



CLEAN ENERGY FINANCING

Driving Market Transformation



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Our Mission:

Accelerate the transition
to a sustainable world
powered by clean energy

What We Do

Information Resource & Expert Implementation Partner



Energy
Programs



Technical
Assistance



Training &
Education

Areas of Expertise



Building
Performance



Clean
Transportation



Distributed
Generation



Energy
Efficiency



Energy
Storage

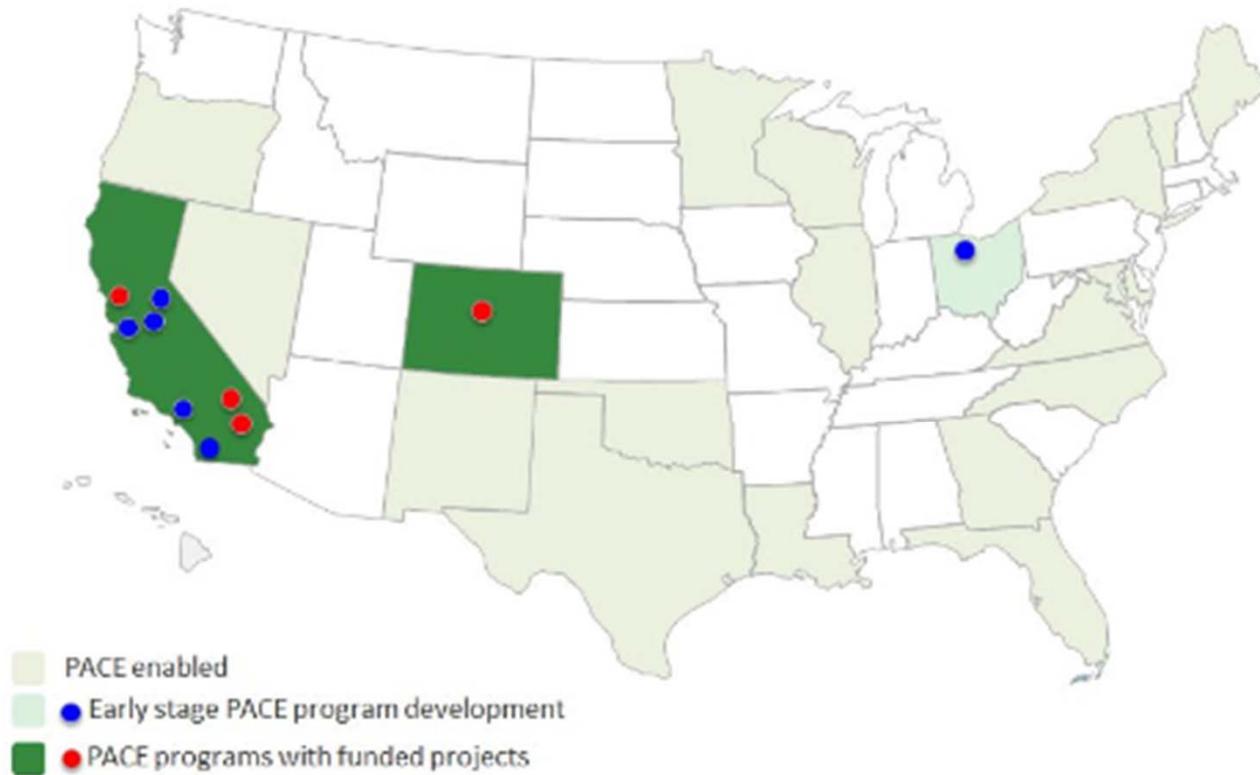


Renewable
Energy

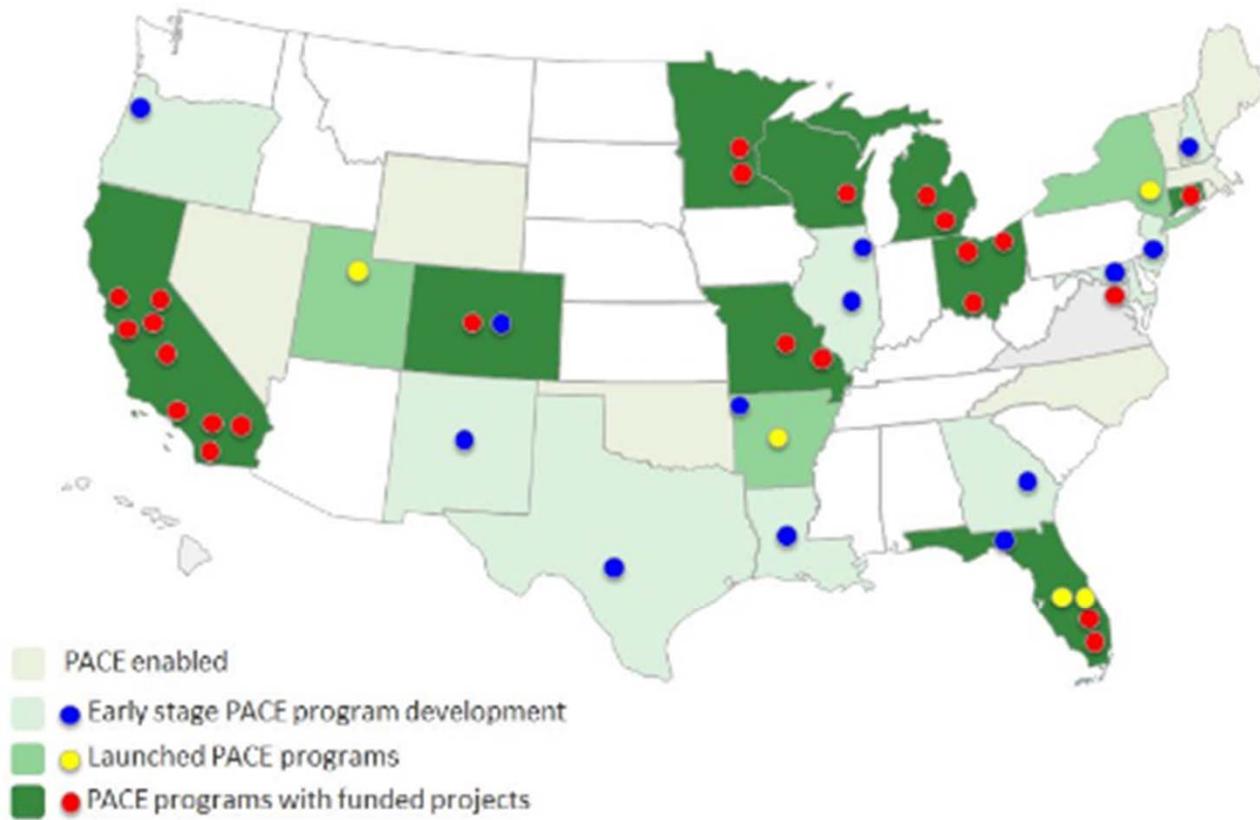
Clean Energy Financing

PACE financing has exploded in California and contractors are using it as a vehicle to not only provide basic services like HVAC change-outs, but to expand their business models and find new clients.

PACE Market in 2010



PACE Market in 2015



California Policies Accelerating Growth

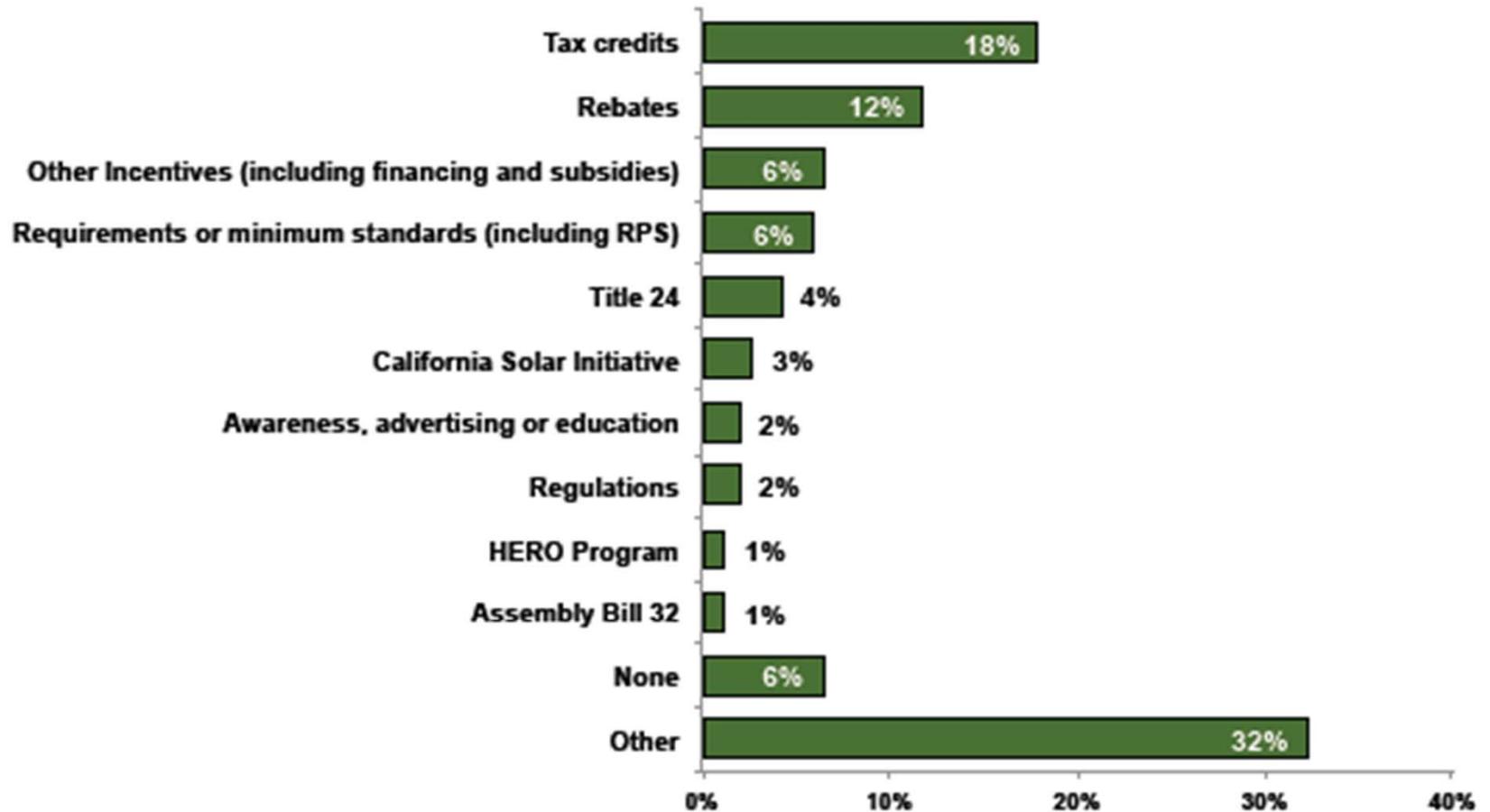


Figure 11: Policies Accelerating Advanced Energy Growth

California Advanced Energy Employment Survey, December 2014

Estimated National Residential PACE Market

Estimated Residential Market

25000

Number of Projects

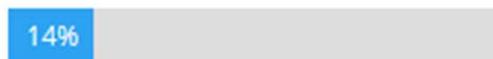
500

\$, millions

Energy Efficiency



Renewable Energy



Mixed



7500

Jobs Created

Estimated California Residential PACE Market

	WRCOG & CA HERO	SANBAG HERO	Sonoma County	CA FIRST	Ygrene
Projects funded	17,695	6,320	2,061	140	<100
\$ funded <i>(in millions \$)</i>	\$342.6	\$112.1	\$58.0	\$2.8	<\$2.0

California EE Jobs by Region

Region	Energy Efficiency Jobs
Southern California	130,000
Inland Empire	40,500
Central Coast	10,000
Greater San Francisco Bay	65,500
Greater Sacramento	7,500
Rest of CA	47,513

California Advanced Energy Employment Survey, December 2014

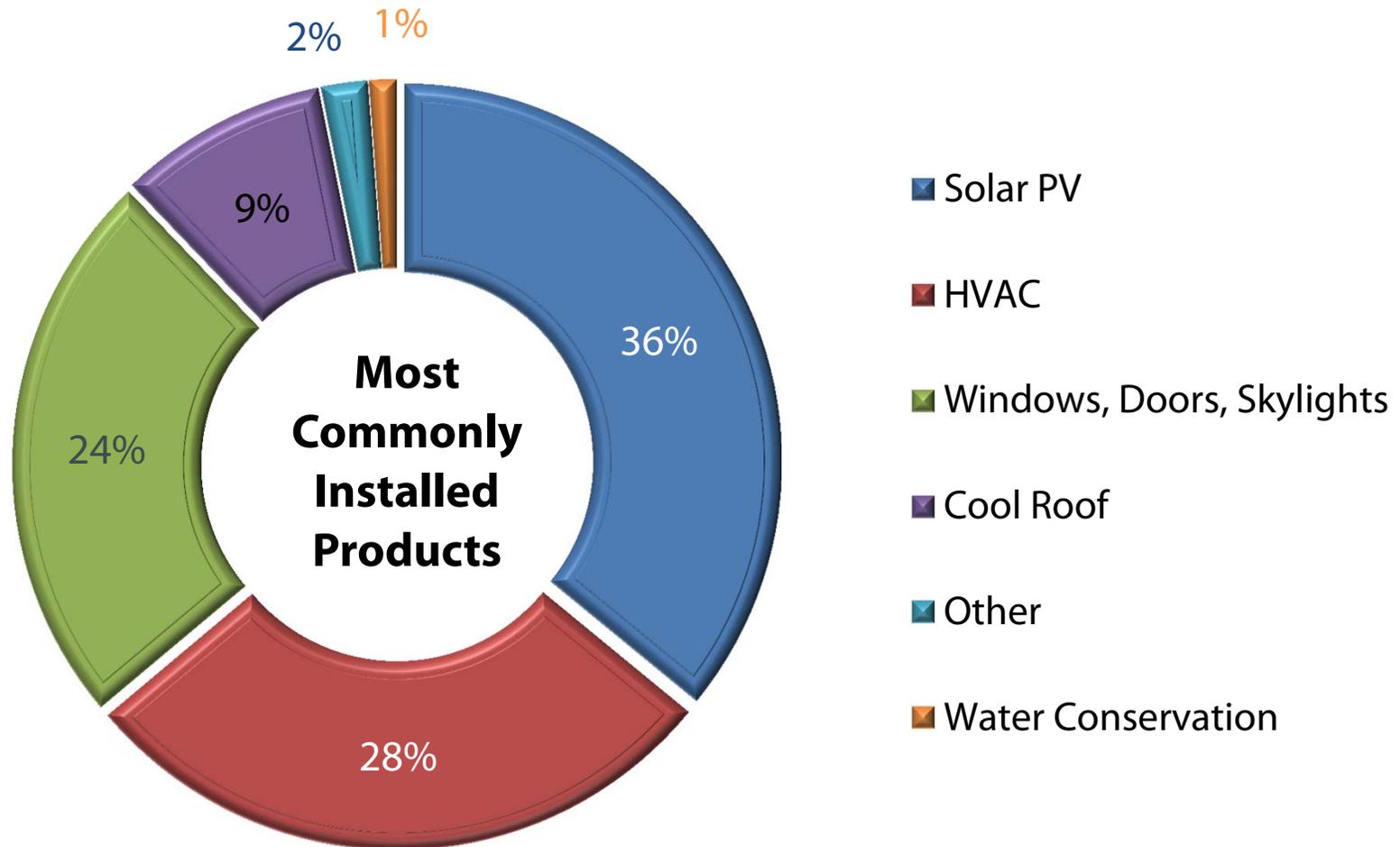
Jobs that are Financed

Average project size
of financed jobs: \$ 10,130



Average project size
of non-financed jobs: \$ 4,365

Most Commonly Installed Products



HERO Program, January 2015

Energy Efficiency Programs

Energy financing programs that have generated substantial volume permit customers to finance single measure improvements (i.e., HVAC replacement, lighting retrofits) in addition to more comprehensive approaches that deliver deeper energy savings.



Panel Presentations

- **Laura Franke, Managing Director**
Public Financing Management, Inc.
- **Barbara Spoonhour, Director of Energy and Environmental Programs**
Western Riverside Council of Governments
- **Andrew Waugh, Strategic Accounts Manager**
Renovate America

Discussion

- What are some of the **benefits** of energy efficiency financing?
- What are some of the **challenges** that need to be overcome?
- What are some of the **tools** available to integrate energy efficiency into the market?

Benefits

- Opportunity to incentivize homeowners to move from a single measure to a whole house retrofit
- Aligns with homeowner behavior and how various market segments decide the install order of their retrofits
- An opportunity for Raters (and additional professionals) to provide services to the contracting community
- In-depth contractor training on financial tools and sales techniques, as well as other professional training (Raters, Realtors, other channel partners)

Challenges

- Lack of collaboration between contractors
 - Many solar contractors do not offer home performance services or collaborate with home performance contractors
 - Many contractors do not collaborate with Raters
- Lack of customer understanding and/or interest
 - Confusing program messaging, marketing and EE rebate programs
- Solar is more visible than EE
 - Prioritizing solar installations over home performance
- Insufficient financing options to cover combined projects
 - PACE is helping

Tools

- PACENow – PACENow.org
- CSE's California's statewide PACE Map – www.energycenter.org/PACE
- CSE's Clean Energy Finance Database – www.energycenter.org/Finance
- CAEATFA's Energy Efficiency Financing Pilot Programs – single family this spring
- California's PACE Providers



Center for
Sustainable Energy™

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