

DC'S NEW BUILDING ENERGY PERFORMANCE STANDARDS

Monthly Update
March 25, 2021



AGENDA

- Updates on the timeline of program implementation
- Basic framework of BEPS
- Building Innovation Hub update
- DOEE Benchmarking
- Q&A

BEPS PROGRAM TIMELINE



- Standards effective January 1, 2021
- Public comments on BEPS rulemaking were due March 4, 2021 – DOEE working on response now – several topics will be discussed with the Task Force on March 30
- Task Force meetings are now every 4 weeks, with possible biweekly meeting called if needed. Next is **March 30**:
<https://doee.dc.gov/node/1436891>
- Will continue monthly update webinars until rules are final

WEBINAR UPDATE

March 25
April 29
May 27
June 24

DOEE hosts a live [monthly webinar](#) to update the public on the progress of BEPS implementation.

<https://beps-monthly-webinar.eventbrite.com>

DOEE [Benchmarking](#) webinar recording for updating 2020 property use details: <https://youtu.be/oSjqPHOI2xk>

**2020 GREEN BUILDING
PROFESSIONAL SEMINAR SERIES**

**RAMPING UP TO A
CLEAN ENERGY DC**

Last webinar in the series!

“Getting Ready for BEPS” – April 14, 2021



2023 CONSTRUCTION CODE DEVELOPMENT

- Construction Codes Coordinating Board is **commencing a new code development cycle** (goal is 2023 adoption)
- **Proposed changes** to model codes in the box are requested **by March 29, 2021**
- Information on how to participate is available in the DC Register posting at <https://www.dcregs.dc.gov/Common/NoticeDetail.aspx?NoticeId=N103202>

- 2021 International Code Council (ICC) suite: (including **2021 IECC for Residential Energy Code**)
- 2020 National Electrical Code
- **ASHRAE 90.1-2019 for Commercial Energy Code**
- 2021 IgCC has not been released yet, so development of the DC Green Construction Code has not commenced yet

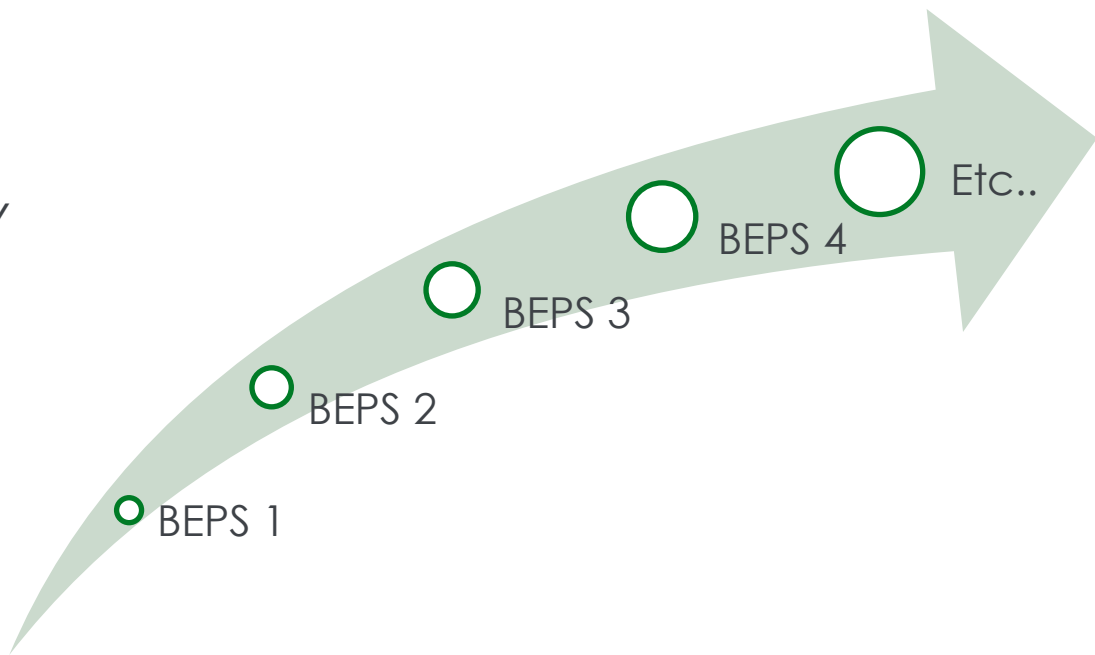
WHAT ARE BEPS?

On January 1, 2021, DOEE established building energy performance standards, a minimum threshold of energy performance that is “no lower than” the local median ENERGY STAR Score (or Source EUI) by property type.

BEPS 1:

Private buildings >50,000 sq. ft.
and DC-owned >10,000 sq. ft.

Standards are set
every 6 years

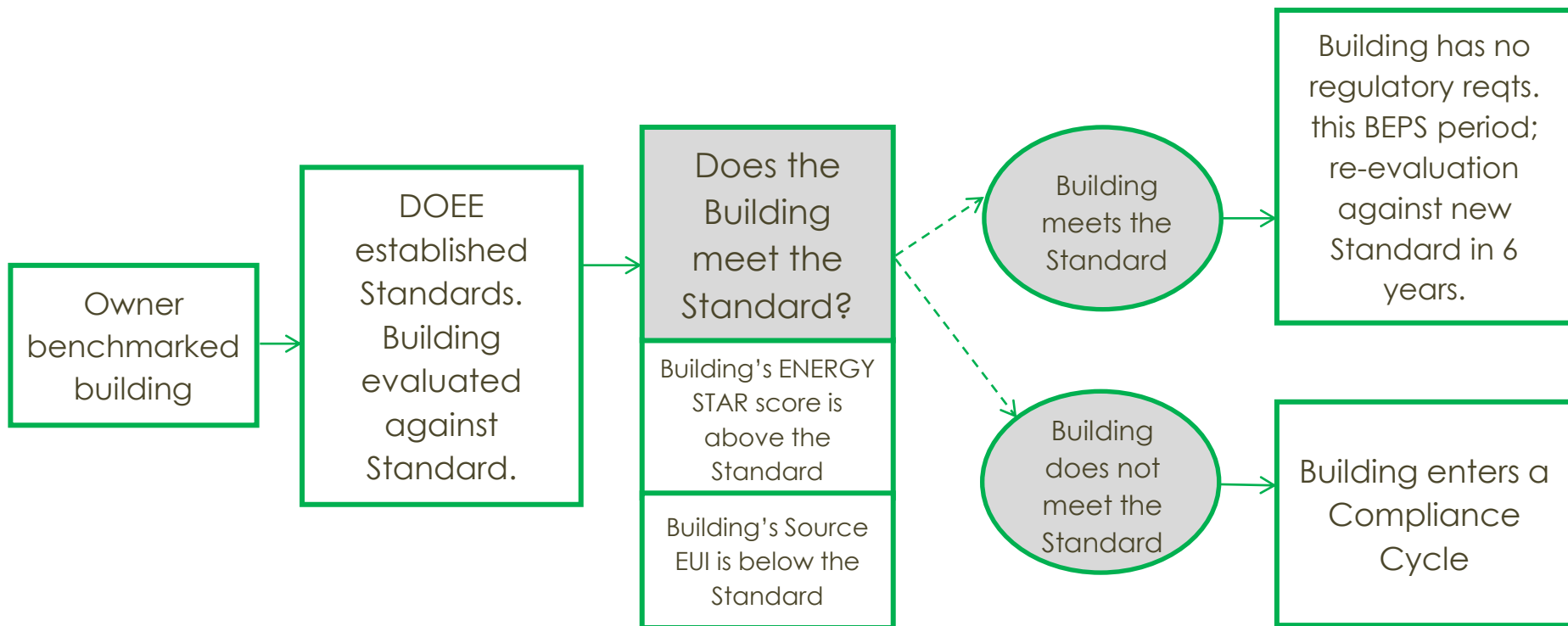


STANDARDS TABLE SAMPLING

The bolded property types account for more than 80% of DC's buildings over 50K

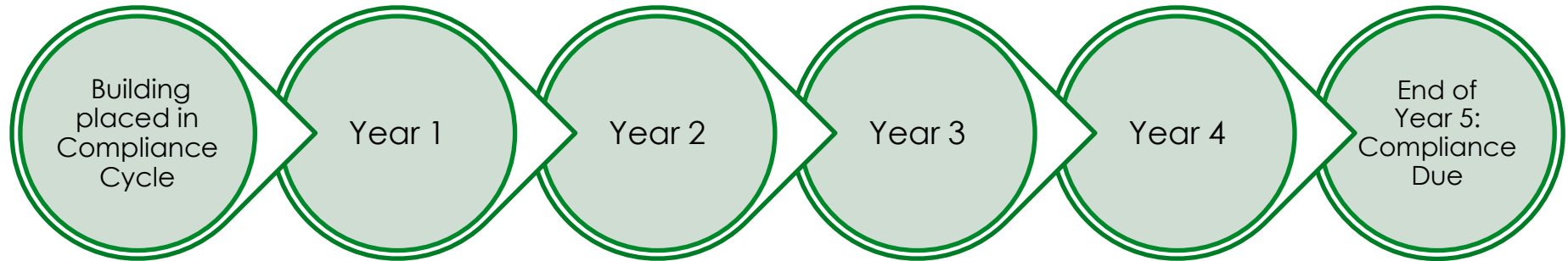
Property Type	Metric	Standard Level	Standard
Multifamily Housing	ENERGY STAR Score	Local Median	66
Office	ENERGY STAR Score	Local Median	71
K-12 School	ENERGY STAR Score	Local Median	36
Hotel	ENERGY STAR Score	Local Median	54
Other - Public Services	Source EUI	Local Median	229.4
Residence Hall/Dormitory	ENERGY STAR Score	Local Median	56
Non-Refrigerated Warehouse	ENERGY STAR Score	Local Median	19
Retail Store	ENERGY STAR Score	Local Median	64
Self-Storage Facility	Source EUI	Local Median	21.2
Worship Facility	ENERGY STAR Score	Local Median	17
Medical Office	ENERGY STAR Score	National Median	62
Fitness Center/Health Club/Gym	Source EUI	National Median	206.6
Hospitals	ENERGY STAR Score	National Median	50

STANDARD EVALUATION



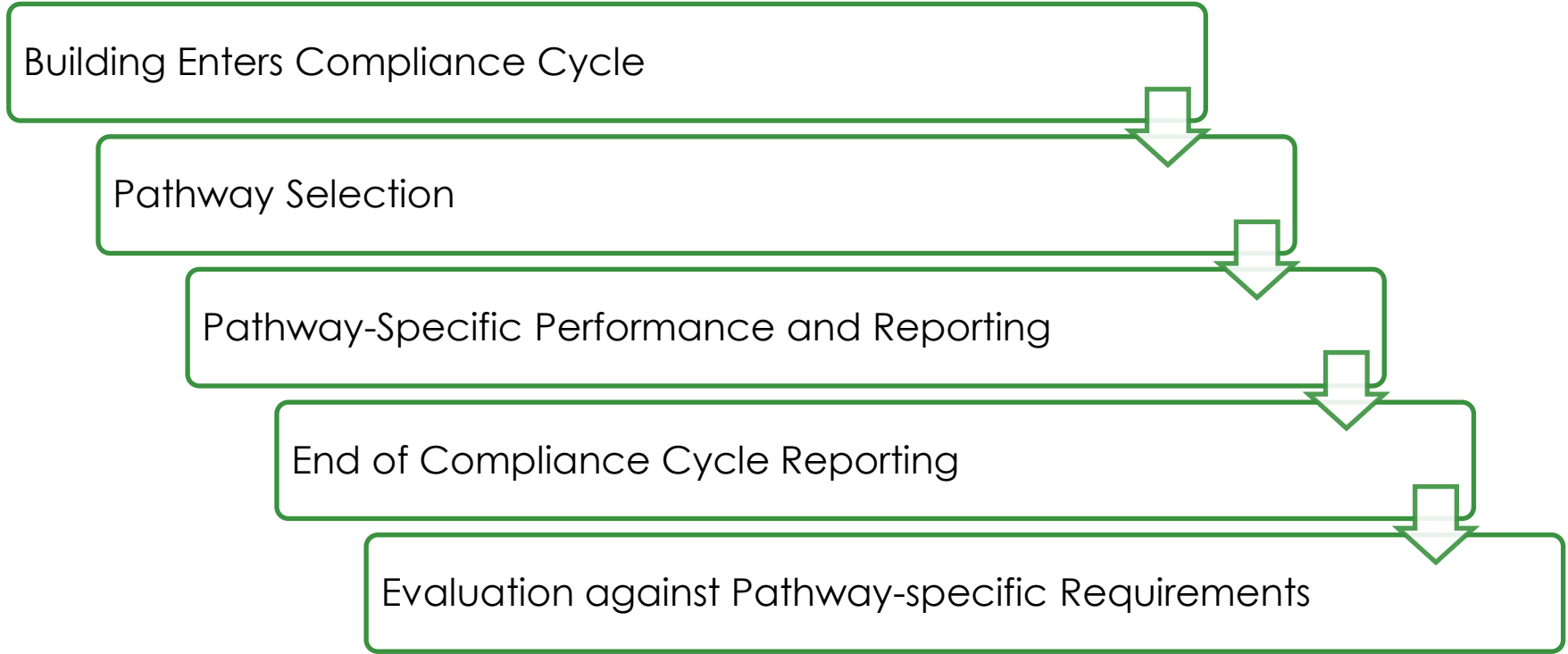
COMPLIANCE CYCLES

Buildings that do not meet the Standard for a BEPS Period will be placed in a 5-year compliance cycle. The building owner has until the end of the cycle to bring their building into compliance.

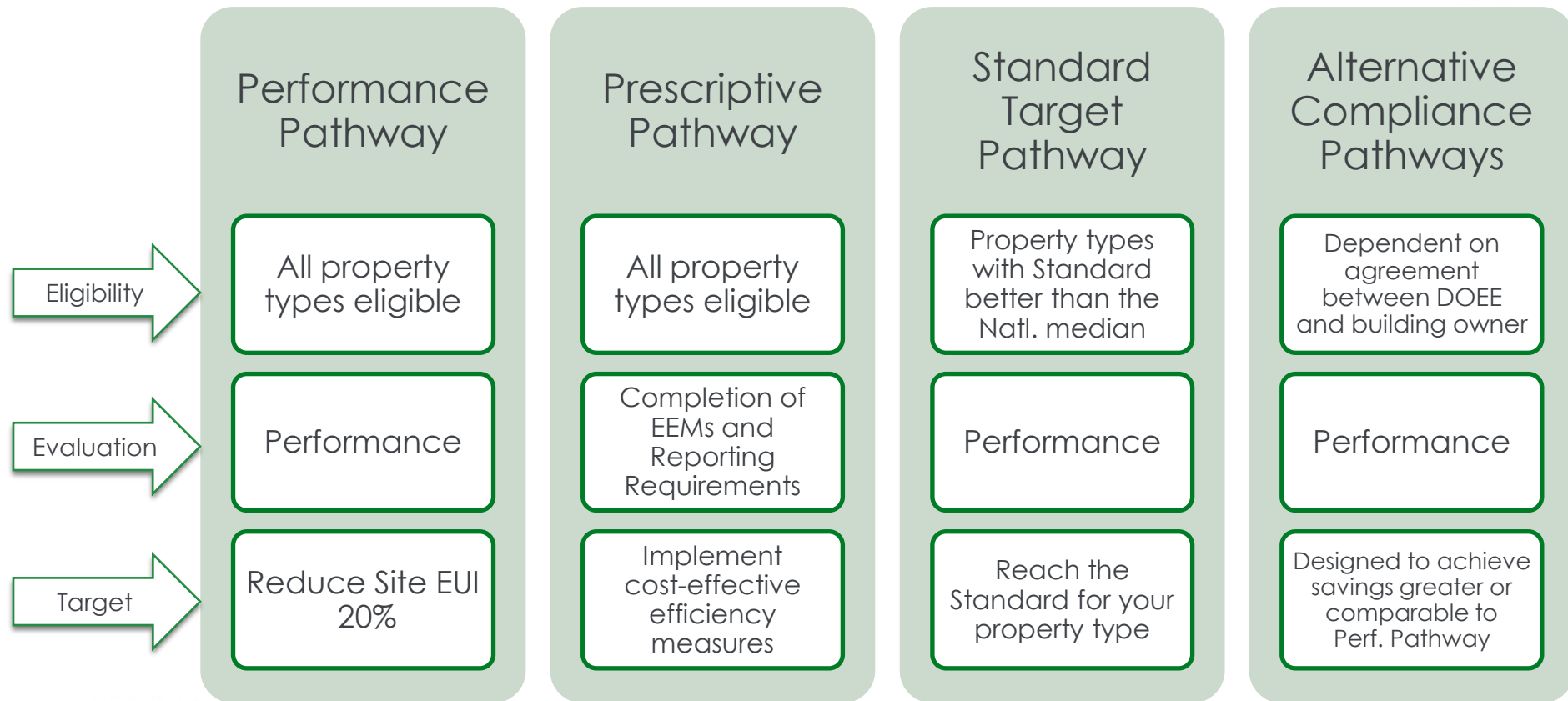


* Proposed COVID-19 PHE adjustment – automatic delay of the BEPS compliance requirement one year ★

COMPLIANCE PROCESS



COMPLIANCE PATHWAYS





Building
Innovation
Hub

BEPS DC

Monthly Update Webinar: March 25, 2021

Speakers

Who's here with us today.



Theresa Backhus

Associate Director, Outreach and Engagement
Building Innovation Hub
Institute for Market Transformation



About us

Who we are.

The Building Innovation Hub helps building industry professionals in and around Washington, DC create and operate high-performing buildings. The Hub connects professionals and provides information and training.

The goal of the Hub is to meet the current needs of the building industry while simultaneously pushing the industry towards the innovative solutions that we will need to build and operate high-performing buildings.



A program of



Hello





Available Resources

What's around to help.

Hub Resources

We're here to help.

- [Covid Checklists](#). Guides to managing buildings during the pandemic.



- [Event Takeaways](#). Summaries from past Covid x BEPS webinars.



Hub Resources

We're here to help.

Understanding energy benchmarking

Get the facts on key metrics and learn how to interpret the data.

LEARN MORE →



Hub Resources

We're here to help.



A Commercial Real Estate Guide to Common Errors in DC Energy Benchmarking

Avoid common mistakes and get accurate data about the performance of your building.

[LEARN MORE →](#)



Hub Resources

We're here to help.

- [Building-to-Vendor Matchmaking](#). Email distribution matching system to help buildings distribute project opportunities, and to keep local service providers notified of opportunities as they arise.
- [High-Road Contracting](#). Guide and sample tools for building owners to design their own high-road contracting standards in order to advance diversity & inclusion in the building sector.
- [Procurement Guide](#). Step-by-step roadmap to making decisions about how to improve the operations and energy efficiency of your building.
- [Industry Playbook](#). Guides for owners, operators, brokers, and commercial tenants on BEPS compliance.
- [Funding and Financing Map](#). A searchable database of the major financing programs so you can make your project a reality.



What Else is New?

The latest Hub developments.

Social Priorities. Prioritizing diversity, equity, and inclusion as cornerstones.

Building Capacity. Associate Director of Outreach and Engagement hired.

Membership Program. Founding Members to be announced in April.

Advisory Board. In development, to be launched late spring / early summer.

New Resources. Covid checklists, “flash briefings,” tear sheets, case studies.

Upcoming Events. AEG Stakeholder Challenge, ULI Sustainability Program Day, etc.

Expanded Outreach. One-on-one conversations, company presentations.



Stay connected

Let us know what you want to know.

Check out the website.

[Sign up](#) for our newsletter.

Tell us what you think by contacting us.

- How can the Hub help you and your business?
- Provide feedback
- Ask a question
- Submit a case study

<http://buildinginnovationhub.org>





Thank you



Check us out!

<http://buildinginnovationhub.org>

BENCHMARKING: UPDATES AND COUNTDOWN TO ANNUAL REPORTING DEADLINE



BENCHMARKING IN DC

- Clean and Affordable Energy Act of 2008 requires all private buildings >50,000 ft² to report their **annual energy and water use**
- Annual reporting deadline is **April 1** of each year
- Failure to meet the reporting requirements results in a fine of up to **\$100/day** for every day that building is not in compliance
- Benchmarking reports submitted through Portfolio Manager Web Services (also called **Automatic Reporting**)
- Check you are enrolled by going to the “Summary” tab of your property and reviewing the box that says “Sharing this Property”

Sharing this Property			
2 People Have Access to this Property			
Name ▲	Permissions ◆	Action	
District of Columbia Annual Reporting (District_of_Columbia_Annual_Reporting)	Exchange Data Shared by [REDACTED]	I want to... ▼	

UPCOMING CHANGES TO BENCHMARKING

Size Threshold Dropping:

- In **2022**, buildings **25,000 – 49,999 ft²** required to report (with their 2021 data)
- In **2025**, buildings **10,000 – 24,999 ft²** required to report (with their 2024 data)

New Third-Party Verification Requirement:

- Begins in 2024 with calendar year 2023 data and every three years thereafter
- Specific requirements outlined in proposed benchmarking regulations in the DC Register

Building Size	Reporting Begins	Data Verification Required
50,000+ ft ²	2014 (with 2013 data)	2024 (with 2023 data)
25,000 - 49,999 ft ²	2022 (with 2021 data)	2024 (with 2023 data)
10,000 - 24,999 ft ²	2025 (with 2024 data)	2027 (with 2026 data)

VOLUNTARY REPORTING

DOEE is encouraging buildings 10,000-49,999 ft² to voluntarily benchmark their buildings before the required reporting year

Benefits of early reporting:

- Staff become accustomed to the process of benchmarking
- One-on-one benchmarking help provided by DOEE and DC Sustainable Energy Utility (DCSEU)
- Connection to DOEE partners, like DCSEU, who offer various services and rebate programs to buildings
- Jump start preparing your building to meet its building energy performance standard (BEPS)

CHANGES IN BUILDING OPERATIONS

- DOEE understands that the COVID-19 pandemic has impacted the building operations of commercial buildings in the District
- Significant changes in operation must be reflected in Portfolio Manager and should be regularly updated
- Having up to date property use details will ensure your building energy metrics are accurate and reflective of your building's actual performance
- Inaccurate property use details for 2020 calendar year submissions could put your building at risk of noncompliance and enforcement

WHAT TO UPDATE

- Portfolio Manager guidance states that updates to property use details should only be made if:
 - Your property is eligible for an ENERGY STAR score **AND**
 - Your property has experienced significant changes in operations due to COVID-19
- If your buildings meets this criteria, you should update the following property use details:
 - Weekly Operating Hours
 - Number of Workers on Main Shift (or Number of FTE Workers for hospitals)
 - Weekend Operation (Yes/No) - **for K-12 Schools only**

HOW TO MEASURE OPERATIONAL CHANGES

- Property use details should always be reflective of real values, never estimations or default values provided by Portfolio Manager
- Portfolio Manager suggests the following approaches for determining the Weekly Operating Hours and Number of Workers during periods impacted by COVID-19:
 - Use data from turnstiles
 - Use data from FOBs or other electronic means of gaining entry to buildings
 - Speak with tenant representatives to gather data for their space
 - Obtain data from security guards who may have signed individuals into and out of the building
 - Review recordings from video cameras

STEP BY STEP TUTORIAL

- Once you have gathered your updated property use details for 2020, go through the following steps to update Portfolio Manager

- Select “Update with New Information” from the drop-down menu of the property use type you are updating
- Enter the new value in the column titled “Updated Value”
- Enter the date that the new value took effect under “Current as Of”
- Once updated values and dates are entered, select “Save Update”

Update Property Use Details

It is important to keep the information about how your property is used up to date since this information is used to calculate your performance metrics. Updates that you make here are tracked as part of the [History Log](#). To correct an error that you find, use the [History Log](#). Note: you do not need to provide any new information for details you aren't updating.

Property Use Name:

Type of Use:

Detail	Current Value	Updated Value	Current As Of	Temporary Value
★ Gross Floor Area	300000 Sq. Ft. (as of 01/01/2008)	<input type="text"/> Sq. Ft. <input type="button" value="v"/>	<input type="text"/> <input type="button" value="calendar"/>	<input type="checkbox"/>
★ Weekly Operating Hours	50 (as of 01/01/2008)	<input type="text" value="20"/> <input type="checkbox"/> Use a default	<input type="text" value="03/11/2020"/> <input type="button" value="calendar"/>	<input type="checkbox"/>
★ Number of Workers on Main Shift	800 (as of 01/01/2008)	<input type="text" value="25"/> <input type="checkbox"/> Use a default	<input type="text" value="03/11/2020"/> <input type="button" value="calendar"/>	<input type="checkbox"/>
★ Number of Computers	800 (as of 01/01/2008)	<input type="text"/> <input type="checkbox"/> Use a default	<input type="text"/> <input type="button" value="calendar"/>	<input type="checkbox"/>
Percent That Can Be Heated	50 % or more (as of 01/01/2008)	<input type="text"/> <input type="checkbox"/> Use a default	<input type="text"/> <input type="button" value="calendar"/>	<input type="checkbox"/>
★ Percent That Can Be Cooled	50 % or more (as of 01/01/2008)	<input type="text"/> <input type="checkbox"/> Use a default	<input type="text"/> <input type="button" value="calendar"/>	<input type="checkbox"/>

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

⚠ If your property has more than one building, you need to update your Property Use Details (# Workers, Weekly Operating Hours of operation) for both the parent property (campus) and the child properties. It is not done automatically. [Learn more about keeping Use Details up to date](#)

STEP BY STEP TUTORIAL

You can also view the changes over time by selecting “View Update History” from the action drop-down menu

Property Uses and Use Details

[View as Diagram](#)

Add Another Type of Use

Add

Name	Property Use Type	Gross Floor Area	Action
▶ Office Use	Office	300,000 ft²	I want to...
	Property GFA (Buildings):	300,000 (used)	Update with New Information
	Property GFA (Parking):	0	View Update History
			Correct Mistakes

History Log for Office Use

Below is a record of any details you have provided for this Property Use. These values represent how your Property Use has changed over time and are used to provide you with the most accurate metrics possible for your property for any time period. You can also correct any errors you find here. If you have a multi-building property (campus), you need to [update these Property Use Details in BOTH the parent and child properties](#).

★ Gross Floor Area

<input type="checkbox"/>	Current As Of	Value	Temporary Value?	Revised By	Revised Date
<input type="checkbox"/>	01/01/2008 (to present)	300,000 Sq. Ft.	<input type="checkbox"/>		10/02/2019

✗ Delete Selected Entries

★ Weekly Operating Hours







<input type="checkbox"/>	Current As Of	Value	Temporary Value?	Revised By	Revised Date
<input type="checkbox"/>	03/11/2020 (to present)	20	<input type="checkbox"/>		02/09/2021
<input type="checkbox"/>	01/01/2008 (through 3/10/2020)	50	<input type="checkbox"/>		10/02/2019

✗ Delete Selected Entries

STEP BY STEP TUTORIAL

- Given the ever-changing nature of the COVID-19 pandemic, it is possible that building operations have changed multiple times over 2020. If this is the case, you will need to make multiple updates.
- If your Weekly Operating Hours changed multiple times over 2020, your update log may look something like this:

★ Weekly Operating Hours

<input type="checkbox"/>	Current As Of	Value	Temporary Value?	Revised By	Revised Date
<input type="checkbox"/>	10/12/2020  (to present)	30	<input type="checkbox"/>		02/09/2021
<input type="checkbox"/>	03/11/2020  (through 10/11/2020)	20	<input type="checkbox"/>		02/09/2021
<input type="checkbox"/>	01/01/2008  (through 3/10/2020)	50	<input type="checkbox"/>		10/02/2019

EXEMPTION FROM 2020 REPORTING

DOEE understands that buildings may have been significantly less occupied in 2020 compared to previous years. While DOEE allows exemptions for “unoccupied” buildings, the criteria for “unoccupied” is specific, and documentation is required:

- A building may apply for an “unoccupied” exemption if on **average less than one full-time-equivalent employee or occupant (less than 40 person-hours per week/2080 person-hours per year) worked or resided 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))
- All exemption requests must be made in writing to info.benchmark@dc.gov. DOEE has final authority on whether to grant any exemption.

DATA QUALITY CHECKER

- Prior to April 1, run the Data Quality Checker in Portfolio Manager
- Select December for the month, select the year for which you are attempting to report, and click “Run Checker”
- Make sure to fix any relevant alerts before April 1
- Any alerts regarding waste can be disregarded - reporting waste consumption is not required

MyPortfolio | Sharing | Reporting | Recognition

Test Office

Portfolio Manager Property ID: [redacted] | [Map It](#)

Year Built: 2008 | [Edit](#)

[Not eligible to apply for ENERGY STAR Certification](#)

[Change Metric](#)

ENERGY STAR Score (1-100)

Current Score: 1

Baseline Score: 1

Summary | Details | Energy | **Water** | Waste & Materials | Goals | Design

[Refresh](#) to see Source EUI Trend | [Change Metric](#)

2009 2011 2013 2015 2017 2019

[Change Metrics](#) | [Change Time Periods](#)

Metric	Dec 2018 (Energy Baseline)	Dec 2018 (Energy Current)	Change
ENERGY STAR Score (1-100)	1	1	0.00 (0.00%)
Source EUI (kBtu/ft²)	3,821.4	3,821.4	0.00 (0.00%)
Site EUI (kBtu/ft²)	1,364.8	1,364.8	0.00 (0.00%)
Energy Cost (\$)	60,000.00	60,000.00	0.00 (0.00%)
Total GHG Emissions Intensity (kgCO₂e/ft²)	138.3	138.3	0.00 (0.00%)
Water Use (All Water Sources) (kgal)	Not Available	Not Available	N/A
Total Waste (Disposed and Diverted) (Tons)	Not Available	Not Available	N/A

Check for Possible Data Errors

Run a check for any 12-month time period to see if there are any possible errors found with your data.

[Check for Possible Errors](#)

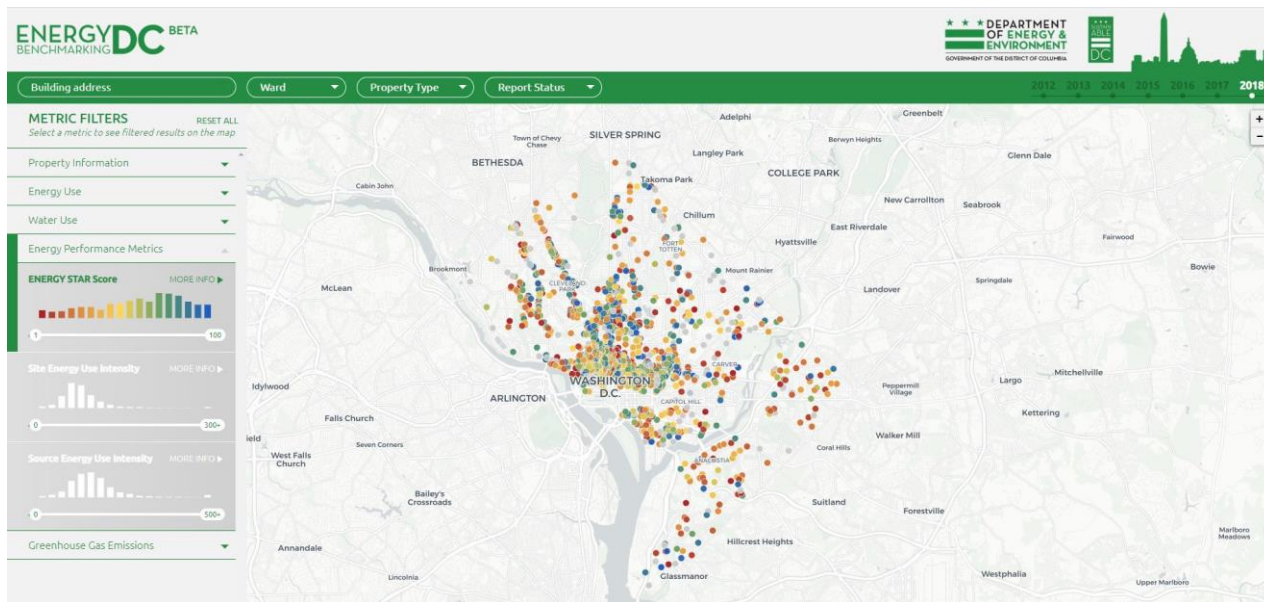
REPORTING TIMELINE

- **March:** DOEE starts reviewing data for quality issues and sending emails alerting reporters of errors and how to fix them
 - **We will NOT check for compliance until after the April 1 reporting deadline; this is for pre-reporting compliance assistance purposes only**
- **April 1:** Benchmarking reports due to DOEE
- **After April 1 :** DOEE will start sending compliance and data quality emails
 - If report is complete and accurate, you will receive email confirmation that your report has been accepted
 - If report has incomplete or inaccurate data, you will receive an email with these errors flagged and steps to remedy them



PUBLIC DISCLOSURE

After April 1, benchmarking data is publicly disclosed on our benchmarking disclosure map and on OpenDataDC



Map: energybenchmarkingdc.org OpenData: opendata.dc.gov/datasets/building-energy-benchmarks

BENCHMARKING RESOURCES

- ENERGY STAR Portfolio Manager offers multiple webinars and recorded videos that cover a wide range of topics
 - Full list of upcoming webinars, recorded presentations, and videos:
www.energystar.gov/buildings/training/training
- Portfolio Manager maintains a comprehensive list of FAQs:
<https://energystar-mesa.force.com/PortfolioManager/s/>
- DOE website has additional webinars at
<https://doee.dc.gov/page/get-help-benchmarking>
 - “How to Enroll in Automatic Reporting”
 - “Benchmarking Multi-Tenant Buildings”
 - “Benchmarking 101 for Smaller Buildings”

BENCHMARKING HELP CENTER

If you have questions, please contact us at:

Email: info.benchmark@dc.gov

Website: doee.dc.gov/energybenchmarking

LEARN MORE!

doee.dc.gov/service/BEPS
info.beps@dc.gov
info.benchmark@dc.gov

- Attend a BEPS Task Force meeting
- Attend a future education session (search DOEE in EventBrite)
- Check out the [Building Innovation Hub](#) and their events
- Join us for the next update on [April 29!](#)
- Tell your friends/coworkers/clients about BEPS