### All Cases



kBTu/sf

180,000

#### **ALL OPTIONS**

Make sure that the Statement of Energy Performance, provided as supporting

This active sample form has be documentation, matches the

Current energy performance performance period end-date for the project building as entered into, tracked, and reported by ENERGY STAR's Portfolio Manager tool.

Performance period start: Dec 1, 2010

Performance period end: Nov 30, 2011

Project building's site energy intensity:

(as provided by ENERGY STAR's Portfolio Manager tool)

#### Project building gross square footage:

The content highlighted in yellow above is linked to Plf2, Plf3, Plf5, IEQc1.2, IEQc3.2-3.4, MRc1-9 & IOc3.

The building gross area here must be consistent with the gross area listed on the Statement of Energy Performance.

### All Cases



#### **ALL OPTIONS**

Note that if you're pursuing the streamlined path with an ENERGY STAR

This active sample form has be Sample forms are for reference

label, the performance period dates for

Current energy performance for the project building as Manager tool.

EAp2 should still align with the rest of the prerequisites and credits.

Performance period start: Dec 1, 2010

Performance period end: Nov 30, 2011

Project building's site energy intensity: 83 kBTu/sf (as provided by ENERGY STAR's Portfolio Manager tool)

Project building gross square footage: 180,000 sf

The content highlighted in yellow above is linked to Plf2, Plf3, Plf5, IEQc1.2, IEQc3.2-3.4, MRc1-9 & IOc3.

# Statement of Energy Performance



Year Built: 1928 Gross Floor Area (ft2): 180,000

Energy Performance Rating<sup>2</sup> (1-100) 82

Site Energy Use Summary<sup>3</sup> District Steam (kBtu) Electricity - Grid Purchase(kBtu) Natural Gas - (kBtu)4 Total Energy (kBtu)

Energy Intensity<sup>4</sup> Site (kBtu/ft2/yr) Source (kBtu/ft²/vr) With few exceptions, gross floor area should be consistent with all other credits and prerequisites.

One exception is if a portion of the building (up to 10%) is being excluded from this prerequisite but not other credits.

For 12-month Period Ending: November 30, 20111 Date SEP becomes ineligible: N/A

The 12 month period must fall within 30 days of the latest performance period end-date for the project unless pursuing the Streamlined (ENERGY STAR) label path.

#### All Cases



#### **ENERGY PERFORMANCE**

Shared Access: The project team has shared access to the ENERGY STAR profile of the project building with the GBCI LEED EB: O&M master account. (Optional)

Note: Project teams electing to share access to the ENERGY STAR profile of the project building with the **GBCI** LEED-EB: O&M master account are exempt from providing certain submittal elements below as they will be obtained via the master account. Upon checking the box above, exempted elements will be highlighted in gray and input fields will be locked as no input is required. To share access, click on "Add user to share this Facility" from the main building view, then select "GBCI - LEED\_EB: O&M".

Your team may elect to share access with GBCI to the building on Portfolio Manager. Access can be granted as "read only". This allows you to streamline the information you have to upload as supporting documentation. Note that sharing access here is different than sharing access to meet the Minimum Program Requirements # 6.



Enter the rating from Portfolio Manager and the Statement of Energy Performance.

#### **ENERGY STAR (RATING SYSTEM CASE 1)**

Energy Performance Rating<sup>2</sup> (1-100) 82

Using the Portfolio Manager tool on the <u>ENERGY STAR website</u>, the project building has achieved the following an ENERGY STAR performance rating:

82

The content highlighted in yellow above is linked to EAc1.

#### Select one of the following:

- Streamlined Path: Project building has recently earned the ENERGY STAR label.
- No Recent Labels: Building has an ENERGY STAR rating, but no recent ENERGY STAR label.

The streamlined path is available if the building has received an ENERGY STAR Label within 12 months of the LEED application submittal date.



Upload a copy of the full Statement of Energy Performance to demonstrate building operations and energy use inputs on Portfolio Manager.

#### NO RECENT LABELS

**Upload EAp2-3.** Provide copies of the Portfolio Manager Web Pages that show: The project building's source and site energy use intensities. The ENERGY STAR performance rating. The list of space usage types. The values for the space attributes and actual operational variables.



Note: The rating may NOT be based on the default values of the space attributes and operating variables; the ENERGY STAR documentation must confirm that the user overrode all the default values with the actual values for the project building.

Briefly explain how the space attributes and actual operational variables used to generate the ENERGY STAR rating were derived and verified.

Building attributes were verified based on existing building documentation and a walkthrough performed by the chief engineer. Operational variables including occupancy, operating hours, and computers are tracked by building management and confirmed with the building tenants.



Generate the SEP based on the following selections. This will cover all of the documentation needs except for the supporting utility bills.

*Period Ending Date:	November, 2011 💠
Optional Contact Information:	
Select the Organization that owns this facility:	Select Contact 💠
Select the Primary Point of Contact for this statement:	Select Contact 💠
Select the Certifying Professional for this statement:	Select Contact 💠
Add/Edit Contacts and Organizations	
Report Options:	
* Select one or more of the following options:	
<ul> <li>✓ Statement of Energy Performance (for uses other than applying for the</li> <li>✓ Data Checklist</li> <li>✓ Facility Summary</li> </ul>	
<ul> <li>Statement for Display Purposes (Only for buildings with ratings - must period)</li> </ul>	t select valid 12 month rating



The summary of monthly energy should be provided directly from Portfolio Manager. The full SEP takes care of this.

**Upload EAp2-4.** Provide a summary of the monthly energy use (kilowatthours, therms, gallons, etc.) including each type of energy used by the project building over the performance period (this information can be printed from Portfolio Manager).

Upload Files:

**Upload EAp2-5.** Provide copies of the cover or summary pages of energy bills from the energy suppliers representing at least three months of the performance period. These cover pages must confirm the energy use entered into Portfolio Manager for those months. The bills must show energy consumption at least, and also peak demand if it is available. All fuel types must be included.

Upload Files:

Upload copies of the building utility bills for three months.



### The point tally is automatically populated at the end of the form based on the ENERGY STAR rating input.

Table EAp2-1. LEED-EB: O&M EA Prerequisite 2/Credit 1 Threshold Calculation

EAc1 points	Energy Star Rating	No Energy Star	Rating - percenti	le points above n	ational average
	Case 1	Case 2 Option 1	Case 2 Option 2A	Case 2 Option 2B	Case 2 Option 2C
EAp2 Compliance	69	19	19	19	19
1	71	21	n/a	21	21
2	73	23	n/a	23	23
3	74	24	n/a	24	24
4	75	25	n/a	25	25
5	76	26	n/a	26	26
6	77	27	n/a	27	27
7	78	28	n/a	28	28
8	79	29	n/a	29	29
9	80	30	n/a	30+	30
10	81	31	n/a	n/a	31
11	82	32	n/a	n/a	32
12	83	33	n/a	n/a	33
13	85	35	n/a	n/a	35



Make sure that the total area of all spaces equals to gross area for all other prerequisites and credits. Even small differences must be flagged by the review team.

		pulluling.		
Office Space (Office)				
CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	$\overline{\mathbf{A}}$
Gross Floor Area	179,063 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		



Watch out for the weekly operating hours. This should match the building operating plan for EAp1.

Weekly operating hours	60 Hours	Is this the total number of hours per week that the Office space is 75% occupied? This number should exclude hours when the facility is occupied only by maintenance, security, or other support personnel. For facilities with a schedule that varies during the year, "operating hours/week" refers to the total weekly hours for the schedule most often followed.		
------------------------	----------	---	--	--

Weekly operating hours aren't based on equipment run times but rather the hours that the hours when 75% of occupants are present in the building (for office buildings). That being said, there shouldn't be an obvious conflict between the Energy Star operating hours and the building operating plan for EAp1; for example, if the equipment schedules don't show typical runtimes on the weekend, it should be assumed that no weekend hours should be included in the Energy Star operating hours.



Actual occupants should be verified and be consistent with all other credits and prerequisites.

Actual values for PCs should be verified and it's not unusual for the amount PC's to exceed the number of occupants somewhat.

Workers on Main Shift	464	Is this the number of employees present during the main shift? Note this is not the total number of employees or visitors who are in a building during an entire 24 hour period. For example, if there are two daily 8 hour shifts of 100 workers each, the Workers on Main Shift value is 100. The normal worker density ranges between 0.3 and 5.3 workers per 1000 square feet (92.8 square meters)	
Number of PCs	538	Is this the number of personal computers in the Office?	



# Check out guidance on ENERGY STAR for benchmarking mixed-use properties.

Coffee Shop (Other)				
CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	$\overline{\mathbf{Q}}$

Page 1 of 4

Gross Floor Area 937 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		
------------------------------	--	--	--



If the parking energy use is included with the energy use input on Portfolio Manager, the parking space should be included on Portfolio Manager as well.

Parking Garage (Park	ing)			
CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	$\overline{\mathbf{A}}$
Gross Floor Area	83,920 Sq. Ft.	Is this the total square footage of the entire parking area (enclosed + nonenclosed + open floor area)?		
Enclosed Floor Area	41,960 Sq. Ft.	is this the total square footage of the enclosed garage space? An enclosed garage is defined as having both sides and a roof.		
Non-Enclosed Floor Area (w/roof)	0 Sq. Ft.	Is this the total square footage of the nonenclosed garage space? This is typically defined as the portion of the garage above ground (contains no sides but is under a roof).		
Open Floor Area (w/o roof)	41,960 Sq. Ft.	Is this the total square footage of the nonenclosed parking area without a roof? This is typically defined as open parking lots or the very top level of an above ground parking garage.		
Weekly Hours of Access	168 Hours	Is this the total number of hours per week when it is possible for a vehicle to enter or exit?		



Make sure the energy use dates match the utility bill service dates exactly. This is required for the program to properly normalize for weather.

#### Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Co of Colorado [Xcel Energy Inc]

#### Fuel Type: Electricity

Meter: 000003891147 (kWh (thousand Watt-hours))

Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
10/11/2011	11/09/2011	190,395.00
09/12/2011	10/11/2011	213,239.00
08/11/2011	09/12/2011	249,183.00
07/13/2011	08/11/2011	242,413.00
06/13/2011	07/12/2011	291,680.00
05/13/2011	06/12/2011	235,045.00
04/13/2011	05/12/2011	203,237.00
03/13/2011	04/12/2011	188,938.00



If the building is not eligible for an ENERGY STAR rating, move on to Case 2. USGBC's Case 2 calculator walks teams through the process of determining which Case 2 option should be pursued.

#### Select one of the following compliance options:

- ENERGY STAR (Rating System Case 1)
- Adjusted Benchmark Score (Rating System Case 2, Option 1). The project building is not eligible to receive an energy performance rating using Portfolio Manager.
- Alternative Score (Rating System Case 2, Option 2). The project building is not eligible to receive an energy performance rating using Portfolio Manager.

The content highlighted in yellow above is linked to EAc1.

#### ADJUSTED BENCHMARK SCORE (RATING SYSTEM CASE 2 OPTION 1)

The project activity type is categorized as follows:

- Standard Case 2, Option 1 activity types.
- Lab space in over 10% of building area.



# This decision tree on the Case 2 calculator helps you determine which Option should be pursued.

#### LEED EB: O&M 2009, EA prerequisite 2 and EA credit 1 Case 2 Calculator, v1.2 Before using this sheet, enter your building and energy use on ENERGY STAR'S online Portfolio Manager tool. If no Energy Star rating is provided there, answer the questions in this section to determine whether this calculator should be used. Was an Energy Star rating provided by Portfolio Manager? (Y N If yes, use Case 1 in LEED Online, not this calculator If the Energy Star rating was not available: Was the rating unavailable because of insufficient metered If yes, obtain the missing information, and then complete the Energy Star energy information? (Y / N) rating for use in LEED Online Case 1 If the Energy Star rating was unavailable because of building characteristics or activities, the activity types in the building will determine which of the III. Case 2 alternatives applies. Refer to the type list below in answering the following questions. If yes, use "Option 1-Labs" Tab to calculate LEED-EB: O&M Adjusted Do laboratories occupy 10% or more of total floor space? N Benchmark Score Does the combined area of floor space allocated to the If yes, use the "Option 2" Tab to calculate LEED-EB: O&M Alternative following activities exceed 10% of the project total? Score Service N N All Other - not classified Use the "Option 1" Tab to calculate LEED-EB: O&M Adjusted Benchmark Υ Any other project not identified by I, through III.b. above. Score

## Case 2: Option 1-Labs



If laboratory space is more than 10% of the floor area, pursue Option 1-Labs.

a. Do laboratories occupy 10% or more of total floor space?

Y

If yes, use "Option 1-Labs" Tab to calculate LEED-EB: O&M Adjusted Benchmark Score

LEED EB: O&M 2009, EA prerequisite 2 and EA credit 1

	Use this Option 1-Labs calculator if laborator	rice occupy at least 10% of tot	al floor area	
•	Related instructions and tools	les occupy at least 10 % of to	al libbi alea	
	Labs21 Guidance on how to use the tool	for LEED EB: O&M	Labs21 Benchmar	rking Tool
I.	Basic Information			
	Project Building Name			
	LEED Registration Number			
	Project Administrator			
	Responsible Party (if different)			
	Measured energy end date (enter the final date of the year of metered energy used in this calculation)		Valid date required displayed	i for results to be
	Gross floor area (sq ft)			



If laboratory space or the combined area for Service and All Other – Not Classified is less than 10%, Option 1 is pursued.

	2 Calculator, v1.2		
			ise on ENERGY STAR'S online Portfolio Manager tool. his section to determine whether this calculator should be used.
I.	Was an Energy Star rating provided by Portfolio Manager? (Y / N)	N	If yes, use Case 1 in LEED Online, not this calculator
II.	If the Energy Star rating was not available:		
	Was the rating unavailable because of insufficient metered energy information? (Y / N)	N	If yes, obtain the missing information, and then complete the Energy Star rating for use in LEED Online Case 1
III.	If the Energy Star rating was unavailable because of building cl Case 2 alternatives applies. Refer to the type list below in answer		s or activities, the activity types in the building will determine which of the illowing questions.
a.	Do laboratories occupy 10% or more of total floor space?	N	If yes, use "Option 1-Labs" Tab to calculate LEED-EB: O&M Adjusted Benchmark Score
b.	Does the combined area of floor space allocated to the following activities exceed 10% of the project total?	N	If yes, use the "Option 2" Tab to calculate LEED-EB: O&M Alternative Score
	Service	N	
	All Other - not classified	N	
C.	Any other project not identified by I. through III.b. above.	Υ	Use the "Option 1" Tab to calculate LEED-EB: O&M Adjusted Benchmark Score

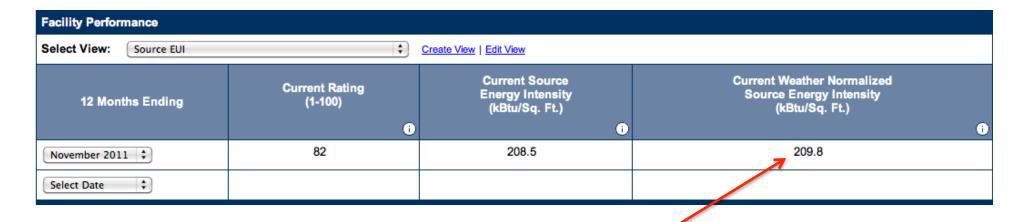


### Input required data for Option 1.

. Cal	culate Benchmark Source EUI				
Cor		n Portfolio Manager from its online Space Use screen	n - see example	in section V	
	EXCEPTION: Do not enter parki				
	EXCEPTION : Enter laboratory sp	pace separately below, not as "Other - not classified"	(the category us	ed for labs b	y Portfolio Manage
		INPUT AREA		CALC	ULATIONS
		Space Type	Gross floor area		Adjusted Nat'l Avg Source EUI
	Space Name	(choose from drop-down list)	(sq ft)	floor area	(kBtu/sf)
	1 Office	Office	75,000	75%	182
	2 Multifamily Residential	Lodging - Residential - Multifamily	25,000	25%	170
	3				
	4				
	5				
	6				
_					
	Whole Building	Combined	100,000	100%	179
. Cal	Whole Building	Combined  ther-normalized Source Energy Use Intensity (from	100,000	100%	179



Make sure the building's weather normalized source EUI is entered. This value may be different from that listed on page 1 of the SEP.



Use this value, not this value.

Energy Intensity<sup>4</sup>
Site (kBtu/ft²/yr)
Source (kBtu/ft²/yr)
208



If Service or All Other – Not Classified areas are more than 10% of the total floor area, Option 2 is pursued.

b.	Does the combined area of floor space allocated to the following activities exceed 10% of the project total?	Υ	If yes, use the "Option 2" Tab to calculate LEED-EB: O&M Alternative Score
	Service	N	
	All Other - not classified	Υ	



Begin by entering basic building data and comparison against the national average. If at least 19 percentile points better, the building qualifies for the prerequisite.

			INPUT AREA		CALC	ULATIONS
		Space Name	Space Type (choose from drop-down list)	Gross floor area (sq ft)	% of Total floor area	Adjusted Nat'l Avg Source EUI (kBtu/sf)
		Manufacturing Facility	All Other - not classified	100,000	100%	213
	3					
	4					
	5					
	6					
		Whole Building	Combined (2A baseline)	100,000	100%	213
V.	Calcul		I Average for EAp2 using Streamlined App			
V.	Calcu	This Streamlined Approach	I Average for EAp2 using Streamlined Applies used only to meet EA Prerequisite 2. For the also be provided. (The initial 2009 Referen	points under EAc		
V.		This Streamlined Approach Option 2B or 2C below mus point maximum.) Project Building's annual weath	is used only to meet EA Prerequisite 2. For	points under EAc		
V.		This Streamlined Approach Option 2B or 2C below mus point maximum.) Project Building's annual weath	is used only to meet EA Prerequisite 2. For et also be provided. (The initial 2009 Referen er-normalized Source Energy Use Intensity	points under EAc nce Guide misstat	ed the Streaml	



# To earn points or if prerequisite not earned yet, input historical building energy use.

Enter the project building's historic weather-normalized source EUIs from Portfolio Manager. If you have further no experience for other changes, as described in the Reference Guide, enter those values in column c and upload a d normalization process in LEED Online.					
	a. Year ending	b. Weather Normalized Source EUI from Portfolio Manager	c. Further Normalized EUI (optional)		
		KBtu/sf	KBtu/sf		
Currer	nt Experience				
	12/31/11	190	190		
Histor	ic Experience (Enter old				
1	12/31/08	288	288		
2	12/31/09	280	250		
3	12/31/10	270	225		
	Historic Average	279	254		
	2B Baseline	279	254		
		te percentile points above National Ave	erage 22		



To earn more points or if prerequisite not earned yet, input comparable building energy use. Note that comparable building energy use should be normalized to facilitate a better comparison.

VII.		Option 2C Detail - Alterna	ative Score from	Historic Data o	lus Comparable	Buildings			
		Option 2C Detail - Alternative Score from Historic Data plus Comparable Buildings  Information entered here will be used only after the Option 2 tab is completed							
		In addition to providing the historic data under Option 2B, provide total building energy usage by fuel below for at buildings with similar uses. See the Reference Guide for further explanation.							
		If measured usage was normalized for these sites (for factors other than square footage), enter the normalized upload a narrative to LEED Online, explaining the basis of normalization, as described in the Reference Guide.  Please enter energy data for a total period of one year for each building.							
		ricase enter energy editar	or a total period	l cine year ior co	orr comoning.				
					Choose site energy types and ur				
					Energy Type Energy Units	PURCHASED ELECTRICITY kWh	NATURAL GAS ccf nat gas		
		Building Identifier (Required to calculate resu	ults)	Gross Floor Area	measured year end date		site, measured 6		
	(required) a	Comparable 1		100,000	12/31/10	1,600,000			
	(required) b	Comparable 2		100,000	12/31/10	1,600,000			
	(required) c	Comparable 3		100,000	12/31/10	1,600,000	100,000		
	(optional) d								
	(optional) e								
	(optional) f								
	(optional) g								
	(optional) h								

Total site energy kBtu/sf	Total source energy kBtu/sf/year
157.6	290.2
157.6	290.2
157.6	290.2
0.0	
0.0	
0.0	
0.0	
0.0	