

**Department of General Services
Energy Efficient State Property Revolving Fund
Annual Legislative Report
January 1, 2013**

Background

The American Recovery and Reinvestment Act of 2009 (ARRA) provided funds to the United States Department of Energy to make allocations to its existing programs. Accordingly, on June 25, 2009, the California Energy Commission (CEC), in its role as the State Energy Office in California, received \$226,093,000 for distribution under federal guidelines.

On June 28, 2009, Governor Schwarzenegger signed Assembly Bill 11 from the Fourth Extraordinary Session of the 2009-2010 Session (ABX4 11), adding sections 25470 through 25474 to the Public Resources Code (PRC), and creating the Energy Efficient State Property Revolving Fund (Loan Fund). Under the terms of the statute, the CEC transferred \$25 million to the Department of General Services (DGS) to administer the Loan Fund and finance energy efficient retrofits at state facilities. Participating state agencies would use the savings realized through the retrofits to service their debt to the Loan Fund. PRC Section 25473 requires the DGS to provide the Legislature with an annual report on the projects identified and planned for each fiscal year.

Fiscal Years 2009-10 Through 2011-12

The DGS allocated the original \$25 million to nine departments in 12 loans, funding 70 projects at over 400 buildings. Most of these projects are closed or in the process of closeout. Three projects, a heating and air conditioning upgrade at the Department of Developmental Services Sonoma campus, a chiller replacement at the DGS-managed CalTrans District 11 office building, and a lighting upgrade at the Department of Water Resources visitor center at Vista Del Lago, remain open due to unexpected incongruities that contractors are working to adjust. These loans will remain open until the problems are resolved. The table that follows this section contains information about the projects funded through the Loan Fund during fiscal years (FY) 2009-2010, through FY 2011-2012.

Fiscal Year 2012-13

The first repayments on the inaugural loans took place in February 2012. The Loan Fund also received additional funds from the CEC due to the passage of Assembly Bill 1392 (Chapter 488, Statutes of 2011), which added section 25471(d)(1) to the PRC and authorizes the CEC to transfer up to \$50 million to ensure the effective expenditure of the funds it received through the ARRA. The CEC consequently transferred funds in June and July. The current balance of the fund breaks down as follows:

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Transfer from CEC 6/28/12		\$1,500,000.00
Transfer from CEC 7/20/12		\$1,130,724.62
Principal Payment 2012	\$2,811,836.91	
Interest Payment 2012	\$468,807.42	
Total Repayment 2012		\$3,280,644.33
Unallocated funds from original \$25 million (approx.)		\$480,000.00
Total Funds		\$6,391,368.95
Less Allocation for 2012-13 Admin.		(\$529,590.17)
Total Available for Loan Allocations 2012-13		\$5,861,778.78

Currently, the following projects are in the development stage:

- The Department of Public Health (DPH) Richmond Lab facility is replacing a boiler that is in violation of the local air quality management district's standards with a replacement boiler that not only meets local emission standards, but is also more efficient. The project is in the design phase, so a final cost remains unknown; however, the DPH can submit a placeholder application for the current estimate.
- The Department of Corrections and Rehabilitation (CDCR) will apply for a loan for a lighting retrofit at the Richard J. Donovan Correctional Facility in San Diego to meet the California Public Utilities Commission's request that state facilities reduce their electrical load in the San Diego area as much as possible to ease transmission problems in the electrical grid. The CDCR has a second lighting project already designed and ready to go into construction in the Salinas Valley State Prison. Both of these projects will proceed once the appropriate accounting procedures are in place at the CDCR.

<u>Potential Projects</u>	<u>Estimated Project Cost</u>
DPH Richmond Lab	\$3,800,000.00
CDCR RJ Donovan	\$500,000.00
CDCR Salinas Valley	\$800,000.00
Total Earmarked for Allocation	\$5,100,000.00
Remaining Balance Available	\$761,778.78

In February 2013, a second annual repayment will occur. Meanwhile, work is underway to release in January 2013 several Requests for Proposals for additional projects to energy service companies in a qualified pool established under the authority of Public Utilities Code section 388. The Statewide Energy Efficiency Program in the Special Programs Section of the DGS Real Estate Services Division's Professional Services

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Branch is working with several interested departments to develop candidate projects. Once these projects are ready to apply for funding, the DGS will allocate the entire amount of available funds to the most attractive projects. Project evaluation will rest primarily on scope of work and payback terms. The following departments are interested in receiving loans through the DGS Statewide Energy Efficiency Program:

Department of Fish and Game

Department of Parks and Recreation

Department of Fish and Game

California Highway Patrol

Department of Motor Vehicles

Department of Food and Agriculture

California Conservation Corps

CalFire

Department of Veterans Affairs

ARRA Energy Efficient State Property Revolving Fund Loan Status
Revised December, 2012
Open Loans

Department of Developmental Services – Loan 120

Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
Fairview	Lighting Upgrade Web-Based Monitoring	\$1,373,695	2,101,987		\$257,624	5.3
Sonoma	Lighting Upgrade HVAC Upgrade – Nelson HVAC Upgrade – EJOR Web-Based Monitoring	\$2,421,021	2,160,715	36,114	\$429,240	5.6
Porterville	HVAC – VAV Conversion Web-Based Monitoring	\$764,289	1,069,858	79,560	\$139,020	5.5
Total		\$4,559,004	5,332,560	115,674	\$825,884	5.5

Department of Water Resources – Loan 118

Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
Bryte Chemical Lab	Lighting Upgrade HVAC Upgrade Web-Based Monitoring	\$428,531	247,165	9,171	\$46,300	9.3

¹ Reductions in lighting energy have secondary effects on cooling and heating energy consumption that can result in an increase in natural gas consumption, reflected here as negative savings.

NOTE: Monetary amounts are rounded to the nearest dollar.

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Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
Oroville Visitors Center	Lighting Upgrade HVAC Upgrade Web-Based Monitoring	\$110,662	51,508	1,400	\$9,465	11.7
Romero Overlook	Lighting Upgrade HVAC Upgrade Web-Based Monitoring	\$110,254	31,287		\$5,172	21.3
Vista Del Lago	Lighting Upgrade HVAC Upgrade Web-Based Monitoring	\$200,082	173,061		\$23,686	8.4
Total		\$849,529	503,021	10,571	\$84,623	10.0

Department of General Services – Loan 101

Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
Secretary of State	Replace Chiller Lighting Controls Replace Air Filters Clean Coils	\$527,606	176,888		\$17,689	29.8
Bateson	Lighting Controls Replace Air Filters Clean Coils	\$221,400	79,840		\$7,984	27.7
Jesse Unruh	Lighting Controls and Variable Fan Drives Replace Air Filters Clean Coils	\$309,604	165,101		\$16,510	18.8
Mission Valley, Caltrans District 11	Exterior Lighting Retro	\$127,053	123,302		\$12,330	10.3

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Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
BOE	Lighting Upgrade VFD Retrofit VAV Optimization DW Pumps Installation Water Valve Replacement Boiler Retrofit	\$1,901,795	2,444,207	28,523	\$284,353	6.7
Bonderson	Lighting Retrofit	\$582,480	517,300		\$51,730	11.3
Fresno State Office Building	Optimum Start Routine for Chiller and Boiler Resent Condenser Water Temperature Optimum Stop Routine Chilled Water Reset Variable Air Volume (VAV) Air Handlers Chiller Retrofit	\$412,229	243,426	2,863	\$43,823	9.4
California Energy Commission	De-Lamp Perimeter Lights Reschedule Air Handler Reschedule Hot Water Pump Reschedule Fans Occupancy Sensors on Hearing Room Air Handler Night Cooling Occupancy Sensor for Lighting	\$170,580	76,004		\$7,600	22.4
Caltrans District 11	Chiller Replacement	\$902,579	405,830	29,507	\$80,268	11.2
Total		\$5,155,325	4,231,898	60,893	\$522,287	9.9

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**ARRA Energy Efficient State Property Revolving Fund Loan Status
Revised December, 2012
Closed Loans**

Department of Motor Vehicles – Loan 116

Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
Arleta Field Office	Lighting Upgrade Web-Based Monitoring	\$69,415	43,701	-15	\$5,156	13.5
Chula Vista	Lighting Upgrade Web-Based Monitoring	\$77,818	35,148		\$6,323	12.3
El Cajon	Lighting Upgrade Web-Based Monitoring	\$27,585	42,409	-164	\$8,220	3.4
Hanford	Lighting Upgrade Web-Based Monitoring	\$36,480	17,657		\$2,156	16.9
Hollister	Lighting Upgrade Web-Based Monitoring	\$20,796	13,147		\$2,348	8.9
Merced	Lighting Upgrade Web-Based Monitoring	\$61,284	44,892		\$6,860	8.9
Modesto	Lighting Upgrade Web-Based Monitoring	\$36,936	42,223		\$4,822	7.7
Mountain View	Lighting Upgrade Web-Based Monitoring	\$35,651	31,660		\$5,009	7.1
Oakland Claremont	Lighting Upgrade Web-Based Monitoring	\$74,442	70,933		\$11,151	6.7
Oakland Coliseum	Lighting Upgrade Web-Based Monitoring	\$67,133	38,095		\$5,907	11.4
Redwood City	Lighting Upgrade Web-Based Monitoring	\$73,369	40,877	-71	\$6,401	11.5
Sacramento	Lighting Upgrade HVAC Upgrade Web-Based Monitoring	\$256,679	51,185	1,189	\$13,212	19.4

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Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
San Diego	Lighting Upgrade Web-Based Monitoring	\$58,172	44,429		\$8,242	7.1
San Mateo	Lighting Upgrade Web-Based Monitoring	\$32,017	36,252		\$6,243	5.1
Turlock	Lighting Upgrade HVAC Upgrade Web-Based Monitoring	\$135,139	31,470	351	\$5,157	26.2
Visalia	Lighting Upgrade Web-Based Monitoring	\$38,332	38,909		\$4,743	8.1
Watsonville	Lighting Upgrade Web-Based Monitoring	\$22,972	13,305		\$2,346	9.8
Yuba City	Lighting Upgrade HVAC Upgrade Web-Based Monitoring	\$110,946	29,776	811	\$10,135	10.9
Salinas	Lighting Upgrade Web-Based Monitoring	\$82,302	40,607		\$7,147	11.5
Total		\$1,317,468	706,675	2,101	\$121,578	10.8

CA Highway Patrol – Loan 114

Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
Altadena Area	Lighting Upgrade HVAC Upgrade Web-Based Monitoring	\$145,280	74,505		\$8,650	16.8
Central Los Angeles Area	Lighting Upgrade Web-Based Monitoring	\$110,275	117,162		\$13,298	8.3
El Cajon Area	Lighting Upgrade Web-Based Monitoring	\$58,650	50,108		\$9,455	6.2

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Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
Coalinga Area	Lighting Upgrade HVAC Upgrade Rezone HVAC Web-Based Monitoring	\$131,511	51,789		\$9,022	14.6
Fort Tejon	Lighting Upgrade Web-Based Monitoring	\$54,650	43,918		\$6,206	8.8
Fresno Area	Lighting Upgrade Web-Based Monitoring	\$62,169	106,793	-893	\$14,439	4.3
Hanford Area	Lighting Upgrade HVAC Upgrade Web-Based Monitoring	\$103,140	53,996		\$8,569	12.0
Hayward Area	Lighting Upgrade Web-Based Monitoring	\$48,035	68,385		\$11,913	4.0
Hollister-Gilroy Area	Lighting Upgrade HVAC Upgrade Web-Based Monitoring	\$149,535	50,038	963	\$10,192	14.7
Madera Area	Lighting Upgrade Web-Based Monitoring	\$37,928	39,785		\$6,931	5.5
Merced Area	Lighting Upgrade HVAC Upgrade Web-Based Monitoring	\$261,335	192,425	683	\$34,273	7.6
Modesto Area	Lighting Upgrade HVAC Upgrade Web-Based Monitoring	\$156,597	132,904	1,321	\$17,681	8.9
Oakland Area	Lighting Upgrade Web-Based Monitoring	\$64,220	89,502		\$15,591	4.1
Redwood City Area	Lighting Upgrade Web-Based Monitoring	\$37,878	31,977		\$5,570	6.8
San Jose Area	Lighting Upgrade Web-Based Monitoring	\$39,574	92,204		\$16,062	2.5

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Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
South Los Angeles Area	Lighting Upgrade Web-Based Monitoring	\$55,174	119,927		\$14,079	3.9
West Los Angeles Area	Lighting Upgrade Rezone HVAC Web-Based Monitoring	\$54,087	66,869		\$7,824	6.9
Yuba-Sutter Area	Lighting Upgrade HVAC Upgrade Rezone HVAC Web-Based Monitoring	\$156,254	73,870	97	\$12,982	12.0
San Luis Obispo	Lighting Upgrade Web-Based Monitoring	\$105,964	91,735		\$12,843	8.3
Total		\$1,831,976	1,547,892	2,171	\$235,579	7.8

Department of Mental Health – Loan 108 and Loan 110

Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
Atascadero	Lighting Upgrade Web-Based Monitoring	\$673,129	823,446		\$85,124	7.9
Patton	Lighting Upgrade Web-Based Monitoring	\$399,682	456,119		\$54,917	7.3
Total		\$1,072,811	1,279,565		\$140,041	7.7

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Department of General Services, Office of Fleet and Asset Management – Loan 104

Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
Parking Lot 8	Lighting Retrofits	\$22,666	482,643		\$88,493	0.3
Parking Lot 14		\$98,513				
Parking Lot 38		\$51,757				
Parking Lot 50		\$119,652				
Parking Lot 55		\$117,474				
Total		\$470,063	482,643		\$88,493	5.3

CA Highway Patrol – Loan 106

Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
CHP Headquarters	Lighting Retrofit	\$163,356	185,440		\$18,544	8.8
Total		\$163,356	185,440		\$18,544	8.8

Department of Corrections and Rehabilitation – Loan 102

Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
Tehachapi	Install Boilers	\$786,371	616,144	345,222	\$333,580	2.4
Soledad Valley State Prison	Lighting Upgrades Replace Water Heaters Lighting Retrofit	\$684,626	1,392,066	95,202	\$205,160	3.1
Salinas Correctional Training Facility	Replace Boilers Lighting Retrofit Upgrade Air Controls	\$727,619	656,312	223,021	\$246,021	3.1

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Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
Corcoran State Prison	Expand Energy Mgmt System Programmable Thermostats Variable Fan Drives Lighting Upgrade	\$1,886,366	4,558,114	66,458	\$467,290	4.0
Total		\$4,084,982	7,222,636	729,903	\$1,252,213	3.3

Department of Corrections and Rehabilitation – Loan 124

Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
Corcoran Treatment Center	HVAC Controls Outside Lighting Controls	\$632,793	5,443,383	38,204	\$532,107	1.2
Norco Rehabilitation	Boiler Replacement	\$701,816	133,376	220,980	\$172,194	4.1
Total		\$1,334,609	5,576,759	259,184	\$704,301	1.9

CA Technology Agency (Office of the Chief Information Officer) – Loan 112

Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
Gold Camp Data Center	CRAC Units Upgrade Chiller Upgrade Cooling Towers Lighting Upgrade	\$2,278,049	1,741,198		\$158,446	14.4
Total		\$2,278,049	1,741,198		\$158,446	14.4

Administration

\$335,963

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Loan Fund Program Totals

Project/ Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings: kWh	Annual Savings: Therms¹	Annual Savings: Dollars	Simple Payback (Years)
		\$23,453,136	28,810,287	1,180,497	\$4,151,987	5.6