

**Metro**Los Angeles County  
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metro.net**FINANCE, BUDGET AND AUDIT COMMITTEE  
MAY 15, 2013****SUBJECT: ALTERNATIVE FINANCING MECHANISMS FOR ENERGY PROJECTS****ACTION: AUTHORIZE CEO TO UTILIZE ALTERNATIVE FINANCING TO  
ACCELERATE ENERGY PROJECTS****RECOMMENDATION**

- A. Authorize the Chief Executive Officer (CEO) to Apply Utility-Related Financing in Accelerating Energy Program Implementation; and
- B. Authorize the CEO to use Project Number 450001 funds for administration of projects developed using Utility-Related Financing.

**ISSUE**

On March 20, 2013, Metro staff presented to the Finance, Budget and Audit Committee its findings from a comprehensive survey of the various alternative financing strategies and identified specific funding mechanisms that can be available for energy and sustainability-related capital projects potentially available to the agency. The Committee responded favorably towards the presentation of alternative financing opportunities and encouraged the pursuit of these opportunities that are easily implemented.

**DISCUSSION**

Management of the agency's energy and resource consumption and efficiency matters is handled by the Environmental Compliance and Services Department (ECSD). In this capacity, Metro ECSD is working closely with our utility service providers, through the formation of Metro's Energy Blue Ribbon Collaborative (Energy BRC). The Energy BRC is chaired by Metro's CEO and currently consists of executives from the Los Angeles Department of Water and Power, Southern California Edison, Southern California Gas Company and a professor from UCLA's Luskin Institute.

Among other things, the Energy BRC has been working to identify incentives, rebates, and other financing mechanisms to promote the agency's energy efficiency projects. It is also designed to ensure seamless cooperation on all identified energy-related collaborative efforts that simultaneously support regional energy as well as individual Energy BRC member goals. The Energy BRC work is very important to Metro as staff anticipates a significant increase in energy use and most importantly cost (up to 100% increase) during this time of transit and facility expansion. The Energy BRC work is aligned with staff's internal sustainability program.

As presented to the Finance, Budget and Audit Committee, the following are some of the alternative financing opportunities available for energy related projects:

- **On Bill Financing (OBF) / Repayment Programs** – some utilities offer low to no interest "On Bill Financing" to their customers. On Bill Financing or similar financing mechanisms help to fund qualifying energy efficiency projects by providing loans that are repaid as a line item on monthly bills. Qualifying equipment funded through OBF is then eligible for incentives through the rebate programs described above. Some of the anticipated projects noted under the Energy Efficiency Incentive Programs category, may also be eligible for this financing mechanism. These may include:
  - Retrofit of lighting systems
  - Replacement of outdated, inefficient building systems
  - Completion of retro-commissioning activities on energy systems
  
- **Renewable Energy Programs** – There are three main types of renewable Energy Programs or Financing Structures. Incentive programs like described above offer on time revenue and would be realized if and when LACMTA installs its own renewable energy systems. Project support can be in the form of Renewable Energy Power Purchase Agreements. This mechanism allows for guaranteed revenue to repay the investment of renewable energy systems or rental of land or roof space to 3rd party providers. Feed in Tariff Programs allow for guaranteed revenue from the utility to repay the investment of renewable energy systems that Metro would need to finance. Anticipated projects eligible for this financing mechanism include:
  - Installation of solar (PV) panels as part of the construction of Division 13, a new bus maintenance in the downtown Los Angeles area
  - Installation of solar (PV) panels at two locations as part of the Energy Efficiency and Renewable Energy projects submitted for funding under the FY14 Capital Program
  
- **Grants and Other Opportunities** – Metro diligently searches for and prepares grant applications to pursue new innovative energy efficiency ideas that may lead to an expanded project that will reap greater energy saving benefits. Some of these grant opportunities are done in partnership with entities who have secured

grants for installation of value-creating or cost-saving projects along our system. Projects currently using this financing mechanism include:

- Metro Red Line Westlake/MacArthur Park Station Wayside Energy Storage System (FTA: \$4.5M)
- Metro Gold Line Wayside Energy Storage System (SCAQMD: \$800,000)
- Metro Electric Vehicle Charger Stations (CEC: \$180,000)

Authorization to use these alternate financing mechanisms will contribute to funding for energy efficiency projects that will increase savings realized from a reduction in energy consumption and an accelerated payback period due to offset of project costs.

In conjunction with the Energy BRC, Metro staff is developing project packages for lighting retrofit and other energy-related projects; and will explore grant opportunities. The energy audits, cost estimates, cost-benefit analysis efforts are intended to identify priority locations to implement all of these anticipated projects.

### **DETERMINATION OF SAFETY IMPACT**

This program will have no impact on safety.

### **FINANCIAL IMPACT**

Administrative funding for these projects are included in the FY13 budget in cost center 8420, Environmental Compliance and Services, under project number 450001, Task Order 1.01.

Since these are going to be multi-year project, the cost center manager and Executive Director, Transit Project Delivery will be accountable for budgeting the cost in future years.

#### **Source of funds**

As specific energy-related projects are identified that are associated with utility-related financing, Capital Project workbooks will be developed and request for funding will be requested from the annual capital funding program or if already associated with a capital project, from their associated project budget, upon approval by the responsible Project Manager. If the technology is innovative and a pilot is needed, Board approved Sustainability Capital funding will be used to commence project. Examples of projects that have already been identified in FY13 to FY14 are included in Attachment A.

#### **Impact to Budget**

There will be no net impact to the Bus and Rail Operating and Capital Budgets. There will initially be an impact to the budgets from this action as qualifying equipment will be more expensive than lowest cost options. Utility-related financing require better

performing products that command a premium but cost savings over project life cycle will offset these added costs.

## **ALTERNATIVES CONSIDERED**

Rejection of the recommended Board action will reduce staff's ability to pursue alternative financing options that will otherwise be available to Metro. Rejection of the staff recommendation is also inconsistent with the provisions of our Board adopted Environmental Policy, Sustainability and Energy Policy, and Renewable Energy Policy that specifically commits to specific actions in pursuing all available options to reduce energy costs, meet agency-wide renewable energy use of 33% by 2020, and enhance energy performance in all existing facilities.


## **NEXT STEPS**

After Board approval of this action; 1) discuss proposed energy efficiency projects with our Energy BRC partners to identify alternative financing opportunities; 2) prepare project workbooks to establish project budgets; and 3) initiate energy related projects using alternative financing mechanism.

## **ATTACHMENT**

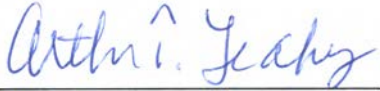
### A. Example of Energy-Related Projects

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Chief Executive Officer

## Example of Energy-Related Projects

Natural Gas Projects	Facility	Est. Annual Gas Savings (Therms)	Estimated Project Cost	Estimated Annual Cost Savings	Incentive Amount
Boiler Replacement	Gateway Bldg	21,183	\$370,644	\$13,769	\$6,000
RCx: Increase Deadband	Gateway Bldg	2,711	\$8,000	\$1,762	\$2,711
RCx: Boiler Lockout	Gateway Bldg	29,596	\$40,000	\$19,238	\$29,596
New Construction—Comprehensive	Expo Phase II	3,944	\$113,300	\$28,743	\$3,944
		<b>57,434</b>	<b>\$531,944</b>	<b>\$63,512</b>	<b>\$42,251</b>
Electricity Projects	Facility	Est. Annual Electricity Savings (kWh)	Estimated Project Cost	Estimated Annual Cost Savings	Incentive Amount
High Bay Lighting Retrofit	Division 7	638,122	\$226,219	\$70,193	\$19,144
High Bay Lighting Retrofit	Division 9	115,328	\$54,373	\$13,839	\$3,460
Office Retrofit	Division 18	62,862	\$1,660	\$7,229	-
Full Building Lighting Retrofit	Division 11	2,235,832	\$915,088	\$245,942	\$67,075
Full Building Lighting Retrofit	Division 22	1,530,276	\$636,873	\$168,330	\$45,908
Full Building Lighting Retrofit	Division 7	58,473	\$35,888	\$6,432	\$1,754
Full Building Lighting Retrofit	Division 9	682,007	\$332,198	\$75,021	\$20,460
New Construction—Comprehensive	Expo Phase II	117,138	\$267,900	\$28,743	\$59,761
Full Building Lighting Retrofit	Gateway Bldg	1,343,966	\$829,452	\$147,836	\$103,140
Parking Structure Lighting Retrofits	Gateway Bldg	538,600	\$431,800	\$62,700	
Cooling Tower VFD	Gateway Bldg		\$60,000		
3rd Floor RC	Gateway Bldg	3,698	\$30,000	\$444	
HHW VFD - Boiler Replacement	Gateway Bldg		\$22,000		
RCx: Increase Deadband	Gateway Bldg	29,837	\$6,000	\$3,282	\$2,387
RCx: Supply Duct Static Pressure Reset	Gateway Bldg	62,941	\$37,000	\$6,923	\$5,035
RCx: Boiler Lockout	Gateway Bldg	86,667	\$6,000	\$9,533	\$6,933
RCx: Chilled Water Reset	Gateway Bldg	45,693	\$4,000	\$5,026	\$3,655
RCx: Condensor Water Supply Temp. Reset	Gateway Bldg	157,529	\$12,500	\$17,328	\$12,602
Office Retrofit	Division 15	24,866	\$1,545	\$2,984	-
		<b>7,733,835</b>	<b>\$3,910,496</b>	<b>\$871,786</b>	<b>\$351,315</b>
Solar (PV) Panel Projects	Facility	Est. Annual Electricity Production (kWh)	Estimated Project Cost	Est. Annual Cost Savings	Incentive Amount
Rooftop PV Installation - Main Shop	Division 20	1,132,603	\$2,331,829	\$117,677	\$732,860
Rooftop PV Installation - Maintenance Bldg	Division 10	407,316	\$958,392	\$42,320	\$263,558
		<b>1,539,919</b>	<b>\$3,290,221</b>	<b>\$159,998</b>	<b>\$996,418</b>