

# Building Performance Tracking Success Story

## The Aventine

Glenborough's Aventine facility in La Jolla, California is a living example of how multiple tools and strategies can be combined to create a successful building performance tracking story. The result: an ENERGY STAR® score of 100, a Leadership in Energy and Environmental Design (LEED) Platinum certification, and HVAC issues addressed *before* they turn into tenant complaints.

Glenborough uses the following tools and services to support its building performance tracking goals:

- **Benchmarking:** ENERGY STAR Portfolio Manager to track progress towards energy savings goals and to prioritize energy-savings investment across their portfolio
- **Third Party Utility Bill Analysis Services:** Contract with Constellation Energy to analyze monthly utility bills and to provide alerts when usage is off-target
- **Automated System Optimization:** Optimum Energy's OptimumMVM services track chilled water plant performance and automatically optimize settings based on load
- **Building Automation System (BAS):** Alerton BAS to track key HVAC system performance indicators and follow up on alerts reported through other performance tracking tools

The combination of these tools enables Glenborough to 1) directly track system performance and 2) identify anomalies in energy use, thereby covering the two key elements of building performance tracking.

Performance tracking tools do not guarantee improved building performance on their own. Equally important are the management strategies that support the use of tools.

### What is Building Performance Tracking?

The process of monitoring facility data on a regular basis to continually improve building energy performance. The four steps below detail the fundamental process for tracking, analyzing, diagnosing, and resolving issues with heating, ventilation, and air conditioning (HVAC) and lighting systems.

1. Collect data and track performance
2. Detect performance issues
3. Diagnose issues and identify solutions
4. Fix issues and verify results

Building performance is tracked on an ongoing basis and incorporated as part of standard processes.



The Aventine in La Jolla, CA

"Decisions made now will be with the building for five, ten, maybe even twenty-five years."

— Carlos Santamaria, LEED AP  
Director of Engineering, Glenborough, LLC

### Quick Facts

FACILITY NAME:	Aventine
OWNER:	Glenborough, LLC
WEBSITE:	www.glenborough.com
LOCATION:	La Jolla, CA
TYPE:	Multi-tenant commercial office
GROSS SQUARE FOOTAGE:	250,000
ENERGY USE INDEX:	26.4 kBtu/ft <sup>2</sup>
ENERGY STAR® SCORE:	100
LEED RATING:	Platinum
PERFORMANCE TRACKING STRATEGIES:	
	■ Energy Benchmarking
	■ Utility Bill Analysis
	■ Building Automation System (BAS)
	■ Automated System Optimization

Glenborough contracts out facility management to ABM Industries and gives staff the resources, time, and training needed to identify performance anomalies, diagnose the root cause, fix the issues, and verify the energy savings and improved performance on a regular basis. As a result, building performance is now at the core of facility operation, encompassing:

- **Culture.** Glenborough's top down support for building performance tracking helps make it a company best practice. Management promotes energy awareness through competitions, open lines of communication, and creative autonomy for operators to find and fix performance issues.
- **Financial Support.** Glenborough has a strong track record of supporting investment in building performance. Operators receive bonuses and annual recognition to reward best practices.
- **Accountability.** Quarterly and annual reports from Optimum Energy to Glenborough highlight facility events and prioritize areas for improvement. This reinforces accountability and places energy performance alongside other traditional business health indicators.
- **Operator Training.** Glenborough hosts an annual training for operators on energy and system performance topics. These efforts keep staff current on the latest tools, equipment, and processes necessary to maintain peak operation.

## Lessons Learned

Glenborough's Aventine facility learned lessons implementing building performance tracking tools that are widely applicable to organizations with similar objectives:

- Achieve buy-in and participation from corporate management and site engineers.
- Use third-party providers for energy management services if in-house engineering time is limited.
- Maintain awareness of facility operation by making the viewing of dashboards and reports part of daily operations.

Glenborough's Aventine facility is a shining example of using Building Performance Tracking to increase Net Operating Income (NOI) and enhance asset value, thereby maintaining competitiveness in the highly challenging multi-tenant commercial real estate market.

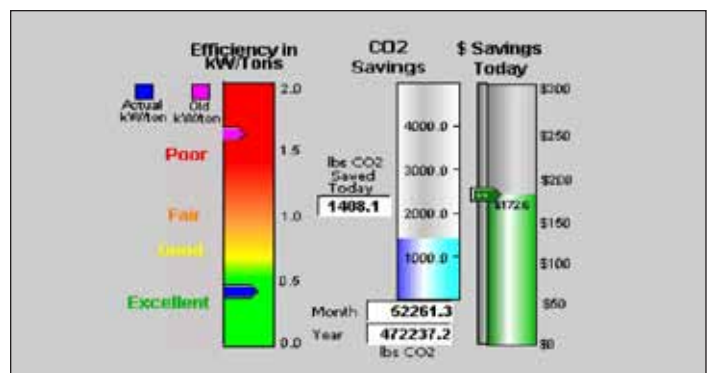
## Building Performance Tracking 101

Elements of a supportive working environment:

- Clear goals
- Time and resources to utilize tools, analyze identified issues, and perform corrective action
- Sufficient training on tool capabilities
- Incorporate energy performance metrics in management reporting
- Communication among stakeholders
- Support from facility managers, building operators, financial decision-makers and senior management
- Direct digital controls and building-level energy meters
- IT support and server storage

"Information must be actionable.  
Make the information work for you."

— Carlos Santamaria, LEED AP  
Director of Engineering, Glenborough, LLC



Glenborough tracks chiller efficiency, CO<sub>2</sub> and cost savings with its OptimumMVM tool



## About this Success Story

This case study was developed by the California Commissioning Collaborative (CCC) with funding from the California Energy Commission's Public Interest Energy Research (PIER) program.

## For more information, contact the CCC at

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View more case studies and download a free copy of **The Building Performance Tracking Handbook** at <http://www.cacx.org/PIER/handbook.html>