

Abcam Transforms Building Operations with Verdigris

Abcam Limited is a biotechnology company specializing in the development and supply of high-quality research tools for the life sciences sector. Founded in Cambridge UK, Abcam is a subsidiary of Danaher Corporation with revenues of approximately \$400M and nearly 2 000 employees worldwide.

The Challenge

Abcam's 100,000 sq. ft. Waltham, MA facility—home to manufacturing, R&D, and lab operations—needed greater visibility into energy use and system performance.

Reliable power was critical to maintaining operations and controlling costs, but existing tools, including legacy meters and manual reviews, lacked the real-time, high-resolution data needed for proactive management.

The Approach

In December 2024, Abcam selected Verdigris' market-leading AI Energy Intelligence platform for its ease of implementation, modern architecture, and high-quality data insights.

Five Energy Data Gateways and more than 70 current transformers (CTs) were installed across critical loads. Within a month, the team was accessing real-time insights via the Verdigris analytics dashboard.

The platform enabled the Facilities Operations team to:

- **Analyze energy usage patterns** at switchboards and distribution panels by time of day and operational activity.
- **Monitor power capacity** to identify panel overloads and validate backup generator readiness.
- **Mitigate operational risks** by detecting major power fluctuations and evaluating how breaker or panel modifications could affect uptime.



Location

100,000 sq ft facility supporting biotech manufacturing, R&D, and lab operations

Highlights

- Enabled real-time visibility into energy use and capacity
- Improved operational decision-making across systems
- Reduced energy costs and increased reporting efficiency

The Results

The Verdigris implementation resulted in significant improvements:

Increased Efficiency: automated generation and email delivery of weekly energy data reporting saves significant time and effort.

Reduced Energy Costs: Facility operating cost reduction through improved efficiency and resource utilization.

Improved Decision Making: The integrated platform enabled the customer to scale their operations smoothly and efficiently.

What's Next?

Following the success at the Waltham facility, Abcam plans to extend the Verdigris platform to additional sites in Cambridge, UK, and other U.S. locations. This expansion reflects the strategic value recognized by facilities and engineering teams, and their commitment to scaling intelligent, energy-efficient operations globally.

"The Abcam-Verdigris partnership has been transformative. The Verdigris platform has given an unprecedented level of visibility and helped uncover valuable energy insights to drive reliable, cost-efficient operations. We now have clear insight into our energy use and are leveraging this data to develop our sustainability goals."

*– Adam Ovoian, Sr. Manager,
Facilities Operations, Abcam*