



Better Buildings: Select Resources for Federal users

Kristen Taddonio
DOE Building Technologies
Office

Why Does DOE Work with the Market?



- Commercial buildings—our offices, schools, hospitals, restaurants, hotels and stores—consume nearly 20 percent of all energy used in the United States!
- We spend more than \$200 billion each year to power our country's commercial buildings.
- Unfortunately, much of this energy and money is wasted: a typical commercial building could save 20 percent on its energy bills simply by commissioning existing systems so they operate as intended.
- Energy efficiency is a cost effective way to save money, support job growth, reduce pollution, and improve competitiveness.

Commercial building owners and managers face many common challenges

- **Energy efficiency: many cost effective opportunities**
- **But persistent barriers exist...**
 - Split incentives
 - High hurdle rates
 - Lack of senior leadership buy-in
 - Not included in corporate decision making; biz planning
 - Lack of information; need for unbiased information
 - Not enough/qualified workforce

Better Buildings offers strategies to overcome barriers and drive action

Developing Innovative, Replicable Solutions with Market Leaders

- **Better Buildings Challenge**
- **Better Buildings Alliance**
- Better Buildings, Better Plants
- Better Buildings Case Competition
- Better Buildings Neighborhood program

Developing a Skilled Clean Energy Workforce

- Job/Task Analyses drafted
- Pilot program with NIST: Training and education programs on Buildings Retuning

Making Energy Efficiency Investment Easier

Better Information:

- Asset Score
- Buildings Performance Database
- Green Button
- Data Access Map
- MOU with the Appraisal Foundation

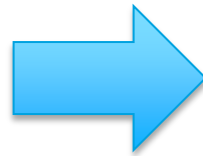
Improving Effectiveness of Federal Incentives:

- 179d eligibility and tool
- Qualified Energy Conservation Bonds

Federal Leadership by Example

Better Buildings promotes energy efficiency as top priority energy resource

- Leverage ARRA
- Overcome Barriers
- Drive Action/Change
- Grow Partnerships



**Revolutionary
change in market
Robust energy
efficiency
industry
Prime the market
for new
technology**

Goals:

- Buildings 20% more efficient by 2020
- Save more than \$40 billion annually
- Create jobs in the USA

How:

- Leadership
- Results
- Transparency
- Best Practice Models
- Recognition
- Catalyzing Action



Better Buildings Challenge to date:

- 190+ Partners (Commercial, Industrial, Public, Private)
- 3 Billion + Square Feet
- \$2 Billion Private Sector Financing
- 600 + Manufacturing plants
- 2 Billion in financing through financial allies

Example Showcase Project



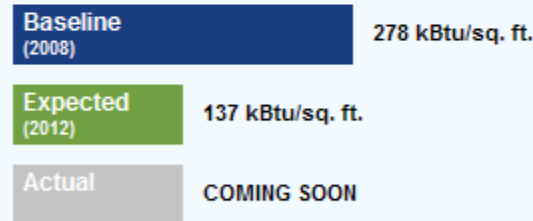
SMART LABS INITIATIVE/NATURAL SCIENCES II Showcase Project: University of California, Irvine

LOCATION
Irvine, CA

PROJECT SIZE
NS II: 146,000 SF

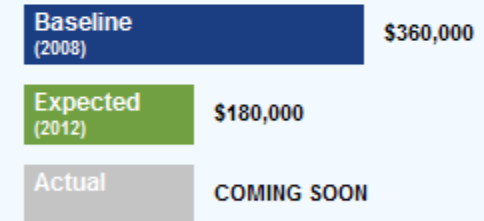
FINANCIAL OVERVIEW
Project Cost NS II: \$829,864,
with utility incentive of \$416,442

Annual Energy Use (Source EUI)



Expected
Energy Savings: **51%**

Annual Energy Cost



Expected
Savings: **\$180,000**

Savings based on data from four energy retrofit measures in Natural Sciences II (NS II), with measures implemented annually.

Example Implementation Model

Get a view of the efficiency “Playbook” used by leaders in your sector



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

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CITY OF ATLANTA



COMMUNITY SIZE

Large Urban

GOAL

To engage the local community in reducing energy and water consumption in more than 40 million square feet of buildings by at least 20% by 2020 and become one of the country's 10 most sustainable cities

APPROACH

Leveraged a public-private partnership to create a new initiative that provides access to project financing, free building assessments, education and training, and public recognition.

INITIATIVE LAUNCHED

November 2011

How do we assure these
success strategies are
replicated?

Better Buildings Alliance

Better Buildings Alliance

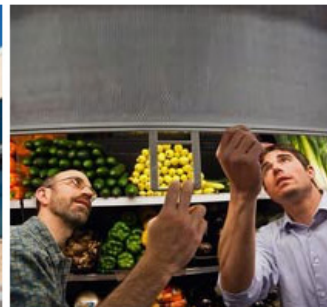
Better Buildings

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Patrick Corkery, NREL/18596



Installation of night curtains

Whole Foods Market, a BBA member, installed night curtains to cover the refrigerated produce cases when stores are closed. This strategy lowers the cooling load on the refrigeration case by about 40% during unoccupied periods.

BETTER BUILDINGS ALLIANCE SIGN-UP FORM

Building owners and operators can join the Better Buildings Alliance (BBA) by completing the sign-up form.

[SIGN-UP FORM](#)

Join the Better Buildings Alliance

Commercial buildings—our offices, schools, hospitals, restaurants, hotels and stores—consume nearly 20 percent of all energy used in the United States. We spend more than \$200 billion each year to power our country's commercial buildings. Unfortunately, much of this energy and money is wasted: a typical commercial building could save 20 percent on its energy bills simply by commissioning existing systems so they operate as intended. Energy efficiency is a cost effective way to save money, support job growth, reduce pollution, and improve competitiveness.

Through the Better Buildings Alliance, members in different market sectors identify specific barriers and work with the U.S. Department of Energy's (DOE) exceptional network of research and technical experts to develop and deploy innovative, cost-effective, energy-saving solutions that lead to better technologies, more profitable businesses, and better buildings in which we work, shop, eat, stay, and learn.

Example Activities & Resources Available to Federal Users too

Technology Procurement Specifications

■ Lighting and Electrical



- [High-efficiency troffer lighting](#)
- [LED site lighting \(parking lot\)](#)
- [High-efficiency parking structure lighting](#)
- [LED refrigerated display case lighting](#)



■ Plug and Process Loads

- [Low voltage distribution transformers](#)



■ Heat Pump Water Heaters

[Commercial heat pump water heaters](#)

▶ Space Conditioning

- [Gas heaters](#)
- [Rooftop air conditioning units](#)



▶ Refrigeration

- [Ultra-low temperature freezers](#)



Laboratories

- [Laboratory fume hoods](#)



CommercialBuildings.energy.gov/technologies

Lighting Energy Efficiency in Parking Campaign – LEEPCampaign.org

Lighting Energy Efficiency in Parking Campaign

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It's easy to
take the LEEP

- » [Join the team](#)
- » [Save electricity AND money](#)
- » [Get recognized for success](#)

[Join For Free](#)





LEEP Campaign Information & Resources for Federal Users

Federal sites are encouraged by the Federal Energy Management Program (FEMP) to participate in the LEEP Campaign. **JOIN TODAY!**

Why join?

- **Save Money!** Significantly reduce your site's energy and maintenance costs. High efficiency lighting technology with controls can cut parking facility lighting energy bills by 40% or more while delivering additional benefits including long life, reduced maintenance costs, and improved lighting uniformity.
- **Meet Federal Guidelines!** Help ensure that you are meeting federal requirements for energy efficiency.
- **Receive Free Technical Assistance!** Lighting engineers are available to provide technical assistance to help ensure that your site is designed in a manner to take full advantage of new high efficiency lighting and controls systems.
- **Get recognized!** In addition to saving money and energy, all LEEP participants will be recognized on the campaign website and are eligible to receive awards for exemplary energy efficient lighting design and upgrades.

What is required? Participating building owners and facility managers agree to evaluate their portfolio to identify potential parking lots or parking structures that can apply high-efficiency lighting technology, and to use high-efficiency lighting where feasible and cost-effective. *No formal commitment is required.*

Who is eligible? New construction projects and sites retrofitted since January 2010 are eligible.

Federal Resources

While the information and resources available on the main LEEP Campaign web site are relevant to federal sites, this page offers additional information and resources that federal users may find especially helpful, including:

- Federal energy efficiency requirements for exterior lighting
- Find qualifying products: A web based resource for finding products that meet minimum federal efficacy requirements
- [Case studies of federal sites](#)
- Design guidance for federal sites
 - [Guide to FEMP-Designated Parking Lot Lighting](#)
 - [Guide to FEMP-Designated Parking Structure Lighting](#)

AdvancedRTU.org

Advanced RTU Campaign

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Replace. Retrofit. Reap Rewards.

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Save energy and money.
Get recognized for success.

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Comparison Calculator

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Green Lease Leaders -- GreenLeaseLeaders.com

GREEN LEASE LEADERS

Creating sustainable landlord-tenant relationships.



Congratulations!

The 2014 Green Lease Leaders have been announced. [Click here for more.](#)

About the Program

Green Lease Leaders™ is a designation created to recognize companies or brokerage teams that successfully implement green lease language into new or existing leases.

While the concept of green leasing has been tested and discussed for years, there previously has been no distinct standard to define what constitutes a green lease. The Green Lease Leaders program is moving the field of green leasing forward by simultaneously setting standards for what constitutes a green lease and recognizing leaders in the green leasing field.

The program was developed by the Institute for Market Transformation (IMT), with support from the Department of Energy's Better Buildings Alliance.

Is My Company Eligible?

Recognition is available for:

1. Commercial landlords
2. Commercial tenant companies
3. Commercial brokerage teams
4. Individual brokers

Recognition is not available for:

1. Property managers
2. Firms that primarily create income as third party property manager*

*Firms focused on third party property management can achieve recognition for individual broker teams.

Key Dates & Deadlines

[BOMA Every Building Conference & Expo](#)
June 22-24, Orlando, FL

[World Energy Engineering Congress](#)
October 1-3, Washington, DC

2015 Application Period Begins
Fall 2014

Contact Information

- Kristen.Taddonio@ee.doe.gov