



“**Green retrofits** are the **single most important measure** that corporations and real estate owners can take to reduce their operating costs, **raise commercial property values** and achieve important environmental benefits like reduced carbon dioxide emissions.” - Deloitte



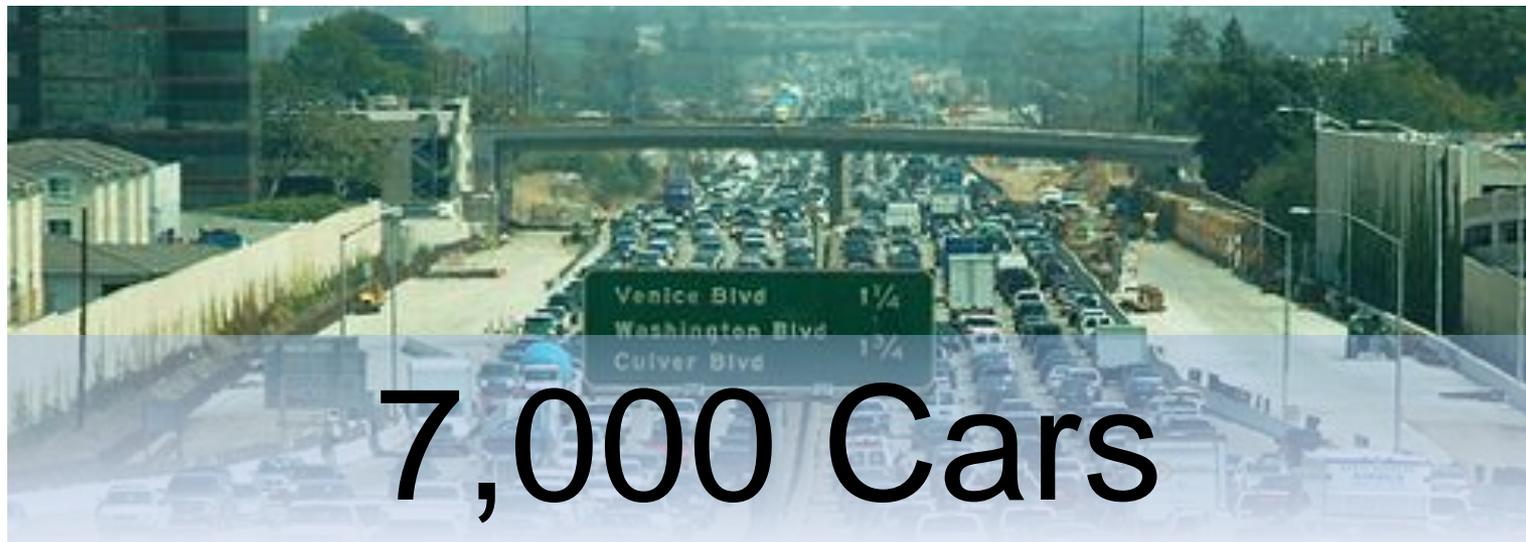
LA Better Buildings Challenge



- 20% energy savings by 2020
- 30 million square feet
- Make LA the greenest big city in the US



LA Better Buildings Challenge



LA Better Buildings Challenge



900,000 Trees



80,000 Barrels of Oil

LA Better Buildings Challenge



7,000 Jobs



I'm slammed at work, and this stuff is confusing...

**WHY DO I NEED ANOTHER
CHALLENGE IN MY LIFE?**

DO THE PERFECT THING?

Retrocommissioning

Change light bulbs

Recycling

Solar panels

BMS systems

Zero energy

Window film

Ice storage

Geothermal conditioning

Historic repositioning

Change behavior

DO SOMETHING!

Get LEED certified

Deep rejuvenation

Continuous commissioning

Focus on energy

DO NOTHING

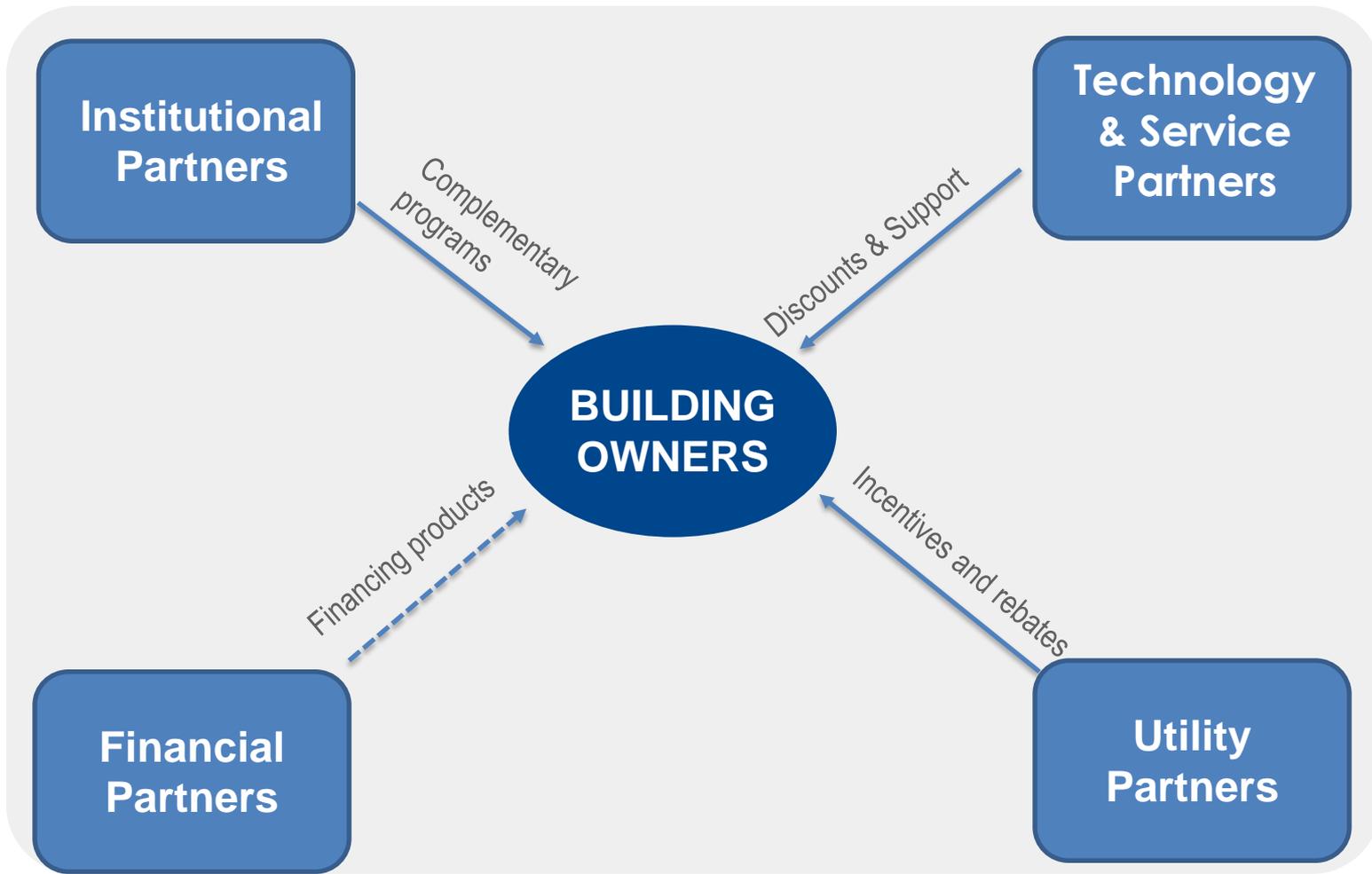
benchmark

Replace chiller

Green roof

White roof

LABBC Partnership Model



Going Green, Makes Green

Hard Value	Soft Value
8.5% Reduction in operating costs	Market differentiation
6.8% Increase in building values	Growing tenant demand
9.2% Increase in ROI	Reduced risk of obsolescence
6.4% Increased occupancy	Lower energy cost risk
6.2% Increases in rent	Stay ahead of regulations
8.5% Reduction in operating costs	Reputation, public image

*Source: McGraw Hill, Green Outlook 2011: Green Trends Driving Growth

Energy Performance will Impact Values more and more directly



Home

DOE and The Appraisal Foundation Announce New Partnership to Focus on Energy Performance and Building Appraisals

June 13, 2011 - 12:00am

WASHINGTON, DC - As part of the Obama Administration's efforts to improve commercial building efficiency 20 percent by 2020, U.S. Energy Secretary Steven Chu today announced a partnership with The Appraisal Foundation that will help expand access to energy efficiency and building performance information for commercial buildings and help American businesses to reduce energy waste. Under the new partnership, the Department of Energy and The Appraisal Foundation will

http://www.eere.energy.gov/pdfs/doe_taf_mou_signed_6-10.pdf

Tenants Care about Green

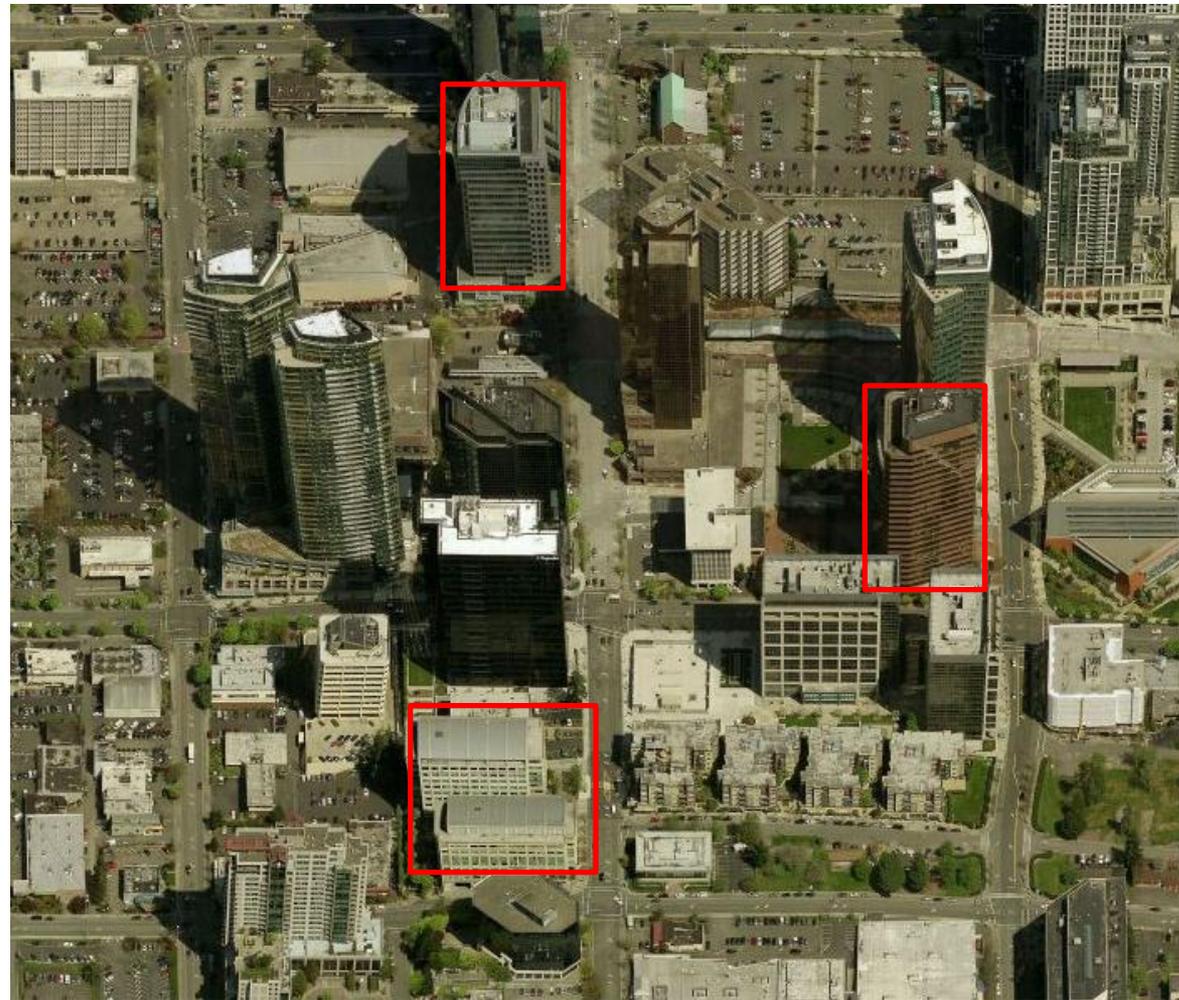
- **Fewer Sick Days**
 - Average of 2.9 fewer sick days
 - Net impact of ~\$5/sf occupied
- **Higher Productivity**
 - 55% report productivity improvement (~\$20/sf)
- **Recruitment and retention**
 - Young people want green
- **But what is the *main* reason tenants care?**



LOWER TOTAL COST OF OCCUPANCY

Source: CBRE 2009 Green Building Study

The Tenant's Perspective: An Example



*Source: Kilroy Realty Corporation



The Tenant's Perspective



Operating Expenses (\$ psf)

Utilities	1.32	1.80	2.33
Janitorial	1.15	1.56	1.97
Administration	0.96	1.60	2.09
Repairs & Maintenance	1.34	1.73	1.05
Management Fees	0.91	0.77	1.67
Insurance	0.59	0.65	0.52
Security	0.54	0.59	0.50
Landscaping	0.07	0.05	0.30
Non-Reimbursable	0.01	0.15	0.10
Expenses ex Tax	6.89	8.90	10.53
RE Tax Estimate	4.00	4.00	4.00
Other	1.71	-	-
Total Expenses	12.60	12.90	14.53
Rental Rate (NNN)	?	?	25.97
Total Cost to Tenant	?	?	40.50
Building Age	2000	1983	2001
Sq Ft	490,000	415,000	300,000

*Source: Kilroy Realty Corporation

The Tenant's Perspective



Operating Expenses (\$ psf)

Utilities	1.32	1.80	2.33
Janitorial	1.15	1.56	1.97
Administration	0.96	1.60	2.09
Repairs & Maintenance	1.34	1.73	1.05
Management Fees	0.91	0.77	1.67
Insurance	0.59	0.65	0.52
Security	0.54	0.59	0.50
Landscaping	0.07	0.05	0.30
Non-Reimbursable	0.01	0.15	0.10
Expenses ex Tax	6.89	8.90	10.53
RE Tax Estimate	4.00	4.00	4.00
Other	1.71	-	-
Total Expenses	12.60	12.90	14.53
Rental Rate (NNN)	27.90	27.60	25.97
Total Cost to Tenant	40.50	40.50	40.50

*Source: Kilroy Realty Corporation

The Owner's Perspective

Operating Expenses (\$ psf)

			
Utilities	1.32	1.80	2.33
Janitorial	1.15	1.56	1.97
Administration	0.96	1.60	2.09
Repairs & Maintenance	1.34	1.73	1.05
Management Fees	0.91	0.77	1.67
Insurance	0.59	0.65	0.52
Security	0.54	0.59	0.50
Landscaping	0.07	0.05	0.30
Non-Reimbursable	0.01	0.15	0.10
Expenses ex Tax	6.89	8.90	10.53
RE Tax Estimate	4.00	4.00	4.00
Other	1.71	-	-
Total Expenses	12.60	12.90	14.53
Rental Rate (NNN)	27.90	27.60	25.97
Total Cost to Tenant	40.50	40.50	40.50
Additional Net Income (\$ psf)	1.92	1.63	
Additional Net Income	938,952	678,641	
Additional Bldg Value (7cap)	13,413,604	9,694,868	

*Source: Kilroy Realty Corporation

The Owner's Perspective



Operating Expenses (\$ psf)

	1.32	1.80	2.33
Utilities			
Janitorial	1.15	1.56	1.97
Administration	0.96	1.60	2.09
Repairs & Maintenance	1.34	1.73	1.05
Management Fees	0.91	0.77	1.67
Insurance	0.59	0.65	0.52
Security	0.54	0.59	0.50
Landscaping	0.07	0.05	0.30
Non-Reimbursable	0.01	0.15	0.10
Expenses ex Tax	6.89	8.90	10.53
RE Tax Estimate	4.00	4.00	4.00
Other	1.71	-	-
Total Expenses	12.60	12.90	14.53
Rental Rate (NNN)	27.90	27.60	25.97
Total Cost to Tenant	40.50	40.50	40.50

Additional Net Income (\$ psf)	1.92	1.63
Additional Net Income	938,952	678,641
Additional Bldg Value (7cap)	13,413,604	9,694,868

Utilities Savings Only (\$ psf)	1.02	0.53
Additional Net Income	497,047	222,660
Additional Bldg Value (7cap)	7,100,667	3,180,855

*Source: Kilroy Realty Corporation

Market Potential

Energy Efficiency is a massive investment opportunity

Percent Market Penetration	Retrofit Cost Per Square Foot		
	\$1/sf	\$3/sf	\$5/sf
10%	\$135m	\$410m	\$680m
25%	\$340m	\$1bn	\$1.7bn
50%	\$680m	\$2bn	\$3.4bn

* >1.8B square feet of commercial space in LA County, Source: CoStar 4.18.11

** Figures in table exclude the approx. 25% of properties whose mortgages are held in ABS, CMBS or CDO trusts.

OK, I'm listening...

SO WHO ELSE IS INVOLVED?

LABBC Partners



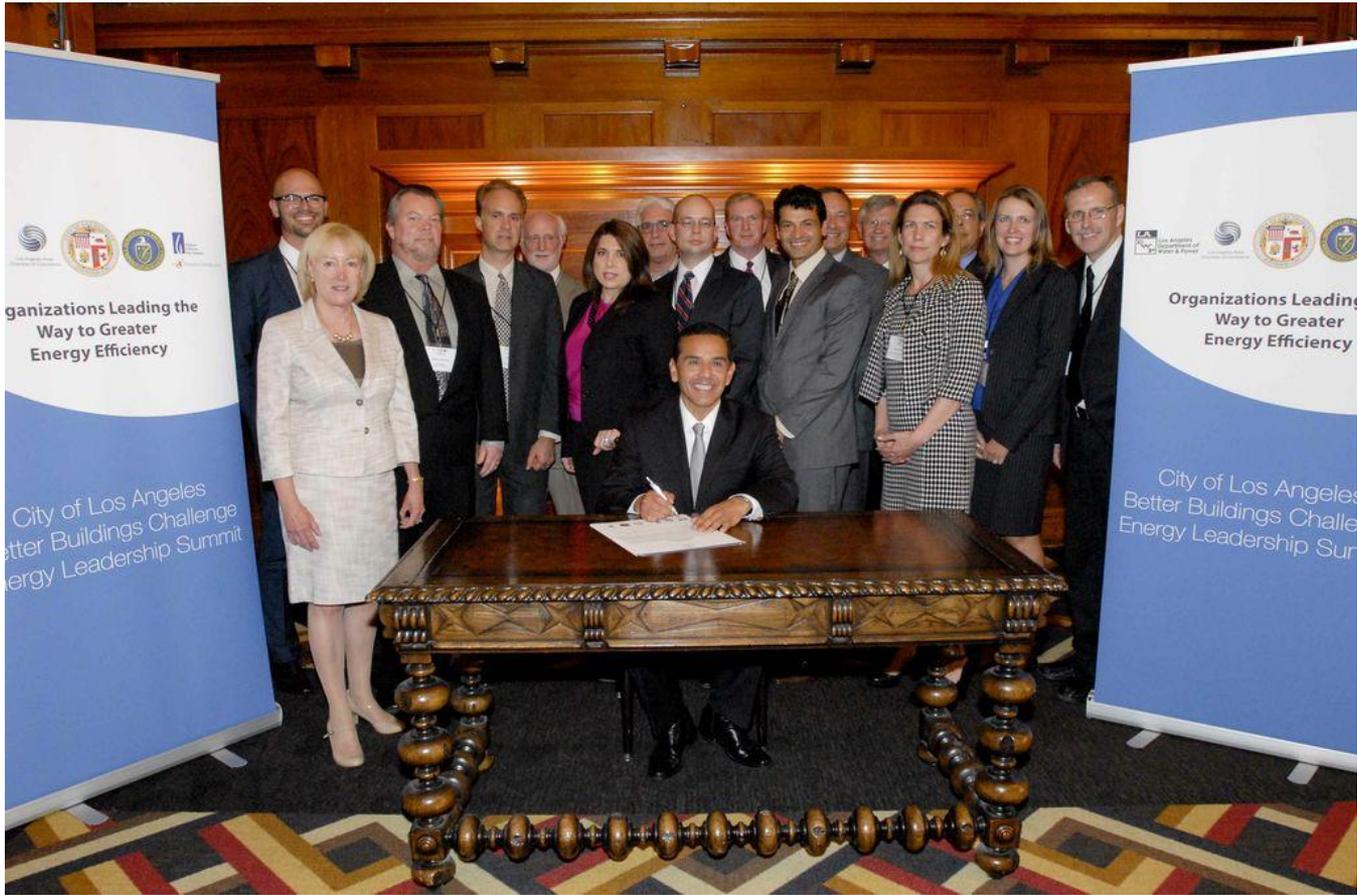
LOS ANGELES



*As of 3/20/2013



LABBC Founding Partners



Commercial Buildings



Municipal Buildings



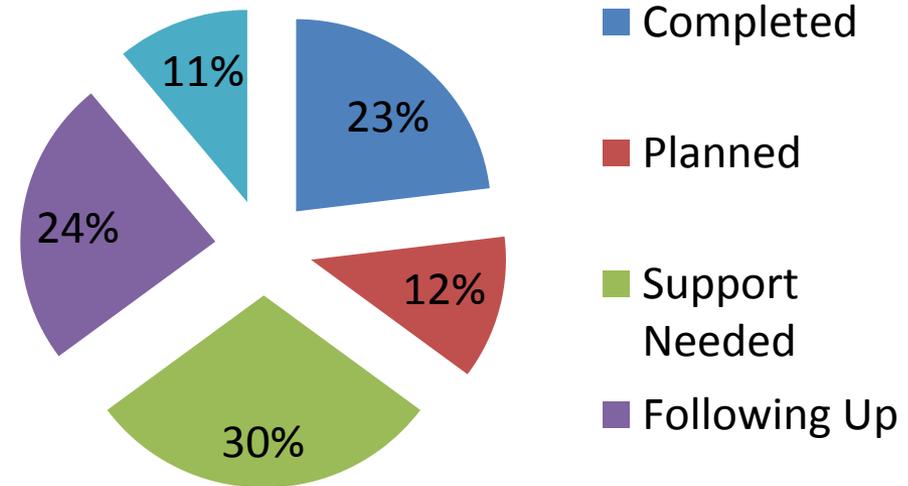
Residential Buildings



The Foundation Has Been Laid

- 91 ASHRAE Level II Audits in 2012 (>35M square feet)
- 32 of 91 (35%) have already implemented or budgeted to implement projects
- Savings equivalent to taking over 2,500 cars off the road or powering over 1,800 homes for a year

Project Status

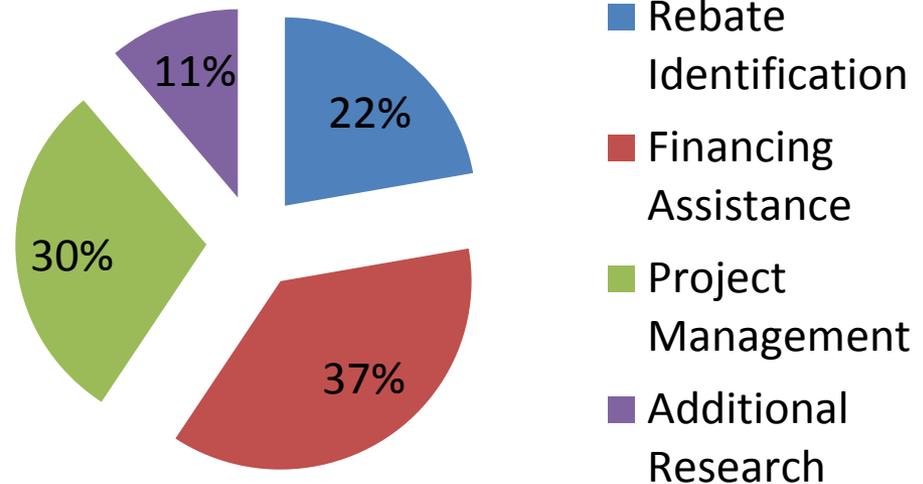


Projected Annual Dollar Savings	ECM cost after Rebate	ECM Payback (in years)	Estimated Saved kWh	Estimated Saved Gal./CCF	Estimated Saved Therms
\$2,279,674	\$12,437,096	5.46	17,118,551	10,515,972	31,092

The Foundation Has Been Laid

- Financing could unlock another \$21 Million in Investment
- Support in securing Rebates and Incentives could unlock \$14 Million more
- Project Management support could unlock another \$17 Million

Support Requested



Individualized Case Management & Special Incentives to LABBC Support BBC Participants

Project Identification & Development through LADWP “EETAP”*

- Automated Data Acquisition
- Energy Audits
- Project Development Support

Financing & Implementation

- Technology Discounts
- Technical Services Discounts
- Contractor Introductions
- Rebate Application Support
- Tax Incentive Support
- Project Financing Support



* The Energy Efficiency Technical Assistance Program is in development, precise offerings still TBD.

Subsidized Energy Audits

- Pre-screened, Approved Engineering Firms
- Comprehensive Report Deliverable
- Unbiased Analysis and Support in reviewing the results

Project Development Support

- Dedicated Project Manager
- Direct access to Department of Building & Safety
- Unbiased advice on available technology and project implementation strategy
- Rebate assistance and support



* The Energy Efficiency Technical Assistance Program is in development, precise offerings still TBD.

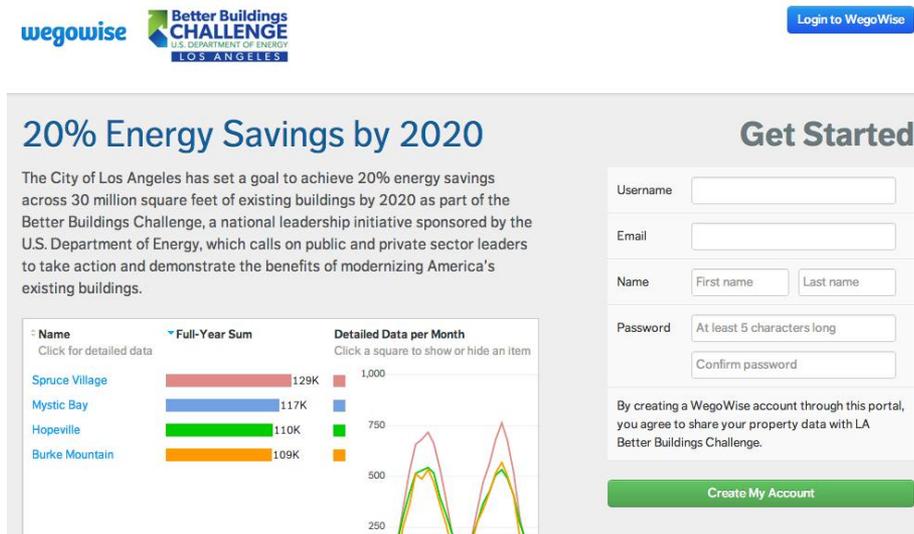
Data Acquisition & Tracking

Free automated utility tracking and analytics for participating properties.

Track your building's water, electricity and natural gas use all in one place. The online software does all the work, no hardware installation required.

Benefits:

- Automatically import consumption and cost data
- Export to Portfolio Manager for Energy Star ratings
- Monitor and analyze performance through intuitive visualizations
- Measure and verify the effectiveness of building retrofits
- Track your building's performance against LABBC goals
- Share your building information with your organization and with external partners



wego wise Better Buildings CHALLENGE U.S. DEPARTMENT OF ENERGY LOS ANGELES [Login to WegoWise](#)

20% Energy Savings by 2020

The City of Los Angeles has set a goal to achieve 20% energy savings across 30 million square feet of existing buildings by 2020 as part of the Better Buildings Challenge, a national leadership initiative sponsored by the U.S. Department of Energy, which calls on public and private sector leaders to take action and demonstrate the benefits of modernizing America's existing buildings.

Name	Full-Year Sum
Spruce Village	129K
Mystic Bay	117K
Hopeville	110K
Burke Mountain	109K

Detailed Data per Month

Click a square to show or hide an item

By creating a WegoWise account through this portal, you agree to share your property data with LA Better Buildings Challenge.

[Create My Account](#)

Innovative Financing Options

LABBC assists Partners in evaluating financing options to enable implementation of deeper projects while preserving capital for investment in core business activities and enhancing cash flow

Historical Barriers

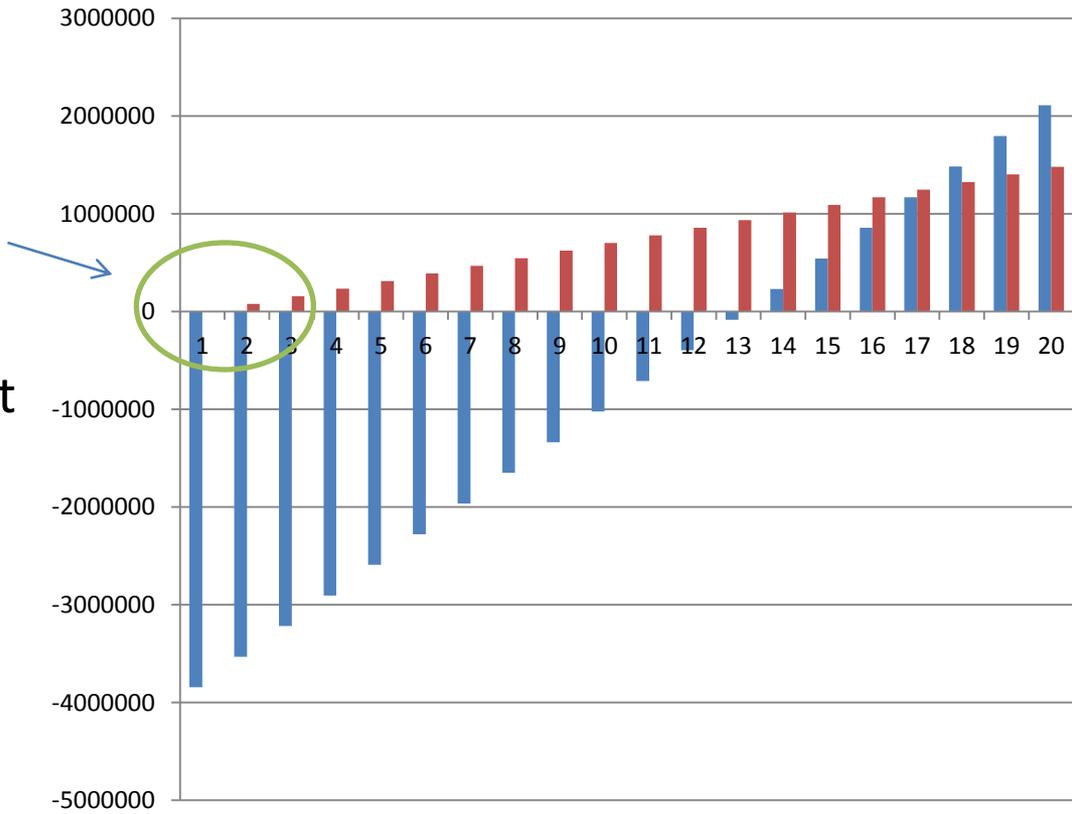
- Inability to secure repayment drives up rates, shortens terms
- Assets held by single-purpose LLC with no credit
- Owner desires to preserve borrowing capacity
- Competition for capital
- “Split-incentives” between landlords and tenants
- Short hold period
- Short payback requirements

New Solutions

- ✓ Repayment secured through property taxes or utility bills
- ✓ Repayment secured by contract or by property, not owner credit
- ✓ Off-balance Sheet Treatment preserves borrowing capacity
- ✓ 100% external financing
- ✓ Repayment structured as an operating expense, like utility bills
- ✓ Repayment transfers with property
- ✓ Longer term financing = cash flow +

Cash Flow Positivity

No upfront cost for necessary equipment replacement



■ Cumulative Unlevered Cash Flow
 ■ Cumulative Levered Cash Flow (Net)

Discounted Products & Services

- **Discounts** from distributor pricing on high-efficiency building products
- Free analysis of accelerated depreciation and other **tax benefits** of going green
- Deep bench of resources for **technical services**
- Access to a short-listed, qualified group of **energy efficiency financing** entities
- Free, **non-biased** assistance with **financial analysis** of energy efficiency investment opportunities



Tax Incentives for EE Retrofits



But if you're going green...

Tax Incentives for EE Retrofits

The LABBC is partnered with best in class tax consultation firms to provide a *pro-bono* predictive analysis of tax benefits that improve the ROI of EE projects

- **Cost Segregation**
 - Provides a means of accelerating the depreciable life of certain improvements
- **2012 Tangible Property Regulations**
 - Building owners may now write down the value of building components disposed of during building improvement projects.
- **EPAct 179-D Tax Deduction**
 - Tax deduction of up to \$1.80/sf for properties that improve performance above ASHRAE 90.1-2001



Educational & Networking Events Co-hosted with LABBC Partner Organizations

LABBC Partner Organizations

- LADWP
- So Cal Gas
- BOMA of Greater Los Angeles
- LA Business Council
- LA Cleantech Incubator
- USGBC – Los Angeles
- LA Area Chamber of Commerce
- LA 2030 District
- And more to come...



ww4.eere.energy.gov/challenge/showcase



U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

Home Partners Allies

www4.eere.energy.gov/challenge/showcase/los-angeles

Home » Partners » Showcase Projects » Showcase Projects

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

SHOWCASE PROJECTS

CORPORATE PARTNERS

- Best Buy**
Enterprise Energy Management System
All US Big Box Locations
- CBRE**
Oakland City Center
Oakland, CA
- Forest City Enterprises**
South Bay Galleria – Energy Reduction Project
Redondo Beach, CA
- HEI Hotels & Resorts**
San Diego Marriott La Jolla
La Jolla, CA
- IHG (InterContinental Hotels)**

STATE AND MUNICIPAL PARTNERS

- Atlanta, GA**
Boisfeuillet Jon Center
Atlanta, GA
- Beaverton, OR**
Beaverton City
Beaverton, OR
- Cleveland, OH**
Fire Station 1
Cleveland, OH
- Denver, CO**
The Alliance Co Block
Denver, CO



Home Partners Allies Media About Contact

Home » Partners » Showcase Projects » State and Municipal Partners » City of Los Angeles, CA - Advance Paper Box – Energy Upgrade Project



Advance Paper Box's Headquarters

ADVANCE PAPER BOX – ENERGY UPGRADE PROJECT

Showcase Project: City of Los Angeles

LOCATION	PROJECT SIZE	FINANCIAL OVERVIEW
Los Angeles, CA	65,000 Square Feet	Project Cost \$748,000

Annual Energy Use^(Source EUI)

Baseline (2011)	373 kBtu/sq. ft.
Expected (2014)	314 kBtu/sq. ft.
Actual	COMING SOON

Expected Energy Savings: **16%**

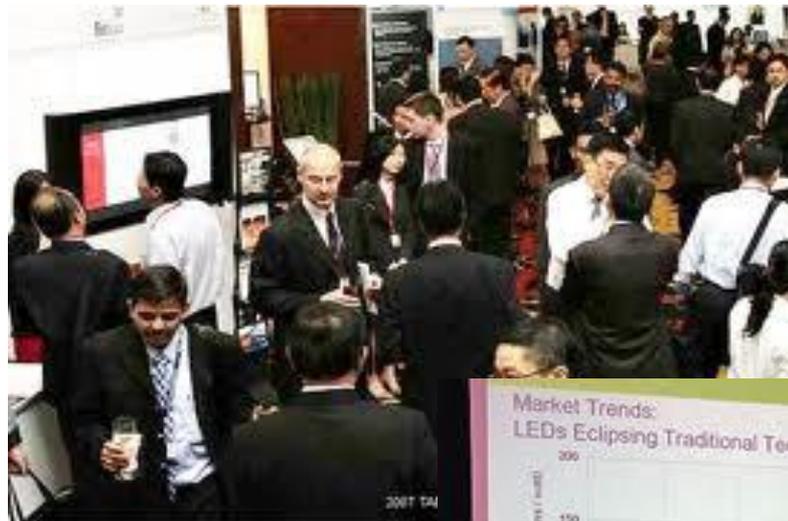
Annual Energy Cost

Baseline (2011)	\$491,000
Expected (2014)	\$412,000
Actual	COMING SOON

Expected Savings: **\$79,000**

LABBC Building Technology Showcase

- Fast Pitch Presentations
- Panel Discussions
- Networking



LABBC Webinar Series

- New Tax Incentives for EE retrofits
- Staying ahead of impending legislation
- Innovations in Energy Efficiency Project Financing
- And more



How (and Why) to Get Involved

Property Owner Partners

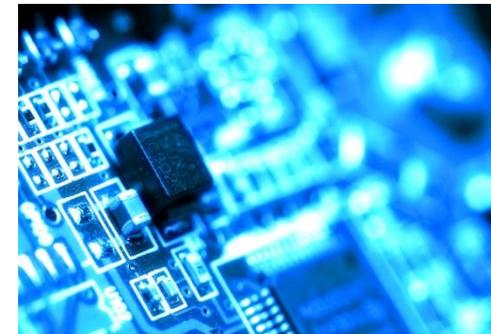
- Simple enrollment process, no penalties, access LABBC benefits

Institutional Partners

- Cross-promote programs and services, pool resources, drive synergies, expand impact

Technology, Service & Financial Partners

- Build brand equity, gain exposure



Take the Challenge Today!

- Enrolling allows you to take advantage of the program's resources
- Simple two-page enrollment form
- No penalties if you can not meet the 20% goal
- Data is reported only aggregate



Your building will benefit from helping make LA the greenest big City in the US

LABBC Contact Information

www.LA-BBC.com

David Hodgins

Executive Director
LA Better Buildings Challenge
970-319-6611
david@la-bbc.com

Ben Stapleton

Director, Commercial Property
LA Better Buildings Challenge
310-737-8379
ben@la-bbc.com

<p>Operating costs drop 8.5%</p>	<p>Building value rises 6.8%</p>	<p>ROI improves 2.5%</p>	<p>Occupancy rises 1%</p>	<p>Rents rise 19.2%</p>
---	---	-------------------------------------	--------------------------------------	------------------------------------

Source: McGraw Hill Construction (2010). Green Outlook 2011: Green Trends Driving Growth.

1. Deloitte – <http://www.deloitte.com>
2. Deloitte – An Inconvenient Truth, 2012
3. Deloitte – An Inconvenient Truth, 2012
4. USGBC
5. McGraw Hill Construction, Green Outlook 2011: Green Trends Driving Growth, 2010
6. McGraw Hill Construction, Green Outlook 2011: Green Trends Driving Growth, 2010