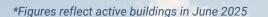


# **Building Case Study**

## Building Sustainable Performance in Life Science with the BOMA 360 Program

The BOMA 360 Performance Program is helping life science buildings across the U.S. elevate operational excellence, sustainability, and community impact. With participating properties in the 360 Program, on average, exceeding 230,000 square feet, these facilities benefit from the program's framework to meet industry best practices.\*





Life science is growing at record speeds with no signs of slowing down. Towards Healthcare, for example, found that the global life science market is projected to reach about US\$ 269.56 billion by 2034, expanding at a compound annual growth rate (CAGR) of 11.82%. Currently, the market is expected to grow to \$98.63 billion this year alone. This shows promising signs for life science buildings and their potential, however, there is always room to improve their operational efficiencies and building experience.

According to <u>ThermoFisher</u>, laboratories use ten times more energy than offices and also use four times more water than offices. Due to this consumption, many life science buildings are looking for ways to reduce their waste and improve their sustainability initiatives as a whole. As a result of these strategies, they will not only promote a greener facility but improve occupant satisfaction and health too.

This case study examines how two life science facilities used the BOMA 360 Performance Program to help them achieve their goals. The 360 program is a globally recognized standard that highlights operational distinction across six critical areas: building operations and management, life safety and security, training and education, energy, environmental/sustainability and tenant relations/community involvement. Attaining this designation not only demonstrates high performance—it enhances your property's value and reputation within the industry. The buildings below demonstrate how they utilized BOMA 360's program as a valuable framework for achieving energy efficiency, invaluable upgrades and tenant satisfaction.



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#### **Sustainability Performance Results**

At **9605 Medical Center Drive**, in Rockville, MD, (developed by Spaulding & Slye and New Boston Fund, in collaboration with Johns Hopkins University on their Montgomery County Campus) they improved their energy performance by installing LED lights, submeters, upgraded their environmental management system (EMS), and using their utility management platform and Energy Star to maintain efficiency. They also reduced waste through the use of their mulching mowers, which provide nutrients, and



require less fertilizer to reduce landfill waste. Additionally, when they do plant maintenance, they send the prunings to a recycle center rather than sending the debris to a landfill. Restroom fixtures are all motion activated to avoid waste, and all plumbing was replaced in 2020 with water saving devices.

The **Boren Labs** at **1930 Boren Avenue** in Seattle, WA (managed by Cushman & Wakefield) discusses how they achieved dramatic results with their sustainability initiatives. As part of the 360 program, their team discovered a notable 16% decrease in water usage over previous years. These savings were met by fine-tuning the HVAC setpoint, schedules and equipment settings. They also implemented a new, real-time waste stream auditing service by partnering with an industry sustainability strategy consultant, which was created to better track their building's waste and recycling. This service provides data-driven insights to manage and reduce the building's waste, moving beyond a single yearly audit to continuous monitoring and improvement.

### **ROI From Upgrades or Improvements**

One of the major improvements to the **Boren Labs** HVAC system was the Chiller Bypass Valve Relocation project. Its implementation resulted in less stress on the HVAC chiller system and increased energy efficiency. These improvements are expected to produce savings by reducing repair and maintenance costs, as well as utility expenses.

Boren Labs also installed four new EV chargers in the underground parking garage with plans for an incremental increase in the coming years, in order to meet the growing demand for green building amenities. Implementing green building amenities was a priority for the **9605 Medical Center Drive** building as well. For instance, their LED lighting upgrade was a major improvement, and when the time comes for the light bulbs to be disposed of, they are crushed and brought to the Montgomery County recycle center to be disposed according to jurisdiction requirements.

Beyond recycling initiatives, **9605 Medical Center Drive** is committed to sustainability, per their Environmental

Sustainability Policy, which states: "as part of our ongoing efforts to reduce the environmental footprint of our operating properties, we continue to pursue measures aimed at reducing water consumption and increasing waste diversion, as appropriate (click here to read their full policy.)" Sustainability and tenant satisfaction go hand in hand. By providing healthy environments and amenities such as the EV charging stations by **Boren Labs** or LED-controlled lighting, these initiatives improve the building's energy efficiency and occupant comfort simultaneously.

#### **Community Involvement and Occupant Satisfaction**

**Boren Labs** received positive feedback from tenants regarding a multitude of different projects and initiatives. The implementation of a new styrofoam recycling program, for example, received positive praise. Additionally, the team coordinates monthly events ranging from food trucks and catering to rooftop happy hours and trivia nights. They partner with their tenants to actively support local communities year-round through food and gift drives, and promote environmental sustainability by hosting bi-annual electronics recycling events in celebration of Earth Day.

9605 Medical Drive hosts several tenant events annually as well, including bike to work days, yoga class series and food truck events to name a few. Raising money for charity is another essential part of their community events. For instance, they ask their service partners to contribute to their charitable fundraising to notable programs such as the Tech Council of Maryland for the Alexandria Scholars, Nourish Now and the Canine Warrior Connection. They've raised \$75,000 for those programs in just a couple of months. Over the years they were able to provide over \$450,000 worth of scholarships to dozens of deserving students. Community involvement is essential for not only garnering positive engagement among occupants, but also for adding vitality and purpose to your building.

These two facilities demonstrate that comprehensive building performance programs can deliver measurable improvements across environmental, financial and community factors. Their success with the BOMA 360 Performance Program serves as a roadmap for sustainable development that benefits both the bottom line and the broader community.

Coming up, we'll continue exploring how the BOMA 360 program is positively impacting other building types in our article series. Keep an eye out – and <u>click here</u> to learn more about starting your application today.