

New Project

2016 Building Technologies Office Peer Review



SoCal *Edge*

U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy

Ben Stapleton, LA Cleantech Incubator
David Hodgins, LA Better Buildings Challenge

Project Summary

Timeline:

Start date: July 2015

Planned end date: July 2017

Key Milestones

1. RFI Release, September 2015
2. Define demonstration opportunities, January 2016
3. Launch matchmaking campaign, January 2016

Budget:

Total Project \$ to Date:

- DOE: \$28,000
- Cost Share: \$33,000

Total Project \$:

- DOE: \$417,119
- Cost Share: \$520,000

Key Partners:

LA Cleantech Incubator
LA Better Buildings Challenge
LA Department of Water & Power
Southern California Gas

Project Outcome:

The intended outcome of the project is to accelerate market adoption of best-in-class building technologies, and to create an “on-ramp” for emerging technologies to enter the market.

Purpose and Objectives

Problem Statement: Technology is advancing rapidly, investment brings risk, and property owners and managers are extremely busy – together these factors slow the market’s adoption of best-in-class technologies.

Target Market and Audience: SoCal Edge currently targets Commercial buildings in the City of Los Angeles, which account for 12.8 million megawatt-hours of energy consumption (50%). The audience is property managers and owners with large real estate portfolios, who will be able to scale successful pilots.

Impact of Project:

- Outputs:
 - 5 completed pilot projects, with 2 scaling up to multiple sites
 - Emerging Technologies “Onramp” process
- Near-term outcomes – Qualified Products List for LED Lighting
- Intermediate outcomes – Emerging Technology Onramp
- Long-term outcomes – Expand regionally, demonstrate emerging technologies across larger markets and in more sectors

Approach

Approach:

- Identify best-in-class technologies through RFI processes
 - Leverage Green Proving Ground testing and research
 - Leverage DOE performance specifications
 - Engage utility partners
- Negotiate demonstration opportunities, metrics for success that can lead to scaled up portfolio implementation
- Market technologies to LABBC owner/manager partner base
- Provide free Technical Assistance
- In parallel, work with utility partners to develop emerging technology “on-ramp”
- Develop M&V process for emerging tech projects

SoCalEdge



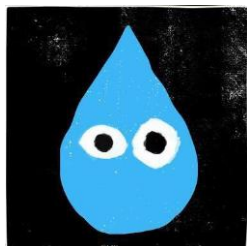
✓ Successfully tested through GSA
Green Proving Ground



✓ High-impact, Meet DOE Performance
Specification



✓ LACI Portfolio Companies



✓ Water Saving Technologies

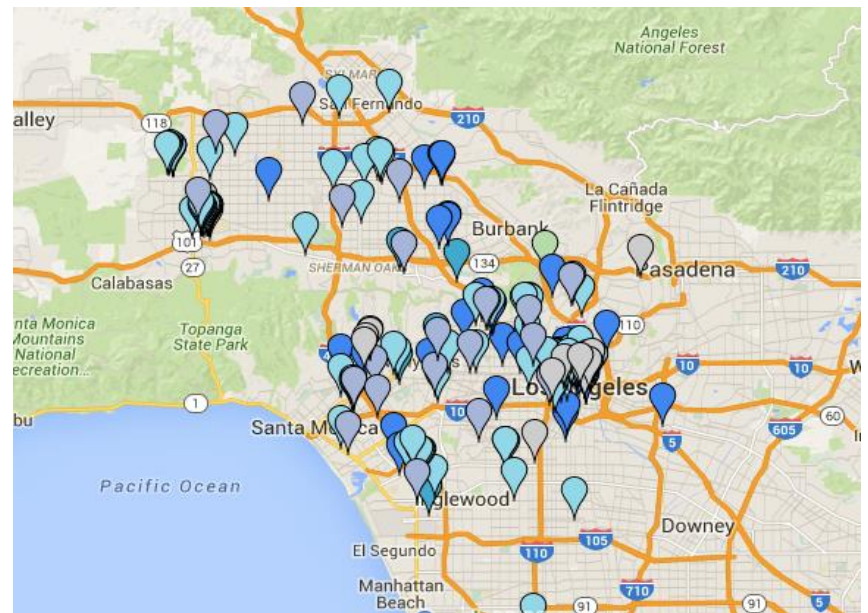
Approach

Key Issues:

- Lack of objective standards / specifications
- Lack of time to survey, select and test technologies

Distinctive Characteristics:

- LACI campus & capabilities
- LABBC partnership base
- Technical Advisory support
- Utility engagement



Progress and Accomplishments

Accomplishments:

- RFI processes complete
- Technology demonstration opportunities complete (first round)
- Outreach in process (70M+ square footage in LABBC program)
- Initial demonstration opportunities in process

Market Impact:

- As this is a new project, there are no quantitative results to report at this point.
- Outreach efforts are underway to develop projects and accelerate impact, focusing on large portfolios
- The project is currently on track, with the first demonstration projected to begin in July at the latest

Awards/Recognition: None yet.

Lessons Learned: Pilots for proven technologies should be focused on direct cost savings and ROI, M&V less needed for proven tech, real issue for emerging tech

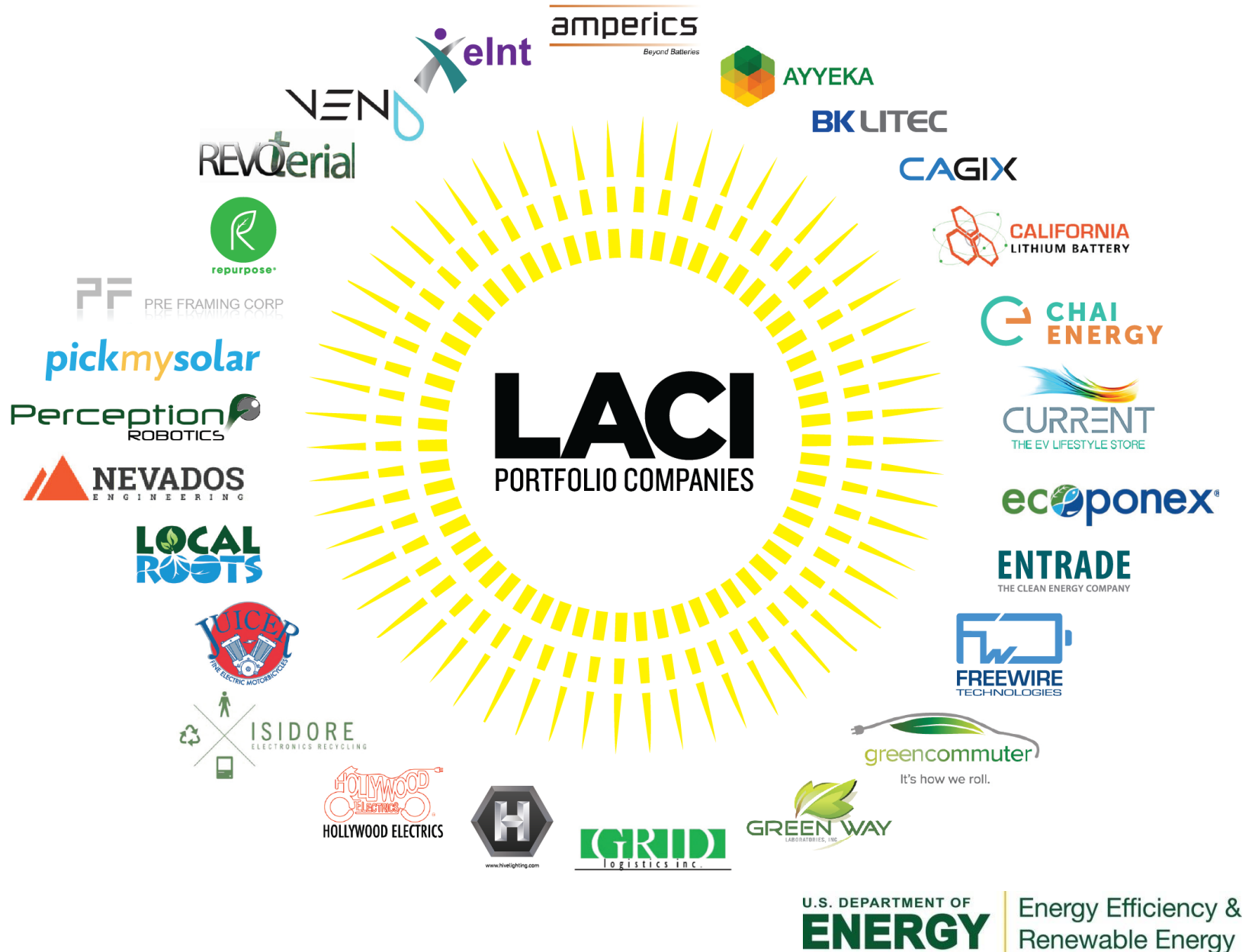
Partners & Collaborators



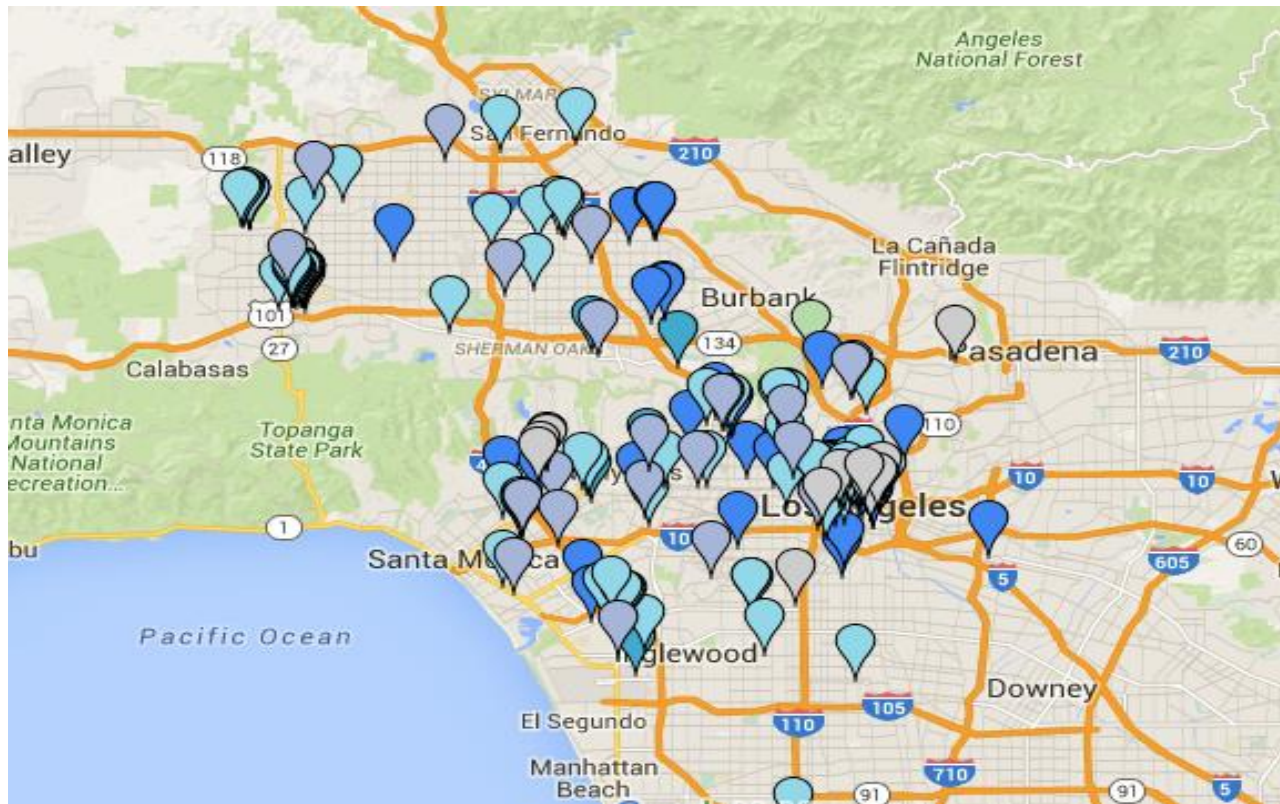
SoCal Edge First Movers



Partners & Collaborators



Partners & Collaborators



Project Integration and Collaboration

Project Integration:

- LABBC conducts outreach, provides project development support
- LACI conducts outreach, refers owners/manager to LABBC
- LACI develops built environment cluster in collaboration with utilities, creates emerging tech on-ramp
- Utility partners fund outreach efforts, define technologies of interest



2016 Building Technology Showcase scheduled for 8/26/16

Next Steps and Future Plans

Next Steps and Future Plans:

- Ongoing outreach to owners & managers
- Case studies on completed projects
- Finalization of Qualified Products List with DOE Lighting Facts

Potential Additional Tasks

- Bring additional technologies in to the program
- Support additional demonstration project types (energy storage, EV)
- Expand throughout Southern CA

REFERENCE SLIDES

Project Budget

Project Budget: The project is within budget, and on schedule.

Variiances: A portion of the budget will be shifted from LABBC to LACI to support additional staff to develop the emerging technology on-ramp.

Cost to Date: Identify what portion of the project budget has been expended to date.

Additional Funding: Existing LACI and LABBC budgets

Budget History

July 1 – FY 2015 (past)		FY 2016 (current)		FY 2017 – June 30 (planned)	
DOE	Cost-share	DOE	Cost-share	DOE	Cost-share
\$28,000	\$33,000	TBD	TBD	\$520,000	\$520,000

Project Plan and Schedule

Task Name	Quarter:	Q1			Q2			Q3			Q4		Q5			Q6			
	Year:	2015						2016											
	Month:	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
	Month:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Task 1.0 -- Project Management Plan																			
Subtask 1.1: Project Management Plan	1	M																	
Task 2.0 -- Identifying Tech and Sites																			
Subtask 2.1: TDI RFQ Launch	3			M															
Subtask 2.2: TDI Marketplace Survey for New Technologies	7							M											
Subtask 2.3: Complete 3 of 5 TDI Demonstration Project Descriptions	9									M									
Subtask 2.4: Launch TDI Property Matchmaking Program	7							M											
Subtask 2.5: Development of TDI Recommended Elements of a Project Development Agreement	12													M					
Subtask 2.6: Complete 3 of 20 TDI Property Assessment Reports	11												M						
Subtask 2.7: 1st Property Owner Commits to TDI Demonstration Project Installation	12													M					
1 -- End of Budget Period 1: Go / No Go Decision	12												G / NG						