



Major Outstanding Projects

- ▶ Air handlers audit
- ▶ Retro-commissioning
- ▶ Recycling Compactor
- ▶ Occupant Surveys
- ▶ Improved Pest Management
- ▶ Phase out program for CFC-based HVAC units



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Performance Period July – September 2009

7/13/09	Air handlers audit
7/13/09	Retrocommissioning (RCx)
7/22/09	Improved Pest Management
8/1/09	Install New Recycling Compactor
8/1/09	Install New boilers
8/15/09	Occupant Surveys
8/21/09	Custodial Effectiveness Survey
8/31/09	Phase out Program for CFC based HVAC



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Replace Boilers

- ▶ Replace three boilers in:
 - One in each tower: T1, T2, & T3
- ▶ Existing boilers:
 - Less than 70% efficiency
- ▶ New boilers:
 - ModCon Munchkin
 - ▶ 94% efficiency



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ModCon

- ▶ 94% efficiency
- ▶ Modulating
- ▶ Stackable frame
- ▶ Requires special air intake & exhaust
 - All boiler rooms were inspected and will comply with requirements
- ▶ Equipment cost: \$8,600 - \$13,100 depending on size
- ▶ Some extra installation costs
- ▶ Rebate of \$700 - \$1,200 per unit depending on size



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Boiler Savings

- ▶ Move from less than 70% efficiency to 94%.
- ▶ Approx. savings of \$11,500 per year replacing 3 boilers
 - At \$1.20 per therm



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Waste Stream Reduction

- ▶ Composting Program
 - Landscaping Waste & Residents
- ▶ Placed posters in all trash rooms
 - Batteries and hazardous light bulbs
 - E-waste (TVs, PCs, phones, etc.)
- ▶ To install New Compactor



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RECYCLING ONLY

including bottles, cans, clean paper, foil, and cardboard

COMPOSTING ONLY

including food scraps, napkins, paper plates, compostable cups & compostable utensils

WASTE ONLY

ELECTRONIC RECYCLING ONLY

RECICLAJE ELECTRÓNICO SOLO

NO TRASH

Please place unwanted items in the box below, with care:

- Computers
- Printers
- Home Electronics
- Telephones
- Cell Phones
- Fax Machines
- and all other electronic devices

CALIFORNIA LAW STATES: All individuals dropping off 250 or less computers/recyclables must give their name and address. No cash for items.

Trash Only Here

Food and soiled paper belong in the green cart.

Clean paper, bottles, cans, and hard plastics belong in the blue cart.

Blue and green carts are downstairs.

Thank You,
The Management

Battery Recycling

Now in your building

Reciclaje de Pilas
Ahora en su edificio
回收電池現在就在你的居住樓宇內

When U.S. signs you call 800-333-3333 for a free poster.

USED FLUORESCENT CFL BULBS RECYCLING

EL RECICLAJE DE BOMBILLAS
NO TRASH

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Plaque in Lobby

Your Disposal Room Guide

R - Recycling

C - Composting

E - Electronic Recycling

CFL - Fluorescent Bulb Recycling

B - Battery Recycling

QUESTIONS?

Sunset Scavenger
(415) 330-1300

Golden Gate Disposal & Recycling
(415) 626-4000

SFRecycling.com

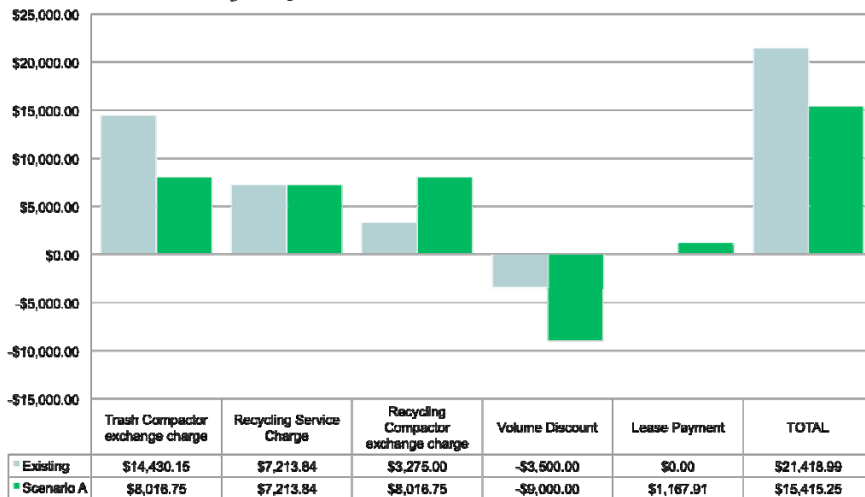
Savings from New Compactor

- ▶ Incentive: % Diverted = % Savings
- ▶ Annual Savings: 40% Diversion
 - Approx. \$72,000
 - 810 cubic yards diverted from landfill
- ▶ Annual Savings: 60% Diversion
 - Approx. \$114,000
 - 1,460 cubic yards diverted from landfill
 - ▶ Equivalent to 10 semi truck trailers



Waste Stream Savings

Monthly Disposal Cost Breakdown – 40% Diversion



Note: This is an approximation and the actual bill amount will vary.

Tenant Education Week

- ▶ Explanation of “Fillmore Greening” to tenants
- ▶ Distributed compost bins
- ▶ Distributed 500 CFLS
 - 23.5 kW load reduction
- ▶ Bike to Work Week
- ▶ Great response from tenants!
- ▶ Video Sample



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Staff Education Week – July 27 - 31

- ▶ Personal training for completed Plans & Policies:
 - Hardscape Management Plan
 - Integrated Pest Management Plan
 - Purchasing Policy
 - Waste Stream Policy
- ▶ Performed my SEP and Fillmore head staff
- ▶ The goal is to clarify & streamline processes to improve efficiencies, minimize mistakes, and increase consistency.



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Air Handler Audit

- ▶ Required by LEED to meet ASHRAE standards
- ▶ Clark Seif Clark, Inc. 
- ▶ Project Scope
 - Certified Industrial Hygienist / Certified Indoor Environmentalist
 - Develop comprehensive catalog of all air handling equipment
 - Assess condition of all air handling units
 - Identify inefficiencies / recommend upgrades
 - Determine indoor air flow and indoor air quality



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Occupant Surveys

- ▶ 15 possible LEED points
- ▶ Transportation Survey
 - Residents who commute in a single occupied car – vs. – other forms of commuting
- ▶ Occupancy Comfort Survey
 - Satisfaction with appliances, thermal comfort, air quality, lighting levels, and building cleanliness



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Integrated Pest Management (IPM)

- ▶ Site Assessment Complete
- ▶ Terminix fine-tuned IPM plan
- ▶ Fewer chemicals used
- ▶ Prevention over termination
 - Example: Alter landscaping procedures to prevent nests rather than exterminate pests



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Other Projects Underway

- ▶ Custodial Effectiveness Assessment Survey
- ▶ Replacing light bulbs during unit turnover with high efficient CFLs
- ▶ Replacing fountain lights with high efficient lighting
- ▶ Replacing dog runs with new synthetic turf
 - Using recycled content
 - Scheduled for August



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Solar PV & Thermal

- ▶ Power Purchase Agreement



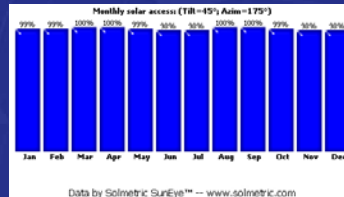
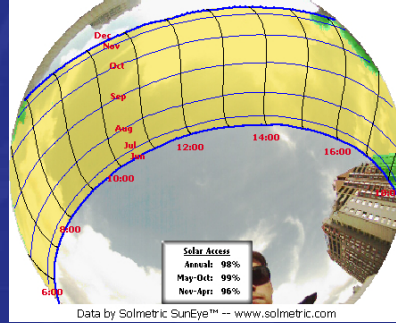
Solar System Design

- ▶ Solar PV
 - Offsets 7% of electricity
 - System Size: 135 kW
- ▶ Solar Thermal
 - Offset 6% of natural gas
 - System Size: 3,136 Sq. Ft.

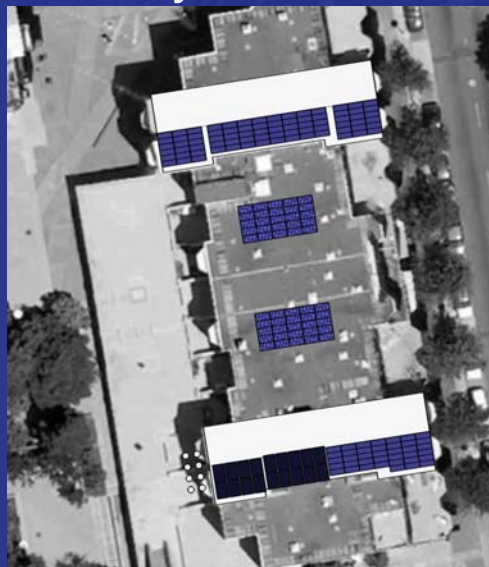


Solar Opportunity

- ▶ Great solar access
- ▶ Minimal shading
- ▶ San Francisco climate
- ▶ Full solar analysis completed



Solar Layout – F1



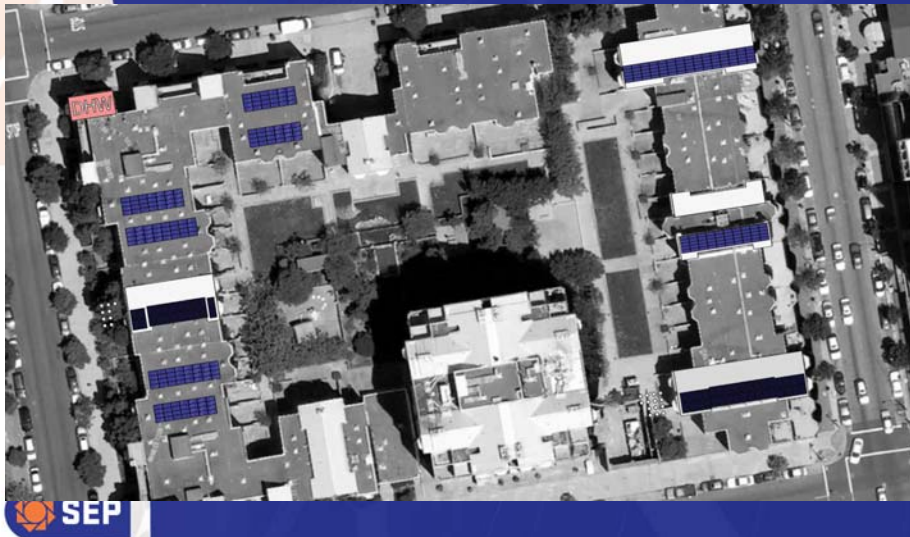
Blue modules are PV
Black modules are thermal



Solar Layout – S2 & F2



Solar Layout – S3 & F3



SUSTAINABLE ENERGY PARTNERS

2588 Mission St Suite 210 San Francisco, CA 94110 | (415) 648 1299 t | www.SEPpartners.com

LEED Cost List

Replace three boilers	\$78,000
Retro commissioning	\$24,600
Low mercury light bulbs	\$12,600
New compactor	\$45,099
Air handler Audit	\$8,500
Occupant Surveys	\$10,000
Custodial Effectiveness Assessment	\$4,500
Sustainable Cleaning Supplies	\$10,000
TOTAL	\$193,299



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Current Point Status

Category	Points
Sustainable Sites	5
Water Efficiency	3
Energy Efficiency	14
Materials & Resources	6
Air Quality	8
Innovation in Operations	5
Total	41

- ▶ Certification – 34 points
- ▶ Silver – 43 points
- ▶ Gold – 51 points
- ▶ Platinum – 68 points



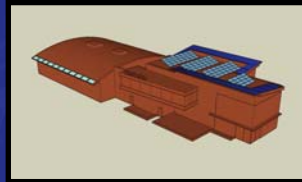
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