



SENT TO COUNCIL:

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JUN 11 2010

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# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** John Stufflebean

**SUBJECT:** Transportation and Environment  
Committee—Verbal Energy Update

**DATE:** 06-08-10

Approved

Date

6-11-10

## INFORMATION

The Environmental Services Department provides a verbal update on energy activities at each Council Transportation and Environment Committee. The attached document provides a written overview of what was presented at the June 7, 2010 Committee meeting and an overview of upcoming energy workshops coordinated by the Environmental Services Department.

/s/

JOHN STUFFLEBEAN  
Director, Environmental Services

For questions please contact Mary Tucker, Energy Program Manager at (408) 975-2581.

Attachment

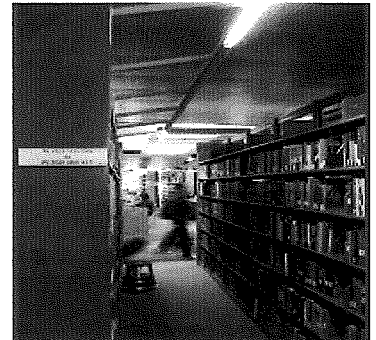
Attachment  
**Transportation and Environment Committee**  
**June 7, 2010 ENERGY REPORT (VERBAL)**

**LIBRARY ENERGY HIGHLIGHTS\***

**Energy Efficiency**

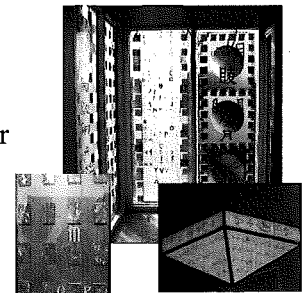
**Martin Luther King Jr. Library:**

- 5,180 book stack lights & 2,255 ceiling lights (offices & public areas) replaced with energy-efficient light fixtures
- Improved light controlling/scheduling features
- Installed occupancy sensors
- Results:
  - Reduced energy consumption by 29% (1.9M kWh/ yr.)
  - \$310K annual savings as result of retrofit
  - \$387K PG&E incentive received
  - Projected payback in 2.24 years



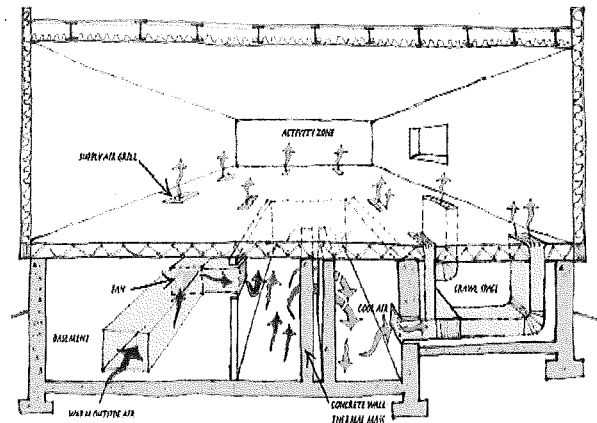
**Pearl Avenue Branch:**

- Designed to meet Leadership in Energy & Environmental Design (LEED) certified
- Solar photovoltaic cells are embedded on the exterior side of each of the four art glass panes
  - Collect energy from sunlight
  - Provide power to illuminate “We are all one” LED lamp (public art piece)



**East San Jose Carnegie Branch:**

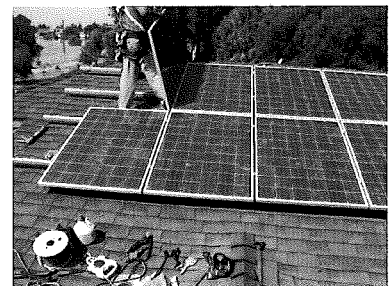
- Designed to meet LEED certified
- Uniquely designed remote mass cooling system in basement
  - 4' high crawl space draws in cool night air
  - Keeps building cooler in summer
  - Thermal mass in walls reduces heating in winter



**Solar Installations**

**Alviso Library:**

- 3 kW photovoltaic system installed in August 2010
- Funded by the Community Development Block Grant (CDBG)



**Under Consideration:**

Solar RFP planned for release in summer 2010 which proposes solar on eleven new and existing library sites:

- |                           |                 |
|---------------------------|-----------------|
| 1. Almaden                | 7. Evergreen    |
| 2. Alviso (parking lot)   | 8. Santa Teresa |
| 3. East San Jose Carnegie | 9. Seven Trees  |
| 4. Educational Park       | 10. Tully       |
| 5. Edenvale               | 11. Willow Glen |
| 6. Joyce Ellington        |                 |
- savings estimates based on current operating hours

Attachment  
**Transportation and Environment Committee**  
**June 7, 2010 ENERGY REPORT (VERBAL)**

**Waste Conversion to Energy—Zero Waste/Energy Plan Strategies**

- *Technology Feasibility Analysis*
- *Private Sector Partnering*
- *Commercial Solid Waste Redesign*
- *Treatment Plant Master Plan*
- *Grant Funding*

**UPDATES**

- Commercial RFP for organics processing released on Feb 4, 2010. Proposals, which include conversion technology processing options, being reviewed by rating panel, and technical experts. System recommendations to Council in Winter 2010.
- Demonstration Project RFI resulted in 4 conversion technology projects for consideration by ESD. Technical evaluation of proposals to analyze feasibility of project concepts supported by HDR engineering.
- Demonstration agreement for gasification feasibility and demonstration project being developed with Harvest Power to be reviewed by Council in August, 2010.
- Harvest Power partnered with the City of San Jose to submit a \$1.9 million grant to the California Energy Commission for pre-development feasibility and demonstration of a gasification project to be located at the Wastewater Treatment Plant.
- Treatment Plant Activities: Nine Par Anaerobic Digestion Project, FOG Processing, Master Plan Opportunities (Harvest Power)

**City of San Jose Energy Program—Grant Agreements Update**

- Solar America City—Education and Outreach (\$200,000)—no cost extension beyond June 30, 2010 expiration date
- Solar America City—Market Transformation/Special Projects (\$1.3M)—final negotiated agreement to Council for approval June 22, 2010
- Local Energy Assurance Program (\$300,000)—energy issues as a part of emergency planning—final negotiated agreement to Council for approval June 22, 2010
- P&GE Innovation Pilot (\$900,000)—Expanding Housing Rehab with energy improvements and providing mini-grants for energy education activities to neighborhood groups. In negotiation, anticipate early August Council approval
- Retrofit California (\$750,000)—part of California collaborative (Los Angeles County/lead; ABAG, San Diego, and Sacramento County) for receipt of DOE Competitive EECBG funds. Focus on Whole Neighborhood Approach for energy efficiency and workforce development (micro-loans). Leveraged with SNI, Housing and Work2Future

- savings estimates based on current operating hours

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**Workshops and Classes**

**Community/Neighborhood Classes**

June 2, 2010 1-3 p.m.	Pizza Box Solar Oven Workshop Alviso Library
June 9, 6:30 PM	Home Energy Efficiency Presentation – Alviso Library Community Room
June 10, 2010 6:30 p.m	Japantown Neighborhood Association Solar Program Presentation The Campbell home @ 711 N. 7th Street
June 16, 2010	Willow Glen Neighborhood Association Solar Program Presentation Location TBD
June 17, 2010	Lynhaven Neighborhood Association Solar Program Presentation International Christian Center 3275 Williams Road, San Jose

**Professional Training/Workshops**

Thu, Jun 3 9:00 am - 4:30 pm	Combined Hydronic Space and Water Heating for Homes San Jose--Pipe Trades, 780 Commercial Street, San José, CA
June 9-12, 8-5 (9-1 on Saturday for practical examination	Build It Green certification trainings & GreenPoint Rater Training IBEW Local 332 Headquarters 2125 Canoas Garden Avenue San Jose, CA 95125
June 7-8, 8am – 5pm	Certified Green Building Professional – Monday and Tuesday, , IBEW Local 332 Headquarters, 2125 Canoas Garden Road, 95125
Tue, Jun 22 9:00 am - 4:30 pm	Deep Energy Reductions - The Thousand Home Challenge San Jose--Pipe Trades, 780 Commercial Street, San José, CA

- savings estimates based on current operating hours