



Office of Administration
and Resources Management

Greening the Caribbean: EPA's Region 2 Puerto Rico Office



For more than three decades, the U.S. Environmental Protection Agency has operated an office in Puerto Rico. In the mid-1980s, EPA Region 2 created the Caribbean Environmental Protection Division (CEPD) to expand the capacity of the Puerto Rico office and to serve as the federal government's primary liaison on environmental issues within Puerto Rico and the U.S. Virgin Islands.

When the CEPD office lease was up for renewal, EPA's Office of Administration and Resources Management worked with EPA's Region 2 to locate a building space that could showcase green building strategies and demonstrate how local citizens could incorporate sustainability, energy efficiency, and environmental performance into their lives. The new office is located in City View Plaza, in a previously unoccupied top-floor space of a recently built multi-tenant office building in the city of Guaynabo.

Vital Statistics

Facility Type: Office

Construction: Tenant build-out

Location: Guaynabo, Puerto Rico

Size: 22,291 rentable square feet (7th floor)

Occupancy: 62 EPA employees

EPA Occupied: Since February 2012

Going for Gold With Energy Savings

From the ceiling to the floor, the CEPD's tenant improvements were strategically designed to minimize environmental impact while maximizing sustainable practices, productivity, and energy efficiency. The CEPD used the LEED® for Commercial Interiors 2009 rating system as a framework to drive the environmental performance of the space and is striving to receive a LEED Gold rating. LEED, or the U.S. Green Building Council's Leadership in Energy and Environmental Design program, is a nationally accepted green building certification. If achieved, the CEPD office space will become the first LEED for Commercial Interiors project in Puerto Rico to attain LEED Gold.

To ensure energy-efficient operations in this office, EPA installed two new, ENERGY STAR® qualified air conditioning units to meet the extra cooling needs required in the network and security rooms. The units include combined ion/media filters that remove dust, spores, and odor from the air. Additionally, all eligible equipment and appliances (e.g., computers, monitors, scanners, printers, and refrigerators) installed are ENERGY STAR qualified. EPA also purchased renewable energy certificates (RECs) to offset 100 percent of the CEPD's electricity use. The RECs are Green-e certified, which means they have been verified to support specific renewable energy projects.

EPA reduced energy use associated with lighting the CEPD seventh-floor office by incorporating daylighting strategies, installing energy-efficient overhead lighting, and installing daylight and occupancy sensors. Translucent glass in office partitions and workstation panels, along with light-reflective colors and higher ceilings at exterior window walls, are used to enable natural light to reach further into interior spaces. Daylight sensors on 50 percent of the lighting load dim ceiling fixtures when sufficient sunlight enters the space. Overhead lighting was designed with a combination of energy-efficient T5 fluorescent and LED fixtures to achieve a lighting power density of 0.85 watts per square foot, 21 percent less than the standard building code allowance. Occupancy sensors regulate LED task lighting in workstations and 100 percent of the overhead lighting, turning lights off when occupants are not present.



Sustainable Interior Features

Workstation furniture such as panels, desks, chairs, and shelving is Business and Institutional Furniture Manufacturer's Association (BIFMA) "level 2" certified. BIFMA's multi-attribute, third-party certification program evaluates the material selection, energy use, human ecosystem health impacts, and social responsibility associated with the manufacturing of office furniture. The workstations are also certified under the Scientific Certification Systems (SCS) Indoor Advantage™ Gold program, which sets maximum thresholds for volatile organic compound (VOC) emissions.

Each workstation is outfitted with computer equipment purchased using the Electronic Product Environmental Assessment Tool (EPEAT), a system that helps buyers select computers and other electronic equipment based on energy efficiency and other environmental factors. All of the CEPD's computers are rated EPEAT Gold.



High-efficiency toilets, urinals, faucets, and a showerhead reduce water consumption by 36 percent compared to conventional models. Newly installed carpeting meets the Carpet and Rug Institute Green Label Plus criteria, contains at least 29 percent recycled content, and is 100 percent recyclable. Non-carpet flooring is FloorScore® certified by SCS to comply with VOC emissions criteria.

The CEPD's reception desk is made of Blue Mahoe, a native Puerto Rican tree species, which supports the local economy and reduces the fuel and emissions associated with shipping material from far away. The Blue Mahoe used to make the desk originates from a forest that is currently implementing sustainable forestry practices.



Other Green Features

The building has a 150,000-gallon cistern to capture rainwater and air handler condensate. This water is then used to meet 100 percent of the building's irrigation needs. To promote alternative transportation, EPA installed bike lockers and a shower stall for cyclists to use. A bus stop is located across the street from the building's main entrance.

During the office renovation period, EPA recycled 56 percent of its construction debris and diverted nearly 45,000 pounds of furniture used in its former office space from landfills by donating it to other federal and local agencies in the Caribbean. During construction, contractors followed an Indoor Air Quality Management Plan that required low-emitting materials, ventilation system protection, regular cleaning, and moisture and mold prevention.

Securing Sustainability for the Future

Ensuring that EPA continues its commitment to environmental stewardship throughout its tenure at City View Plaza, the CEPD developed an environmental management system to reduce its environmental impacts and increase its operating efficiency. EPA also worked with the lessor to develop a Building Operations Plan that addresses solid waste management, green cleaning, integrated pest management, and indoor air quality management for the space.

