

San Francisco Public Utilities Commission Headquarters "The Greenest Urban Building in the United States"

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Abstract : San Francisco Public Utilities Commission's Headquarters was listed in the 2013-American Institute of Architects Committee of the Environment (AIA COTE) Top Ten Green Projects. This 13-story, 277,000-square-foot building, housing more than 900 of the agency's employees was completed in June 2012. It was designed to achieve LEED Platinum Certification and boasts a plethora of green features to significantly reduce the use of energy and water consumption, and provide a healthy office work environment with high interior air quality and natural daylight. Key sustainability features include on-site clean energy generation through renewable photovoltaic and wind sources providing \$118 million in energy cost savings over 75 years; 45 percent daylight harvesting; and the consumption of 55 percent less energy and a 32 percent less electricity demand from the main power grid. It uses 60 percent less water usage than an average 13-story office building as most of that water will be recycled for non-potable uses at the site, running through a system of underground tanks and artificial wetlands that cleans and clarifies whatever is flushed down toilets or washed down drains. This is one of the first buildings in the nation with treatment of gray and black water. The building utilizes an innovative structural system with post tensioned cores that will provide the highest asset preservation for the building. In addition, the building uses a "green" concrete mixture that releases less carbon gases. As a public utility commission this building has set a good example for resource conservation-the building is expected to be cheaper to operate and maintain as time goes on and will have saved rate-payers \$500 million in energy and water savings. Within the anticipated 100-year lifespan of the building, our ratepayers will save approximately \$3.7 billion through the combination of rental savings, energy efficiencies, and asset ownership.

Keywords : energy efficiency, sustainability, resource conservation, asset ownership, rental savings

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