

Better Buildings Challenge Data Collection Template

Overview:

This template is intended to assist Better Buildings Challenge commercial buildings partners in reporting energy data from alternative (non-Portfolio Manager) software tools. All alternative tools must be reviewed and approved by DOE.

Annualized energy data for each building in the portfolio must be submitted to the Better Buildings Challenge in this template for the baseline period (preferably for calendar year 2008, but any year from 2008 through 2011 may be used) and to demonstrate progress every six months (i.e., annual consumption must be provided for the 12 months ending December 2011, June 2012, December 2012, etc.). New data should be added to the previously submitted spreadsheet, such that each submission includes a full record of progress over time.

General Instructions:

Fill in all required information on the Data Reporting Template tab of this worksheet. Columns shown in red are required. Cells shaded in gray will populate automatically. Please overwrite gray example text with your own data.

Field-Specific Information:

Facility Name - enter a unique building identifier for each facility in the portfolio. This identifier must be identical for the same facility across all reporting periods.

Facility Owner - enter the name of the facility owner

Facility Type - choose the facility type from the drop-down menu. If your facility does not fit into any of these categories, choose "Other."

Total Floor Space (Sq. Ft.) - enter total square footage for each building. If the square footage of the building has changed over the 12 month period in which you are reporting data, please provide a time-weighted value (e.g., for a 5000 sq. ft. building that received a 1000 sq. ft. addition for one month of the year: Total Floor Space (Sq. Ft.) = $5000 * (11/12) + 6000 * (1/12) = 5083$ sq. ft.)

Type of Data - please choose "Weather-normalized" or "Adjusted," according to the following definitions

Adjusted metrics - data have been adjusted to account for changes in weather and key operating characteristics

Weather-normalized metrics - data have been adjusted to account for changes in weather

Period Ending Date - provide the ending date of the 12 month reporting period for which your metrics are annualized

Energy Use (columns G-L):

To enter your annualized energy use, you have two options:

(1) Provide **site energy** by fuel type in columns G-J (kBtu/Sq. Ft.). [Please note: If your buildings use additional fuels other than natural gas and electricity (columns I and J, e.g., fuel oil, solar, wood, etc.), contact us and we will work with you accommodate your data], or

(2) Enter **source energy** (kBtu/Sq.Ft.) in column L. You will need to overwrite the existing formula with your data. Note that if you provide a value in column L, you DO NOT need to fill in columns G-J.

Annual Energy Cost per Sq. Ft. (US Dollars (\$/Sq. Ft.)) - enter the total energy cost per sq. ft. for the 12 month period ending on the date indicated in column F

To obtain approval to use an alternative software tool, a Partner must provide a description of the tool used, as well as sample data illustrating that the tool generates all of the necessary metrics. The description of the tool should include general information (e.g. name, tool developer, etc.) and must answer the following questions:

1) How does the tool annualize energy data?

Data should be provided as annualized totals every six months (e.g. annual consumption should be provided for the 12 months ending June 2012, December 2012, June 2013, etc.)

To generate annualized totals from monthly bills, does the tool 1) normalize actual billing periods to calendar months, 2) allocate energy use to the month it was billed in, 3) assign energy use to the month in which most energy was used, or 4) follow another procedure?

2) How does the tool calculate Site and/or Source EUI in kBtu/square foot?

DOE will track EUI in terms of source energy. The Partner can either provide Source EUI values, or can provide fuel-specific values that can be converted by DOE.

What conversion factors are used to generate Site Energy values? Source Energy values?

3) How does the tool calculate Weather Normalized EUI?

Describe the algorithms used, weather stations utilized, and the time period of weather data used for normalization.

4) If applicable, how does the tool calculate Adjusted EUI?

What operating characteristics are adjusted for? How are the adjustments calculated?

5) What checks are performed to ensure that data is complete and accurate?

Source-Site Ratios for all Portfolio Manager Fuels	
Fuel Type	Source-Site Ratio
Electricity (Grid Purchase)	3.34
Electricity (on-Site Solar or Wind Installation)	1
Natural Gas	1.047
Fuel Oil (1,2,4,5,6,Diesel, Kerosene)	1.01
Propane & Liquid Propane	1.01
Steam	1.21
Hot Water	1.28
Chilled Water	1.05
Wood	1
Coal/Coke	1
Other	1