

CASESTUDY

# Easton Town Center Columbus Ohio, USA

## Central Energy Management of Multi-Site



Easton Town Center, owned by the Steiner Group, is a large mixed-use town center in northeast Columbus, Ohio, United States. It is designed to look like a classic American main street with public spaces, fountains, a street grid, and metered storefront parking.

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01 Easton Town Center

Easton are committed to energy saving and have installed Dyson Airblades in restrooms that use up to 80% less energy than traditional hand dryers, switched over 15,000 bulbs to LED bulbs throughout the property, escalators are equipped with sensory technology to detect traffic and use, reducing the power needed for continuous operation

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“The ABB Cylon® Active Energy solution enables Easton Town Centre shopping mall to provide real time billing information to tenants based on their actual energy and water consumption”.  
Jared Keron, Speer

By adding Active Energy, a real time energy management system, Easton is ensuring that all lighting and mechanical equipment are aligning energy use and operation with actual need. Together, these efforts will result in an annual savings of over 2,211,663 kWh of electricity. That’s enough to power 193 Ohio homes!

With extensive retail space (1.5 million square feet) energy costs are considerable and present real scope to make significant cost savings through monitoring and managing water and electrical consumption.

### Project Summary

- Applications: Active Energy Manager
- Type of Building: 180 Retail Stores across a Shopping Mal
- Meters connected: 520 + meters
- Use: Energy Project Tracking  
Energy Awareness  
Tenant Billing

### Active Energy Solution

Active Energy is connected to 520+ electrical and water meters which monitor the energy consumption of each retail outlet across the shopping mall.

As the meters were already physically connected to existing Building Energy Management Systems across the campus and were either writing to CSV files or an SQL database, it was not necessary to install additional hardware to connect the meters to Active Energy.

Suitable data collection agents were installed remotely to push the data from the existing files and databases to the Active Energy cloud where it is processed and displayed on the Active Energy Manager. This resulted in an easy and efficient integration. In addition the historical data for most meters already existed in a CSV file and this was uploaded to the Active Energy Manager to enable trend analysis from day one.

The Active Energy Manager allows Steiner & Associates to monitor and manage the energy consumption in the landlord areas of the development as well as bill the various tenants for their energy and water consumption and validate any queries in invoices caused by tenants.

The project was managed by ABB Cylon® | Philips Teletrol System Integrator, Speers Mechanical, Columbus, Ohio.

### Solution Benefits

#### Flexibility:

As the site is integrated with Active Energy using SQL and CSV data collection agents, it is possible to add meters to the Active Energy Manager remotely making it a faster, more flexible and cost effective monitoring solution for large diverse campuses.

#### Project Tracking:

The Active Energy Manager can also be used to track the performance of energy saving measures across the buildings in the campus, ensuring the return on investment can be accurately determined for the various energy reduction technologies deployed.

#### Tenant Cost Validation:

The Active Energy Manager allows the billing team to centrally monitor the energy consumed throughout the campus via the user friendly and intuitive interface and validate and substantiate energy costs for each tenant.

Spectral Analysis View | Annual 2014



This is the profile of the building for the whole year showing plant and equipment running 24/7 during some of the colder winter months and improved energy performance in the summer period.

Time Period Comparison | 2011 v 2012



The time period comparison shows a drop in energy consumption of 17% from 2011 to 2012 which is due to more efficient operation of the AHU during store operating hours.

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