



## Local, Clean and Green

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# SF and LA Commercial PACE Programs

- Using “Open Market” Programmatic Approach
  - Designed by Clinton Climate Initiative
    - Assisted by Hannon Armstrong, Renewable Funding, others
  - Create competitive marketplace
  - Property owner negotiates rate, terms directly with project investor
  - City issues bond to project investor, collects payments through property taxes, remits to project investor
- ARRA funds for debt service reserve fund
  - Helps cover payments to project investor in the case of late payments or default by property owner

# Sonoma Mountain Village

First project using the “open market” PACE structure (September 2011)



- \$1.6 million PACE financing for portion of 1MW PV system
- Proof of private capital interest in PACE
- Entailed modification of Sonoma program to allow owner-arranged financing
- Demonstrated critical value-add of private sector expertise
- Clean Fund developed structure to meet mortgage lender requirement that project generate positive EBITDA in all years
- Year 1-20 payments = \$150,000  
Utilities reduction year 1 = \$175,000

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# Energy Loans: The Good News

- Bad News: Most traditional sources of financing were hammered over the last few years.
  - Underwriting standards failed
  - Banks are conservative
  - Consumers are deleveraging
- Good News: Energy loans performed well
  - PACE defaults near zero
  - Unsecured lending outperformed comparable unsecured consumer credit

# Example CA Energy Upgrade Financing Options

	Rate	Terms	Loan Amount	Notes
<b>Local Example:</b> EUC Los Angeles	4.99% - 8.99%	10-15 years secured 5-10 years unsecured	\$2,500-\$50,000	ARRA funded Loan Loss Reserve
<b>State Example:</b> CHF Residential Energy Retrofit Loans	3% fixed	15 years Unsecured	N/A	No private capital. Restricted to low to mid-income homeowners
<b>National Example:</b> FHA PowerSaver Loans	Varies by lender; may be between 6 – 10%	Up to 20 years Secured and Unsecured	Up to \$25,000	FHA provides reserve for a percentage of portfolio

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# Energy Efficiency Upgrades - Multiple Barriers

- People are primed on the issue of energy efficiency, but...
  - Underestimate what is required; overestimate what they've done so far
  - Tend to think of energy improvements only when something breaks
  - Are stymied by complexity, lack of trust in contractors and government
  - Can't pay for the improvements and don't want to borrow money
  - Are put off by the lack of visibility of these improvements



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# Visibility



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# Invisible



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# What Do Consumers Really Think?

- **Flipping the Switch Will Save the World**
  - People are primed on energy saving, but underestimate what is involved
  - Turning off lights beat “retrofits” by 10-to-1
  - Most think they are “above average”
- **Trust is in Short Supply**
  - Contractors are not trusted
  - Government programs are viewed with skepticism
- **You Had Me at Hello, But Lost Me at “Audit”**
  - Complexity is killing demand
  - Don’t say “retrofit” or “audit”
- **Financing is a Dirty Word, but Desperately Needed**
  - 44% said debt was a reason to avoid a program
  - 80% said financing would be necessary to do a project
  - Far more comfortable with “pay as you go”

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# 1,493,641



Web portal  
individual  
page views since  
February


# 4,454



Emails sent through  
the web portal to  
**contractors and  
raters**

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# Over 2,000

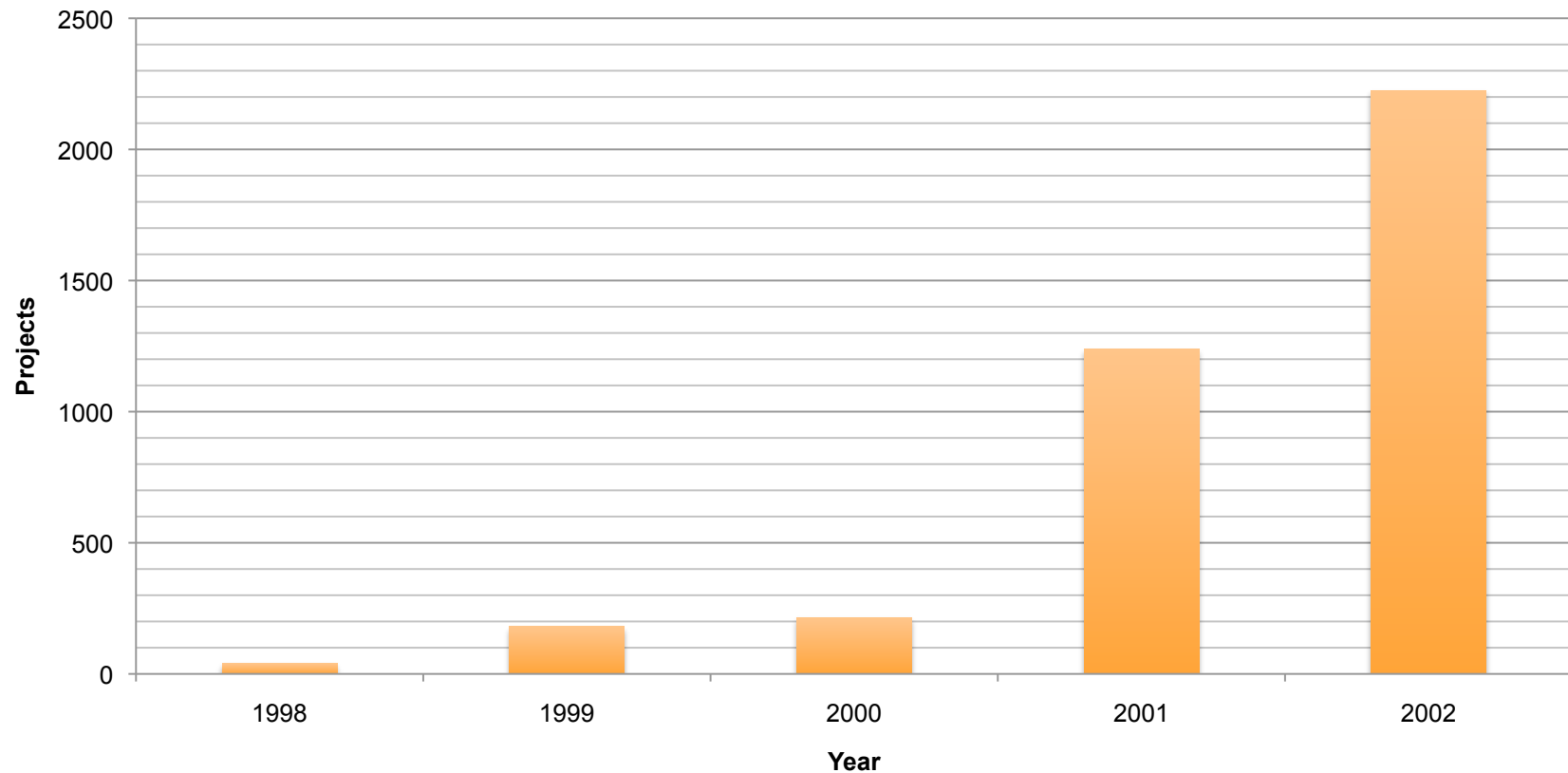
Energy efficiency  
projects in the IOU  
incentive programs  
since January 2011

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# Comparison to Early PV Market

## Emerging Renewables Program (PV)



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# 250

Contractors qualified to participate in incentive programs within PG&E, SCE/SCG, SDG&E and SMUD territories.

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