Financing Innovation the SF Bay Area:
PACE and beyond
SEEC Forum, Riverside CA
June 15, 2016
2010 Citywide CO$_2$e by Sector

5.3 million metric tons
(14.5% below 1990)

<table>
<thead>
<tr>
<th>Category</th>
<th>Source</th>
<th>CO$_2$e (MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cars &amp; Trucks</td>
<td></td>
<td>2,118,863</td>
</tr>
<tr>
<td>Commercial Electricity</td>
<td></td>
<td>928,785</td>
</tr>
<tr>
<td>Residential Natural Gas</td>
<td></td>
<td>782,960</td>
</tr>
<tr>
<td>Commercial Natural Gas</td>
<td></td>
<td>609,521</td>
</tr>
<tr>
<td>Residential Electricity</td>
<td></td>
<td>335,195</td>
</tr>
<tr>
<td>Waste</td>
<td></td>
<td>244,625</td>
</tr>
<tr>
<td>Municipal Natural Gas</td>
<td></td>
<td>119,860</td>
</tr>
<tr>
<td>Rail (BART &amp; Caltrain)</td>
<td></td>
<td>68,046</td>
</tr>
<tr>
<td>MUNI</td>
<td></td>
<td>45,310</td>
</tr>
<tr>
<td>Ferry</td>
<td></td>
<td>34,103</td>
</tr>
<tr>
<td>Municipal Electricity</td>
<td></td>
<td>12,489</td>
</tr>
<tr>
<td>Forestry</td>
<td></td>
<td>-4,717</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td>5,299,757</td>
</tr>
<tr>
<td>Total with Sink:</td>
<td></td>
<td>5,295,040</td>
</tr>
</tbody>
</table>

Category | %    
---------|------
Building Energy Use | 52%  
Transportation      | 43%  
Waste               | 5%   

Source
Mello-Roos special tax bonds (SB 555)
“Open market financing” (SF is conduit issuer)
Multiple capital providers compete to finance a wide range of buildings and projects
  - Owner-occupied or multitenant office; retail; industrial/warehouse; nonprofit-owned
Financing terms customized for each transaction (interest rate and other terms)
Leasehold interests can serve as security (e.g. Prologis)
Could eventually offer to new construction projects
Case Study: Prologis

Pier 1, San Francisco

- $1,400,000 bond issued by SF, purchased by Clean Fund
- HVAC + lighting + 200kW PV = 32% demand reduction
- Solved “spilt incentive” (savings and debt service shared w/tenants)
- Positive cash flow
**Investor Confidence Project (ICP)**

**What:** ICP standardizes the EE origination process

**Why:** Because standardized *Investment Ready* projects:

- **increase** investor confidence in project returns
- **reduce** complexity in bringing projects to market

![Diagram showing the process steps: Project Developer, Quality Assurance Provider, Verification, Energy Performance Protocol]

www.eeepformance.org
BayREN C-PACE Program

- Sustainable Real Estate Solutions
- PACE training (contractors)
- Project development support
  - Optimize project scenario for SIR* > 1
  - ICP protocols integrated
- Owner, capital provider meetings & coordination
- “Success-based” fee structure
- ~$15 million pipeline

*Savings-to-Investment ratio: total projected savings / total debt service over life of PACE term
## Local Government Education

### ABAG Residential PACE Comparison Matrix

<table>
<thead>
<tr>
<th>Program Name</th>
<th>HERO</th>
<th>Ygrene Works</th>
<th>CSODA Open PACE</th>
<th>Figtree</th>
</tr>
</thead>
</table>
| Financing Organization | Renovate America (Residential) Sans Capital (Commercial) | Ygrene Energy Fund | Residential - Renew Financial
Commercial - Has a preferred capital provider, but with option for property owner to source their own capital | Deutsche Bank, PACE Funding Group/Admirals Bank |
| Administrator | Western Riverside Council of Governments / Public Financial Management | Ygrene Energy Fund | Renew Financial | CounterPoint Energy Solutions |
| GPA Sponsor | Western Riverside Council of Governments (WRCOG) | Golden State Finance Authority (formerly known as CA Home Finance Authority) | California Statewide Communities Development Authority (CSODA) | California Statewide Communities Development Authority (CSODA) |
| Governance Structure (e.g. who makes up the board) | 17 Member Cities and County that make up WRCOG GPA | Executive Team Includes CEO, Founding Board Member, and senior staff | CSODA was created by and for local governments in California, and is sponsored by the California State Association of Counties (CSAC) and the League of California Cities (The League). Currently, more than 500 cities, counties and special districts have become Program Participants to CSODA. CSODA is governed by a seven-member commission that are appointed by CSAC and the League. | California Association for Local Development (CALDO) |
| Enrolled in CARATEA’s PACE Loss Reserve Program | Yes | Yes | Yes | In Process |
| Legislative Origin | AB 811 | AB 811 and AS 811 | AB 811 | AB 811 |
| Year Started | 2011 | 2010 | 2014 | 2015 |
| Property types served | Residential, multifamily w/4+ units, commercial | Residential, multifamily w/4+ units, commercial | Residential, multifamily w/5+ units, commercial | Residential, Apartments 3 units or less |
| Program Admin/Underwriting Fees | Residential: closing fee 4.99% of principle
Commercial: not exceed greater of $250 or 1% of financing amount, closing fee of 5% | Residential: $884 flat fee plus 3% of contract amount
Commercial: Noc start at $700 and depend on size | Residential: closing fee not to exceed 0.4%
Commercial: Closing fee depends on source of capital, ranges 2.5%-4%, capped at 3% for projects <500k | Residential: Closing fee of 6.5% of assessment
Commercial: Closing fee of 5% of assessment |

### PACE Key Points
- PACE is a customer-oriented program, with an emphasis on quality projects, highly trained contractors, and unique consumer protection measures.
- If a property owner has a positive payment history for the mortgage and property taxes, and has equity in the property, they probably qualify for PACE.
- Application processes are simple and straightforward, and approvals are quick.
- Under State law, a PACE assessment automatically stays with the property upon transfer of ownership.

Over the past three years, more than $700 million in residential (single family) PACE financing has occurred in California. This number is expected to continue as the state expands the PACE program.
PA’s affirm they will:

- Clearly disclose potential risks (FHFA, mortgage lenders, etc.), and related concerns (e.g. taxes) to homeowners in program documents
- Participate in CAEATFA Loss Reserve
- Share program/project data with local governments (standardization)
- Promote ratepayer funded incentives, rebates, and related TA offerings
- Other: require owner sign-off on installs; provide detailed financing info to PO’s; indemnify LG’s; meet minimum contractor standards
PACE technical standards development

- Push highest savings/optimized/premium solutions?
- Tracking or M&V to verify savings?
- Project data and quality spec’s helps sell to long term investors
- What’s public vs. private?
District-scale initiatives

Central South of Market (SOMA)
Long term funding sources for:
• District energy/water systems
• Revolving funds for building-scale projects (solar, EE, DER’s)

Sustainable Chinatown
• Assemble data to inform opportunities
• Aggregate demand for energy projects and financing
• Demonstration projects (public housing: greywater and solar)
Microfinance (Co-pay revolving loans)

Goals

1. Pilot new service (co-pay microloans) with past and new SFEW customers in order to complete more projects.
2. Help customers implement projects that improve monthly business cash flow and provide long terms energy and financial savings.
3. Reduce GHG emissions related to small business energy use.
4. Draft terms
   - 0% loans to range $100-$4,999 for businesses that enroll in SFEW
   - Loans will be re-paid from energy savings, terms match payback (in months), revolve $ to loan to more customers
   - Use existing program infrastructure (ECM’s, assessors, contractors)
   - Targeting ~20-30 businesses in the first pilot year
   - Community lending partner to administer fund; will provide wrap around credit building training etc.
Thank You!

Richard Chien
Senior Program Coordinator
GreenFinanceSF
richard.chien@sfgov.org

© 2016 SF Environment All Rights Reserved
The author of this document has secured the necessary permission to use all the images depicted in this presentation. Permission to reuse or repurpose the graphics in this document should not be assumed nor is it transferable for any other use. Please do not reproduce or broadcast any content from this document without written permission from the holder of copyright.