



District Data Collection Worksheet Energy Benchmarking of Existing Buildings 2013

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INSTRUCTIONS AND GUIDANCE

1. 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 U.S. Environmental Protection Agency's (EPA) ENERGY STAR[®] Portfolio Manager[®] tool in accordance with the requirements established by the District Department of the Environment (DDOE). This document also contains instructions and guidance for proper reporting.

This worksheet covers requirements for 2013 data reporting, due to DDOE by April 1, 2014. All privately-owned buildings over 50,000 gross square feet are required to report this year. DDOE is making a few small changes to reporting via this guidance document.

In order to benchmark the building, you must gather property use and calendar-year utility data for the building, including from your non-residential tenants. **Non-residential tenants are required by law to provide you with access to the data needed for benchmarking within thirty (30) calendar days of receiving a written request (20 DCMR 3513.6).** All the data required to be gathered from tenants can be found on this worksheet. For your convenience, the District Department of the Environment (DDOE) has also created a *Non-Residential Tenant Information Form* that you can optionally 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 collect property use information. **You do not need to collect any space or utility information directly from residents.**

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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 and training resources on Portfolio Manager at <http://www.energystar.gov/benchmark>. For technical support, please contact the DC Sustainable Energy Utility's (DCSEU) Benchmarking Help Center at 202-525-7036 or benchmarking@dcseu.com. You can contact DDOE directly at info.benchmark@dc.gov.

2. General Instructions

2.1: About Portfolio Manager

Portfolio Manager[®] is a widely-used, free, online software tool, designed by EPA to help building owners and managers track and manage energy and water use in their buildings. Portfolio Manager[®] was overhauled with an all-new user interface in July 2013. 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, including a weather-normalized Energy Use Intensity (EUI). Twenty building types can also receive a 1-100 score comparing them with similar buildings. The score is calculated by comparing a building's EUI to buildings within the same peer group, based on the statistically significant property use attributes that are inputted into the tool. Being eligible for a score is neither a requirement for benchmarking in Portfolio Manager[®], nor for reporting to the District.

2.2 General Steps to Benchmarking and Reporting

1. **Identify** buildings larger than 50,000 gross square feet.
2. **Collect** the data needed to benchmark, as detailed on this worksheet.
3. **Benchmark** by entering the data in ENERGY STAR[®] Portfolio Manager[®]
 - a. Create an account
 - b. Create properties
 - c. Enter data on property uses
 - d. Enter energy and water meter data
 - e. Run the data quality checker to identify common errors or missing data
4. **Report** the data to DDOE. Once benchmarked, it is necessary to submit the data to DDOE through Portfolio Manager[®] as described below. *Remember that this guidance document is just a worksheet and does not need to be sent to DDOE.*
 - a. Download reporting template and instructions from <http://ddoe.dc.gov/page/report-benchmarking-data>.
 - b. Follow the instructions to verify data accuracy and send the data to DDOE.
 - c. Save all records for 3 years past the submission date.

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2.3: Overview of Required Data:

- General Building Information ([Worksheet Section A](#)).
 - The building street address, year built, total size, and occupancy rate.
 - The identification number assigned by the District of Columbia. DDOE has published a list of these numbers for buildings over 50,000 sq. ft., along with the floor area/floor area estimate as recorded by the Office of Tax and Revenue, at www.ddoe.dc.gov. The number(s) should be entered in Portfolio Manager[®] as the ***District of Columbia Real Property ID*** in the “Standard ID” list. If you have previously reported to DDOE, you should find this new field pre-populated with the correct ID.

For most properties, this is the property's Square-Suffix-Lot (SSL) or Parcel number. If your property covers multiple parcels or tax lots, and is not a condominium, enter all included SSL/parcel numbers. Condominium buildings are assigned a single complex number, the Square-Suffix-Regime number.

- Property Use Attributes ([Worksheet Section B](#)):
 - The building gross floor area and key operating characteristics for the building type, or each major space type within a building. Please reference the appropriate sections of this form when using Portfolio Manager[®] for the purpose of reporting to the District. **Please note that although some information fields may be listed as *optional* within Portfolio Manager[®], the District has additional data requirements that Section B incorporates.** Fields that are optional for EPA, but are required in the District, are highlighted in grey block.
- Meter Information ([Worksheet Section C](#))
 - Usage for **all fuel types and water** must be reported for calendar year 2013. Because most bills do not begin on the first of the month and go to the last day of the month, you will need to include up to 14 consecutive months of utility usage, including the start and end dates for each bill so that your data is inclusive of January 1, 2013 to December 31, 2013. If you are missing any part of the year, Portfolio Manager[®] will report “N/A” and you will not be able to submit to DDOE. If you do not have this information readily available, contact your utility provider(s); contact information is provided in Section C.
 - If energy or water is individually metered for any *non-residential* tenants within your building, then you must request this information from your non-residential tenants to complete benchmarking. If you have five or more tenants, you can get whole-building electricity data directly from Pepco instead of from the tenants. You *are required* to obtain aggregate electricity data for all your individually-metered residential tenants.

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- Optional Information ([Worksheet Section B.5](#))
 - 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 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 1,000 characters. To conserve space DDOE recommends that you put the text you want made public first, separated from private notes with “##.”*

3. New Guidance for Reporting of 2013 data

3.1. Excluding Certain Non-Ratable Commercial Spaces

For 2012 reporting, DDOE required that building owners include all spaces within the building, even if those spaces may be excluded from an application for ENERGY STAR certification. Based on lessons learned from the reporting of 2012 data, stakeholder concerns, and [new guidance from EPA](#), DDOE is harmonizing our guidance with EPA guidance on this issue.

Spaces that meets the definition of one of the property use types eligible for an ENERGY STAR score in Portfolio Manager (such as retail stores, bank branches, or data centers) cannot be excluded *under any circumstances*. If such a property use type is excluded from Portfolio Manager, the property cannot earn an accurate score. When entering data, DDOE recommends grouping all instances of a single property use type together, unless they vary dramatically in operating characteristics.

It is best practice to include all of a property’s floor area when benchmarking. All commercial property uses that do not qualify as one of the types eligible to earn an ENERGY STAR score can be benchmarked as a subtype of the category “Other.” You may exclude a portion of the property from the benchmarking report if, and only if, *all* of the following conditions are met:

1. The property use and energy use patterns are significantly different than those of the rest of the building (for example: A restaurant or a gym in an office building);
2. The space is less than 10% of the building’s gross floor area;
3. The space is not be a type eligible to receive an ENERGY STAR score, nor be residential multifamily housing;,
4. The space’s energy use is separately metered or sub-metered for all energy sources, so that both the space’s floor area and total energy consumption can be excluded from the benchmarking report; and,
5. The building as a whole is eligible to receive an ENERGY STAR score.

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If all of the above conditions are met then that space, and only that space, can be excluded from the building's record in Portfolio Manager, including the building's total gross floor area. These exclusion guidelines do not affect whether the building as a whole is required to report.

3.2 Whole Building Electrical Data

Whole building reporting for electrical utility data is now required for all types of buildings, including multifamily. Building owners or managers of residential, multifamily buildings with separate metering *must* request aggregate data from Pepco as described in [Worksheet C](#).

3.3 Data Quality Checker

The New Portfolio Manager incorporates a "[Data Quality Checker](#)" tool, accessible from the Summary Tab of each property. This checker runs a simple verification that compares your data with typical values. The checker then issues alerts that will help you identify energy values and property use details that are unusual given your building's use, possible typos, incorrect meter readings, missing information, incorrect units of measure, and other common data entry issues. If a value is flagged that is actually accurate, you can provide an explanation. The data quality checker is currently only available for property types that are eligible for a 1-100 score. DDOE *highly recommends* that you run this checker, with "December 2013" as the timeframe, before submitting to DDOE, if it is available.

3.4. Exemptions for Buildings

DDOE regulations allow exemptions from the benchmarking regulations under certain conditions. Major exemption categories are listed below; these are largely not new, but are listed here for clarity. All exemption requests should be made in writing to info.benchmark@dc.gov. DDOE has final authority on whether to grant any exemption.

- *Unoccupied*: A building may apply for an "unoccupied" exemption if on average less than one full-time-equivalent employee (less than 40 person-hours per week/2080 person-hours per year) worked in the building, *exclusive* of security guards, janitors, construction workers, landscapers, and other maintenance personal during the year being reported. (20 DCMR 3511.2(d))
- *National Security*: If you believe the disclosure of the energy use of the building would be harmful to the public interest and national security, you may apply for an exemption from reporting or public disclosure. (20 DCMR 3511.2(b))
- *Sale*: If your building was sold in the year being reported then reporting will recommence once a full calendar year of utility data can be collected. (20 DCMR 3513.11(b))

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- *New Construction:* If your building received its Temporary or Permanent Certificate of Occupancy in the year being reported then reporting will commence once a full calendar year of utility data can be collected. (20 DCMR 3513.11(a))
- *Demolition:* If your building was demolished in the year being reported then reporting is not required, as the building no longer exists. (20 DCMR 3513.1)
- *Under the threshold:* If your building is smaller than 50,000 gross square feet, then it is not required to benchmark, unless it shares energy use with other buildings as described below. (20 DCMR 3513.1)

4. 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 building must be benchmarked as a single property 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 benchmark in the same manner as any other property in Portfolio Manager[®] but select “More than One” and the number of buildings in the first screen of creating a property.

Note that if you have multiple buildings that are separately metered for all energy sources, but share a common water meter, DDOE recommends that you pro-rate the water use across the buildings by their gross floor area.

5. 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 January 18, 2013, you DO NOT need to collect any data from them. Instead, please just collect any meter information at the whole building level, and use Portfolio Manager[®] “default values” for the property use attributes. If a tenant was 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[®]. If you have tenants whose lease ended after January 18, 2013, you must still collect data from them. If you have any tenants who will soon be vacating, DDOE recommends you just get waiver forms from them so you will not have to follow-up with them after they move out to get the final month(s) of usage data.

Worksheet A. General Building Information

Facility Name: _____

Street Address: _____ Quadrant: _____

City: Washington State: DC ZIP _____

Year Built: _____

DC Real Property ID (Square-Suffix-Lot (SSL), Parcel, or Complex Number) _____

Additional SSL or parcel numbers if needed _____

Total Gross Floor Area: _____ sq. ft.

(Gross Floor Area is the total floor area, expressed in square feet, measured from the principal exterior surfaces of the building(s) and not including parking area(s))

Occupancy Percentage: _____%

Worksheet B. Property Use Attributes

- The new Portfolio Manager has over 80 different property types. However, only 20 are eligible for a 1-100 score. For help choosing the appropriate property type, refer to the Portfolio Manager Help at www.energystar.gov/benchmark and click on *Identify your property type*.
- Property use attributes are used by Portfolio Manager to calculate the Energy Use Intensity per square foot, and for many types, the 1-100 ENERGY STAR score.
- Some properties may contain multiple use types within a single building (e.g., office, data center, and parking, swimming pool, etc.). Select as many major use types as are applicable to your building and fill in their respective information as necessary.
- **Portfolio Manager fields that are generally optional, but are required in the District, are highlighted in grey block within each category.**
- If your property has multiple tenants with the same use type, these uses need to be entered separately only when the number of weekly operating hours among tenants differs by more than 10 hours.
- If the values for a property use attribute changed over the course of the year, 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 space at the end of Section B where you can note this.)

B.1: Types Eligible for a Score

The following property use types are eligible for an ENERGY STAR score and, if present in your building, must be included when benchmarking. Property Use Attributes that must be collected for these types follow; for simplicity, types with the same data collection requirements have been grouped together.

- [Bank branch](#)
- [Barracks](#)
- [Courthouse](#)
- [Data center](#)
- [Distribution center](#)
- [Financial office](#)
- [Hospital \(general medical / surgical\)](#)
- [Hotel](#)
- [K-12 school](#)
- [Medical office](#)
- [Non-refrigerated warehouse](#)
- [Office](#)
- [Refrigerated warehouse](#)
- [Residence hall/ dormitory](#)
- [Retail store](#)
- [Senior care community](#)
- [Supermarket/grocery store](#)
- [Wastewater treatment plant](#)
- [Wholesale club/supercenter](#)
- [Worship facility](#)

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Office / Financial Office / Medical Office / Bank Branch / Courthouse

Required:

- _____ Gross Floor Area (sq. ft.)
- _____ Weekly Operating Hours
- _____ Number of workers on main shift
- _____ Number of computers
- _____ Percent of floor area that is air conditioned (50% or more, Less than 50%, or none)
- _____ Percent of floor area that is heated (50% or more, Less than 50%, or none)

Hospital (general medical & surgical)

Required:

- _____ Gross floor area (>20,000 SF)
- _____ # of staffed beds
- _____ # of MRI machines
- _____ # FTE workers
- _____ Maximum # of floors
- _____ Tertiary care facility – yes or no
- _____ Number of Buildings
- _____ Laboratory on-site – yes or no
- _____ Laundry facilities on site – yes or no
- _____ Ownership Status (non-profit, for-profit, government)

Hotel

Required:

- _____ Gross floor area (sq. ft.)
- _____ # of rooms
- _____ # of workers on main shift
- _____ # of commercial refrigeration/freezer units
- _____ On-site cooking – yes or no
- _____ Percent of floor area that is cooled (in 10% increments)
- _____ Percent of floor area that is heated (in 10% increments)

Optional:

- _____ Hours per day the guests are on-site
- _____ Number of guest meals served
- _____ Floor area of full-service spas
- _____ Floor area of gym/fitness center

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K-12 school

Required:

- _____ Gross floor area (sq. ft.)
- _____ # of personal computers
- _____ # of walk-in refrigeration/freezer units
- _____ High school - yes or no
- _____ Open weekends – yes or no
- _____ On-site cooking – yes or no
- _____ Percent of floor area that is cooled (in 10% increments)
- _____ Percent of floor area that is heated (in 10% increments)

Optional:

- _____ School District
- _____ Months of use

Retail store

Required:

- _____ Gross floor area (sq. ft.)
- _____ Weekly operating hours
- _____ # of workers on main shift
- _____ # of personal computers
- _____ # of cash registers
- _____ # of walk-in refrigeration/freezer units
- _____ # of open & closed refrigeration/freezer cases
- _____ Percent of floor area that is cooled (in 10% increments)
- _____ Percent of floor area that is heated (in 10% increments)
- _____ Exterior entrance to the public – yes or no

Residence Hall / Dormitory / Barracks

Required:

- _____ Gross floor area (sq. ft.)
- _____ # of rooms
- _____ Percent of floor area that is cooled (in 10% increments)
- _____ Percent of floor area that is heated (in 10% increments)
- _____ Computer lab on-site – yes or no
- _____ Dining Hall on-site– yes or no

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Supermarket/grocery store or Wholesale club/supercenter

Required:

- _____ Gross floor area (sq. ft.)
- _____ Weekly operating hours
- _____ Workers on main shift
- _____ On-site cooking – yes or no
- _____ # of walk-in refrigeration/freezer units
- _____ Percent of floor area that is cooled (in 10% increments)
- _____ Percent of floor area that is heated (in 10% increments)
- _____ # of open or closed refrigeration/freezer cases
- _____ # of registers and/or personal computers

Senior care community

Required:

- _____ Gross floor area (sq. ft.)
- _____ # of units
- _____ Average Number of Residents
- _____ Total Resident Capacity
- _____ # of workers on the main shift
- _____ # of PCs owned by the community (does not include PCs owned by residents)
- _____ # of commercial refrigeration/freezer units
- _____ # of commercial washing machines
- _____ # of residential washing machines
- _____ # of residential electronic lift systems
- _____ Percent of floor area that is cooled (in 10% increments)
- _____ Percent of floor area that is heated (in 10% increments)

Non-refrigerated warehouse / Distribution center

Required:

- _____ Gross floor area (sq. ft.)
- _____ Weekly operating hours
- _____ # of workers on main shift
- _____ # of walk-in refrigerators/freezer units
- _____ Percent of floor area that is cooled (in 10% increments)
- _____ Percent of floor area that is heated (in 10% increments)

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Refrigerated warehouse

Required:

- _____ Gross floor area (sq. ft.)
- _____ Weekly operating hours
- _____ # of workers on main shift

Worship facility

Required:

- _____ Gross floor area (sq. ft.)
- _____ Maximum seating capacity
- _____ # of Weekdays of operation
- _____ Hours of operation per week
- _____ # of personal computers
- _____ Presence of cooking facilities - yes or no
- _____ # of commercial refrigeration/freezer units

B2: Multifamily Housing

Multifamily Housing is not currently eligible for a 1-100 score, but nonetheless must always be included in benchmarking and reporting to DDOE if present.

Required:

- _____ Gross floor area (sq. ft.)
- _____ Total number of units
- _____ Total number of bedrooms
- _____ Maximum number of floors in the tallest building/tower
- _____ Percent of floor area devoted to common area
- _____ Percent of floor area that is heated (in 10% increments)
- _____ Primary hot water fuel type
- _____ Government subsidized housing (Yes or No)
- _____ Resident population type (No specific type, Dedicated Student, Dedicated Military, Dedicated Senior/Independent Living, Dedicated Special Accessibility Needs, Other Dedicated Housing)
- _____ Meter Configuration (which energy meters cover tenants only, common spaces only, or both), entered when entering energy meter information.

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Multifamily Optional:

- _____ Number of laundry hookups in common area
- _____ Number of laundry hookups in each unit
- _____ Percent of floor area that is cooled (in 10% increments)
- _____ Total number of dishwashers in all units

B3: Secondary Spaces

The following secondary property use types should be included if their energy use contributes to the energy use of the building. Note that parking floor area does not count towards the threshold for the District benchmarking reporting requirements. More on accounting for parking: <http://portfoliomanager.supportportal.com/ics/support/KBAnswer.asp?questionID=15974>

Parking:

Required:

- _____ Open Parking Lot Size (sq. ft.)
- _____ Partially Enclosed Parking Garage Size (sq. ft.)
- _____ Complete Enclosed Parking Garage Size (sq. ft.)
- _____ Supplemental Heating: yes / no

Swimming Pool:

Required:

- _____ Swimming pool size, choose from:
 - Olympic (50 meters x 25 meters)
 - Recreational (20 yards x 15 yards)
 - Short Course (25 yards x 20 yards)
- _____ Location of Pool: Indoor or outdoor
- _____ Months of use

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B.4: Any Other Property Uses:

Any property use may be tracked in Portfolio Manager[®], and [over 60 other property use types are available for selection](#) in the tool. For these types, the only use attributes you need are the use type and the gross floor area. *It is best practice to include all the energy use and floor area of the building.* However, under certain specific conditions detailed in the [instructions in section 3.1](#), such property uses and their requisite floor areas may be excluded from benchmarking in Portfolio Manager[®]. You must record the information here for your records and in the event of an audit.

Property Use Type: _____

Property Use Type: _____

Gross Floor Area: _____

Gross Floor Area: _____

Included in Benchmarking Report? Yes/No

Included in Benchmarking Report? Yes/No

Property Use Type: _____

Property Use Type: _____

Gross Floor Area: _____

Gross Floor Area: _____

Included in Benchmarking Report? Yes/No

Included in Benchmarking Report? Yes/No

B5: Optional Information

Optional: Record notes about property 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.

Worksheet C. Meter Data

Use this section to help with the collection of information for each building and/or property use type being benchmarked. You need to collect monthly consumption information for all energy sources (usually just electricity and natural gas, but sometimes oil, propane, steam, etc), and water. Because most bills do not begin on the first of the month and go to the last day of the month, you will need to include additional months so that your data is inclusive of January 1, 2013 to December 31, 2013; you may need as many as 14 months of data. If you are missing part of the year, Portfolio Manager[®] will report N/A and you will not be able to submit a complete report to DDOE. Some utilities include usage for the last 12 months on each bill. Utility history is also available online, or by calling customer service.

When collecting this information from your non-residential tenants, your tenants have one of three options. Tenants can (a) fill out a [utility data authorization release form](#) which you can use to request their data from the utility company or companies directly, (b) fill out a grid similar to the example below in the [Non-Residential Tenant Information Form for 2013](#), or (c) provide you with copies of their utility bills.

The use of whole-building electrical data, acquired either from Pepco or your tenants, is required. For electricity data only, if you have five or more tenants, you can obtain aggregated whole-building data from Pepco directly instead of from your tenants, by providing Pepco with all the meter numbers via their [Building Energy Consumption Request Form](#). Pepco may take up to 30 calendar days to provide the requested data.

Electricity Contact Pepco or your electricity supplier
<http://www.pepco.com/contact/>
<http://www.pepco.com/business/services/consumptionrequestform/>
202-872-2040

Natural Gas Contact Washington Gas or your supplier
<http://www.washgas.com/pages/ContactUs>
(703) 750-1000

Water Contact DC Water
<http://www.dewater.com/contact>
202-787-2000

Other utilities, like fuel oil, steam, or propane: Contact your supplier(s). Note that reporting for delivery-based fuels can be done based on the delivery schedule. If the “Enter as Delivery” box is checked as you are creating the meter then you can just enter in delivery dates and amounts in order to comply.

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Electricity Usage		
Month Start Date	Month End Date	kWh (kilowatt-hours)

Natural Gas Usage		
Month Start Date	Month End Date	Therms

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Water Usage		
Month Start Date	Month End Date	kGal (thousand gallons)

Fuel Oil Usage (if applicable)		
Month Start Date	Month End Date	gallons

