



District Data Collection Worksheet

Energy Benchmarking of Existing Buildings

2010 - 2011

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INSTRUCTIONS

I. Overview

This worksheet provides guidance to building owners or their agents (such as property managers or service providers) on the data that needs to be collected in order to benchmark buildings using the ENERGY STAR® Portfolio Manager (Portfolio Manager) in accordance with District of Columbia benchmark requirements. This worksheet is based on the [Portfolio Manager Data Collection Worksheet](#), with additional District requirements highlighted.

ENERGY STAR® Portfolio Manager is a widely-used, free, online software tool designed by the United States Environmental Protection Agency (U.S. EPA) to help building owners and managers track and manage energy and water use in their buildings. The tool requires basic information such as building size, occupancy patterns, and utility information to measure the performance of a building. All buildings can be entered into Portfolio Manager to receive an analysis of their energy and water efficiency, as well as a comparison of performance against a national average for buildings of a similar type. All buildings receive a weather-normalized Energy Use Intensity (EUI), measured in kBtu/sq ft. Some building types can also receive a 1-100 score; however, being eligible for a score is not a requirement for benchmarking in Portfolio Manager or reporting to the District. The score is calculated by comparing their building's EUI to buildings used in similar ways, based on the space use data that is inputted into the tool. The space use data being required was selected by U.S. EPA because it correlates with energy use in a statistically significant manner.

This worksheet covers requirements for 2010 and 2011 only. Buildings over 200,000 gross square feet (gsf) must report data for calendar years 2010 and 2011. Buildings between 150,000 and 20,000 gsf must report data for calendar year 2011 only. For 2010 and 2011, only data required by U.S. EPA is required by DDOE. Only space use attribute fields that listed in Portfolio Manager as required need to be in your 2010 or 2011 District Benchmark Report. Water data is also optional for 2010 and 2011 reporting. Spaces that can be excluded from an ENERGY STAR® certification application, such as ground-floor retail, can

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also be excluded from your 2010 and 2011 reports to DDOE. In short, this means that if you have already successfully benchmarked your building for 2010 or 2011, you can submit to DDOE as is.

Beginning with 2012 data, water consumption and additional space use fields are required, and all spaces must be included in the building. Please consult the 2012 District Data Collection Worksheet for details on the 2012 reporting requirements.

If you are benchmarking your building for the first time, DDOE recommends you input all the space use information required for 2012 for 2010 and 2011 as well, since that will be both easier and more accurate than adding in additional data for only calendar year 2012.

If you have non-residential tenants, you must gather space use and utility data about those tenants. All the data required from the tenants can be found on this worksheet. For your convenience, the District Department of the Environment has also created a *Non-Residential Tenant Information Form* that you can use to request information from the tenants. Even if you are already in possession of the utility information for the tenant spaces, you may still need to assemble space use information. If the building has *only* residential tenants (or members, in the case of a cooperative/condominium), then you do not need to collect information from tenants.

All DDOE forms, along with a comprehensive Frequently Asked Questions (FAQ) document, can be found at <http://ddoe.dc.gov/energybenchmarking>. You can find technical information on Portfolio Manager at <http://www.energystar.gov/benchmark>. For technical support, please contact the DC Sustainable Energy Utility's Benchmarking Help Center at 202-525-7036 or benchmarking@dcseu.com. For questions regarding enforcement, you can contact DDOE directly at info.benchmark@dc.gov.

II. Required Data for District ENERGY STAR® Benchmarking for 2010

- Portfolio Manager account, with a username and password.
- The building street address, year built, and contact information (Listed in **Section A**)
- The square suffix lot (SSL) number or parcel number assigned by the DC Office of Tax and Revenue, which should be entered as the Building ID in Portfolio Manager. If your property covers multiple parcels or tax lots, enter all included SSL/parcel numbers in the Notes field in Portfolio Manager. To figure out if multiple buildings need to be combined into a single property for the purposes of benchmarking in Portfolio Manager, see section IV below. Enter this information in **Section A**.
- The building gross floor area (in square feet) and key operating characteristics for the building type, or each major space type within a building. Use **Section B** on pages 2 through 8 of this worksheet to collect this information before logging in to Portfolio Manager.
- Usage for all fuel types must be reported for each full calendar year. **Water data is optional for 2010 and 2011**; it will be required by the District beginning with 2012 data. Note that most utility bills do not begin on the first of the month and go to the last day of the month. If reporting only for 2011, you will need to include up to 14 consecutive months of utility usage for each year so that your data is inclusive

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of January 1, 2011 to December 31, 2011. If reporting for 2010 and 2011, you will need to include up to 26 consecutive months of utility usage so your data is inclusive of January 1, 2010 to December 31, 2011. If you are missing any part of a year, Portfolio Manager will report N/A for that calendar year, and you will not be able to submit to DDOE. Use **Section C** to enter this information. If you do not have this information readily available, contact your utility provider(s); contact information is also provided in **Section C**.

- **If energy is individually metered for *non-residential* tenants within your building, then you must request this information from your non-residential tenants to complete benchmarking.** You do not need to collect information from any residential tenants. Use **Section C** on Page 9 of this worksheet to manually collect utility information if needed.

III. Collecting Data for Multiple Buildings

If your property has meters shared across multiple buildings, or building systems (such as a central gas furnace) shared across multiple buildings without sub-metering, then the energy use cannot be attributed to any individual building. In such cases, the property must be benchmarked as a single building or campus in Portfolio Manager. Hospitals, K-12 schools, and multifamily housing properties in this situation should be benchmarked as a single property. University campuses and other large campuses comprised of vastly differing uses should be benchmarked using the special campus functionality in Portfolio Manager. Because the campus functionality requires a special, manual submission process in order to report to the District, DDOE recommends that, when in doubt, to group as a single property rather than a campus.

If you are entering in water data, which is optional for 2010 and 2011, and have multiple buildings that are separately metered for all energy sources, but share a common water meter, DDOE recommends that you prorate the water use across the buildings, according to their respective gross square footage.

IV. Collecting Data for Vacated or Vacating Non-Residential Tenants

If you had tenants whose lease ended, and who vacated the building, prior to the finalization of the benchmarking regulations on [**date of final publication in the register**], you **DO NOT** need to attempt to collect data from them. Instead, please just collect any meter information at the whole building level, and use Portfolio Manager “default values” for the space use attributes. If the vacant spaces were separately metered for all energy utilities, then do not include them in your report. Please see the Frequently Asked Questions document for a more detailed explanation of how to do this in Portfolio Manager.

V. Optional Narrative Information

If you have additional information about your building that you would like to submit to help clarify a poor score or Energy Use Intensity (EUI), you may enter this in the Notes field in Portfolio Manager. Such information may include a description of past or future plans for a building, or legal restrictions such as rent control that may limit your ability to make upgrades. You must make clear that you want some of the text made public, as DDOE will by default not make any notes field data public. *The notes field currently allows a maximum of 1000 characters. To conserve space DDOE recommends that you put the text you want made public first, and use the mark “##” to separate it from the private notes.*

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Worksheet Section A. General Building Information

Facility name _____

Year built _____

Building address:

Street _____ Quadrant _____

City _____ State _____ ZIP _____

DC Office of Tax and Revenue square suffix lot number (SSL) or parcel number _____

Additional SSL or parcel numbers if needed _____

Worksheet Section B. Space Use Attributes for Building Type and Space

Please note the following PRIOR to completing this section:

- For help choosing the appropriate building type, refer to the Portfolio Manager Help at www.energystar.gov/benchmark and click on “Space Type Definitions”.
- Some properties may contain multiple space types within a single building (e.g., office, data center, parking, swimming pool, etc.). Select as many major space types as are applicable to your building and fill in their respective information as necessary.
- If your property has multiple tenants with the same space type, these spaces should be entered separately only when the number of weekly operating hours among tenants differs by more than 10 hours. For example, in a 100,000 square foot (SF) office building where 75,000 SF operates 60 hours a week and 25,000 SF operates 80 hours a week, please list as two separate spaces – one 75,000 SF space and one 25,000 SF space. As this is most common in office buildings, multiple office space fields are provided below to capture data for multiple tenants if necessary.
- If the values for a space use value changed over the course of 2010, you *need* only record the average value for the year. However, if the value changed by more than 10%, then it may improve your score to record the date of this change and both the old and new values. The form has a notes field at the end of section B where you can note this.
- Portfolio Manager does have default values for all space use characteristics with the exception of gross floor area. However, you should not use those values except in special cases such as a vacated tenant as discussed above in IV.

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<p>Hospital (General Medical and Surgical):</p> <p>Required:</p> <p>_____ Gross floor area</p> <p>_____ # of staffed beds</p> <p>_____ # of MRI machines</p> <p>_____ # FTE workers</p> <p>Optional:</p> <p>_____ Maximum # of floors</p> <p>_____ Tertiary care facility – yes or no</p> <p>_____ Number of Buildings</p> <p>_____ Laboratory on-site – yes or no</p> <p>_____ Laundry facilities on site – yes or no</p> <p>_____ Ownership Status (non-profit, for-profit, government)</p>	<p>House of Worship:</p> <p>Required:</p> <p>_____ Gross floor area (SF)</p> <p>_____ Maximum seating capacity</p> <p>_____ # of Weekdays of operation</p> <p>_____ Hours of operation per week</p> <p>_____ # of personal computers</p> <p>_____ Presence of cooking facilities - yes or no</p> <p>_____ # of commercial refrigeration/freezer units</p>
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<p>Hotel:</p> <p><i>Required:</i></p> <p>_____ Gross floor area (SF)</p> <p>_____ # of rooms</p> <p>_____ # of workers on main shift</p> <p>_____ # of commercial refrigeration/freezer units</p> <p>_____ On-site cooking – yes or no</p> <p>_____ Percent of floor area that is cooled in 10% increments (10%, 20%, 30%, etc.)</p> <p>_____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)</p> <p><i>Optional:</i></p> <p>_____ Hours per day the guests are on-site</p> <p>_____ Number of guest meals served</p> <p>_____ Square footage of full-service spas</p> <p>_____ Square footage of gym/fitness center</p> <p>_____ Laundry processed at site (choose one: no laundry facility, linens only (e.g. bed/table linens), terry only (e.g. towels, bathrobes), both linens and terry)</p> <p>_____ Annual quantity of laundry processed on-site</p> <p>_____ Average Occupancy (%)</p>	<p>K-12 School:</p> <p><i>Required:</i></p> <p>_____ Gross floor area (SF)</p> <p>_____ # of personal computers</p> <p>_____ # of walk-in refrigeration/freezer units</p> <p>_____ High school - yes or no</p> <p>_____ Open weekends – yes or no</p> <p>_____ On-site cooking – yes or no</p> <p>_____ Percent of floor area that is cooled in 10% increments (10%, 20%, 30%, etc.)</p> <p>_____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)</p> <p><i>Optional:</i></p> <p>_____ Months of use</p> <p>_____ School District</p>
<p>Medical Office:</p> <p><i>Required:</i></p> <p>_____ Gross floor area (SF)</p> <p>_____ # of workers on main shift</p> <p>_____ Weekly operating hours</p> <p>_____ Percent of floor area that is cooled in 10% increments (10%, 20%, 30%, etc.)</p> <p>_____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)</p>	<p>General Office 1</p> <p><i>Required:</i></p> <p>_____ Gross floor area (SF)</p> <p>_____ Weekly operating hours</p> <p>_____ # of workers on main shift</p> <p>_____ # of personal computers</p> <p>_____ Percent of floor area that is air conditioned (>=50%, <50%, or none)</p> <p>_____ Percent of floor area that is heated (>=50%, <50%, or none)</p>

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Multifamily Housing:

[No tenant data collection needed]

Required:

_____ Gross floor area (SF)

Optional:

_____ Total number of units

_____ Total number of bedrooms

_____ Maximum number of floors in the tallest building/tower

_____ Percent of square footage devoted to common area

_____ Number of laundry hookups in common area

_____ Number of laundry hookups in each unit

_____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)

_____ Percent of floor area that is cooled in 10% increments (10%, 20%, 30%, etc.)

_____ Government subsidized housing (Yes or No)

_____ Meter Configuration (which meters cover tenants only, common spaces only, or both)

_____ Total number of dishwashers in all units

_____ Resident population type (No specific type, Dedicated Student, Dedicated Military, Dedicated Senior/Independent Living, Dedicated Special Accessibility Needs, Other Dedicated Housing)

_____ Primary hot water fuel type

General Office 2:

Required:

_____ Gross floor area (SF)

_____ Weekly operating hours

_____ # of workers on main shift

_____ # of personal computers

_____ Percent of floor area that is air conditioned (>=50%, <50%, or none)

_____ Percent of floor area that is heated (>=50%, <50%, or none)

General Office 3:

Required:

_____ Gross floor area (SF)

_____ Weekly operating hours

_____ # of workers on main shift

_____ # of personal computers

_____ Percent of floor area that is air conditioned (>=50%, <50%, or none)

_____ Percent of floor area that is heated (>=50%, <50%, or none)

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<p>Other:</p> <p>Required:</p> <p>_____ Gross floor area (SF) (must be less than 10% of gross building floor area in order for the building to be eligible for a rating)</p> <p>Optional:</p> <p>_____ Weekly operating hours</p> <p>_____ # of personal computers</p> <p>_____ # workers on main shift</p>	<p>Parking:</p> <p>Required:</p> <p>_____ Gross floor area that is enclosed (SF)</p> <p>_____ Gross floor area that is unenclosed with a roof (SF)</p> <p>_____ Gross floor area that is open (no roof) (SF)</p> <p>_____ Weekly hours of access</p>
<p>Retail Store:</p> <p>Required:</p> <p>_____ Gross floor area (SF)</p> <p>_____ Weekly operating hours</p> <p>_____ # of workers on main shift</p> <p>_____ # of personal computers</p> <p>_____ # of cash registers</p> <p>_____ # of walk-in refrigeration/freezer units</p> <p>_____ # of open & closed refrigeration/freezer cases</p> <p>_____ Percent of floor area that is cooled in 10% increments (10%, 20%, 30%, etc.)</p> <p>_____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)</p> <p>_____ Exterior entrance to the public – yes or no</p>	<p>Residence Hall/Dormitory :</p> <p>Required:</p> <p>_____ Gross floor area (SF)</p> <p>_____ # of rooms</p> <p>_____ Percent of floor area that is cooled in 10% increments (10%, 20%, 30%, etc.)</p> <p>_____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)</p> <p>Optional:</p> <p>_____ Computer lab on-site – yes or no</p> <p>_____ Dining Hall on-site– yes or no</p>

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<p>Senior Care Facility</p> <p><i>Required:</i></p> <p>_____ Gross floor area (SF)</p> <p>_____ # of units</p> <p>_____ Average Number of Residents</p> <p>_____ Total Resident Capacity</p> <p>_____ # of workers on the main shift</p> <p>_____ # of PCs owned by the community (does not include PCs owned by residents)</p> <p>_____ # of commercial refrigeration/freezer units</p> <p>_____ # of commercial washing machines</p> <p>_____ # of residential washing machines</p> <p>_____ # of residential electronic lift systems</p> <p>_____ Percent of floor area that is cooled in 10% increments (10%, 20%, 30%, etc.)</p> <p>_____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)</p>	<p>Supermarket/Grocery Stores:</p> <p><i>Required:</i></p> <p>_____ Gross floor area (SF)</p> <p>_____ Weekly operating hours</p> <p>_____ Workers on main shift</p> <p>_____ On-site cooking – yes or no</p> <p>_____ # of walk-in refrigeration/freezer units</p> <p>_____ Percent of floor area that is cooled in 10% increments (10%, 20%, 30%, etc.)</p> <p>_____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)</p> <p><i>Optional:</i></p> <p>_____ # of open or closed refrigeration/freezer cases</p> <p>_____ # of registers and/or personal computers</p>
<p>Swimming Pool:</p> <p><i>Required:</i></p> <p>_____ Swimming pool size, choose from: Olympic (50 meters x 25 meters) Recreational (20 yards x 15 yards) Short Course (25 yards x 20 yards)</p> <p>_____ Indoor or outdoor</p> <p><i>Optional:</i></p> <p>_____ Months of use</p>	

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<p>Warehouse (unrefrigerated and refrigerated):</p> <p>Warehouse (Unrefrigerated):</p> <p><i>Required:</i></p> <p>_____ Gross floor area (SF)</p> <p>_____ Weekly operating hours</p> <p>_____ # of workers on main shift</p> <p>_____ # of walk-in refrigerators/freezer units</p> <p>_____ Percent of floor area that is cooled in 10% increments (10%, 20%, 30%, etc.)</p> <p>_____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)</p> <p><i>Optional:</i></p> <p>_____ Distribution Center – yes or no</p> <p>Warehouse (Refrigerated):</p> <p><i>Required:</i></p> <p>_____ Gross floor area (SF)</p> <p>_____ Weekly operating hours</p> <p>_____ # of workers on main shift</p>	<p>Wastewater Treatment Plant:</p> <p><i>Required:</i></p> <p>_____ Average influent flow (mgd)</p> <p>_____ Average influent biological oxygen demand (BOD₅)</p> <p>_____ Average effluent biological oxygen demand (BOD₅)</p> <p>_____ Plant design flow rate (mgd)</p> <p>_____ Presence of fixed film trickle filtration process – yes or no</p> <p>_____ Presence of nutrient removal process – yes or no</p> <hr/> <p>Water Treatment and Distribution Utility:</p> <p><i>Required:</i></p> <p>_____ Average flow (mgd)</p>
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Optional: Record notes about space use attributes, such as a change to an attribute over the course of the year (if the change was more than 10%) here:

Optional: Record contextual information you want to put into Portfolio Manager’s notes field for public disclosure here.

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Worksheet Section C. Utility Information Collection

Use this section to help with the collection of information for each building and/or space type being benchmarked for calendar year 2010. You need to collect monthly consumption information for all energy sources (usually just electricity and natural gas, but sometimes oil, propane, steam, etc). For 2010, water consumption is optional. Note that most bills do not begin on the first of the month and go to the last day of the month. If reporting only for 2011, you may need to include up to 14 consecutive months of utility usage for each year so that your data is inclusive of January 1, 2011 to December 31, 2011. If reporting for 2010 and 2011, you may need to include up to 26 consecutive months of utility usage so your data is inclusive of January 1, 2010 to December 31, 2011. If you are missing part of the year, Portfolio Manager will report N/A and you will not be able to submit complete data to DDOE. Some utilities include usage for the last 12 months on each bill, so that may help you more easily identify your usage. Utility history is also available online, or by calling customer service.

Electricity:

Contact Pepco or your electricity supplier

<http://www.pepco.com/contact/>

(202) 833-7500

Natural Gas:

Contact Washington Gas or your supplier

<http://www.washgas.com/pages/ContactUs>

(703) 750-1000

Water (*Optional for 2010 and 2011*):

Contact DC Water

<http://www.dewater.com/contact>

202-787-2000

Other utilities, like fuel oil or propane: Contact your supplier

When collecting this information from your tenants, your tenants have one of three options. Tenants can (a) fill out a grid similar to this one in the Non-Residential Tenant Information Form, (b) fill out a utility data authorization release form which you can use to request their data from the utility company or companies directly, or (c) provide you with copies of their utility bills if those bills have usage for each month of 2010 listed on them.

