Building Energy Analytics and Optimization

What is Dynamic Energy Management?

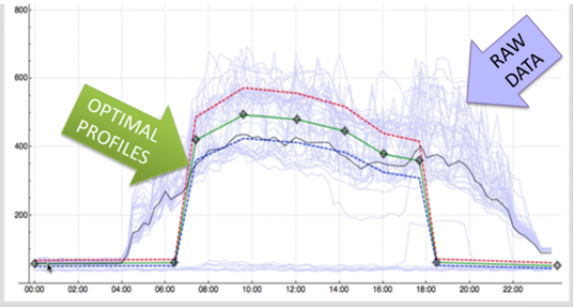
Where Dynamic Commissioning evaluates your controls system for inefficient sequences and mechanical defects, Energy Optimization analyzes your energy profile to dig deeper into hidden causes of waste. Analytics convert the raw data into actionable measures that reduce energy consumption and occupant complaints while increasing system performance.

How is Dynamic Energy Management Beneficial?

Energy Optimization refines a facility's energy consumption by analyzing energy profiles and detecting areas of waste. This deep dive into energy data may be required to;

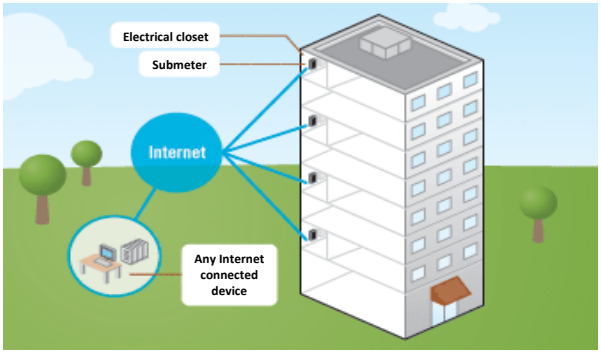
- Allocate energy to different buildings or spaces
- Detect wasteful interactions of otherwise normally operating systems
- Provide occupants with real-time information and instant feedback
- Provide continuous verification of improvements

We baseline your building's current performance and refine control techniques in combination with Dynamic Commissioning to help you achieve a responsive and high performance building.



How is Energy Optimization Applied?

Active Energy Management starts with live data of your energy consumption. Current energy meters can be outfitted to communicate a data stream of interval data that is far more timely and useful than monthly totalized data. Buildings and areas that are not individually metered can be segregated with communicating sub-meters.



Turning Data into Dollars

Data collected in real-time can be analyzed against activities, schedules, occupancy, weather and other variables occurring at the same time. This type of energy patterning will reveal improvement opportunities that may not be obvious without continuous vigilance, and advanced data analytics.

FEMP Federal Energy Management Program

Action	Observed Savings
Installation of meters	0 to 2% - initial impact, but savings will not persist
Bill allocation only	2½ to 5% - improved occupant awareness
Building tune-up and load management	5 to 15% - improved awareness, identification of simple operations and maintenance improvements, and managing demand loads per electric rate schedules
Ongoing commissioning	15 to 45% - improved awareness, identification of operations and maintenance improvements, and continuing management attention

ENERGY STAR