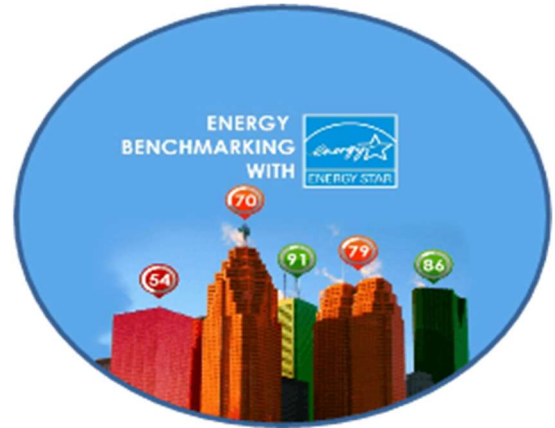


Building Energy Benchmarking

1. Overview

Rockville began partnering with various organizations to promote building energy benchmarking in 2013 to encourage building energy management, improve performance and reduce utility costs. The program has evolved from education and outreach to an annual benchmarking requirement for non-residential buildings greater than 50,000 square feet. From 2016 through 2021, building owners began reporting annual benchmarking data to Montgomery County.



Energy benchmarking is the process of tracking a building's annual energy use and using a standard metric to compare the building's performance against past performance and to its peers nationwide. Additionally, a goal of energy disclosure is to increase the energy performance data available to the market during leasing, property sale, and appraisals to drive energy management and efficiency improvements.

In 2021, the County introduced Bill 16-21 to establish a Building Energy Performance Standard for commercial and multifamily buildings. Building Energy Performance Standards (BEPS) are policies that establish performance levels for buildings and drive all buildings that BEPS covers to achieve these levels in the long-term with required progress at regular intervals in the interim. A BEPS sets a minimum threshold for energy performance for existing buildings, which are based on and measured against a building's demonstrated energy performance, as shown in their benchmarking data. A public hearing is scheduled for the summer of 2021. Adoption and implementation would be dependent on Council action.

2. History

After several years of focusing on outreach, Montgomery County and Rockville's Environment Commission expressed interest in coordinating with the City to explore opportunities to work with Rockville property owners through either voluntary reporting or required reporting if the City adopts a benchmarking law similar to Montgomery County's law. On July 11, 2016, the Mayor and Council amended the Rockville City

Code to allow Montgomery County's building energy benchmarking requirements to apply within the City of Rockville. Beginning on June 1, 2016, Rockville building owners of nonresidential buildings 50,000 square feet and greater were required to annually benchmark energy in ENERGY STAR Portfolio Manager and report to the County for public disclosure.

Allowing this County law to apply in Rockville allows the consistent application of benchmarking requirements. For real estate and property management firms with multiple properties, maintaining consistency with the County's reporting requirements, methodology, and process helps to streamline procedures and facilitate compliance. Consistent data and disclosure requirements and a consolidated location to access benchmarking data are also beneficial to the market, tenants, and investors.

3. Who is responsible for the project and are there supporting organizations? Please include all organizations involved and their roles.

Montgomery County's building energy benchmarking requirements are administered by the Montgomery County Department of Environmental Protection (DEP). Rockville Environmental Management Division (EMD) coordinates with various agencies to provide outreach and education on benchmarking and incentives and programs available to help buildings improve energy performance. Since 2013, Rockville has coordinated with MCDEP, Rockville Chamber of Commerce, Montgomery County Chamber of Commerce, U.S. Environmental Protection Agency, and the U.S. Green Building Council - National Capital Region's Montgomery County Branch to promote various building energy education and outreach events in and around Rockville. For example, the annual Montgomery County Energy Summit to offer cutting-edge education focused on the latest trends in green building, energy efficiency, renewable energy, and related topics pertinent to commercial, multifamily, and residential projects in Montgomery County. The target audience includes building owners, property managers, developers, energy contractors, and other sustainability professionals working in Montgomery County and the larger DMV area (see event promotion in Appendix A). The County also maintains an outreach newsletter with nearly 800 subscribers, held numerous information and training sessions, and developed various outreach tools and guidance documents that are available to Rockville property owners.

4. Who is served by the program?

Building owners and operators are served by the benchmarking requirement. Energy benchmarking is the process of measuring a building's energy use over time. This

allows owners and occupants to understand their building's energy performance relative to similar buildings and helps identify opportunities to cut energy waste.

5. Was the project publicized? If so, how was it publicized?

The benchmarking requirement is codified in the Rockville, Maryland Municipal Code at Section 1-8. The Municipal Code is available on the City's [website](#). The Montgomery County requirements are available at a [checklist](#) website and a [general](#) website.

The City promoted information with the Rockville Chamber of Commerce, the Environment Commission, the monthly Rockville Reports newsletter and on the City's website. The County maintains a list of potentially eligible properties, an energy listserve, and posts reports and case studies on DEP and MyGreenMontgomery websites.

Notification to property owners occur via the website, emails are sent to identified property owners, and notices in the county newsletter.

6. What is the project's annual budget?

Montgomery County DEP funds one full time staff member to administer the benchmarking program. Rockville provides in-kind staff and outreach support through the Environmental Management Division.

7. How will the program continue in the future?

The benchmarking requirement is codified and will remain in effect until amended.

8. How is the program being evaluated?

Section 18A-42 of the Montgomery County Code requires the Montgomery County Department of Environmental Protection (DEP) to submit an annual report to the County Executive and County Council on activities related to the County's Benchmarking Law. Disclosed data and annual reports from 2015-2019 are posted on the county [website](#). The [2019 report](#) noted that overall County-wide compliance rates improved and that 92% of properties eventually reported 2019 data. The reported properties saw a 2.5% reduction in weather-normalized site EUI in 2019 compared to 2017; reducing greenhouse gas intensity by 9% over this time. Finally, reported buildings had a median ENERGY STAR score of 60 and a median weather-normalized site energy use intensity of 65.5 kBtu per sq ft per year.

Additionally, the County provided summaries for covered properties in Rockville. Table 1 presents 2019 benchmarking compliance information and performance data. Of the 113 covered buildings in Rockville, 86 reported energy data, 14 requested waivers and 13 buildings did not report data for an 88% compliance rate.

Table 1: 2019 Benchmarking Data for Rockville Buildings

	County	Group 1	Group 2	Rockville City	Total
sq ft total	1,183,034	1,411,810	12,626,437	57,352	15,278,633
sq ft reported	1,183,034	1,411,810	10,089,231	57,352	12,741,427
waiver sq ft	0	0	1,490,112	0	1490112
	100%	100%	92%	100%	93%
# total	5	4	103	1	113
# reported	5	4	76	1	86
# waivers	0	0	14	0	14
	100%	100%	87%	100%	88%

Figure 1 provides a summary of the square footage and building types reporting benchmarking data. Of the building reporting benchmarking results, office space represented 73 percent of the gross floor area; followed by strip mall (8%), hotel (5%) and mixed use properties (4%).

Figure 1: Benchmarked Buildings Types and Gross Floor Area

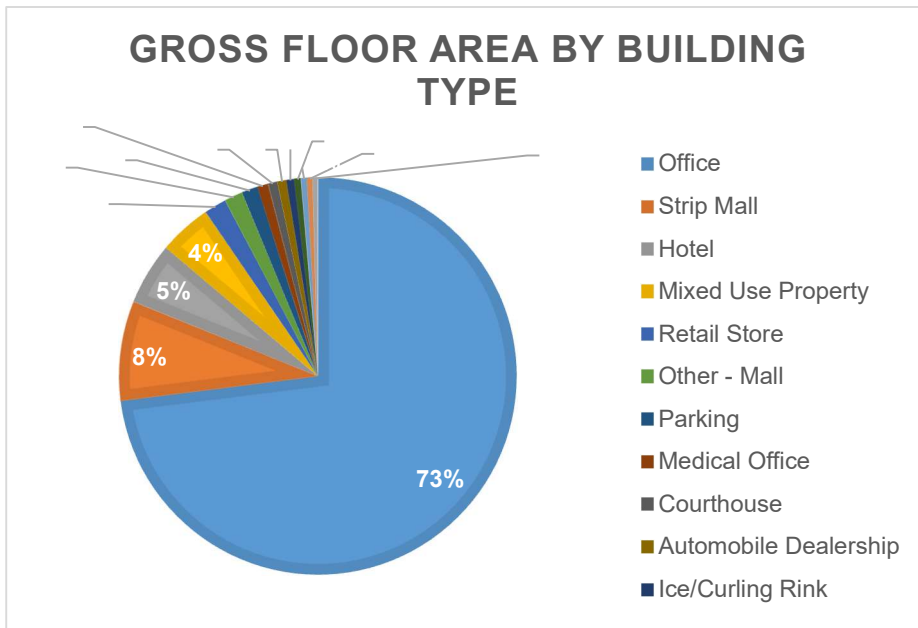


Table 2 summarizes the average ENERGY STAR rating by building type for buildings that are eligible for an ENERGY STAR rating.

Table 2: Average ENERGY STAR Scores

Average ENERGY STAR Score	ES Score	#
Hotel	34	5
Mixed Use Property	87	1
Office	58	50
Office; Strip Mall	9	1
Office; Worship Facility	19	1
Retail Store	85	1

Finally, Table 3 summarizes the average site energy use intensity data by building type for properties in Rockville.

Table 3: Average Site EUI by Building Type

Average Site EUI	EUI	#
Automobile Dealership	96.4	1
Hotel	79.0	6
Ice/Curling Rink	152.9	1
Lifestyle Center	167.1	1
Mixed Use Property	77.8	3
Office	82.3	56
Office; Strip Mall	299.8	1
Office; Worship Facility	78.3	1
Other - Mall	91.7	2
Performing Arts	63.9	1
Retail Store	28.6	1
Strip Mall	107.2	7

9. Has the program sparked other projects?

Benchmarking is one component of Rockville's green building and energy initiatives, which include green building regulations for new commercial and residential construction, efficiency outreach, residential solar co-op program, and municipal energy efficiency programs.

Appendix A: Rockville and Montgomery County Benchmarking Websites and Event Promotion Materials

Manage Application

Benchmarking - Department of E

Energy and Climate | Rockville, M

rockvillemd.gov/288/Energy

AppsOffice 365BookmarksEMD MonthlyRockville, MD - Offi...Montgomery Count...MC COUNCIL - LEG...Refuse & Recycle O...Large Business Cust...Reading list

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About Rockville • Environment & Sustainability • Energy

ENERGY AND CLIMATE

In Rockville, buildings and transportation are the largest consumers of energy and the largest generators of greenhouse gas emissions. Becoming more energy-efficient and using green energy sources can not only save money, but help minimize the effects of climate change.

[Participate in developing Rockville's first Climate Action Plan](#)

Benchmarking

Energy benchmarking is the process of measuring a building's energy use over time. This allows owners and occupants to understand their building's energy performance relative to similar buildings and helps identify opportunities to cut energy waste.

Rockville property owners must comply with the Montgomery County Benchmarking Law:

- Owners of certain types of non-residential buildings 50,000 square feet and greater, or a group of buildings that share a parcel (have the same Tax ID) that are collectively 50,000 square feet or greater, are required to benchmark energy use in ENERGY STAR Portfolio Manager.
- Data must be verified by a Recognized Data Verifier the first year and every three years thereafter; and
- Report data to Montgomery County annually by June 1st for public disclosure.



Green Power Community Challenge

Support Rockville in the U.S. Environmental Protection Agency's Green Power Community Challenge by using renewable energy and fighting climate change.

Ways to Help:

- [Purchase Clean Energy from a Supplier](#)
- [Purchase Renewable Energy Certificates](#)
- [Install a Renewable Energy System \(Solar\) at Your Home or Business](#)

Still have questions? Contact:

ENVIRONMENTAL MANAGEMENT

📞

240-314-8870

✉️

environment@rockvillemd.gov

📍

111 Maryland Ave.
Rockville, MD 20850

🕒

Monday - Friday
8:30 a.m. - 5 p.m.

Select Language

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Benchmarking - Department of E

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montgomerycountymd.gov/green/energy/benchmarking.html

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Building Energy Benchmarking

Energy Benchmarking is the process of tracking a building's annual energy use and using a standard metric to compare the building's performance against past performance and to its peers nationwide. Benchmarking improves our understanding of energy consumption patterns; helps identify energy saving opportunities within a portfolio of buildings; and manages business bottom line through consistent data collection and tracking.

Building owners are required to benchmark the energy use of their nonresidential buildings 50,000 square feet and greater in the county in ENERGY STAR Portfolio Manager, and report it to the County for public disclosure.

See an interactive map of benchmarked buildings in the County and key data metrics here .

Explore More About Benchmarking:

Compliance

Resources

Recognition

Reporting Link for Calendar Year 2020 Data

The reporting link to submit your calendar year 2020 building energy benchmarking report to DEP is now available: [Calendar Year 2020 Reporting Link](#). The submission deadline for all covered buildings (50,000 sq. ft. and greater) is **Tuesday, June 1, 2021**.

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Green Bank

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Building Energy Performance Standard

Building Benchmarking

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