

Financing Innovation the SF Bay Area:

PACE and beyond SEEC Forum, Riverside CA

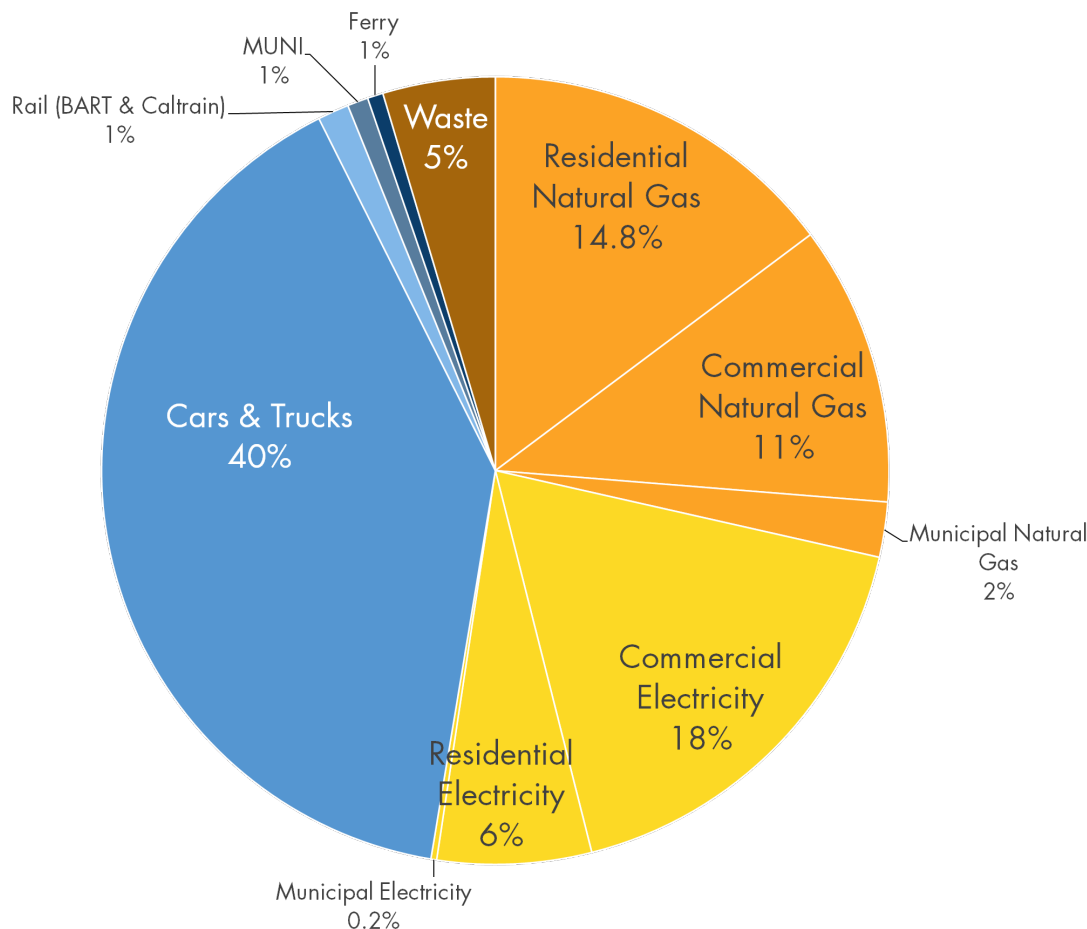
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2010 Citywide CO₂e by Sector



5.3 million metric tons
(14.5% below 1990)

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

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

GreenFinanceSF (C-PACE)



GreenFinanceSF 
Saving You Money, Energy and Water

- 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



www.eepperformance.org



BayREN C-PACE Program



For Immediate Release:

SRS and BayREN Launch Clean Energy Financing Workshop Series

Sessions Will Focus On How Contractors Can Use PACE Financing to Grow Their Business

TRUMBULL, Conn. – April 8, 2015 – Sustainable Real Estate Solutions, Inc. (SRS)—a leading provider of services and tools to assist contractors, project developers, and energy service companies qualify, develop and underwrite projects for energy efficiency financing—has been retained by the Bay Area Regional Energy Network (BayREN), to conduct a workshop series for San Francisco Bay Area contractors entitled: *How C-PACE Financing Can Grow Your Business*.

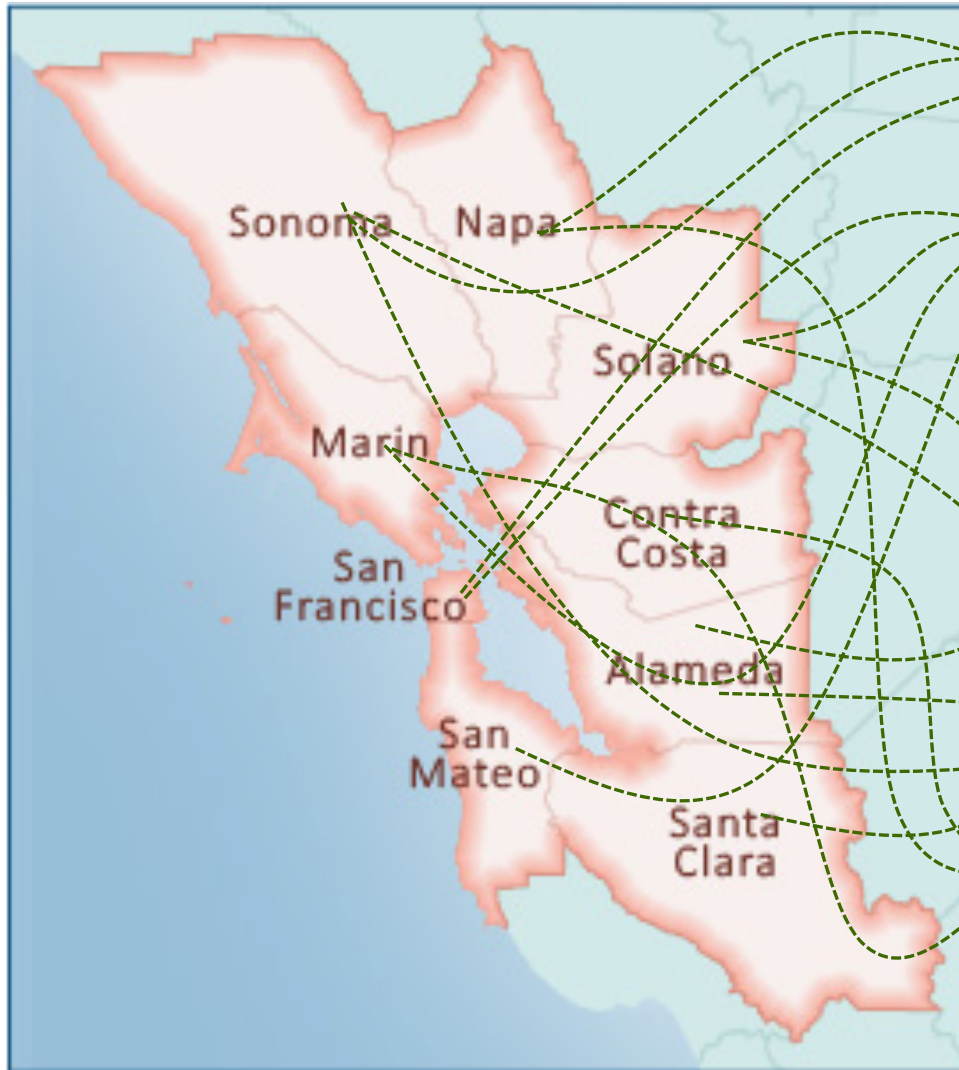
The free workshops are scheduled on Tuesday, May 5 through Friday, May 8, from 8:30 a.m. to 12:30 p.m. at select locations across the Bay Area. [Registration is currently open](#) for the sessions.

The workshops, led by Brian J. McCarter, CEO of SRS, third-party administrator for the industry-leading Connecticut statewide C-PACE program, are designed to show how commercial and industrial real estate project developers, energy service companies and contractors can grow their business using innovative C-PACE financing. The sessions will outline other successful programs and showcase the standards, tools and underwriting best practices proven to win projects and meet stakeholder underwriting demands.

- 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 term⁶

CA PACE “Open Market”



Local Government Education



[ABAG](#)
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[For Local Governments](#)
[PACE Providers](#)
[More Info](#)

ABAG RESIDENTIAL PACE COMPARISON MATRIX

DRAFT 10-22-

Program Name	HERO	Ygrene Works	CSCDA Open PACE			Figtree
			CaliforniaFIRST	Alliance NRG	Pace Funding Group	
Financing Organization	Renovate America (Residential) Samas 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	PAVE Funding Group/Admirals bank	Figtree Financing
Administrator	Western Riverside Council of Governments / Public Financial Management	Ygrene Energy Fund	Renew Financial	CounterPointe Energy Solutions	Pace Funding Group	Figtree Financing
JPA Sponsor	Western Riverside Council of Governments (WRCOG)	Golden State Finance Authority (formerly known as CA Home Finance Authority)	California Statewide Communities Development Authority (CSCDA)	California Statewide Communities Development Authority (CSCDA)	California Statewide Communities Development Authority (CSCDA)	California Enterprise Development Authority (CEDA)
Governance Structure (e.g. who makes up the board?)	17 Member Cities and County that make up WRCOG JPA	Executive Team includes CEO, Founding Board Member, and senior staff	CSCDA 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 CSCDA. CSCDA is governed by a seven-member commission that are appointed by CSAC and the League.			California Association for Local Development (CALED)
Enrolled in CAEATFA's PACE Loss Reserve Program	Yes	Yes	Yes	Yes	In Process	Yes
Legislative Origin	AB 811	SB 555 and AB 811	AB 811	AB 811	AB 811	AB 811
Year Started	2011	2010	2014	2015	2015	2010
Property types served	Residential, multifamily w/4+ units, commercial	Residential, multifamily w/5+ units, commercial	Residential, multifamily w/5+ units, commercial	Residential, multifamily w/5+ units, commercial	Residential, Apartments 3 units or less	Commercial; residential coming soon
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: fees start at \$700 and depend on size	Residential: closing fee not to exceed 6.4% 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	Residential: Closing fee of 5.95% of assessment Commercial: TBD	Commercial: Cost of Issuance Fee of 2% to 4% of total financing to cover costs of issuing bonds to fund projects

- 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. Jurisdictions across the nation are looking to California as a model as they explore similar

Collaborative Services Agreement



AGREEMENT FOR COLLABORATIVE SERVICES FOR PROPERTY ASSESSED CLEAN ENERGY FINANCING

This Agreement ("Agreement"), dated as of _____, 2016 ("Effective Date") is by and among the Association of Bay Area Governments (hereinafter "ABAG"), [insert PACE program provider name], (hereinafter "PACE Provider"), as an entity administering a Property Assessed Clean Energy (PACE) financing program utilizing either the California Assembly Bill 811 and/or California Senate Bill 555 model and the Participating Entity described in this Agreement.

RECITALS

WHEREAS, ABAG is committed to mitigating and adapting to the causes and impacts of climate change and supporting energy independence from fossil fuels to safeguard the environment, human health and the economy; and

WHEREAS, ABAG as Program Administrator for the Bay Area Regional Energy Network (BayREN), works closely with 101 cities in the nine county Bay Area region (ABAG territory) to develop and implement innovative energy efficiency programs, including supporting commercial and residential Property Assessed Clean Energy (PACE) programs.

WHEREAS, the BayREN offers programs, technical resources and education for energy upgrades and retrofits; and

WHEREAS, the objective of the BayREN is to help property owners save energy, save money, and live comfortably; and

WHEREAS, the BayREN seeks to assist local governments to understand all aspects of partnering with PACE Providers in order to minimize customer confusion, provide access to education and information to property owners and assist with making informed decisions on rebates and incentives, contractor programs, and financing options; and

WHEREAS, the PACE Provider is willing to participate to support community climate goals and minimize consumer and contractor confusion; and

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

Data and Reporting



Required Data

Assesor's Parcel Number (APN)	Dollar Amt Financed	Measure Category	Measure Subcategory	Unit of Measure	Measure Quantity	For Generation only: PV Capacity Installed (STC-DC kW)	Contractor Name
555-55-551	\$ 10,000	Renewable Energy	PV; thermal	# panels	11	5.45	AAA Solar
555-55-552	\$ 5,000	Energy Efficiency	water heaters	MBTUH; energy factor			AAA Plumber
555-55-553	\$ 25,000	Energy Efficiency	boilers; furance	AFUE; CE			AAA Contractor
555-55-554	\$ 40,000	Energy Efficiency	pipe insulation	psi			AAA Contractor
555-55-555	\$ 7,500	Energy Efficiency	AC; heat pumps	BTU; EER; SEER			AAA Contractor
555-55-556	\$ 12,500	Energy Efficiency	fans; motors	horsepower			AAA Contractor
555-55-557	\$ 60,000	Energy Efficiency	pipe insulation	R-value			AAA Contractor

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



SOMA SOLAR & DEEP GREEN PROGRAM / INNOVATION FUND

\$15-60M

Capital cost funding for high-performance systems (revolving low-interest loan fund, grants, Mello Roos bond, et al)

- District systems / utilities
- Healthier/more efficient affordable housing
- Community solar / green power
- Community education and outreach



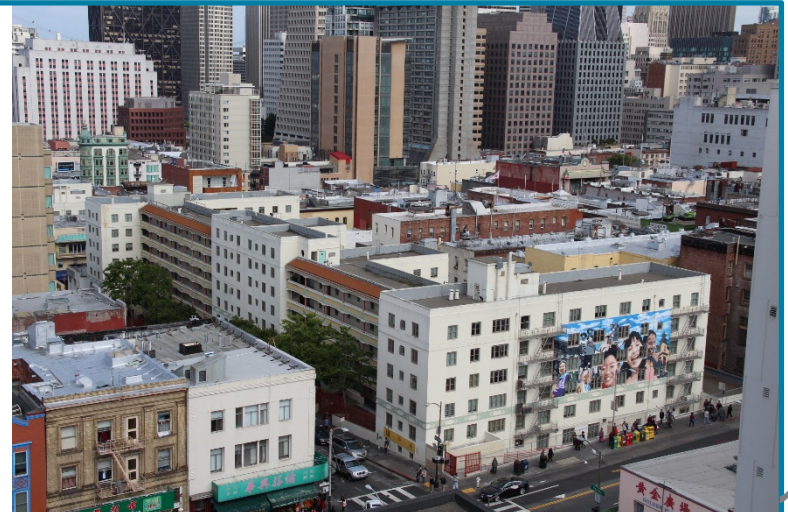
Central South of Market (SOMA)

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!

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Senior Program Coordinator

GreenFinanceSF

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SF Environment

Our home. Our city. Our planet.

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A Department of the City and County of San Francisco

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