



## Agenda Item 9b

April 14, 2014

**ITEM NAME:** Annual Operational Sustainability Update

**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 continues to exceed mandated targets outlined within the Governor's Executive Order 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 Order B-18-12 which set aggressive new sustainability standards for the greening of State buildings and the efficient use of energy, water, and materials. The topic of sustainability continues to expand new laws, best practices, and innovative ideas that have resulted in a broadened 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 2013 presentation and agenda item.

#### The US Green Building Commission's Leadership in Energy and Environmental Design (LEED):

- The LEED green building certification program, administered through the Green Building Council (GBCI), is the nationally accepted benchmark for the design, construction, and operation of green buildings. Lincoln Plaza North is currently certified LEED Existing Building Operations and Maintenance (EBO&M) at the Gold level. Lincoln Plaza East/West is currently certified LEED New Construction (NC) at the Gold level. Over the past year CalPERS set out to achieve compliance with the remaining standards and to recertify the

Lincoln Plaza buildings through GBCI. One requirement of the recertification process was to survey our employees on modes of transportation. Out of over 1,200 employee participants surveyed, approximately 40% use alternate modes of transportation to the workplace.

- Based on recommendations identified in the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) surveys that were conducted in preparation for the recertification process and to assist in compliance with Executive Order B-18-12, CalPERS performed “No Cost” and “Low Cost” Measures in 2013. These measures included but are not limited to reduction in parking garage lighting, modification of building temperature set-points and operating hours, installation of controllers on vending machines, and replacement of inefficient lamps with higher efficiency models.
- All required data has been submitted to GBCI and CalPERS anticipates receiving its re-certifications in May 2014. We expect to receive minimum ratings of Gold for both North and East/West buildings.

#### Energy Conservation:

- CalPERS Headquarters operates a 17,614 square foot Data Center inside Class A office space. Due to increased awareness on energy conservation and rising energy costs, CalPERS identified the Data Center as an impactful area to focus conservation efforts. The Data Center represents only 3% of the overall square footage of the Lincoln Plaza buildings, but accounts for approximately 31% of the total annual electrical usage in the building (based on 2012 actual data). Reducing the energy consumption in the Data Center reduces greenhouse gas emissions, electrical grid purchases and lowers energy costs.
- In September 2013 CalPERS was recognized for its Data Center Energy Conservation Project at the Sustainable Business of the Year Award Ceremony in Sacramento. Awards received included recognition by the Business Environmental Resource Center, Certificate of Appreciation from Congresswomen Doris Matsui, Certificate of Recognition from Assemblyman Richard Pan, Certificate of Recognition from Senate President pro Tem Darrell Steinberg, and a Resolution from the County of Sacramento Board of Supervisors.

#### Water Efficiency Measures:

- Earlier this year, Governor Brown proclaimed a drought state of emergency as California struggles with historic low record rainfall. The Governor ordered state agencies to take action and prepare for emergency conditions and to reduce water consumption by 20%. In response to the Executive Order, CalPERS has instituted many water saving measures including but not limited

to: eliminated pressure washing except on a case-by-case basis, discontinued window washing, installed low-flow shower heads in the West building (already in the North), recaptured (and continue to recapture) clean excess ice from the Café for landscape irrigation and discontinued the operation of all fountains.

- While CalPERS is highly efficient at water and energy conservation, we will continue to take action with short and long-term utility savings efforts. We are currently performing a feasibility study to determine the cost effectiveness and overall efficiency of reclaiming cooling tower blow-down water for use as landscape irrigation. In addition, CalPERS captures monthly energy and water usage and enters the information into the Energy Star Portfolio Manager (ESPM) system and energy audit software, both which track water, gas and electrical energy consumption profiles and assesses usage against benchmarks and metrics. Additionally, with the urgency in reducing water consumption, CalPERS has leveraged existing water sub-meters for daily monitoring by our Engineering team and is actively engaged with key account representatives of local utility providers to keep informed of utility incentives, programs and education.

#### Green Executive Order Road Map:

- The Department of General Services (DGS) requested a Green Road Map detailing objectives, targets and timelines to meet the sustainability standards and reduction of environmental impacts set forth in the Executive Order. CalPERS provided DGS with a detailed document outlining the status and steps to achievement in the areas of Greenhouse Gas Emissions, Energy, Existing Buildings – LEED, Indoor Environmental Quality, Water Efficiency, Electric Vehicle Charging Stations, Environmental Preferable Purchasing, and Zero Emission Fleet Purchases. In addition, CalPERS provided electrical, water and gas baseline benchmarks and input all energy and water usage statistics into the ESPM.
- Electric Vehicle (EV) infrastructure and charging stations are requirements of Executive Order B-18-12. CalPERS currently has legacy and Level II EV charging stations in Lincoln Plaza East. In the coming year the Lincoln Plaza buildings will receive electrical infrastructure upgrades in the North and East garages to comply with the additional requirement and to meet growing demand. Upgrades to the EV infrastructure will include charging stations that will serve multiple parking stalls, maximizing the number of electric vehicles we can accommodate at one time. Additionally, by the summer of 2014, the 400 R Street garage will receive EV charging station infrastructure and charging stations.

#### Waste Management and Diversion:

- To monitor the amount of waste sent to landfills annually, 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 sending waste to landfills of a rate below 0.6 pounds per person per day. In 2013, CalPERS exceeded this goal by achieving a Per Capita Disposal Rate of 0.3 pounds per person per day.

- In January 2014, staff conducted an annual waste audit and collected waste bags from desk side containers in the Lincoln Plaza buildings. In total, 45 bags were examined; 30 from waste and 15 from recycling sources. Staff will provide further education on proper recycling procedures during Earth Month in April. The information will educate and assist staff in implementing initiatives designed to lessen the amount of recyclable material that is sent to landfills.
- Beginning 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 will collect their organic waste for disposal into a special Atlas trash bin. The food waste will then be 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.

#### 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% for each. In Fiscal Year 2012-13, our total expenses for recycled content products which met the minimum postconsumer content requirement were as follows: 51% paper products, 68% metal products, 90% plastic products, and 73% in printing and writing paper.

#### Café Vendor:

- Compass Group USA is highly committed to sustainability and has implemented several programs that support CalPERS green initiatives. In addition to the sustainably farmed seafood, locally sourced produce, and packaging made from renewable resources, they have also implemented waste reduction and diversion practices to minimize environmental impact. Additionally, in 2014, Compass plans to implement their "Carbon Foodprint" web-based program, which will assist the café in designing menus around sustainable ingredients and creating customized solutions to decrease waste, energy and water use.

CalPERS 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 various topics which encourage sustainability at CalPERS. Annual activities include surveys and educational booths in the café corridor during April's "Earth Month", distributing information on alternative commuting, energy efficiency, recycling, and waste reduction. In addition, members assist with seminars such as the Smart Cycling clinic held during "May is Bike Month" which encourages staff to ride their bicycles. Information is also provided on the CalPERS bicycle program, which allows CalPERS employees to "check-out" bicycles and helmets for personal use. The recently introduced "Spark" communication tool, allowed for the set-up of a "Green Club" group, where staff is actively engaged and sharing ideas regarding water conservation and various sustainable topics.

In summary, CalPERS is committed to being a leader in sustainable practices. We routinely attend meetings and working groups with state agencies and organizations on topics of environmental stewardship. We recognize that minimizing waste and increasing energy efficiency can have long-term benefits to the environment. As innovative ideas continue to expand we will broaden our approach to sustainable operations and address environmental issues as a leader in sustainable operations.

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