



## Fact Sheet: Headquarters Building

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The Joe Serna Jr. Cal/EPA Headquarters Building is Sacramento's largest high rise. A public/private partnership between the City of Sacramento and Thomas Properties Group, the building was designed and built using sustainable, yet economically competitive technologies and materials. The building is the first state project to participate in the U.S. Green Building Council's Leadership in Energy and Environmental Design for Existing Buildings (LEED-EB) Pilot Program. In addition Cal/EPA was the first building in the nation to be certified at the Platinum Level, which is the highest designation in the LEED program.

### GREEN CONSTRUCTION:

- The building team evaluated "life-cycle" pollution associated with the manufacture, transport, construction, use, maintenance, and disposal of materials and workspaces to minimize environmental impacts.
- Spackle and paints used in the building eliminated volatile organic compounds – reducing air pollution.
- Expansive use of glass also reduces energy use by providing natural ambient lighting in more workspace areas.
- Low-flow urinals use less than one-half gallon per flush.
- Wood paneling in the lobby and other public areas is made from sustainable Eucalyptus which is plentiful, fast-growing and its harvest does not damage the environment.
- Soda bottles, diaper tabs, sunflower seeds, structural steel, and other recycled products have been transformed into construction materials, carpeting, acoustic panels, auditorium seating, cubicle surfaces, modular systems, signage, and dozens of other components and furnishings throughout the building.

### ENERGY EFFICIENCY:

- The HVAC system allows for on-demand fresh air, flushing internal air and cooling with outside air. HVAC energy efficiency measures save electricity. The building's energy costs are \$1.15 per sq ft. lower than typical buildings of the same size.
- Cal/EPA is an Energy Star building, using lighting controls, office and desktop motion sensors, and high efficiency lamps. Our latest Energy Star score rating was 99/100.
- Solar panels located on the mid-level rooftop generate up to 55,000 kilowatt hours of electricity per year – producing enough electricity to power 10 homes for an entire year. Other electricity used to power operations is purchased from 100% renewable energy sources.
- Building the long axis of the building East-West saves 6% total energy versus a building that is built North-South.

### RECYCLING:

- An aggressive recycling program results in approximately 200 tons of diverted recycled materials each year, dramatically reducing the building's waste costs.
- Carpet tiles, made from 52% recycled content, are used exclusively throughout the building to allow for easy and efficient replacement. Their installation was made without wet glue – eliminating volatile organic compounds from entering the air.
- 100% recycled content ceiling tiles will be recycled when its useful life is over.
- 90% of the building's structural steel is recycled.
- Use of cloth waste bags, that are laundered onsite, instead of plastic bags for certain waste, reducing the amount of plastic bags sent to the landfills.

# CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

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The Joe Serna Jr. Cal/EPA Headquarters Building is the first common home for the state's Environmental Protection Agency and its five boards, departments and offices (BDO). For the first time specialists in air, water and land protection are housed together and can consult and collaborate continuously as cross-discipline environmental protection becomes more relevant and important.

## INTERNAL PROGRAMS:

- More than 80% of employees use alternative modes of transportation including public transportation, car/vanpooling, cycling and teleworking.
- Cal/EPA is a charter member of the California Climate Action Registry, and has begun actively measuring the building's greenhouse gas emissions.
- An indoor air quality plan, that involves janitorial and maintenance practices, uses non-toxic and biodegradable cleaning products, and an integrated pest management plan.

## AMENITIES:

- 25 electric vehicle charging stations in the adjacent parking structure.
- Fitness center, including a weight room and aerobics room, completely funded from employee donations.
- Bicycle storage room contains approximately 150 secured and monitored bike spaces. There are also 28 outdoor bike lockers, located on the north side of the building.
- Child development center that can accommodate 60 infants, toddlers and children, and provides priority enrollment and reduced tuition costs for building employees.
- A café offering food service along with biodegradable, recyclable utensils.
- Cal/EPA Library provides print and electronic resources including books, journals and other periodicals, research reports, and reference materials on environmental topics.
- The Second Chance Store contains a mix of office supplies and equipment that was once underutilized or destined for disposal. There is no cost to retrieve items from this area, since all of its items were purchased with State Funds.
- Electronic Imaging Unit transfers paper documents onto electronic media for document storage or distribution, or for posting on the web. Large projects such as file cabinet conversion, binding projects and the ability to electronically enhance documents in-house saves resources, while protecting our natural resources.

## COST SAVINGS:

- Green Construction measures cost \$2-3 million, less than 2% of the entire cost of construction. The documented cost avoidance from unused energy and water, and diverted waste in the first three years was \$4.8 million. Savings are expected to exceed \$40 million over the life of the 25-year lease – that's 24% of the construction costs.
- A multitude of operational processes save the State money each year. Such projects include the use of cloth waste bags instead of plastic bags for certain waste (saving the building an approximate \$15K each year) and recycling the building's high volume of mixed and white paper (offsetting the waste removal costs by an average of 50%).
- In 2011 the building was enrolled in SMUD's campus meter reading program. The program allows the building's individual SMUD accounts to be served from a common address and provides for hardware combination of the accounts to a single load shape for billing purposes. This program, versus traditional meter reading, saves the building \$36,000 per year in various service charges.