



Agenda Item 10b

April 14, 2015

ITEM NAME: Update on the Annual Operational Sustainability

PROGRAM: Operations Support Services Division

ITEM TYPE: Information

EXECUTIVE SUMMARY

CalPERS has proven to be a leader in sustainable business practices and over the last several years has implemented many initiatives in support of this objective. CalPERS strives to meet and exceed targets outlined within the Governor's Executive Orders B-16-12 and B-18-12 pertaining to green building practices and energy and water efficiency improvements.

STRATEGIC PLAN

While not a specific objective or initiative within the 2012-17 Strategic Plan, this item supports Goal B – Cultivate a high performing, risk intelligent and innovative organization while also supporting the CalPERS Core Values of Accountability and Integrity. This item is part of the regular and ongoing workload of the Operations Support Services Division.

BACKGROUND

In 2012, Governor Brown issued Executive Orders B-16-12 and B-18-12 which set aggressive new sustainability standards for the greening of State buildings and the efficient use of energy, water and materials. Additionally, in 2014, Governor Brown issued a drought State of Emergency Declaration outlining immediate water reduction measures and the Department of General Services released Management Memo 14-09 which specified energy and operating efficiencies in data centers and server rooms. The topic of sustainability continues to grow with best practices, and innovative ideas that have broadened our approach to sustainable operations at CalPERS. Over the last few years, a variety of initiatives have been implemented in support of this objective.

ANALYSIS

The activities outlined below provide highlights and accomplishments CalPERS has achieved since the April 2014 presentation and agenda item.

Leadership in Energy and Environmental Design (LEED):

- The LEED green building certification program, administered through the United States Green Building Council (USGBC) and Green Building Certification Institute (GBCI), is the nationally accepted benchmark for the design, construction, and operation of green buildings.

- The LEED certification process is a point system that determines the environmental merits of a building. In 2014, CalPERS recertified their Headquarters buildings to be recognized as high-performance green buildings that operate in an environmentally responsible manner and in coordination with the Governor's Executive Order B-18-12.
- Lincoln Plaza East/West, which was originally certified at the Gold level under LEED New Construction when it was built in 2006 and was certified at the Platinum level under LEED Existing Building Operations and Maintenance (EBO&M) in May 2014. In August 2014, Lincoln Plaza North was recertified LEED EBO&M at the Gold level.
- In order to achieve the LEED Certifications, operational efficiencies and improvements in the areas of lighting, plumbing and mechanical systems were made. Some specific examples include: reduced parking garage lighting by 50 percent, revised operating schedules for the escalators, replaced high wattage lamps in the mechanical and support rooms, and the result of our alternative commuting transportation survey.
- Lincoln Plaza South data has been submitted to GBCI for certification. We expect to receive a minimum rating of Silver later this year.

Water Conservation and Initiatives:

- In January 2014, Governor Brown issued a drought State of Emergency Declaration as California struggles with historic low record rainfall. The Governor ordered state agencies to take action and prepare for emergency conditions, advancing the previous 2020 reduction goal to reduce water consumption by 20 percent compared to a 2010 baseline.
- In response to the drought declaration, CalPERS instituted many water saving measures including but not limited to: installed new low flow plumbing fixtures in Lincoln Plaza South (already in North and East/West), discontinued after-hour air conditioning requests, stopped watering the turf/lawn areas and converted from traditional spray irrigation to drip irrigation for the plants and trees. These measures resulted in a 30 percent reduction from January through December 2014 (saving more than 9 million gallons) compared to water usage in 2013 for the same months.
- As a result of the water restrictions, the turf/lawn areas were removed and a phased in drought tolerant landscape plan has been developed to replace the turf/lawn in the areas on the 3rd floor terrace of Lincoln Plaza North and along R Street. The design will include native and drought tolerant plant materials and the use of sustainable materials

such as recycled glass for a walking path. Normal water usage for the turf areas was 1.4 million gallons/year. We anticipate a 50 percent or greater reduction with the new drought tolerant landscape, resulting in a savings of 700,000 gallons per year.

- Another exciting new water saving measure is the cooling tower water recapture project. This innovative system will divert accumulated water from the cooling towers, which would normally go into storm drains, and use that water instead for landscape irrigation purposes. The holding tanks have been installed in the garages and feasibility models indicate a nearly 10 percent reduction in water use compared to our 2010 water consumption baseline. Testing is currently underway.

Energy Conservation and Initiatives:

- While the Lincoln Plaza Headquarters building square footage has increased by 65 percent since 2003, the total energy use per square foot has decreased by 35 percent. The Department of General Services (DGS) has directed 2003 as the baseline energy comparison year for all departments.
- CalPERS purchases environmentally preferable renewable energy credits for the Lincoln Plaza Headquarters based on the prior year estimated energy usage. These certified Green-e Energy® renewable energy credits are used to track and trade green power in North America and help off-set CalPERS environmental impact.
- In October 2014, DGS issued Management Memo (MM) 14-09 which further directed state agencies to achieve specified energy efficiencies in data centers and server rooms greater than 200 square feet by December 31, 2014 (and each subsequent year). A study was conducted in 2014 to determine MM 14-09 compliance at all data centers and server rooms at Lincoln Plaza Headquarters, the Emergency Operations Center (EOC) and West Sacramento building. Although all data centers and server rooms meet environmental parameters, the data centers at EOC and Lincoln Plaza North (LPN) do not meet the Power Usage Effectiveness (PUE). A plan was submitted and is in the beginning stages for execution in Fiscal Year 2015-16 to increase and improve the PUE in the EOC and LPN data centers.

Waste Management and Organic Waste Diversion:

- In March 2014, CalPERS partnered with Greenwise and Atlas Waste to implement a food waste diversion program at Lincoln Plaza. Through this program, the Café, Subway, Chocolate Fish & Montessori in the City collects their organic waste for disposal into a special Atlas trash bin. The food waste is then diverted to a digester that produces an alternative fuel product which

is used by the City of Sacramento and Atlas to fuel their fleet vehicles. As of December 2014, CalPERS has diverted 26.1 tons of food waste from landfills.

- In August 2014, CalPERS was recognized at the State Capitol by CleanWorld as a valued leader of sustainability through organic waste diversion and recycling and for our commitment to making California more environmentally sustainable and climate resilient.
- The amount of waste sent to landfills is monitored annually and each State agency submits a report to CalRecycle for the prior calendar year, which includes disposal amounts and current recycling activities. We have a target to divert at least 50 percent of solid waste from landfills with the goal of 0.6 pounds per person per day. In 2014, CalPERS exceeded this goal by achieving a Per Capita Disposal Rate of .34 pounds per person per day.

Electric Vehicle Charging Stations:

- In 2014, CalPERS added seven Electric Vehicle (EV) charging stations at the 500 R Street garage. CalPERS currently has six legacy and Level II EV charging stations in Lincoln Plaza North and East and is in the installation stage of expanding the EV infrastructure in the Lincoln Plaza North and East garages that will include additional charging stations to meet increasing demand. The new charging stations will be up and running by May of this year.

Recycled Content Purchasing:

- The State Agency Buy Recycled Campaign is a joint effort between the California Department of Resources Recycling and Recovery and DGS. In addition to purchasing recycled content products, State agencies are required to track their purchases and submit an annual report on total expenses for each product category, with a goal of 50 percent for each. In Fiscal Year 2013-14, our total expenses for recycled content products which met the minimum postconsumer content requirement were as follows: 80 percent paper products, 100 percent metal products, 81 percent plastic products, and 16 percent in printing and writing paper.
- In an effort to increase participation, OSSD staff launched ItemGrabber in December 2014. ItemGrabber is a newly updated website tool that allows the requesting purchaser to easily identify post-consumer recycled-content products for purchase. In addition, OSSD has reached out to the impacted divisions with information on how they can assist with meeting our goal in the area of printed materials.

Bike Share Program:

- The CalPERS Bike Share Program was implemented in 2011 through a partnership between the Sustainable Operations Program and the Wellness Program. This program makes bicycles available, at no charge, for staff to use during work hours.
- In 2014, the Department of Public Health (DPH) reached out to us to learn about our Bike Share Program. After meeting with our staff and sharing our process, DPH established their own program which mirrored ours. Their program was such a success, in December 2014; DPH launched a state-level Bike Share Program and asked other agencies to participate. CalPERS attended the launch and was thanked for providing a strong model for other agencies to follow.

Café Vendor:

- Compass Group USA continues to be highly committed to sustainability in support of CalPERS' green initiatives. In 2014, Compass partnered with San Francisco Specialty Produce to purchase imperfectly organic produce - "Imperfectly Delicious Produce" is a program that utilizes fruits and vegetables that have slight cosmetic or quality imperfections. This produce is typically left un-harvested in the field or discarded but it is perfectly suitable for cooking.
- Compass has also continued to partner with Monterey Bay Aquarium's Sustainable Seafood Watch program, this program recommends which seafood to buy or avoid, helping to select items that are fished or farmed in ways that have less impact on the environment. Additionally, Compass uses cage free eggs and poultry free of antibiotics or hormones.

Meetings/Reporting:

- Monthly tracking and reporting is input into the Energy Star Portfolio, The Climate Registry, and the Drought Actions Matrix on energy usage, greenhouse gas emissions and water usage. Additional DGS reporting is also required on data center PUE and environmental compliance, as well as, the status and steps to achieve compliance with Executive Orders B-16-12 and B-18-12.
- Monthly meetings on topics of sustainability, best practices and compliance reporting are attended with the DGS Sustainability Working Group as well as The Climate Registry and the Environmental Protection Agency.

Green Club:

- The Green Club continues to be a valuable part of the Sustainable Operations Program. Meetings are held monthly and staff actively engage in discussions and share ideas on ways to save energy, reduce our carbon footprint and other green initiatives at home and at work. Annual activities include educational tables in the café corridor during April's "Earth Month", distributing information on alternative commuting, energy efficiency, recycling, and waste reduction. The Green Club was instrumental in providing input to the new landscape project.

Industry Outreach:

- In 2014, CalPERS joined the Building Health Initiative Owners & Managers Working Group, which is comprised of approximately 45 companies and institutions including: Adobe, Facebook, Genentech, Google, Salesforce, Kaiser Permanente, Troon Pacific, and UCSF, all committed to revolutionizing procurement strategies, fostering healthier communities, and ultimately, reframing green buildings as a public health issue. They are taking simple, impactful steps to foster healthier environments within their local and global projects. Rather than a standardized pledge, each member has made a unique commitment to use their collective market influence to create demand for new and innovative products that improve the environmental health in buildings.

BUDGET AND FISCAL IMPACTS

The majority of funding for the sustainability projects identified above spanned the course of two fiscal years and was included within existing budgetary resources. Savings in the areas of energy and water reduction as well as the discontinuance of window washing, allowed us to implement the following: cooling tower water recapture project, drought tolerant landscape design, artificial turf and erosion control, new drip irrigation, and new EV charging stations. OSSD has one position that works 50 percent on sustainability activities. Ongoing sustainability projects and one additional position have been requested through the FY 2015-16 budget process.

In summary, CalPERS continues to be a leader in sustainability and is committed to help preserve our state's natural resources. CalPERS is committed to aligning business practices with sustainable principles that result in long-term benefits to the environment. We operate in an environmentally responsible manner by reducing and recycling waste, purchasing environmentally preferred products, and conducting green building operations to help reduce the negative environmental impact.

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