

Appendix A. Voluntary Programs At-a-Glance

Program Name	Jurisdiction	Target Building Sector	Green Practices	Program Duration	# of Iterations/ Rounds (to date)	Program(s) Showcased	# of Participants	Participation (buildings)	Participation (commercial area)	Recognition Type	Key Partners
Arlington Green Games	Arlington County, VA	Multifamily, Office, Retail, Restaurant	Energy, water, and waste reduction, tenant/resident engagement	one year	two	2011 Office Games	170 building managers and tenants	100+ buildings and offices	approx. 15 million sq. ft. (1/3 of office space)	Gold, Silver, Bronze, Recognition	
<a href="http://www.arlingtongreengames.com">http://www.arlingtongreengames.com</a>											
The Green Games is part of the County’s AIRE program—Arlington Initiative to Rethink Energy. The inaugural Green Games were conducted from Jan 2011 - Dec 2011, and focused on the commercial office sector. A second round of Games implemented in 2013 offered separate competitions for Restaurants, Retailers, Apartment & Condo Property Managers, and Apartment & Condo Residents. AIRE hopes to launch a second competition for the office sector again in 2014. For the initial 2011 office sector Games, efforts targeted larger office property managers to include the most square footage with the least number of participants. The program was intentionally designed to create a trickle down effect to smaller office buildings, which will be the focus of the upcoming Games. The Games uses a scorecard approach, where participants (managers and tenants/residents) earn points for action taken/ evidence of improvement over the year in multiple categories. The branded approach of the Games entails high-end marketing collateral featuring a catchy sports theme. Well-coordinated and intensive outreach efforts by program staff involve significant face time out in the community. Additionally, the Games offer training, technical assistance and ample networking opportunities.											
Energy Smart Awards	Berkeley, Emeryville, Oakland, CA	Commercial (cross sector)	Energy benchmarking	approx. six months	two (2013; 2014)	2014 Awards	46 building owners and managers	170		Recognition only	Cities of Berkeley, Emeryville and Oakland, BOMA Oakland/East Bay, East Bay Enviromental Network
<a href="http://www.ci.berkeley.ca.us/benchmarking_buildings/">http://www.ci.berkeley.ca.us/benchmarking_buildings/</a>											
The Energy Smart Awards program was piloted in Berkeley to engage commercial property owners and managers around building energy use, as well as identify champions for building energy efficiency and benchmarking. During its second round, which ended in January 2014, activities expanded to include the neighboring cities of Oakland and Emeryville. In addition to outreach to office and public sector buildings, hotel and groceries were targeted, as they are both public facing and energy intensive. The municipalities also partnered with Oakland/East Bay BOMA and the East Bay Environmental Network (EBEN). For the second round, BOMA and EBEN assisted with promotion and jointly hosted the awards ceremony where mayors and other dignitaries conferred awards to participants, who primarily represented environmental leaders in the business community and larger and/or iconic buildings from the three cities. Involvement from the hard-to-reach was minimal, although this sector was included in outreach efforts. To note, in Berkeley, where participation was the greatest, city staff conducted outreach, coordinated training and provided one-on-one technical assistance (approx. 0.4 FTE over six months).											
Commercial Building Energy Rating & Reporting Pilot Program	Boulder, CO	Commercial (cross sector)	Energy benchmarking	less than six months	one	2012-13 Pilot	17 building owners	40 (20 office) buildings	almost 2 million sq ft.	Recognition only	City of Boulder, Colorado Green Building Guilds Commercial Building Energy Coach Association, EnergySmart
<a href="https://bouldercolorado.gov/pages/commercial-buildings-energy-rating-and-reporting-pilot-program">https://bouldercolorado.gov/pages/commercial-buildings-energy-rating-and-reporting-pilot-program</a>											

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As a component of the City of Boulder's Commercial Energy Efficiency Strategy, the city launched a pilot program in September 2012 to explore the development of a standard procedure for rating the energy performance of existing commercial buildings. Of the 17 owners who participated, half had prior involvement in other local energy efficiency initiatives, such as Boulder’s EnergySmart program, which offers advising and incentives. Building on prior relationships was one of the keys to the pilot’s success. Participating buildings represented a cross sampling of the commercial sector, as well as the hard-to-reach. The median size was 15,000 sq. ft., and 27 of 40 of buildings were less than 50,000 sq. ft. The city contracted with the Colorado Green Building Guilds Commercial Building Energy Coach Association Participants to provide Energy Coaches who offered one-on-one assistance to participants to complete the benchmarking process. City resources included a 0.25 - 0.33 FTE staff member to assist with outreach, and oversee the day-to-day coordination with participants and Energy Coaches.											
Kilowatt Crackdown	Boise Metro, ID (greater Boise area)	Commercial office	Energy reduction	one year competition (with kick-off and awards total engagement is approx. 16 months)	one	2013 Program Year	43 property teams from participating buildings	43 buildings	3.7 million sq. ft.	Grand Prize and 1st, 2nd, 3rd prizes for Highest Performing and Most Improved. Special Bonuses (prizes and recognition) for progress throughout year.	BetterBricks, BOMA Boise, Idaho Power
<a href="http://kilowattcrackdown.betterbricks.com/boise/">http://kilowattcrackdown.betterbricks.com/boise/</a>											
The Kilowatt Crackdown competitions involve a strategic partnership with BOMA, the utility of a particular city and Northwest Energy Efficiency Alliance (NEEA), which runs the BetterBricks program. Using a multi-sector approach to successfully engage the commercial real estate community, BOMA and the local utility assist with promotion while BetterBricks oversees overall program implementation. For the Boise Metro area program, the yearlong competition was launched in October 2012 and winners will be announced in Spring 2014. In Boise, most participants are BOMA members, and primarily represent buildings over 30,000 sq. ft. Participants receive free consulting, assistance and technical support. Through its network of consultants, NEEA provides Energy Coaches for a set number of hours to guide participants through the competition, assisting with data gathering, benchmarking, coordination, and development of a Project Bank (three-year action plan) and Project Review. Additionally, participants receive a free Scoping Study (estimated \$2,000-\$3,000 per building), which is a technical assessment to identify potential building performance improvements.											
Chicago Green Office Challenge	Chicago, IL	Commercial (office, retail, schools, industry)	Energy, water and waste reduction, transportation, tenant engagment	under a year with ongoing enrollment	three	Round 1 (2011 Program Year)	263 offices (i.e. teams)	98 buildings		Leadership in Tenant Excellence, Leadership in Property Management Excellence (multiple tiers honoring all participants)	City of Chicago, ICLEI, Office Depot, Delta, Green Per Square Foot
<a href="http://chicagogoc.com/">http://chicagogoc.com/</a>											
The Green Office Challenge (GOC) began in 2008 as a collaboration between the City of Chicago and ICLEI – Local Governments for Sustainability, with core funding from Office Depot. The 2013 GOC is the third generation Challenge, and it expanded to include a broader cross section of the commercial sector while becoming the niche for tenant engagement. While Rounds 1 and 2 focused on Chicago’s Downtown high rise buildings, Round 3 was open to all buildings throughout the city and engaged smaller businesses. The City plans to launch a 4th GOC in Spring 2014. Rounds 1 and 2 were yearlong competitions; the latest Challenge in 2013 was shorter, and participants could enroll at any time. The new Green Per Square Foot platform offers ongoing activities, resources and education addressing a broad spectrum of sustainable practices. The GOC offers workshops up front, but Delta (one of the key partners) also provides ongoing support including technical assistance and advice to improve office practices as well as secure rebate dollars or undertake retrofits. The new platform is fun and offers team building and networking opportunities – the GOC has witnessed an increase in participation of enrollees from 29% in Round 2 to 60% in Round 3. To note, the City of Chicago recently enacted a benchmarking ordinance, and many of its key supporters were GOC participants.											

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<b>Houston Green Office Challenge</b>	Houston, TX	Commerical office	Energy, water, and waste reduction, transportation, tenant engagment	one year with ongoing enrollment	three (2011; 2012; 2013)	2011		375 buildings and tenants	approx. 75 million sq. ft.	Multiple award categories based on baseline and overall Portfolio Manager scores, participation (by District, Manager/Owner, tenant), improvement, and overall winners. Tenant awards (Platinum, Gold, Silver, Bronze) based on scorecard.	City of Houston, ICLEI, Clinton Climate Initiative/C40
<a href="http://www.houstongoc.org">http://www.houstongoc.org</a>											
To date, the Houston Green Office Challenge (HGOC) has implemented three rounds (2011, 2012, and 2013), engaging property managers and tenants throughout the city, and has had the greatest participation of all the showcased programs. Similar to the Chicago GOC, tenants use a Green Office Scorecard to address a suite of sustainability practices, while building managers seek to green operations using Portfolio Manager (water and energy benchmarking) and other tools (waste reduction) to measure change. The HGOC relies heavily on partners (approx. 25) for promotion and recruitment, and enlists seven Management Districts to both market the program and to compete against each other. In addition to outreach, city staff members provide one-on-one assistance and training in person and over the phone, often at places of business. During the first year of implementation (2010), a full time staff member was dedicated to the project. Now, in its third year, the HGOC requires 0.5-0.75 FTE staff member.											
<b>Kilowatt Crackdown</b>	Portland Metro, OR (including Clark County, WA, and Multnomah, Clackamas, and Washington Counties, OR)	Commerical office	Energy reduction	one year competition (with kick-off and awards total engagement is approx. 16 months)	seven	2013 Program Year	76 property teams from participating buildings	76 buildings	almost 15 million sq. ft.; approx 25% of greater Portland office market (since program started in 2007)	Grand Prize and 1st, 2nd, 3rd prizes for Highest Performing (Master's Track) and Most Improved (Professional's and Specialists' Track). Special Bonuses (prizes and recognition) for progress throughout year.	BetterBricks, BOMA Oregon, City of Portland, Energy Trust of Oregon, Clark Public Utilities, Portland Development Commission
<a href="http://kilowattcrackdown.betterbricks.com/portland/">http://kilowattcrackdown.betterbricks.com/portland/</a>											
The Building Performance Partnership’s Kilowatt Crackdown in Portland is an evolution of commercial real estate competitions that began in 2007, including Carbon4Square and Office Energy Showdown. Similar to the Kilowatt Crackdown in Boise, a multi-sector approach is utilized, involving BOMA and the utilities, with funding through NEEA to design and implement the competition through its BetterBricks program. However, in the most recent competition, the City of Portland joined as a key partner (versus as a participant only), assisting with promotion, outreach and recruitment. Similar to Boise, benchmarking and energy reduction is core to the program. Participants work with Energy Coaches and receive a free Scoping Study to identify low-cost, operational areas to save energy, as well as support to develop a Project Bank and Review. Through the current partnership, Kilowatt Crackdown has become more robust, serving as a conduit to connect interested property managers to other city programs, such as Sustainability at Work (which addresses recycling, procurement, and tenant behavior). Moreover, through the addition of the Specialist’s Track, the program expanded this past year to include buildings smaller than 25,000 sq. ft. (although they did not receive the robust consulting services of the other tracks), whereas previous competitions included only larger buildings.											

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<b>San Francisco 24x7 Energy Challenge</b>	San Francisco, CA	Commercial (cross sector)	Energy reduction	one year	one (2009-10)	2009-10		88 buildings enrolled, 10 completed	5.6 million sq. ft.	Grand Prize (Kilowatt Cup) and prizes in multiple sectors (i.e. office, hotel, grocery, retail, hospital, supermarket, school, etc.) for Greatest Improvement and Most Efficient. General recognition (certificates and media promotion) for all participants.	San Francisco's Mayor's Office; San Franciso Environment, BOMA San Francisco, Pacific Gas & Energy, US Green Building Council - Northern CA
<p>The 24x7 Energy Challenge was a one-time voluntary benchmarking program implemented with nominal City resources as a part of the larger global WWF Earth Hour, before San Francisco enacted its benchmarking ordinance. The Challenge was possible only because infrastructure was already in place. Pacific Gas and Electric (PG&amp;E) was already offering free benchmarking classes and had established web services early on. Additionally, PG&amp;E reps assisted with promotion to their customers while BOMA played a critical role in enlisting members. Phone banks for Earth Hour were already running, requiring only an additional message for the Energy Challenge. Similarly, the Challenge received mention at all Earth Hour events, on billboards and in PSAs. Participation included only large buildings, though the Challenge was open to all commercial buildings throughout the city. The 24x7 Energy Challenge provides an example of how a voluntary benchmarking program may be implemented as a module as part of a larger campaign or initiative.</p>											

## Class B & C Office Building Energy Benchmarking Survey

### INTRODUCTION

Hello, my name is \_\_\_\_\_ and I am calling on behalf of the City of \_\_\_\_\_, which is interested in developing / running a (voluntary) program for building owners and property managers that helps you better understand and improve your building's energy performance.

I have listed that you are the owner/ property manager for the \_\_\_\_\_ building at \_\_\_\_\_ (address). Is that correct?

The City is seeking input to figure out what factors might influence participation in the program. I have a few questions. Do you have about 10 minutes to participate in a short survey? (If not, schedule a different time.)

### Are you familiar with building energy benchmarking?

If "Yes," ask respondent for his/her understanding. If unclear, check "No."

- ☐ Yes
- ☐ No

*Comments:*

### Have you benchmarked a building before using the EPA's ENERGY STAR® Portfolio Manager?

- ☐ Yes
- ☐ No

*Comments:*

### How did you learn about ENERGY STAR® Portfolio Manager?

Check all that apply.

- ☐ Participated in a city-sponsored program previously
- ☐ City website
- ☐ Business association
- ☐ Newspaper article
- ☐ Tenant
- ☐ N/A
- ☐ Other:

*Comments:*

### BENCHMARKING EXPLANATION

- Measuring and tracking energy use is the first step to reducing energy usage in your building and identifying potential money saving opportunities.
- The EPA has a simple, free, online tool, called ENERGY STAR® Portfolio Manager, that allows you to track energy usage by linking to your utility bill (such as PG&E).
- Portfolio Manager provides a free, weather-normalized score for your building; meaning the score compares your building to similar types of buildings in similar climates (liken it to "miles per gallon" for a vehicle).
- If your building scores in the top 75%, you qualify for ENERGY STAR® Certification (similar to what you see on appliances), which several studies show result in higher rents and lower vacancy rates.

**BUILDING INFORMATION - METERS & BILL PAYMENT**

To get started, I will get some basic information about your building(s).

**Is the building owner occupied?**

- ☐ Yes
- ☐ No
- ☐ Partial

*Comments:*

**Enter % space owner-occupied** (if applicable).

**How many tenants occupy the building?**

**What type of electric and gas meters does the building(s) have?**

Check all that apply.

- ☐ Single meter – master or house meter
- ☐ Multiple meters

*Comments:*

**Who pays the electric and gas bills?**

Check all that apply.

- ☐ Building owner
- ☐ Tenants
- ☐ Shared/fractional

*Comments:*

## **BARRIERS**

The online process through Portfolio Manager requires that you input basic characteristics for each building(s) and identify each utility meter in your building(s).

**(Only for those that have previously benchmarked) What factors did/would inhibit your ability or interest in benchmarking your building(s) again?**

Check all that apply.

- ☐ Time
- ☐ Ease of use
- ☐ Availability of technical assistance
- ☐ Getting approval from each tenant for energy use disclosure
- ☐ Figuring out multiple meters associated with my building(s)
- ☐ N/A – never benchmarked
- ☐ Other:

*Comments:*

**(For those that have never benchmarked) What factors might inhibit your ability or interest in benchmarking your building(s)?**

Check all that apply.

- ☐ Getting approval from each tenant for energy use disclosure
- ☐ Figuring out multiple meters associated with my building(s)
- ☐ Learning how to use a new tool
- ☐ Other:

*Comments:*

## **OUTREACH & SUPPORT**

**What kind of outreach, training and support would (or did) you find valuable?**

Check all that apply.

- ☐ Links to resources on city website
- ☐ An on-line training to enable you to “benchmark” your buildings independently in your own time
- ☐ A free workshop where technical assistance is provided to complete the benchmarking process
- ☐ One-on-one technical assistance in completing the process in person
- ☐ One-on-one technical assistance in completing the process over the phone
- ☐ Reminders by email
- ☐ Reminders by phone
- ☐ Someone to benchmark my building for me
- ☐ Other:

*Comments:*

## **BENEFITS**

I mentioned that the benchmarking process offers many benefits.

**If you were to participate (or have participated) in a city-sponsored benchmarking program, which of the following would (did) you find valuable in encouraging your participation?**

Check all that apply.

- ☐ General information on what to do after benchmarking – *Next Steps*
- ☐ Follow up by utility-sponsored energy efficiency program with rebates and incentives
- ☐ A list of consultants that could conduct audits or retrofits
- ☐ Potentially lower operating costs by reducing utility bills
- ☐ Potentially higher rents, lower vacancy rates, or more long-term tenants
- ☐ Possibility of attaining Eco-Rating on my building (LEED or ENERGY STAR® Certification)
- ☐ Compliance with local or state ordinances (Explain, as appropriate to your city/state.)
- ☐ Other:

*Comments:*

## **RECOGNITION**

The City is looking at different program designs.

**If you were to participate, which type of program is more appealing?**

Choose one.

- ☐ Recognition only program (recognized for participating, regardless of score)
- ☐ Competition (recognition for best scores in different categories)
- ☐ Other:

*Comments:*

**If you were to participate (or have participated), what kind of recognition is important to you?**

Check all that apply.

- ☐ Listed on the City website
- ☐ Listed on Chamber of Commerce website
- ☐ Listed on other local business association website (East Bay Environmental Network, BOMA, Buy Local, etc.)
- ☐ Window decal
- ☐ Local newspaper ad or story
- ☐ Recognition event with City Mayor or other dignitary
- ☐ Other:

*Comments:*



### **SCORING or RATING**

I mentioned that the ENERGY STAR® Portfolio Manager produces a score, from 0 -100.

#### **Would either or both of the following uses of your score discourage your participation?**

Check all that apply.

- ☐ Disclosure of your benchmarking score for internal purposes only
- ☐ Public disclosure of your score (e.g. on a website)
- ☐ Neither would be discouraging
- ☐ Other:

*Comments:*

### **RESPONDENT INFORMATION**

(Interviewer enter available data beforehand or after interview)

#### **Respondent Name**

#### **Respondent Position**

- ☐ Building Owner
- ☐ Manager
- ☐ Other:

#### **City/Town (of Respondent)**

### **NETWORKS**

#### **Are there any local business or professional organizations with which you communicate regularly?**

(read newsletter, participate in meetings, etc.)

**BUILDING OWNER/ PORTFOLIO INFORMATION**

(Use CoStar, ask only for verification)

**Who is the building owner?**

**What is the City/town of the building(s)?**

- ☐ Berkeley
- ☐ Oakland
- ☐ San Francisco
- ☐ San Jose
- ☐ Boulder
- ☐ Salt Lake
- ☐ Other:

**How many buildings are under this ownership?**

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ More than 5

*Comments:*

**What is the building(s) size?**

- ☐ 5,000 - 9,999 sq. ft
- ☐ 10,000 - 24,999 sq. ft
- ☐ 25,000 - 49,999 sq ft
- ☐ 50,000 sq. ft or larger

*Comments:*

**Building Class?**

- ☐ Class A
- ☐ Class B
- ☐ Class C

*Comments:*

## **PARTICIPATION**

**(For cities with recognition programs) Are you interested in participating in this year's recognition program?**

(For Berkeley and Oakland, must submit information by October 31. The date of the recognition event is November 22)

- ☐ Yes
- ☐ No
- ☐ Maybe

*Comments:*

**Who is the best contact person (name and role)?**

Name

Role

Telephone

Email

**Which contact method is preferred?**

- ☐ Telephone
- ☐ Email

Company

Street Address 1

Street Address 2

State

Zip Code

**Can we schedule a time that I can help you get started?**

BREAKDOWN OF BUILDING TYPES					
Bldg Type	Bldgs (#)	Bldgs (%)	Rentable Area (ft^2)	Rentable Area (%)	Average Size (ft^2)
Multi-Family	1774	46.5%	16,725,149	40.8%	9,428
Industrial/Flex	221	5.8%	3,816,246	9.3%	17,268
Commercial	1819	47.7%	20,428,591	49.9%	11,231

BREAKDOWN BY SPECIFIC BUILDING TYPE					
Bldg Type	Bldgs (#)	Bldgs (%)	Rentable Area (ft^2)	Rentable Area (%)	Average Size (ft^2)
General Retail	738	40.6%	5,422,700	26.5%	7,348
Office	355	19.5%	5,324,372	26.1%	14,998
Warehouse	205	11.3%	3,822,641	18.7%	18,647
Hotel	25	1.4%	797,570	3.9%	31,903
Other-Public Assembly	38	2.1%	536,047	2.6%	14,107
Hospital	4	0.2%	505,851	2.5%	126,463
K-12 School	15	0.8%	500,878	2.5%	33,392
Medical Office	77	4.2%	444,654	2.2%	5,775
Parking	8	0.4%	406,662	2.0%	50,833
Other-Storage	7	0.4%	385,123	1.9%	55,018
Other-AutoRepair	82	4.5%	359,219	1.8%	4,381
Supermarket	14	0.8%	340,889	1.7%	24,349
House of Worship	35	1.9%	307,918	1.5%	8,798
Other-Food Service	86	4.7%	289,070	1.4%	3,361
Senior Care Facility	25	1.4%	259,359	1.3%	10,374
Other-Auto Dealership	14	0.8%	180,711	0.9%	12,908
Bank-Financial Institution	17	0.9%	144,206	0.7%	8,483
Other	13	0.7%	143,508	0.7%	11,039
Other-Service	30	1.6%	126,048	0.6%	4,202
Other-Food Sales	18	1.0%	48,375	0.2%	2,688
Other-DayCareCenter	8	0.4%	38,503	0.2%	4,813
Residence Hall-Dormitory	3	0.2%	35,277	0.2%	11,759
Other-Public Order and Safety	2	0.1%	9,010	0.0%	4,505

BREAKDOWN BY 5,000 SQ FT SIZE CATEGORIES (COMMERCIAL)				
Size Class (ft^2)	Bldgs (#)	% Commercial Bldgs	Rentable Commercial Area (ft^2)	Rentable Commercial Area (%)
<5000	937	51.5%	2,502,134	12.2%
5000 - 9999	413	22.7%	2,832,055	13.9%
10000 - 14999	157	8.6%	1,862,558	9.1%
15000 - 19999	85	4.7%	1,460,372	7.1%
20000 - 24999	58	3.2%	1,275,474	6.2%
25000 - 29999	39	2.1%	1,052,131	5.2%
30000 - 34999	12	0.7%	380,106	1.9%
35000 - 39999	20	1.1%	742,115	3.6%
40000 - 44999	17	0.9%	720,732	3.5%
45000 - 49999	11	0.6%	511,381	2.5%
50000+	70	3.8%	7,089,533	34.7%

BREAKDOWN BY SIZE CATEGORIES (COMMERCIAL)				
Size Class (ft^2)	Bldgs (#)	% Commercial Bldgs	Rentable Commercial Area (ft^2)	Rentable Commercial Area (%)
<5000	937	51.5%	2,502,134	12.2%
5000 - 9999	413	22.7%	2,832,055	13.9%
10000 - 24999	300	16.5%	4,598,404	22.5%
25000 - 49999	99	5.4%	3,406,465	16.7%
50000+	70	3.8%	7,089,533	34.7%

BREAKDOWN BY SIZE CATEGORIES (COMMERCIAL OFFICE)				
Size Class (ft^2)	Bldgs (#)	% Commercial Bldgs	Rentable Commercial Area (ft^2)	Rentable Commercial Area (%)
<5000	158	44.5%	440,717	8.3%
5000 - 9999	72	20.3%	486,160	9.1%
10000 - 24999	73	20.6%	1,150,323	21.6%
25000 - 49999	29	8.2%	1,006,871	18.9%
50000+	23	6.5%	2,240,301	42.1%

GREEN BUILDINGS				
Size Class (ft^2)	Energy Star (#)	Bldg Type	LEED Certified (#)	Type
<5000	0	-	0	-
5000 - 9999	0	-	1	Other/Public Order and Safety
10000 - 24999	2	General Retail, Hotel	4	Other/DayCareCenter
25000 - 49999	0	-	0	-
50000+	1	Office	3	K-12 School, Office, Other
Total Commercial Area (Sq.Ft)		20,428,591	does not include multi-family or industrial	
Total Area Eco-Labeled (Sq. Ft)				
Percent Eco-Labeled				

BREAKDOWN BY NUMBER OF STORIES (OFFICE)			
Building Type	Stories (#)	Total Area (ft^2)	Buildings (#)
Office	1	748,050	104
Office	2	1,646,846	166
Office	3 - 4	1,890,198	69
Office	5 - 10	834,046	12
Office	>10	197,901	2

BUILDING CLASS BREAKDOWN FOR OFFICE BUILDINGS							
Bldg Class	Bldgs (#)	% Office Bldgs	% Commercial Bldgs	Rentable Area (ft^2)	% of Office Area	% Commercial Area	Average Size (ft^2)
A	1	0.3%	0.1%	250,000	4.7%	1.2%	250,000
B	101	28.5%	5.6%	2,729,998	51.3%	13.4%	27,030
C	253	71.3%	13.9%	2,344,374	44.0%	11.5%	9,266

BREAKDOWN BY 5,000 SQ FT SIZE CATEGORIES (OFFICE)					
Size (ft^2)	Bldg Class	Bldgs (#)	% Office Bldgs	Rentable Office Area (ft^2)	Rentable Office
<5000	A	0	0.0%	-	0.0%
5000 - 9999	A	0	0.0%	-	0.0%
10000 - 14999	A	0	0.0%	-	0.0%
15000 - 19999	A	0	0.0%	-	0.0%
20000 - 24999	A	0	0.0%	-	0.0%
25000 - 29999	A	0	0.0%	-	0.0%
30000 - 34999	A	0	0.0%	-	0.0%
35000 - 39999	A	0	0.0%	-	0.0%
40000 - 44999	A	0	0.0%	-	0.0%
45000 - 49999	A	0	0.0%	-	0.0%
50000+	A	1	0.3%	250,000	4.7%
<5000	B	20	5.6%	57,449	1.1%
5000 - 9999	B	15	4.2%	102,451	1.9%
10000 - 14999	B	10	2.8%	116,433	2.2%
15000 - 19999	B	10	2.8%	175,398	3.3%
20000 - 24999	B	13	3.7%	288,582	5.4%
25000 - 29999	B	7	2.0%	194,778	3.7%
30000 - 34999	B	1	0.3%	30,000	0.6%
35000 - 39999	B	5	1.4%	192,065	3.6%
40000 - 44999	B	3	0.8%	126,655	2.4%
45000 - 49999	B	2	0.6%	93,484	1.8%
50000+	B	15	4.2%	1,352,703	25.4%
<5000	C	138	38.9%	383,268	7.2%
5000 - 9999	C	57	16.1%	383,709	7.2%
10000 - 14999	C	28	7.9%	339,532	6.4%
15000 - 19999	C	6	1.7%	104,873	2.0%
20000 - 24999	C	6	1.7%	125,505	2.4%
25000 - 29999	C	4	1.1%	106,370	2.0%
30000 - 34999	C	1	0.3%	31,055	0.6%
35000 - 39999	C	4	1.1%	147,027	2.8%
40000 - 44999	C	2	0.6%	85,437	1.6%
45000 - 49999	C	0	0.0%	-	0.0%
50000+	C	7	2.0%	637,598	12.0%

## QUICK LINKS

[ENERGY STAR® Portfolio Manager](http://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager?s=mega) is a free, interactive, online tool for energy and water benchmarking, and is the tool of choice of local and state governments. <http://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager?s=mega>

U.S Environmental Protection Agency's [ENERGY STAR® Guide to Energy Efficiency Competitions for Buildings & Plants](http://www.energystar.gov/buildings/sites/default/uploads/tools/Building_Competition_Guide_FINAL.pdf?1226-279d) is a useful resource for those developing competition programs. [http://www.energystar.gov/buildings/sites/default/uploads/tools/Building\\_Competition\\_Guide\\_FINAL.pdf?1226-279d](http://www.energystar.gov/buildings/sites/default/uploads/tools/Building_Competition_Guide_FINAL.pdf?1226-279d)

[Institute for Market Transformation](http://www.imt.org/policy/policy-advocacy/benchmarking-communications) (IMT) is a key resource for any city developing benchmarking policy, but its [benchmarking communications](http://www.imt.org/policy/policy-advocacy/benchmarking-communications), including strategy and sample materials, is a valuable resource for voluntary programs as well. <http://www.imt.org/policy/policy-advocacy/benchmarking-communications>

[Building Rating.org](http://www.buildingrating.org/), a project launched by the [Institute for Market Transformation](http://www.imt.org/policy/policy-advocacy/benchmarking-communications) and the National Resources Defense Council, facilitates sharing of global intelligence and best practices, housing national and international benchmarking policies, reports and other resources. <http://www.buildingrating.org/>

## FURTHER READING

Better City and Meister Consulting Group. Benchmarking and disclosure: Lessons from leading cities. Boston Green Ribbon Commission's Commercial Real Estate Working Group, Boston (MA); 2012. <http://www.abettercity.org/docs/06.2012%20-%20Benchmarking%20report%20-%20Final.pdf>

Bricknell, K. ComEd: Helping Chicago businesses turn green. Electric Energy T&D Magazine [Internet]. 2010 Nov/Dec; Issue 7, Volume 14, p. 35. [http://www.electriconline.com/show\\_article.php?mag=67&article=537](http://www.electriconline.com/show_article.php?mag=67&article=537)

Burr A, Keicher C, Leipziger. Building energy transparency: A framework for implementing U.S. commercial energy rating and disclosure policy. Institute for Market Transformation. Washington (DC): 2011 Jul. [http://www.imt.org/uploads/resources/files/IMT-Building\\_Energy\\_Transparency\\_Report.pdf](http://www.imt.org/uploads/resources/files/IMT-Building_Energy_Transparency_Report.pdf)

City of Boulder. Commercial building energy rating & reporting pilot program report. McKinstry; Boulder (CO); 2013. [https://www-static.bouldercolorado.gov/docs/Energy\\_rating\\_and\\_reporting\\_pilot\\_program\\_report-1-201307101448.pdf](https://www-static.bouldercolorado.gov/docs/Energy_rating_and_reporting_pilot_program_report-1-201307101448.pdf)

Econsult Corporation. The market for commercial property energy retrofits in the Philadelphia region. Greater Philadelphia Innovations for Energy-Efficient Buildings. 2011 Oct. [http://www.eebhub.org/media/files/eebhub\\_reports\\_energy-market.pdf](http://www.eebhub.org/media/files/eebhub_reports_energy-market.pdf)

European Environment Agency. Achieving energy efficiency through behaviour change: What does it take? No. 5/2013, Copenhagen. <http://www.eea.europa.eu/publications/achieving-energy-efficiency-through-behaviour>



## Appendix D. Resources

Funk K. Small Business Energy Efficiency: Roadmap to program design. Center for Energy and Environment. 2012 ACEEE Summer Study on Energy Efficiency in Buildings.

<http://www.aceee.org/files/proceedings/2012/data/papers/0193-000109.pdf>

Institute for Market Transformation, San Francisco Department of the Environment. Report on the 2012 Building Energy Disclosure Policy Roundtable. Prepared for Urban Sustainability Directors Network. 2012 May 4.

Kerr L, Beber H, Hope D. New York City Local Law 84 benchmarking report. plaNYC; Mayor's Office of Long-Term Planning and Sustainability. New York (NY); 2012 Aug.

[http://www.nyc.gov/html/gbee/downloads/pdf/nyc\\_ll84\\_benchmarking\\_report\\_2012.pdf](http://www.nyc.gov/html/gbee/downloads/pdf/nyc_ll84_benchmarking_report_2012.pdf)

Mikkonen I, Gynther L, Hämekoski K, Mustonen S, Silvonen S. Innovative communication campaign packages on energy efficiency: WEC-ADEME case report on energy efficiency measures and policies, Motiva Services Oy; 2010.

[http://www.worldenergy.org/documents/ee\\_case\\_study\\_communication.pdf](http://www.worldenergy.org/documents/ee_case_study_communication.pdf)

NMR Group, Inc. and Optimal Energy, Inc., Statewide benchmarking process evaluation, Volume 1: Report, 2012 Apr.

<http://www.energydataweb.com/cpucFiles/pdaDocs/837/Benchmarking%20Report%20%28Volume%201%29%20w%20CPUC%20Letter%204-11-12.pdf>

State and Local Energy Efficiency Action Network. Benchmarking and disclosure: State and local policy design guide and sample policy language. Prepared by A. Burr, Institute for Market Transformation. 2012. [http://www1.eere.energy.gov/seeaction/pdfs/commercialbuildings\\_benchmarking\\_policy.pdf](http://www1.eere.energy.gov/seeaction/pdfs/commercialbuildings_benchmarking_policy.pdf)

Stavins R, Schatzki T, Borck J. An economic perspective on building labeling policies. Analysis Group, Inc. Boston (MA); 2013 Mar 28.

[http://www.analysisgroup.com/uploadedFiles/News\\_and\\_Events/News/Stavins\\_Schatzki\\_Building\\_Labels\\_Research\\_March2013.pdf](http://www.analysisgroup.com/uploadedFiles/News_and_Events/News/Stavins_Schatzki_Building_Labels_Research_March2013.pdf)

Tigchelaar C, Backhaus J, de Best-Waldhober M. Consumer response to energy labels in buildings. Energy Research Center of the Netherlands (ECN); 2011.

[http://www.ideal-epbd.eu/download/pap/Final\\_WP6\\_report\\_findings\\_recommendations.pdf](http://www.ideal-epbd.eu/download/pap/Final_WP6_report_findings_recommendations.pdf)

U.S. Environmental Protection Agency. Building performance with ENERGY STAR®: Early experience summary. 2012 Mar.

[http://www.energystar.gov/ia/partners/rep/ci\\_program\\_sponsors/downloads/BPwES\\_Early\\_Experience.pdf](http://www.energystar.gov/ia/partners/rep/ci_program_sponsors/downloads/BPwES_Early_Experience.pdf)

Vaidya R, Nevius M, Lamming J, Barata S, Lyle T. Commercial building benchmarking: Will they manage it once they've measure it? 2012 ACEEE Summer Study on Energy Efficiency in Buildings.

<http://www.aceee.org/files/proceedings/2012/start.htm>

### **Description of Materials:**

1. **Newsletter:** Downtown Berkeley Association; Fall 2013
2. **Newsletter:** Chamber of Commerce - CA AB 1103 compliance information
3. **E-Newsletter:** Oakland Downtown and Uptown Business Improvement Districts; Dec 2013
4. **Messaging:** Energy benchmarking for commercial buildings - Key messages for building owners
5. **Program description:** City of Boulder, Commercial Energy Building Pilot Program
6. **Press release:** City of Boulder, Commercial Energy Building Pilot Program; Sept 27, 2012
7. **FAQ:** City of Boulder, Commercial Energy Building Pilot Program
8. **Case study:** David Brower Center, Berkeley, CA; Dec 2013
9. **Case study:** Verity Credit Union, Seattle, WA  
<http://www.seattle.gov/environment/case-studies.htm>
10. **Program flyer:** San Francisco 24x7 Energy Challenge; Spring 2010
11. **FAQ:** City of Berkeley, Energy Smart Awards Program; April 2013
12. **Messaging platform:** City of Berkeley, Energy Smart Awards Program; April 2013

*For the Downtown Berkeley Association Newsletter  
Fall 2013*

### **Benchmarking Your Building – a Winning Proposition**

Berkeley building owners and managers can get help complying with the AB 1103, California's Energy Benchmark Disclosure law *and* win an Energy Smart award from the City of Berkeley for proactively managing energy use. Beginning in 2014, the state law requires buildings over 10,000 square feet to disclose their EnergyStar benchmark score to prospective buyers, lessees and lenders. EnergyStar scores are available by registering for the free EnergyStar on-line software tool, Portfolio Manager. Through mid-January, the City of Berkeley's Energy Smart Award Program is available to help buildings register for the software and be eligible for an Energy Smart Award.

Energy Smart buildings in Berkeley will not only be AB 1103 compliance-ready, they get special recognition from the City at an invite-only award celebration hosted by East Bay Environmental Network (EBEN) and BOMA East Bay. For more information on the awards, contact Billi Romain at [bromain@cityofberkeley.info](mailto:bromain@cityofberkeley.info).

Energy Smart Awards information available at the EBEN website  
<http://ebenet.org/resources/upcoming-events/energy-smart-awards-program-how-does-your-building-rate-2/>

Info on AB 1103  
[http://www.energy.ca.gov/ab1103/rulemaking/documents/AB1103\\_Infographic.pdf](http://www.energy.ca.gov/ab1103/rulemaking/documents/AB1103_Infographic.pdf)

## **Are You in Compliance with California's New Energy Benchmarking Policy?**

*AB 1103 implementation begins January 1, 2014*

If you own a non-residential building in Alameda County, you may soon have to comply with the California Energy Commission's energy benchmarking policy, AB 1103. The law requires owners of non-residential buildings to disclose their building's energy usage during all real estate transactions, including the sale, lease or financing of the entire building.

Owners will need to use the U.S. EPA ENERGY STAR Portfolio Manager tool to receive a Statement of Energy Performance Report. The Portfolio Manager compares the building's energy usage to similar buildings across the country and scores a building on a scale of 1-100 based on:

- Energy and water consumption
- Age of building
- Type of use(s)
- Operating hours
- Heating and cooling needs

Energy benchmarking is now a requirement, but it also benefits building owners – commercial buildings that consistently participate in benchmarking use 7 percent less energy over a three-year period, which can lead to cost savings. Additionally, studies have shown that rental prices for green office buildings are 3 to 5 percent higher than non-green buildings and selling prices of green buildings are 11 to 19 percent higher compared to non-green counterparts.

AB 1103 Implementation Schedule:

- On or after January 1, 2014, for a building with a total gross floor area measuring more than 10,000 square feet and up to 50,000 square feet.
- On or after July 1, 2014, for a building with a total gross floor area measuring at least 5,000 square feet and up to 10,000 square feet

Get ahead of these requirements by signing up for ENERGY STAR Portfolio Manager today and see how your building performs. For more information on the AB 1103 law, visit

<http://www.energy.ca.gov/ab1103/>.

To get started benchmarking your building, visit:

[http://www.pge.com/en/mybusiness/account/diy/benchmarking.page?WT.mc\\_id=Vanity\\_benchmarking](http://www.pge.com/en/mybusiness/account/diy/benchmarking.page?WT.mc_id=Vanity_benchmarking).

## Oakland ENERGY SMART AWARDS Program

BENEFITS - Benchmark your building to:

- 1) Save ENERGY and MONEY
- 2) Manage your building's energy performance
- 3) Earn RECOGNITION (all participants earn an Energy Smart Award)
- 4) Stay ahead of the curve in complying with California state [benchmarking and disclosure laws](#)
- 5) Promote Oakland's reputation as one of the greenest cities in America

GET STARTED NOW – Follow these four steps:

- 1) Download and complete the attached application
- 2) Benchmark your building(s) with [ENERGY STAR® Portfolio Manager](#), a **free**, secure, online resource
- 3) Submit the application and your benchmarking report to [info@bomaoeb.org](mailto:info@bomaoeb.org) by **January 17, 2014**
- 4) Join your colleagues to be honored at the [BOMA Energy Smart Awards Event](#) on **January 30, 2014**

DID YOU KNOW? Energy efficient buildings...

- Cost less to operate
- Have higher net operating incomes (NOI)
- Greater asset values
- Have higher rental and occupancy rates

IT PAYS TO BE GREEN...

Benchmarking data for energy-efficient buildings can also be used to achieve ENERGY STAR certification. According to a national study in 2008 by [CoStar Group](#), rental rates in ENERGY STAR-rated buildings command a \$2.40 per square foot premium over similar buildings and have 3.6% higher occupancy rates. Another study found that ENERGY STAR properties sold for 16% more than identical buildings without the ENERGY STAR.

## Energy Benchmarking for Commercial Buildings

### Key Messages for Building Owners

- - ✓ **Lowers energy consumption**
  - ✓ **Informs building owners about energy usage**
  - ✓ **Increased rents and property value**

#### Energy Benchmarking Benefits

- Eco-friendly buildings are more **attractive to potential buyers and renters**
  - Consumers are becoming more savvy about the environment, sustainability and the importance of a healthy working environment
- Energy-efficient buildings **command higher rents and sale prices**
  - Rental prices for green office buildings are **3 – 5 percent higher than non-green buildings** and selling prices of green buildings are **11 - 19 percent higher compared to non-green counterparts** (Nils Kok, April 2013)
  - Energy efficient buildings use fewer resources and can be cheaper to operate
- Benchmarking provides investors with information about their commercial real estate portfolio, making them more likely to continue investing in energy-efficient buildings
- Prepare for the California state law (AB 1103) that will require benchmarking when a building is sold, leased or refinanced.
- The benchmarking process is free, there's nothing but upside to have your building analyzed

#### What is energy benchmarking?

- Benchmarking is the process of using the U.S. Environmental Protection Agency's (EPA) [ENERGY STAR Portfolio Manager](#), an interactive online tool that enables building owners to analyze and track their energy and water usage.
- Benchmarking allows owners to gauge their building's performance against others in the marketplace.
- Approximately 20 different states, cities and municipalities have benchmarking laws.
  - California's law, [AB1103](#), set to go into effect in January 2014, requires public disclosure of benchmarking before a non-residential building can be sold, refinanced or leased.

#### Why is benchmarking needed?

- Similar to the mile-per-gallon comparison to measure vehicle efficiency, **benchmarking creates standardized metrics** to measure commercial building efficiency.
- There are **4.9 million commercial buildings** in the United States **consuming almost 20 percent of the country's energy**. (National Real Estate Investor, April 2013)
- Commercial buildings that consistently participate in benchmarking **use seven percent less energy over a three-year period**. (Energy Star Survey, 2012)

#### How is benchmarking done?

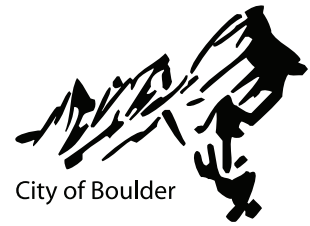
- The U.S. Environmental Protection Agency's [ENERGY STAR Portfolio Manager](#) scores a building on a scale of 1-100 based on:
  - Energy and water consumption
  - Age of building
  - Type of use(s)
  - Operating hours
  - Heating and cooling needs

#### Online Resources

- [ENERGY STAR Portfolio Manager](#)
  - Learn more about the process of benchmarking and the tools needed to get started
  - Sign up to use the ENERGY STAR Portfolio Manager to have your building assessed
- [PG&E Energy Performance Benchmarking](#)
  - Step-by-step resources on beginning the benchmarking process including on-demand benchmarking webinars, hands-on workshops and FAQs
  - Information on California Energy Disclosure Program AB1103 and the schedule for compliance for non-residential building owners

# CITY OF BOULDER

## Benchmarking Pilot Program for Commercial Buildings



The City of Boulder is focusing on a commercial energy efficiency strategy to help Boulder's existing commercial buildings become more energy efficient. The next step in the strategy is to launch an energy benchmarking (or energy rating) pilot program in order to better understand public and private sector commercial building energy performance.

The benchmarking pilot program will include a cross sampling of Boulder's commercial buildings; different sizes and uses. The pilot will inform participating building owners, tenants and the city on how existing commercial buildings use energy. It will also allow building owners and tenants to understand their building's energy performance and identify areas where energy efficiency improvements could help them save money.

### Pilot Program Objectives

- To encourage the benchmarking and disclosure of energy use data for a variety of commercial buildings in Boulder.
- To gain experience benchmarking commercial energy use with an energy rating tool that is becoming the national standard throughout the country, the U.S. EPA's ENERGY STAR Portfolio Manager.<sup>TM</sup>
- To help inform the development of a benchmarking and disclosure program by:
  - Benchmarking a cross-sample of commercial building sizes and types;
  - Evaluating the time and resources needed to benchmark commercial buildings; and
  - Gaining experience in accessing whole building energy use data.

### Pilot Program Design

- The pilot program will subsidize energy coaches\* to help building owners obtain energy use data for their buildings, rate their buildings' energy performance using Portfolio Manager<sup>TM</sup>, and report that data.
- Energy performance data for the benchmarked buildings will be reported to the city.

*\*Energy Coaches are trained professionals that have received a certification in commercial building systems, including how to use the EPA's ENERGY STAR Portfolio Manager<sup>TM</sup> to track, manage and recommend cost-effective improvements*



## Pilot Program Outcomes

Data collected will help the city to understand:

- The sizes and uses of buildings that provide the best opportunity for targeted energy efficiency programs.
- The time, effort and resources it takes a building owner to benchmark their building's energy performance.
- The access and format of building energy use data.

If interested in participating in the pilot and to receive FREE energy tracking and rating services, please contact Anna Gerstle at [gerstlea@bouldercolorado.gov](mailto:gerstlea@bouldercolorado.gov), 303-441-3017 by Nov. 30.

## Commercial Energy Efficiency Strategy (CEES)

On May 22, Boulder City Council discussed moving forward with a three-part Commercial Energy Efficiency Strategy that includes:

- 1) existing and/or expanded voluntary, incentive-based programs;
- 2) development of a program that could require benchmarking and annual reporting; and
- 3) eventual consideration of prescriptive energy efficiency measures and/or performance standards.

The results of the benchmarking pilot program will inform the second part, which is the consideration of a benchmarking and disclosure program for commercial buildings.

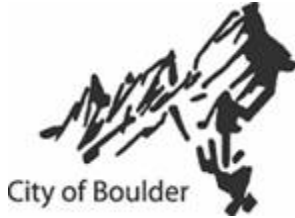
## Next Steps in the CEES are focusing on:

- Continuing to encourage businesses and commercial building owners to participate in voluntary programs, services and incentives such as the “10 for Change” program and EnergySmart services.
- Gathering and reporting more information on the energy performance of existing buildings, i.e. benchmarking and disclosure efforts detailed above. This practice is playing out in cities across the country. Boulder will pilot it in the fall of 2012 and consider a benchmarking and disclosure program in 2013.





**\*For best results, view in HTML**



## NEWS

**Thursday, Sept. 27, 2012**

**Media Contacts:**

Jody Jacobson, Public Works, 303-441-3122

Sarah Huntley, Media Relations, 303-441-3155

[www.bouldercolorado.gov](http://www.bouldercolorado.gov)

### **City launches pilot program to rate the energy performance of existing commercial buildings**

The City of Boulder is launching a “commercial building energy benchmarking pilot program” to help inform development of a standard procedure for rating the energy performance of existing commercial buildings in the community. The pilot will inform building owners, tenants and the city on how existing commercial buildings use energy and identify areas where energy efficiency upgrades could help specific businesses or property owners save money. The pilot program began this month and will run through December.

Participating commercial building owners and businesses will be asked to collect energy use data and rate their energy performance in the [ENERGY STAR Portfolio Manager](#)<sup>™</sup>, a national standard energy rating tool developed by the U.S. Environmental Protection Agency. Participants will then share the results with the city. A variety of commercial building types and sizes will be included in the pilot to provide an accurate estimate of the time and resources necessary to participate. This will help the city determine the most useful kind of energy data to collect and how to simplify the data-sharing process.

Depending on the results of the pilot program, the city will consider a benchmarking program next year that would require commercial building owners to rate their building’s energy performance and report it to the city.

“The commercial sector accounts for nearly 60 percent of Boulder’s greenhouse gas emissions,” said Business Sustainability Specialist Elizabeth Vasatka, “so involving the business community in energy efficiency initiatives is key to achieving Boulder’s long-term emission reduction goals.”

“Acquiring this energy use data will assist the city in designing programs and outreach efforts that will have the greatest economic impact to the business community,” continued Vasatka. “The city already offers significant incentive-based programs to the business community to encourage energy efficiency. This pilot will benefit participating building owners in that they will learn how their buildings use energy compared to buildings of similar size and type. It will also help the city figure out the best way to use the benchmark data so that, eventually, measuring results community-wide will be simpler.”

More than 1,300 businesses or commercial building owners have participated in the city's energy efficiency programs and services.

Commercial building owners that are interested in participating in the pilot program will receive free assistance from an independent energy coach to evaluate their energy use data and rate their buildings' energy performance. Establishing benchmarks will allow commercial building owners and tenants to identify opportunities to save money through energy efficiency improvements.

To find out if your building is eligible for the pilot or for more information about the program and the city's Commercial Energy Efficiency Strategy, contact Business Sustainability Specialist [Elizabeth Vasatka](#) at 303-441-1964 or visit [www.bouldercolorado.gov/cap](http://www.bouldercolorado.gov/cap).

**-- CITY --**

## **Commercial Building Energy Rating and Reporting Pilot Program Frequently Asked Questions**

Thank you for volunteering to participate in the City of Boulder's Commercial Energy Rating and Reporting Pilot Program, which involves rating a whole building's energy performance with a standard rating tool. The most commonly used tool in U.S. cities today is the Environmental Protection Agency's ENERGY STAR Portfolio Manager™ software.

Your assigned energy coach will assist you in the process of rating and reporting your building's energy performance through Portfolio Manager™, which is a free, online, energy and water management tool. This process will involve acquiring data specific to your building's use type. The energy coach will walk you through the rating and reporting process, gather and input the data into Portfolio Manager™, provide you and the city with the report of your building's energy performance generated by Portfolio Manager™ and conduct a short survey with you, and any tenants involved.

### **Why is the city doing this pilot?**

Boulder's commercial buildings account for nearly 60 percent of the community's greenhouse gas emissions. As part of the city's Climate Action Plan, a commercial energy efficiency strategy has been developed to achieve greater gains in helping businesses and buildings to become more energy efficient. Rating commercial buildings' energy performance is a significant part of the strategy and is useful for building owners to know their performance score. The city wants to help building owners and businesses to identify cost-effective energy efficiency improvements that can reduce energy use and saves money.

### **What are the benefits to me (the building owner) for rating my building?**

You cannot manage what you don't measure. Rating the energy performance of your building establishes a starting reference point to help you understand your building's energy use and is the first step towards making informed decisions about energy-saving improvements that can reduce costs. Buildings that fall into the established Portfolio Manager™ use types will receive an ENERGY STAR rating. This rating, based on a scale of 1-100, is relative to a national survey of buildings similar to yours. Buildings that do not fit one of the pre-existing use types will receive an Energy Use Intensity (EUI) score. An EUI score represents the energy consumed by a building relative to its size and can also be used for rating and reporting.

### **What if my building has a low rating?**

A low rating would indicate opportunity for improvement. The next step would be to evaluate the cost/benefit of measures you could take to increase your building's or businesses' energy efficiency opportunities and learn what incentives may be available through local governments and utility providers to help offset the cost of improvements. Building owners and managers recognize the value that energy efficient buildings can have on improved sale prices, lease rates and terms, as well as comfort.

**How will the city use the energy rating data?**

This pilot will help the city to better understand the rating and reporting process and the use of Portfolio Manager™. It will also allow the city to evaluate the commercial energy data gleaned from the pilot and identify trends from a broad sample of building sizes and uses. The city will then use this information and the outcomes of a robust stakeholder process to inform City Council on the next steps in developing a rating and reporting program for existing commercial buildings throughout Boulder.

**Will the energy rating information be available to the public?**

Individual building data will not be available to the public. Various sets of combined, aggregate data will be presented to City Council and will be available to the public in council agenda packets; however, no identifying information will be included in the aggregate forms.

**What is the purpose of the building owner survey?**

This survey will help the city better understand the time, effort and resources it takes a building owner to rate their building's energy performance by using Portfolio Manager™. The city's intent is to understand and facilitate the rating and reporting process; making it more streamlined, low-cost and useful for the building owner.

## The David Brower Center

### *Built Green and Benchmarked to Stay Green*



The David Brower Center was built in 2008 to serve as a vibrant meeting place to inspire and bring together people committed to environmental and social action. Named after David Brower, a Berkeley native who pioneered the modern environmental movement, the Brower Center offers education and arts programs, conference and event facilities and high-quality office space for environmental nonprofits—all in the greenest building in the City of Berkeley.

While the Brower Center is green from the ground up, boasting a LEED Platinum rating (the highest award given by the U.S. Green Building Council Leadership in Energy and Environmental Design program), the Brower Center is constantly seeking out new ways to improve the efficiency of their building operations. Specifically, the Brower Center wanted to assess the operational efficiency of their on-site eatery, Gather Restaurant, which was consuming large quantities of electricity and water, particularly during off hours when the restaurant was closed. Beginning in August 2013, the Brower Center participated in energy benchmarking and conducted energy efficiency upgrades, improving its already state-of-the-art building energy and saving thousands of dollars per year in utilities.

As a cutting-edge facility at the forefront of green building, the Brower Center was built to be 50 percent more efficient than current code requirements, featuring a variety of energy efficient building techniques including: a vast solar photovoltaic array that doubles as a sun shade device; high-efficiency lighting with automatic controls to limit use; and exterior and interior materials that ensure healthy air quality and minimize environmental impacts.

### **BENCHMARKING**

On top of their excellent track record of energy efficiency, the Brower Center pursued an energy benchmarking assessment to determine how they could enhance their already strong green building foundation.

In an effort to improve the performance of the 45,000 square foot multi-use building, the Brower Center participated in the City of Berkeley's Energy Smart Energy Benchmarking program, which offers energy assessments and assistance with implementing energy efficiency measures. Energy benchmarking tracks

a building's energy usage, water consumption and greenhouse gas emissions, and compares the building's performance against similar buildings. Using the EPA ENERGY STAR Portfolio Manager tool, the Brower Center was able to better understand how they were using energy, compare their energy usage against similar-sized buildings in similar climates and uncover areas for added improvement.

## ENERGY EFFICIENCY UPGRADES

The Brower Center is a mixed-use building with a restaurant on the ground floor and office space above it. The multi-use nature of the building presented a unique challenge for benchmarking, as many office buildings similar to the Brower Center, with which it would be compared, do not have the high-energy requirements of 24-hour refrigeration and air conditioning that come along with a running restaurant. In fact, with data gleaned from the benchmarking process, the Brower Center determined that the area ripest for efficiency improvements was their highly-regarded artisanal restaurant, Gather.

Gather prides itself in being a sustainably-focused restaurant and specializes in procuring the freshest seasonal ingredients from local farms and creating dishes from scratch. This dedication to a menu of handcrafted dishes means that much of the preparation of the food is done in-house and requires energy and water needs beyond the normal office hours of the rest of the building. To bring down the cost of continuously running kitchen equipment, the Brower Center invested in ENERGY STAR certified appliances and improved the efficiency of their electrical equipment by using timer controlled settings on all kitchen appliances.

In addition to benchmarking energy use, the Brower Center entered water use data into Portfolio Manager. Once they were able to analyze water usage and identify savings opportunities, they installed diffusers and low-flow appliances, including numerous faucets, throughout the entire building. The upgrades made to their water system brought down water usage from 2 gallons per minute to 1 ½ gallons per minute.



To further enhance their energy efficiency, the Brower Center will replace all exterior building lights with LED bulbs in early 2014. While their current lighting system isn't a significant energy expenditure, true to the Center's mission, they are pursuing every opportunity to ensure that the building is as energy efficient and environmentally friendly as possible.

## OUTCOME

As a result of benchmarking, the Brower Center will save thousands of dollars a year from energy improvements, above and beyond the Center's current efficiency, reducing their overall energy consumption and keeping energy usage consistent throughout the day. In addition, the Brower Center's website now features a real-time Building Dashboard. This provides the Brower Center's 175 on-site employees and the general community with access to up-to-the-minute building performance data, including electricity consumption, solar production, water and rainwater consumption and natural gas production. The Brower Center will also be honored for their benchmarking effort at an awards ceremony on Thursday January 30<sup>th</sup>.

Participating in the benchmarking program and using the ENERGY STAR Portfolio Manager allows the Brower Center to compare energy usage and measure efficiency to identify areas for improvement, so that they can continue to set an example not only among similar buildings in the Bay Area, but as a leader across the entire green building industry.



## BENCHMARKING:

# BANKING ON ENERGY EFFICIENCY

**S**ustainability has long been a top priority for Verity Credit Union. Over the years, the financial institution has embarked on a number of green initiatives, from offering its members discounted loans for fuel-efficient cars and green homes, to the construction of its headquarters, which received an award for efficient design in 1996.

So when Verity's Facilities Manager Stephen Chandler set out to benchmark the energy performance of the building for the first time in 2008, he fully expected it would rate pretty high. He was surprised to find out that the building performed below average compared to other similar buildings. As it turned out, Verity's energy needs had increased over time, plus the building's heating and cooling system needed fine-tuning. Chandler would not have known the building had room for improvement if not for using the EPA's free benchmarking tool, **ENERGY STAR® Portfolio Manager**.

Armed with this knowledge, Chandler set out to discover how Verity could increase the energy efficiency of the building and improve the energy-use habits of those working inside – while continuing to provide a high level of service to its members. From upgrading lighting and fine-tuning the heating and cooling system, to modernizing the data center, and encouraging employees to power down their computers at the end of the day, in just five years Chandler took the building from an energy score of 48 to a 74 – meaning the building now performs nearly 50 percent better than the average comparable building. He is now working on a plan to take the building to a 75 rating or higher, which would qualify it for **ENERGY STAR** status.

### SAVINGS SPOTLIGHT:

**Since 2008, Verity Credit Union has reduced its annual energy consumption by 20% — enough energy savings to power nearly 12 Seattle homes annually.**

### Verity Credit Union Headquarters Stats:

Address	11027 Meridian Ave North, Seattle
Year Built	1996
Size	38,000 sq. ft. (plus 16,000 sq. ft. parking garage)
Type of Use	Retail banking, office space, data center

Verity Credit Union Headquarters  
Seattle, WA



“Energy bills only tell you so much. Benchmarking lets you see trends and how your building compares with others. As a facility manager, you should be looking for ways to lower costs, and being energy efficient is a way to do that which benefits your company and its customers.”



**STEPHEN CHANDLER**  
Facilities Manager



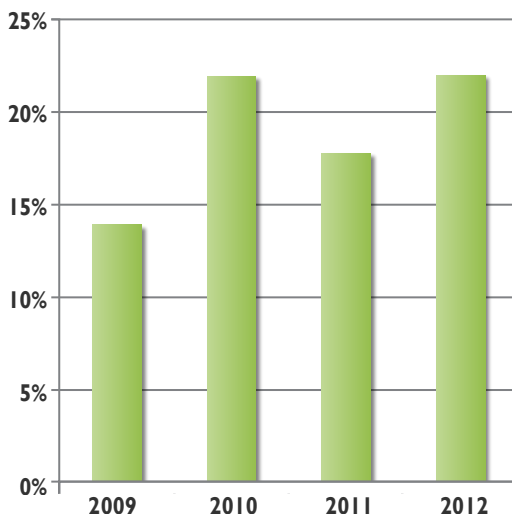
Energy savings continued on back ▶



## Credit Union Knows What a Good Investment Looks Like

In 2008, Verity's board of directors made a commitment to stop wasting energy and reduce the credit union's carbon footprint. To do that, they needed to know where it "stood" in terms of energy use and waste in order to know where they wanted to go from there. That's where benchmarking came in. With benchmarking, the company is able to track its energy use on an annual basis and find ways to save energy and money.

### Average Annual Cost Savings



NOTE: Savings based on estimated yearly energy costs without energy efficiency upgrades less actual energy costs. Does not include capital costs and weather.

Energy-saving upgrades at Verity's headquarters:

- Installed motion sensors in offices and conference rooms that turn lights off in unoccupied rooms.
- Installed high-efficiency lights in garage.
- Rebalanced air conditioning and heating systems.
- Replaced old servers with new high-efficiency models and moved some data center operations onto virtual servers.
- Installed a motion regulator on the soda vending machine so cooling cycles shorten when no one is around.
- Shut down desktop computers at night and over the weekend.

Many of these improvements paid themselves back in two years or less, such as the heating and cooling optimization. Verity also took advantage of utility rebates for several of these upgrades, further reducing the payback period.

Verity's mission to improve its energy performance doesn't stop here. In the future, Chandler hopes to do even more, such as increasing LED lighting and using an outside air economizer for cooling the data center to further bring down energy use and costs, and hopefully earn the building an **ENERGY STAR**.

**GET STARTED  
SAVING  
TODAY:**

**Owners of all commercial and multifamily buildings 20,000 sq. ft. or larger are required to annually benchmark and report energy performance to the City of Seattle.**

**Get a leg up on the competition and benchmark your building today using the EPA's free benchmarking tool.**

For more information on rebates and other financial assistance or energy upgrades to buildings, visit your local utility website:

- Seattle City Light: [seattle.gov/light/conserve](http://seattle.gov/light/conserve)
- Seattle Steam: [seattlesteam.com](http://seattlesteam.com)
- Puget Sound Energy: [pse.com/savingsandenergycenter](http://pse.com/savingsandenergycenter)

Visit the City of Seattle website to learn more about the city's benchmarking policy and how to get started: [seattle.gov/energybenchmarking](http://seattle.gov/energybenchmarking)

**Questions?** Email [EnergyBenchmarking@seattle.gov](mailto:EnergyBenchmarking@seattle.gov) or call (206) 727-8484



SEATTLE OFFICE OF  
**Sustainability & Environment**



## San Francisco Earth Hour 24x7 Energy Challenge

### ***FOR COMMERCIAL BUILDINGS IN SAN FRANCISCO***

Earth Hour is a call to action — to simultaneously switch off all non-essential lights in San Francisco for one hour. Together we will demonstrate our profound power to collaborate to save energy, save money, reduce greenhouse gas emissions, and even conserve wildlife. **Your partnership is critical.** Past participants have realized opportunities to engage employees, tenants, and building management, extending the impact beyond one hour of intense focus and saving energy and money during the remaining 8759 hours of the year.

#### **TAKE ACTION - Earth Hour - March 28**

Turn-off all non-essential interior and exterior lighting on Saturday, March 28, 2009 from 8:30-9:30 PM.

#### **NEXT STEP - Take the 24x7 Energy Challenge**

1. **Assess energy performance:** Enroll your property in ENERGY STAR® Portfolio Manager to calculate and track building energy use online. Get an unbiased benchmark of your energy performance compared to similar buildings in the area. [www.energystar.gov/benchmark](http://www.energystar.gov/benchmark)
2. **Automate energy tracking:** Enable Pacific Gas and Electric Company's (PG&E) no-cost Automated Benchmarking Service to keep your Portfolio Manager records updated. <http://www.pge.com/benchmarking/>
3. **Improve your Portfolio Manager energy benchmark** by March 2010 to receive prizes and recognition!

All participants will receive publicity for their efforts. The most energy efficient buildings in the city – as well as those that make the greatest gains in performance – will be awarded prizes and public recognition from Mayor Gavin Newsom.

**Learn more –** [www.sfenvironment.org/247](http://www.sfenvironment.org/247)

#### ***Benefits***

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. <b>Earn recognition!</b> Your participation will be advertised and promoted.</li> <li>2. <b>Reduce energy costs!</b> Energy dollars go straight to the bottom line.</li> </ol> | <ol style="list-style-type: none"> <li>3. <b>Bonus – Early compliance!</b> By 2010, disclosure of benchmarks will be required in California real estate transactions.</li> <li>4. <b>LEED EBOM!</b> – Benchmarking is a step toward LEED for Existing Buildings certification.</li> </ol> |
|--|---|

**San Francisco Earth Hour 24x7 Energy Challenge is a Partnership of Mayor Gavin Newsom and**



**SFEnvironment**  
Our home. Our city. Our planet.  
A Department of the City and County of San Francisco



**Pacific Gas and Electric Company®**



**BUSINESS COUNCIL ON CLIMATE CHANGE**



**USGBC  
NORTHERN CALIFORNIA**



## Prize Categories

Prizes will be awarded in April 2010. Recognition and free advertising will be awarded to leaders among each category:

- Office
- Hotel
- Retail
- Hospital
- Medical office
- Supermarket
- School

### The Kilowatt Cup

Jury-awarded trophy recognizing superior achievement in energy management, overcoming unique obstacles, and emphasizing energy savings through no- and low-cost practices.

### Greatest Improvement

Awarded for the greatest percentage gain in Energy Performance Rating in one year.

### Most Efficient

Awarded to buildings with the highest Portfolio Manager energy performance rating.

### General Recognition

All participants will be awarded certificates of participation and receive promotion in San Francisco media.

## Judging

Awards will be determined by data from the final Energy Performance Rating generated by Portfolio Manager. Applicants for the Kilowatt Cup must also submit a narrative explaining their achievement and obstacles overcome

## Privacy

Building energy data are private between building owners, PG&E, and EPA's confidential Portfolio Manager. Eligibility for prizes requires confidentially sharing energy information with contest organizers for verification. Only winners, trends, and anonymous rankings will be shared publicly.

Note that a new state law requires disclosure of energy benchmark data in all commercial property transactions as of January 2010, including sale, building lease, and lending. (California Public Resources Code 25402.10 – enacted from Assembly Bill 1103.)

## Contest Rules

Any commercial building that commits to turning out the lights on March 28 and using the free online tools to track and manage energy use is welcome to partner. However, to be eligible for awards, properties must meet the following requirements:

- Located in San Francisco.
- Benchmark the building's energy use in Portfolio Manager, ENERGY STAR's free online tool: [www.energystar.gov/benchmark](http://www.energystar.gov/benchmark).
- Participants must enter energy use data for 24 consecutive months, beginning with the March 2008 billing cycle and ending in February 2010. The easiest way is to enroll in PG&E's Automated Benchmarking Service. [www.pge.com/benchmarking](http://www.pge.com/benchmarking)
- By 3/30/2010, participants will be required to submit Energy Performance ratings using the ENERGY STAR Portfolio Manager "Share" feature.
- All meters for a building must be entered into Portfolio Manager. Building owners and operators may enter multiple buildings, but each building must be entered as a separate facility within your Portfolio Manager account.
- Contest organizers will be allowed to verify submittal data and inspect properties to confirm results of winners.

## Enroll Now:

Property Contact Name:	Title:
Email:	Phone:
Company:	Building Name or Address:
Building Address:	
<i>If enrolling a portfolio: Please complete this form only once for a representative facility, and attach contact info for a responsible manager or engineer for each facility so that we can coordinate turning off lights on March 28.</i>	
<b>To enter:</b> Fax (415)-554-6393 or email this form to <a href="mailto:Gabriella.Canez@sfgov.org">Gabriella.Canez@sfgov.org</a>	
<b>Questions or Comments?</b>	
The San Francisco Department of Environment, PG&E, BOMA and the EPA are available to help you become an Earth Hour 24 x 7 Partner. For specific questions on how to begin or any part of the process, call our Earth Hour 24/7 Energy Challenge hotline: Gabriella Canez (415) 355-3784.	



# Smart Energy Awards

## Frequently Asked Questions

### ***Berkeley business owners: How does your building rate?***

To learn more about how effectively their buildings use energy, owners and managers of commercial and public buildings throughout Berkeley are participating in the City's Smart Energy Awards. The awards program recognizes the environmental management leadership of those who take the first step to better energy efficiency by benchmarking their buildings. Top energy efficiency honors go to buildings with the best energy performance ratings. The awards support the City's Climate Action Plan, which has set bold goals for reducing energy waste and cutting greenhouse gas emissions.

### ***Why is Berkeley holding the Smart Energy Awards?***

The City of Berkeley spotlights building owners and operators who benchmark to **raise awareness about smart energy management and honor progress and excellence in energy efficiency**. In Berkeley, **optimizing energy efficiency of commercial buildings is essential** as the City strives to meet its Climate Action Goals, which call for significant reductions in greenhouse gas (GHG) emissions from energy use.

Buildings now account for about one-third of all GHG emissions in Berkeley. To make it easier to manage and reduce their energy use, the City's Office of Energy and Sustainable Development encourages Berkeley's business owners to benchmark their buildings with the ENERGY STAR® Portfolio Manager benchmarking tool. Top energy efficiency honors go to buildings that show the best energy performance ratings.

- **What is the Climate Action Plan?** The City of Berkeley's [Climate Action Plan](#) was set in motion by voters concerned about greenhouse gas levels in Berkeley. Per Measure G, the City is planning for an 80% reduction in GHG levels between the years 2000 and 2050. On the way to this goal, the City is committed to reducing GHG emissions 33% below 2000 levels by the year 2020, which equates to about a 2% reduction per year communitywide.
- **How does AB1103 fit in?** AB1103, the Nonresidential Building Energy Use Disclosure Program, requires the disclosure of energy use data and ENERGY STAR® Energy Performance Scores for nonresidential buildings in California on a staged compliance schedule that begins July 1, 2013. Benchmarking now with Portfolio Manager helps building professionals stay ahead of the curve. Visit the California Energy Commission at [www.energy.ca.gov/ab1103/](http://www.energy.ca.gov/ab1103/) for more details.





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### ***What is benchmarking, and why is it important?***

Benchmarking is the first step to getting control of building energy use by letting owners and facilities managers know where they stand on energy performance compared to other buildings. Buildings that benchmark using the ENERGY STAR® Portfolio Manager online tool are rated on a 1-100 scale providing apples-to-apples comparisons with the energy performance of similar buildings in similar climates across the country. Whether you own, manage, or hold properties for investment, Portfolio Manager can help set investment priorities, identify under-performing buildings, verify efficiency improvements, and lead to EPA recognition for superior energy performance. Specifically, benchmarking lets owners and operators:

- Track how much energy a building uses and compare this rating with the ratings of similar buildings in similar climates
- Identify whether your building is high performing or could benefit from improvements
- Set energy/cost saving priorities and monitor progress.

### ***Does benchmarking really save energy costs?***

**Yes!** According to the U.S. Environmental Protection Agency (EPA), buildings that track and manage their energy use consistently with Portfolio Manager have achieved **average energy savings of 2.4% per year, and energy savings lead directly to lower utility bills**. A 500,000-square-foot office building that reduces energy use 2.4% for three consecutive years can save \$120,000 in cumulative energy costs and see an increase in asset value of over \$1 million.

More fast facts from the EPA about energy savings:

- Portion of energy in buildings used inefficiently or unnecessarily: **30%**
- Amount of money that would be saved if the energy efficiency of commercial and industrial

buildings improved by 10%: **\$20 billion**

- Amount of greenhouse gas emissions that would be reduced if the energy efficiency of commercial and industrial buildings improved by 10 %: **equal to the GHG emissions produced each year by every vehicle registered in the state of California** (about 30 million vehicles)

### ***Who is eligible to participate in the Smart Energy Awards program?***

All commercial and public buildings in the City of Berkeley are eligible to participate in the Smart Energy Awards program.

### ***Why should I sign up for the Smart Energy Awards competition?***

The Smart Energy Awards program lets you know where you stand on energy performance and can help you:

- Save energy and money on utility bills
- Improve a building's energy efficiency and benefits to tenants and employees
- Lower greenhouse gas emissions within the City of Berkeley.

All participating buildings and owners will be publicly recognized, and the highest achieving buildings will be honored with energy excellence awards and receive:

- Public recognition by industry peers and state and local officials at a party and ceremony in the fall
- An Award Window Decal announcing the building's achievement to tenants and customers
- Special Notice on [www.LocateInBerkeley.com](http://www.LocateInBerkeley.com), Berkeley's premier commercial listing service

### ***How can I sign up for the Smart Energy Awards competition?***

To get started, **you must benchmark your building with ENERGY STAR® Portfolio Manager**,

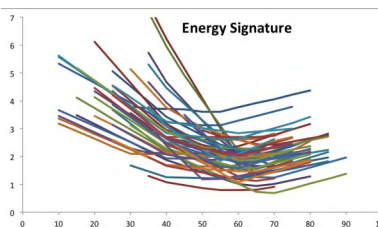
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an online tool. Here's how to ensure your eligibility:

1. Register your building with Portfolio Manager at [www.energystar.gov](http://www.energystar.gov)
2. Sign up with PG&E's Automated Benchmarking Service (ABS) at [www.pge.com/benchmarking/](http://www.pge.com/benchmarking/)
3. Enter your building's information into Portfolio Manager and generate a "Statement of Energy Performance" report
4. Fill out and sign the City's simple application [www.cityofberkeley.info/benchmarking\\_buildings/](http://www.cityofberkeley.info/benchmarking_buildings/)
5. Submit the application and "Statement of Energy Performance" report to [greenbuilding@cityofberkeley.info](mailto:greenbuilding@cityofberkeley.info) by **DATE**



provides the next step to energy efficiency by diagnosing specific areas for improvement. The FirstView software tool, developed by the nonprofit New Buildings Institute, analyzes monthly utility bills, automates system-level diagnostics and allows for peer-building comparisons. FirstView uses billing



data and basic building characteristics to generate an energy signature and segment a building's energy use to determine when

equipment and systems may not be operating optimally. The FirstView report goes beyond benchmarking ratings by providing recommendations managers can use to target investigations and fix problems.

### ***Can Smart Energy Awards participants get additional actionable feedback with FirstView?***

Yes. Because benchmarking is only the first step, participants in this year's Smart Energy Awards program will receive a free FirstView software analysis of their building's energy performance. After a building has been benchmarked, FirstView



Testing of FirstView was funded in part by the California Public Interest Energy Research (PIER) Program through the California Energy Commission. The City of Berkeley will work with StopWaste to conduct the FirstView analysis for Smart Energy Awards program participants.

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### ***Who were last year's award winners?***

In November 2012, these **26 energy efficiency leaders** were recognized for their dedication to environmental stewardship:

Alta Bates Summit Medical Center	Berkwood Hedge School	Netivot Shalom
Ashby Stage	Civic Center, City of Berkeley	Safeway
Bancroft Hotel	David Brower Center	Trumer Brauerei
Bayer Healthcare	Design Community & Environment	University California at Berkeley
Berkeley Chamber of Commerce	Ed Roberts Campus	Wareham Development
Berkeley City College	LJ Kruse Plumbing	2150 Shattuck
Berkeley Food and Housing Project	Lawrence Berkeley Labs	2530 San Pablo Avenue
Berkeley Unified School District	Metro Lighting	
Berkeley Repertory Theater	Meyer Sound	

**Learn More:** For more information and links to resources, please see Smart Energy Awards program at [www.cityofberkeley.info/benchmarking\\_buildings/](http://www.cityofberkeley.info/benchmarking_buildings/) or contact Billi Romain, Sustainability Coordinator at [bromain@cityofberkeley.info](mailto:bromain@cityofberkeley.info).



# Smart Energy Awards

## Messaging Platform

### OVERVIEW

This Messaging Platform has been prepared to provide guidance on outreach efforts in support of the city of Berkeley's Smart Energy Awards program. **The city is seeking 100 building owners and managers to participate in this year's awards competition.** To achieve this goal, awareness of the Smart Energy Awards program must be raised throughout the city and in other targeted Alameda County communities.

### BACKGROUND

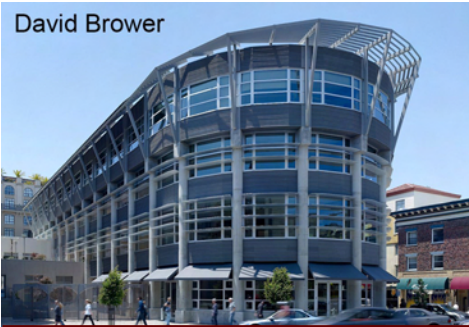
In 2013, the city of Berkeley will hold its Second Annual Smart Energy Awards to recognize owners and operators of commercial and public buildings for their energy management leadership. This past November (2012), 26 energy efficiency leaders were honored by industry peers and state and local officials for taking a first step toward energy efficiency by benchmarking the energy used by their buildings with the ENERGY STAR® Portfolio Manager rating tool.



This free, online tool, developed by the U.S. Environmental Protection Agency (EPA), tracks and assesses a building's energy consumption. Benchmarking enables building owners and managers to determine the energy efficiency of their operations and make informed management and investment decisions. Buildings that track and manage their energy use consistently in Portfolio Manager have achieved average energy savings of 2.4% per year, according to the EPA, and energy savings lead directly to lower utility bills.

This year, in addition to benchmarking with Portfolio Manager, each building entered in the Smart Energy Awards program will receive a diagnostic analysis from New Buildings Institute (NBI) using the FirstView software tool. FirstView serves as the next step toward energy efficiency by providing building owners and managers with actionable feedback. FirstView quickly generates information about whether a building's energy performance is on track or needs improvement. Tested on thousands of

David Brower



Rosa Parks Elementary



Berkeley Civic Center



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## AUDIENCE ASSESSMENT

buildings on behalf of the U.S. Green Building Council (USGBC) and others, FirstView uses monthly billing data and basic building characteristics to generate meaningful and actionable feedback about system level energy performance, and diagnoses opportunities for improvement.

Outreach in support of the Smart Energy Awards program is primarily directed toward building owners and managers. This audience is in the best position to 1) determine why and how to participate in the benchmarking program; and 2) take energy-saving actions in response to benchmarking and FirstView feedback. In order to reach these primary decision-makers, the outreach effort is also directed toward policymakers, business leaders and trade associations, energy/environment-focused NGOs and the general media. These secondary targets are in a position to share information with and/or influence building owners and managers.

A trade media contacts list has been developed for the target audiences described below.

### ***Building Owners and Facilities and Property Managers***

All commercial and public buildings in the city of Berkeley are eligible to participate in the benchmarking program. Building owners, property managers and facilities staff are the primary target audience for information about the city's benchmarking program and Smart Energy Awards. Facilities professionals and property managers are in a position to make changes to the ways in which buildings use energy, and are the people most likely to benchmark a building, review actionable feedback and implement energy-saving changes. Communications should emphasize the ratings competition (e.g., "How does your building rate?"), potential energy-cost savings and the opportunity to receive recognition through the Smart Energy Awards program.

### ***Policymakers and Community Leaders***

Local government representatives have an opportunity to share information with community leaders and constituents about the city's efforts to increase attention to energy efficiency in commercial buildings through benchmarking and feedback. Policymakers, especially those involved with energy management and climate change issues, may be in a good position to encourage participation in this process. By introducing the Smart Energy Awards program to the larger community, policymakers and community leaders can also increase interest in and

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Building owners, property managers and facilities staff are the primary target audience for information about the city's benchmarking program and Smart Energy Awards.

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Local, nonprofit entities focused on energy efficiency and environmental issues ... could support the city's efforts to promote benchmarking and honor benchmarked buildings by raising awareness of the Smart Energy Awards program with their memberships and the community as a whole.

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support for the competition citywide. Communications should emphasize benefits to the city and the business community as a whole, potential energy cost savings and the opportunity to receive recognition through the Smart Energy Awards program.

#### ***Business and Trade Associations***

In order to raise awareness about benchmarking, outreach efforts should target business leaders to engage those who serve as models for others within the community. To get the word out about benchmarking and the Smart Energy Awards program, it will be necessary to connect with chambers of commerce, improvement districts, and business and trade associations; these groups can share information about the program with their memberships. Communications should emphasize potential energy cost savings, the opportunity to receive recognition through the Smart Energy Awards program and the upcoming benchmarking requirements of AB1103.

#### ***NGOs***

Berkeley and the East Bay are home to a number of local, nonprofit entities focused on energy and environmental issues such as the East Bay Environmental Network, sponsors of last year's awards program. These NGOs could support the city's efforts to promote benchmarking and honor benchmarked buildings by raising awareness of the Smart Energy Awards program with their memberships and the community as a whole. Communications should emphasize the potential reductions in citywide greenhouse gas emissions that can result from increased participation in the program, and the upcoming benchmarking requirements of AB1103.

#### ***Community Media***

While the Smart Energy Awards program is primarily directed toward building owners and managers, an interested community potentially could help drive interest among local businesses. Media coverage adds clout and credibility to the awards. Communications should emphasize the ratings competition and the potential reductions in citywide greenhouse gas emissions that could result from increased participation in the program.

### **KEY MESSAGES**

#### ***1) Benchmarking is the first step to getting control of building energy use***

Benchmarking helps building owners, managers, facility staff and tenants better understand how to manage energy use and save money

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Benchmarking helps building owners, managers, facility staff and tenants better understand how to manage energy use and save money on monthly utility bills.

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on monthly utility bills. According to the EPA, buildings that track and manage their energy use consistently in Portfolio Manager have achieved average energy savings of 2.4% each year. Savings of 2.4% for three consecutive years is equivalent to cumulative energy cost savings of \$120,000 for a 500,000-square-foot office building, and an increase in asset value of over \$1 million.

Benchmarking also helps building professionals stay ahead of the curve as they prepare to comply with the upcoming energy benchmarking requirements of **California Assembly Bill 1103**, which will soon require certain building owners to disclose building energy performance.

Benchmarking enables owners and managers to:

- Track how much energy buildings use and compare these findings with similar buildings
- Identify whether your building is high performing or could benefit from improvements
- Set energy/cost saving priorities and monitor progress

***Sample Talking Points:***

1. How does your building rate? If you don't already know how effectively your building is using energy, benchmarking is the first step to finding out where you stand. The city of Berkeley's Smart Energy Awards program gives you access to tools that can help—for free! Participants can benchmark (rate) their building's energy performance with an online tool called Portfolio Manager. FirstView analysis which diagnoses opportunities for improving your energy performance will also be provided for all buildings entered.
2. Buildings owners can improve energy efficiency and lower carbon emissions by paying attention to operations and looking for opportunities to lower energy consumption. Benchmarking makes this easier.
3. Small reductions in energy use can add up to big cost savings over time. Buildings that benchmark their energy performance achieve 2.4% energy savings each year, on average. For a 500,000-square-foot office building, 2.4% savings for three consecutive years is equivalent to cumulative energy cost savings of \$120,000 (source: U.S. EPA).
4. Tenants and employees also benefit from improved energy efficiency in buildings. Tenants spend less on monthly energy bills and employees who enjoy more comfortable workplaces are more likely to stay put.

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5. California law soon will require the owners of certain buildings to disclose building energy performance. Benchmarking puts owners ahead of the curve in meeting the requirements of this new law.

***2) Berkeley works with local businesses to encourage benchmarking of properties and recognizes leaders through the annual Smart Energy Awards program***

In Berkeley, optimizing energy efficiency in buildings is critically important as the city strives to meet its Climate Action Goals, which call for significant reductions in greenhouse gas emissions by 2020. Commercial buildings now account for about one-third of all such emissions in the city. To make it easier for buildings to manage and reduce their energy use, the city's Office of Energy and Sustainable Development encourages Berkeley's business owners to benchmark their buildings using the EPA's Portfolio Manager benchmarking tool. Portfolio Manager allows building owners and managers to track and assess energy consumption in a secure online environment. Portfolio Manager can help set investment priorities, identify under-performing buildings and verify efficiency improvements.

In order to encourage more benchmarking and raise the profile of smart energy management, local agencies like the city of Berkeley are awarding annual energy leadership awards to building owners and operators.

In 2013, the city will hold its Second Annual Smart Energy Awards ceremony to raise the profile of building energy performance and recognize progress and excellence in energy efficiency among Berkeley's benchmarked buildings. In 2012, a diverse set of 26 buildings and their nonprofit and commercial owners were recognized for their energy management leadership. Honorees included the Wareham Development, The Ashby Stage and the Berkeley Unified School District.

Smart Energy Awards program participants receive ratings on their buildings through Portfolio Manager's 1-100 rating scale, which provides apples-to-apples comparisons with the energy performance of similar buildings in similar climates across the country. Information on a building's actual energy use can be automatically uploaded to the secure Portfolio Manager website by linking with Pacific Gas & Electric's (PG&E) [Automated Benchmarking Service \(ABS\)](#) (PDF, 186 KB). For buildings served by PG&E, the ABS provides Portfolio Manager with

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historical energy usage data and updates it monthly, so data does not need to be entered manually.

***Sample Talking Points:***

1. The city of Berkeley's Climate Action Plan mandates big reductions in greenhouse gas emissions in the city.
2. Commercial buildings now account for about one-third of all carbon emissions in the city. These emissions cause pollution, impact health and contribute to climate change. Commercial buildings that improve their energy efficiency can play a big role in making the city more livable.
3. While all buildings use energy, not all buildings perform equally. Are you spending more on energy than your peers? Energy Star's Portfolio Manager offers a benchmarking score of 1-100 providing apples-to apples comparisons with the energy performance of similar buildings in similar climates across the country.
4. The city of Berkeley actively encourages benchmarking as a first step to getting control of building energy use. Through its Smart Energy Awards program, the city spotlights building owners and operators who benchmark to raise awareness about smart energy management and honors progress and excellence in energy efficiency. All commercial and public buildings in the city of Berkeley are encouraged to participate in this year's Smart Energy Awards program.

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Commercial buildings now account for about one-third of all carbon emissions in the city...

Commercial buildings that improve their energy efficiency can play a big role in making the city more livable.

***3) Building owners and managers who participate in the Smart Energy Awards program will receive actionable feedback on how to lower building energy use through a free FirstView software analysis***

Benchmarking is only the first step. Next, building owners and managers must seek actionable feedback on how to improve a building's energy performance. Energy assessments, which have been used in the past to evaluate buildings and identify energy efficiency measures, can cost thousands of dollars and take weeks to complete. New tools such as FirstView can assess energy performance in a matter of hours using monthly billing data and building characteristics.

This year, participants in the Smart Energy Awards program will receive a free FirstView analysis of their building's energy performance. After a building has been benchmarked, FirstView provides the next step to energy efficiency, comparing system-level performance to peer

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buildings, and diagnosing specific areas for improvement. The city of Berkeley will work with StopWaste to conduct the FirstView analysis for program participants.

FirstView was developed by NBI, a nonprofit organization, and tested on thousands of buildings for the USGBC, the Energy Commission and others. The FirstView tool uses monthly billing data and basic building characteristics to generate an energy signature and segment a building's energy use into heating, cooling, domestic hot water, lighting and plug loads. By comparing these loads to other similar buildings, FirstView can determine when equipment and systems may not be operating as they should.

The FirstView report goes beyond benchmarking ratings by providing recommendations managers can use to target investigations and fix problems. Testing of FirstView was funded in part by the California Public Interest Energy Research (PIER) Program through the Energy Commission.

***Sample Talking Points:***

1. After a building has been benchmarked, owners and managers need to take the next step with additional feedback about the specific actions they can take to improve energy performance.
2. For this year's Smart Energy Awards, the city of Berkeley has teamed up with StopWaste and New Buildings Institute to provide free FirstView diagnostic reports to all building owner and manager participants.
3. FirstView uses monthly billing data and simple building characteristics to create an energy signature and compare system-level performance to similar buildings. The feedback provides recommendations on actions that could lead to energy performance improvements. It's the next step beyond benchmarking.
4. FirstView was developed by NBI, a nonprofit organization working for better energy performance in commercial buildings, and was tested in California with support from the state's PIER program and the Energy Commission.

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**This year, participants in the Smart Energy Awards program will receive a free FirstView analysis of their building's energy performance.**

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