



District Data Collection Worksheet

Energy Benchmarking of Existing Buildings

2010-2011

This worksheet is designed to help building owners and managers collect data to benchmark buildings using the ENERGY STAR® Portfolio Manager under District of Columbia benchmark requirements. This worksheet is based on the [ENERGY STAR® Portfolio Manager Data Collection Worksheet](#) (as of April 4, 2012), with additional District requirements highlighted.

Portfolio Manager is a widely used software tool to help building owners and managers track and manage energy and water use in their buildings. The tool uses basic information such as building size, occupancy patterns, and utility bill information to calculate a performance rating for a building. All buildings can be entered into Portfolio Manager to receive an analysis of energy and water efficiency, as well as a comparison of performance against a national average for buildings of a similar type.

Use this worksheet to collect data for all space types at your facility. To request relevant information from commercial or residential tenants, use the District template letter available at <http://ddoe.dc.gov/energybenchmarking>.

If you are unable to find information at <http://ddoe.dc.gov/energybenchmarking> or www.energystar.gov/benchmark, you may contact the District Department of Environment for assistance at info.benchmark@dc.gov or by calling 202-671-3042.

Required Data for District ENERGY STAR Benchmarking

- Portfolio Manager user name and password.
- The building street address, year built, contact information and the square suffix lot number or parcel number assigned by the DC Office of Tax and Revenue. See **Section A** on Page 2 of this worksheet.
- The building gross floor area 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. **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. Please reference the appropriate sections of this form when using Portfolio Manager for the purpose of reporting to the District.** Portfolio Manager fields that are generally optional, but are required in the District, are highlighted in grey block within relevant building or space types in **Section B**.
- 12 consecutive months of utility usage for all fuel types and water used in calendar year 2011 for buildings between 150,000 and 200,000 sq. ft., or 24 consecutive months of utility usage for all fuel types and water used in calendar year 2010 and 2011 for buildings over 200,000 sq. ft.. Most bills will not begin on January 1 of a given year, so please provide information that begins with the first bill that includes only the given year's usage and extend through the next 12 months of usage (this may run into

part of the following calendar year). If you don't have this information readily available, contact your utility provider(s) as most will be able to easily supply this information.

- **IF ENERGY IS SEPARATELY MANAGED BY TENANTS WITHIN YOUR BUILDING, YOU MUST REQUEST THIS INFORMATION FROM YOUR NON-RESIDENTIAL TENANTS TO COMPLETE BENCHMARKING.** Use the **Request for Non-Residential Tenant Information** letter and to collect this information. You do not need to collect information from any residential tenants. Use **Section C** on Page 9 of this worksheet to collect manual utility information if needed.

Section A. General Building Information

Facility name _____

Year built _____

Building address:

Street _____

City _____ State _____ ZIP _____

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

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 buildings may contain multiple space types within a single building (e.g., office, data center, and parking OR K-12 school and swimming pool). Select as many major space types as are applicable to your building and fill in their respective information as necessary.
- If your building 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.

Bank/Financial Institution:

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)

Data Center:

Required:

- _____ Gross floor area (SF)
- _____ IT Energy Configuration – Select one from:
 1. Uninterruptible Power Supply (UPS) Meter supports only IT Equipment. (Preferred)
 2. UPS Meter includes non-IT load of 10% or less.
 3. UPS Meter includes non-IT load greater than 10%. Non-IT load is sub-metered.
 4. UPS Meter includes non-IT load greater than 10%. Non-IT load is not sub-metered.
 5. Facility has no UPS Meter.
 6. IT Energy is not current metered at this facility – Apply Estimates.
- _____ IT Energy Data – 12 months of measured energy consumption data is required from either the UPS or PDU Meter, depending on IT Energy Configuration

Meter Type (select 1): UPS Output or PDU Input

1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Optional (but recommended by DC):

- _____ UPS System Redundancy (N, N+1, N+2, 2N, greater than 2N, none of the above)
- _____ Cooling System Redundancy (N, N+1, N+2, 2N, greater than 2N, none of the above)

Courthouse:

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)

Hospital (General Medical and 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)

House of Worship:

Required:

- _____ Gross floor area (SF)
- _____ 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

Hotel:

Required:

- _____ Gross floor area (SF)
- _____ # 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 (10%, 20%, 30%, etc.)
- _____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)
- _____ Hours per day the guests are on-site
- _____ Number of guest meals served
- _____ Square footage of full-service spas
- _____ Square footage of gym/fitness center
- _____ 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)
- _____ Annual quantity of laundry processed on-site
- _____ Average Occupancy (%)

K-12 School:

Required:

- _____ Gross floor area (SF)
- _____ # 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 (10%, 20%, 30%, etc.)
- _____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)
- _____ Months of use
- _____ School District

Medical Office:

Required:

- _____ Gross floor area (SF)
- _____ # of workers on main shift
- _____ Weekly operating hours
- _____ Percent of floor area that is cooled in 10% increments (10%, 20%, 30%, etc.)
- _____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)

General Office 1:

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)

Multifamily Housing:

Required:

- _____ Gross floor area (SF)
- _____ Common area (SF)
- _____ 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)

Optional:

- _____ 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 ($\geq 50\%$, $< 50\%$, or none)
- _____ Percent of floor area that is heated ($\geq 50\%$, $< 50\%$, or none)

Other:

Required:

_____ 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)

_____ Weekly operating hours

_____ # of personal computers

_____ # workers on main shift

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)

Parking:

Required:

_____ Gross floor area that is enclosed (SF)

_____ Gross floor area that is unenclosed with a roof (SF)

_____ Gross floor area that is open (no roof) (SF)

_____ Weekly hours of access

Retail Store:

Required:

_____ Gross floor area (SF)

_____ 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 (10%, 20%, 30%, etc.)

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

_____ Exterior entrance to the public – yes or no

Residence Hall/Dormitory :

Required:

- _____ Gross floor area (SF)
- _____ # of rooms
- _____ Percent of floor area that is cooled in 10% increments (10%, 20%, 30%, etc.)
- _____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)
- _____ Computer lab on-site – yes or no
- _____ Dining Hall on-site– yes or no

Senior Care Facility

Required:

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

Supermarket/Grocery Stores:

Required:

- _____ Gross floor area (SF)
- _____ 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 (10%, 20%, 30%, etc.)
- _____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)
- _____ # of open or closed refrigeration/freezer cases
- _____ # of registers and/or personal computers

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)
- _____ Indoor or outdoor
- _____ Months of use

Warehouse (unrefrigerated and refrigerated):

Warehouse (Unrefrigerated):

Required:

- _____ Gross floor area (SF)
- _____ Weekly operating hours
- _____ # of workers on main shift
- _____ # of walk-in refrigerators/freezer units
- _____ Percent of floor area that is cooled in 10% increments (10%, 20%, 30%, etc.)
- _____ Percent of floor area that is heated in 10% increments (10%, 20%, 30%, etc.)
- _____ Distribution Center – yes or no

Warehouse (Refrigerated):

Required:

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

Wastewater Treatment Plant:

Required:

- _____ Average influent flow (mgd)
- _____ Average influent biological oxygen demand (BOD₅)
- _____ Average effluent biological oxygen demand (BOD₅)
- _____ Plant design flow rate (mgd)
- _____ Presence of fixed film trickle filtration process – yes or no
- _____ Presence of nutrient removal process – yes or no

Water Treatment and Distribution Utility:

Required:

- _____ Average flow (mgd)

