

Sustainability Profile:

Bay Center Offices



Property name: Bay Center Offices

Location: Emeryville, California

Building type: Class A Office Complex

Building size: 128,499 sq. ft. Building A
(6425 Christie Avenue)

128,502 sq. ft. Building C
(6475 Christie Avenue)

Constructed: 1987-1988

Acquired: 2005

Property manager: Harvest Properties



Property Overview

The Bay Center Offices Corporate Office Park in Emeryville, CA features unobstructed views of the San Francisco Bay and the Berkeley Hills. It includes two five-story office buildings and one three-story office/lab building. They have a total of 340,621 square feet of Class A office space. In 2007, Principal Real Estate Investors acquired the property, which is currently managed by Harvest Properties. The property management and ownership teams work together to embody the city of Emeryville's sustainability vision: "sustainability and innovation, with respect for the past." This vision promotes a lifestyle with low ecological impact to the climate and the natural environment. Recently completed capital upgrades and operational management approaches to maintain Class A tenant standards while reducing energy consumption and limiting costs.

Improving Sustainability

Following an assessment in 2013, the property team implemented a set of energy-conservation measures that included significant upgrades to the exterior and the parking lot lighting, and continual adjustment of EMS set points to reduce energy consumption while balancing occupant comfort levels. These improvements reduced the property's energy consumption by over 50%.¹

Bay Center Offices utilized the local utility's retrocommissioning strategies to add new rooftop controls and control strategies. Retrocommissioning is a process that improves how a building's equipment and systems work together. The property team has focused on ensuring equipment run times have been verified and are operating as programmed, without manual overrides. The property team adjusted elevators that had been automatically dispatching and fixed compressors that had been running throughout the night.

Bay Center Offices has one boiler in each building that operates from 5 a.m. to 7 p.m. on Monday, and 6 a.m. to 7 p.m. Tuesday through Friday. The EMS was programmed to respond to outside air temperatures, which allowed the engineering staff to turn off the boiler from April/May through October/November without complaints from tenants.

Perimeter and interior variable air volume (VAV) boxes condition the common areas and tenant spaces. The property team recently focused on repairs to underperforming and undersized VAV boxes. These repairs are a main contributor to the property's energy savings. Additionally, the engineering staff has taken to running the building "on the edge." This means that if a tenant submits a warm complaint, the first move from the engineering staff is to verify proper operation of the VAV box. After that, they will adjust the building's supply-air set point or investigate the duct static reset.

In April 2015, a severe water shortage forced California governor Jerry Brown to issue an executive order mandating substantial water-use reductions across the state. The Bay Center Offices team has identified opportunities to reduce water consumption through landscaping, irrigation projects, and retrofitting tenant fixtures. The team installed a rain sensor to automatically turn off irrigation systems when it is raining. They also began replacing portions of turf with drought-resistant plants and turned off the exterior water fountain feature. To further assist in water reduction, the team reduced flush rates on tenant plumbing fixtures. In the future, the team plans to replace all the fixtures and add automatic-flush valves.

Bay Center Offices first attained LEED certification for existing buildings in 2010. The team garnered LEED Silver level for Bay Center through focusing on the materials & resources and indoor environmental quality credit categories. During a 2015 recertification, the team's efforts with Bay Center Offices earned it the LEED Gold certification for existing buildings. Since 2009, the property team has monitored energy performance using EPA's ENERGY STAR® Portfolio Manager, and has earned the ENERGY STAR label every year.

Key Facts, Awards, and Recognition:

- LEED Existing Buildings: Operations and Maintenance (EBOM) Gold (initially LEED EBOM Silver in 2010 and recertified in 2015)
- Completed ASHRAE Level II audit (2014)

Building A (6425 Christie Avenue):

- Current ENERGY STAR score: 96
- ENERGY STAR Certification: 2009-2016
- Energy-use reduction 1-year: 15.8%
- Energy-use reduction from baseline: 50.2%
- Water-use reduction 1-year: -3.9% (increase)
- Water-use reduction from baseline: 16.3%

Building C (6475 Christie Avenue):

- Current ENERGY STAR score: 97
- ENERGY STAR Certification: 2008-2016
- Energy-use reduction 1-year: 28.9%
- Energy-use reduction from baseline: 54.9%
- Water-use reduction 1-year: 31.3%
- Water-use reduction from baseline: 47.6%

Sustainability Initiatives:

The property team utilized the following strategies to reduce energy, water, and waste and improve the environmental impact of Bay Center Offices:

- Reduced occupants' conventional commuting trips by 37% through utilization of public transportation
- Implemented a building exterior and hardscape management plan, following sustainable best practices
- Metered building and subsystem water performance to understand consumption patterns and identify opportunities for water savings
- Reduced potable water consumption for cooling tower equipment through effective water management
- Conducted an ASHRAE Level II energy audit and implemented low-cost and no-cost energy conservation measures
- Implemented an ongoing commissioning plan
- Monitored and controlled the major building systems including heating, cooling, ventilation and lighting with a computer-based building automation system (BAS)
- Documented the emission reduction benefits of the building efficiency measures
- Met the sustainable purchasing requirements for 60% of ongoing consumables purchased by the tenants during the performance period
- Met the sustainable purchasing requirements for 40% of the electric-powered equipment purchased by the tenants during the performance period
- Purchased low-mercury, long-life lamps to reduce the overall average mercury content in lamps to less than 90 picograms/lumen-hour
- Audited waste stream to help reduce waste generated by building operations and occupants
- Diverted more than 50% of the ongoing consumables waste stream
- Reused or recycled over 75% of the electronic waste stream
- Implemented an indoor air quality management program based on the EPA Indoor Air Quality Building Education and Assessment Model
- Provided 30% more outdoor air ventilation than required by ASHRAE 62.1-2007 minimum
- Reduced particulates in the air distribution by using filtration media with a minimum efficiency reporting value (MERV) of 13
- Surveyed occupants on thermal comfort, acoustics, indoor air quality, lighting levels, and building cleanliness
- Implemented a high-performance green cleaning program for all janitorial needs
- Implemented an integrated pest management program for indoor and outdoor pest control



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Disclosures

¹Since baseline in 2008

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