser’s computer, posted on an intranet or the Internet, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the express, written permission of Chartwell Inc. Site licenses are available through Chartwell membership agreements. Material contained herein is provided without warranties. The publisher is not responsible for any errors or omissions. Mention of products or services does not constitute endorsement.

Philip I. Dunklin, President and Publisher; Scott Johnson, Director of Research; Suzanne Haggerty, Managing Editor - Best Practices;
Doris Yon, Director of Sales and Member Services; Nancy Brand, Director of Operations

Address all correspondence to: Chartwell Inc., 2970 Peachtree Road NW, Suite 250, Atlanta, Georgia 30305
Telephone: (800) 432-5879 or (404) 237-9099; Fax: (404) 237-5334; Email: utility.info@chartwellinc.com; Website: www.chartwellinc.com

Published in the United States of America ©Chartwell Inc. 2014 All Rights Reserved