Local, Clean and Green

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Renewable Funding
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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

Reduce energy use. Save money. Create jobs.
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

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

Reduce energy use. Save money. Create jobs.
Invisible

Reduce energy use. Save money. Create jobs.
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”
1,493,641

Web portal individual page views since February
4,454

Emails sent through the web portal to contractors and raters.
Over 2,000 Energy efficiency projects in the IOU incentive programs since January 2011
Comparison to Early PV Market

Emerging Renewables Program (PV)

Year

Projects

1998 1999 2000 2001 2002

0 500 1000 1500 2000 2500

Reduce energy use. Save money. Create jobs.
250 Contractors qualified to participate in incentive programs within PG&E, SCE/SCG, SDG&E and SMUD territories.