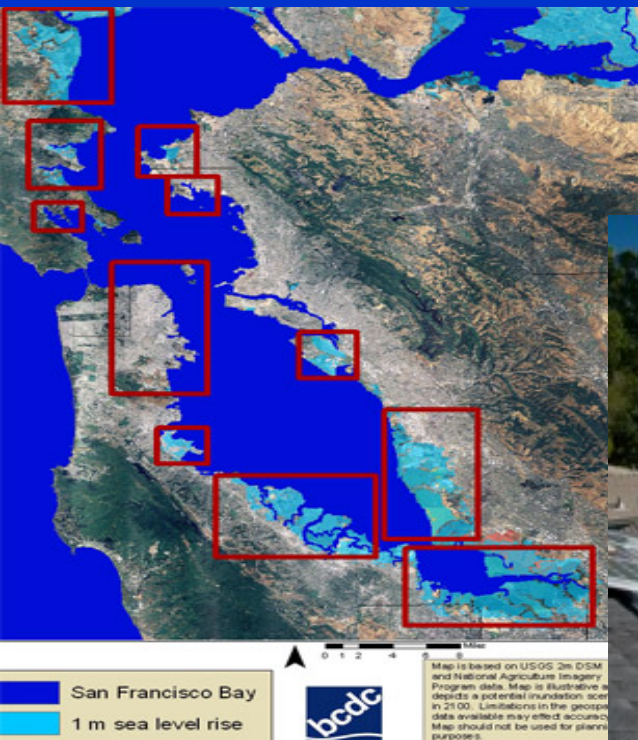
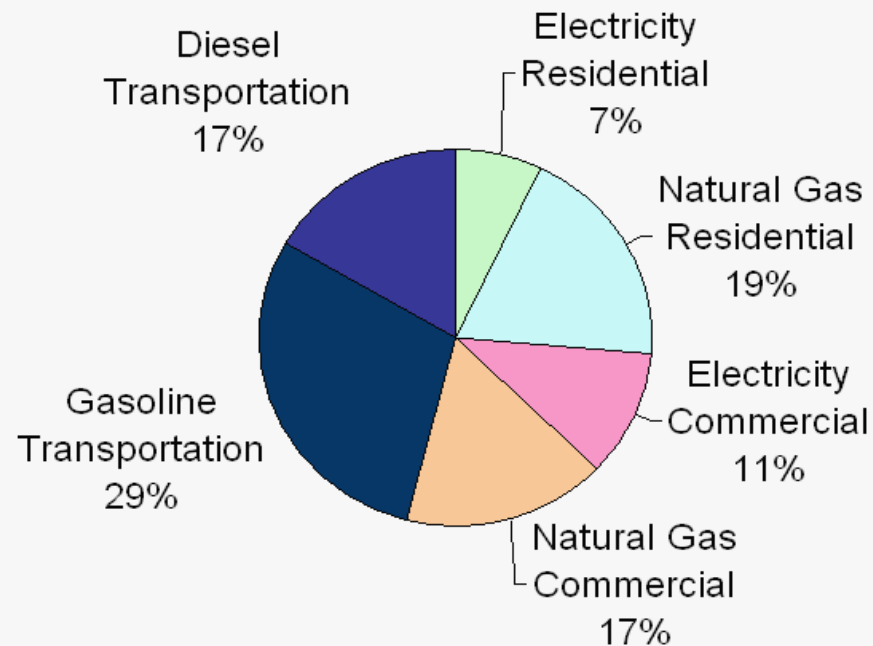


Financing Sustainable Energy City of Berkeley



Source of Green House Gas Emissions in Berkeley



City Plans and Policies

- **General Plan** - 15% GHG reduction by 2010
between 2000 and 2005 achieved **9% decrease**
- **Measure G** - 80% reduction in GHG by 2050
- **Climate Action Plan**
 - Transportation and Land Use
 - Building Energy Use
 - Waste Reduction /Recycling
 - www.BerkeleyClimateAction.org

Solar Goals for 2020

Solar PV & thermal to meet 11% of the GHG Reduction Goal in Climate Action Plan

Residential Installations

Now: 2.9 MW

Goal: 5.3 MW

Commercial Installations

Now: .27 MW

Goal: 1.3 MW

Berkeley Energy Conservation Programs

- Residential and Commercial Energy Conservation Ordinance
- Low Income Weatherization Program
- Smart Solar Program
- Berkeley FIRST – solar financing

Berkeley FIRST Program

(Financing Initiative for Renewable Solar Technology)



Finance solar and energy efficiency improvements for residential & commercial properties

Financing model similar to CFD

Additional 20 year Property Tax levy on participating properties to payoff bonded indebtedness of District

Framework for Sustainable Energy Financing District



- Adopted new Special Tax Financing Law amended Berkeley Municipal Code Chapter 7.98

Incorporates State Law

- CA Constitution Article XIII A Section 4
- Mello-Roos Community Facilities Act

Alternative procedure for forming district to allow territory to consist of parcels to be annexed

Alternate procedure for approving bond indebtedness by unanimous consent of property owner

Framework for Sustainable Energy Financing District



- Establish Sustainable Energy Financing District
- Adopt Goals and Policies
 - As required for Mello-Roos Act
- Set Maximum Bonded Indebtedness
 - Authority to issue bonds up to \$80 M for renewable and energy efficiency improvements
- Levy of Special Taxes on parcels annexed to Special Tax District

Program Design

Property applicant applies and title check conducted



Property owner contracts directly with solar installer

Program Requirements

- California Solar Initiative Rebate requirement
- Compliance with City Residential/Commercial Energy Conservation Ordinance (RECO/CECO)
- Financing provided following documentation of completed installation
- Repayment for 20 years through an annual special tax on their property tax bill.

Financing Process



- Installation completed
- City places Tax lien on property
- Private investment firm purchases individual bonds from the City and issues payment to client
- Investors will receive semi-annual special tax payments from City
- Bonds may be aggregated and resold
- City commits to cover portion of late payments
- County would foreclose after five-year delinquency

Financing Example



| | |
|--------------------|----------|
| Solar Project Cost | \$28,077 |
| CSI Rebate | (6,108) |
| City Program Cost | 538 |

| | |
|-----------------|----------|
| Financed Amount | \$22,507 |
| Interest | 7.75%* |

Annual Tax Payment \$ 2,193 / \$183 mo.

* Based on 10 year Treasury on February 28, 2008 at 3.20% will fluctuate until locked down

Pilot Program Implementation



- 2008 Initial Pilot Program – issue bonds up to \$1.5 M for 40 solar PV installations
- Maximum financing is \$37,500 per property
- Two week application period, final approvals on December 10, 2008

Staffing Resources (Operations)



City Planning Department

1.0 FTE Program Manager

.25 FTE Community Service Specialist

Finance Department

Prepare Property Tax roll, Issue Payments to Property Owners, Debt Service Management

Third Party Administrator

Applications, screening, customer service, verifications and final document preparation

Other Consultants

Bond Counsel, Financial Adviser, Fiscal Agent

Lessons Learned

- Participant Commitment
- Property Tax Timing
- County Cooperation

Lessons

- **Develop a schedule for processing bonds and payments**

Coordination and flow among several partners

- **Up Front and Carrying Costs**

Most installers require minimum \$1,000 deposit and sometimes pre-payment for equipment

- **Periodic Review of Program Terms**

Remind participants of highlights or pre-financing obligations

Next Steps for State

- Legislation - Passage of SB 279
- Program Evaluations
- Energy Efficiency – HERS II - Training
- Identify Financing - Lower rates – loan guarantees
- Statewide or regional roll out

Berkeley FIRST Program

(Financing Initiative for Renewable Solar Technology)



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