

INTER-OFFICE CORRESPONDENCE
Los Angeles Unified School District

INFORMATIVE

TO: Members, Board of Education
Ramon C. Cortines, Superintendent

DATE: May 1, 2009

FROM: Joseph A. Mehula 
Chief Facilities Executive

SUBJECT: Sustainability Initiatives Quarterly Update

BACKGROUND

The Board passed a resolution on October 23, 2007, directing the Superintendent to provide quarterly reports on progress toward achievement in the goals of energy and water conservation. The purpose of this Informative is to be responsive to that direction, and provide the Board with a summary of the activities of the District's Sustainability Program.

As indicated in the January 2008 informative to the Board regarding Sustainability, the Sustainability Steering Group was assembled in early 2008, and working groups were created to generate and communicate ideas and projects for Sustainability Initiatives. The working groups are as follows:

- Facilities
- Education
- Procurement
- Food Services
- Transportation
- Office of Environmental Health and Safety (OEHS)
- AB 32 Compliance
- Regulatory Affairs and Utility Relations
- Workforce Development
- Communications

The Steering Group is co-chaired by the Chief Facilities Executive, the Chief Operating Officer, and the Chief Academic Officer.

The efforts of the Sustainability Steering Group and the Sustainability Initiatives Program have led to the development of a comprehensive Sustainability Plan that staff presented for the Board's review at the March 12, 2009 Safety Committee Meeting and the April 2, 2009 Facilities Committee Meeting. This plan is designed to achieve significant reductions in:

- Utility Expenses in Electricity, Gas, and Water
- Fuel Expenses
- Greenhouse Gas Emissions
- Toxic Materials
- Waste Stream Costs

The reductions are targeted to be accomplished through:

- New school designs that maximize energy and water use efficiencies while maximizing renewable energy capacity and improving indoor air quality
- Acquisition of new clean fuel buses and fleet vehicles, and retrofitting existing buses for greater fuel efficiencies and improved emissions
- Implementation of utility efficiency measures in existing facilities
- Procurement of environmentally friendly materials and supplies
- Installation of renewable energy on school sites, and
- Recycling and waste stream management programs

Communications and curriculum programs are being developed and implemented concurrently with the implementation of the Sustainability programs.

NEW CONSTRUCTION ACCOMPLISHMENTS:

- Since 2001, the District has now built more than 76 schools to high efficiency energy standards, and currently has 55 schools under construction or finishing design which will be completed prior to 2012, averaging a little more than one every month.
- All of these are CHPS designs, with equivalence to LEED for schools, and exceed Title 24 energy conservation standards by at least 30% and exceed water efficiency standards by 30%.
- New schools are designed to provide the infrastructure that will enable each site to produce at least 30% of its required energy from renewable resources. Sites will be evaluated individually to determine their maximum potential renewable generation capacity.
- Staff is currently developing a pilot program with Solyndra, Inc. for a photovoltaic system at a New Construction site. A separate Board report will be submitted for implementation of the pilot program in July 2009.

EXISTING FACILITIES ACCOMPLISHMENTS:

Energy Efficiency

- Staff recently finalized specifications for Energy Management Systems. This will now allow us to move forward with the Request for Qualifications and Requests for Proposals for installations for the first group of 60 schools to be installed.
- Similarly, staff also recently completed an RFQ for Geothermal HVAC systems. Feasibility studies will be conducted to determine appropriate candidates for Geothermal HVAC systems prior to the release of the RFQ.
- In response to the Board's recommendations during committee meetings, Staff is currently exploring an expense savings sharing program for all schools to provide the direct benefit of savings to schools that conserve energy and water in quantifiable ways.

Water Conservation:

- Drought conditions in California have worsened since the last Sustainability Quarterly Report, and the Department of Water and Power recently released new restrictions on water use.
- Staff's preliminary information indicates that more than 50% of District water usage is attributable to irrigation systems for our school's.
- Staff anticipates the completion of specifications and a Request for Qualifications for "smart irrigation controllers" in May 2009, and will be prepared to make public the Request for Proposals in June 2009.
- The Maintenance and Operations staff is currently working with the City of LA – Drought-Busters program to meet water reduction goals wherever possible, and applying for special exemptions as needed to meet the operational needs of our schools.

Renewable Energy:

- Construction on the eight projects approved by the Board of Education on February 10, 2009 is set to begin in late June 2009 and is scheduled to be completed by September 2009.
 - Upon completion of these projects, two of these sites, Ann Street Elementary and El Dorado Elementary, will be grid neutral schools (they will produce as much electricity as they consume).

CHPS Implementation in Existing Facilities

- LAUSD participated with four California school districts and two Massachusetts school districts in the second of an ongoing series regarding CHPS standards for existing facilities in San Francisco. The program is moving forward toward the establishment of standards by which existing schools might be evaluated for CHPS compliance in energy management, water conservation, and maintenance standards. Staff recommended to the group that similar to the CHPS program for new construction, any costs for compliance with CHPS standards should be offset to the greatest degree possible by state funds.

Procurement:

- Issued the RFPs for Sustainable Materials and E-waste recycling.
- Report for the implementation of the "Buy Green" resolution has been completed.
- Revised specifications for the capture of recycled content as of March 2009.

Food Services:

- Food Services is continuing to work with vendors to make product packaging more environmentally responsible, while maintaining costs at current levels. Staff will update the Board through the next Quarterly Update as to the progress accomplished by that time.

Transportation:

- Staff has prepared their preliminary planning for execution of Measure Q.
- Staff is in the process of finalizing the Bio-diesel fuel pilot analysis report, and will update the Board by the next Quarterly Update.
- District Staff ordered 90 propane school buses scheduled for delivery in the fall.
- The District opened the second Compressed Natural Gas (CNG) fueling facility in SunValley.

OEHS:

Recycling Program Update

- For the fiscal year 2007 the District landfill diversion rate was 58%.

Styrofoam Recycling Pilot Program

- Pilot program conducted from March to June 2008 at Alexandria and Cahuenga Elementary Schools.
- Approximately 10, 500 Styrofoam trays (~252 lbs) collected per week.
- Eliminated approximately \$594 in bin rentals and transportation costs per year.
- Avoided \$206 in landfill disposal costs per year.
- Based on the pilot program results, we will be working with Procurement Services Division to implement a District-wide styrofoam recycling program.
- OEHS has been a key partner in the development of the District's "carbon footprint" by working with the Office of General Counsel and the Sustainability Steering Group to identify all of the possible sources of Green House Gas Emissions.

Regulatory Affairs and Utility Relations:

- Staff is working with legislative affairs representatives on several pending pieces of legislation regarding water and energy conservation as well as renewable energy.
- Staff is currently working with LADWP and other stakeholders to develop Feed-in Tariff regulations that will enable the District and other customers to receive payment from DWP for renewable energy production, improving the return on investment for future renewable energy projects.

Communications:

- In April, the Sustainability website <http://mo.laschools.org/fis/existing-facilities/sustainability/> was launched. It provides information on the sustainability efforts of the LAUSD including water and energy conservation progress and goals as well as solar installation goals and efforts.
- On April 23, 2009 the Kick-Off event for the next set of solar panel installations was held. This marked the beginning of an additional 3.7MW that will be installed on seven district school sites and one local district office

- Four Public Service Announcements (PSA) were recorded and aired during Earth week (April 24-27, 2009) on KLCS. The PSA's will be placed on the Sustainability website. The PSA's highlighted:
 - Recycling efforts of students and staff at Dahlia Heights Elementary School
 - Solar panel installation and green products at the Pico Rivera warehouse
 - LAUSD's Compressed Natural Gas bus fleet
 - CHPS features at Maywood Academy
- A Sustainability slideshow presentation was developed and aired on the LAUSD main website the week of April 27, 2009, depicting many of the District's activities in Sustainability Initiatives.

AB 32 Compliance:

- Staff recently completed a preliminary assessment of the District's carbon footprint, which indicated that 41% is attributable to transportation. Since that time, staff has completed a study of the environmental impact of the various transportation vehicles used. LAUSD will prepare a separate report for the Board's review in July, 2009.

Workforce Development Programs

- On April 24, 2009, the first class from the We Build Green program graduated. A total of 25 students completed the course.
- In March, "Jr. iSEE" was launched. This program provides middle school students with a meaningful connection between the math and science concepts they learn in school and possible "green" career paths in architecture, engineering and construction. It also assists in building literacy in the latest sustainable technological developments in these fields.
- Students participating in the iSEE program had the opportunity to meet with members of the Carpenters Union to learn about steel stud framing. Steel stud framing is also a sustainable method of framing.
- There are currently more than 500 students on the waiting list for the photovoltaic installation program at East Los Angeles Skills Center (ELASC). Staff estimated that in order to grow the program to meet the demand would require \$200,000 annually (includes textbooks and materials).
- Staff's goal is to replicate the success of the photovoltaic installation program at ELASC in other sites within the District.

SUMMARY

The Sustainability Program is continuing to employ a combination of strategies in energy efficiency, environmentally friendly practices, and renewable energy installations to enable the District to move forward toward energy independence, while providing significant recurring operational savings.

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