

DC'S NEW BUILDING ENERGY PERFORMANCE STANDARDS

Monthly Update
August 27, 2020



AGENDA

July 30 webinar available at
<http://doee.dc.gov/service/beps>
under Events & Engagement

- Present the basic framework of the performance standards, applicability, and compliance cycles/paths
- Updates on the BEPS Task Force
- Timeline of program implementation
- Complementary program development
- DC Sustainable Energy Utility presentation
- Q&A

SUSTAINABLE DC VISION



Make DC the healthiest, greenest, most livable city in the country.

GOALS: 2032



ADAPT TO CLIMATE CHANGE

CLIMATE READY BUILDINGS

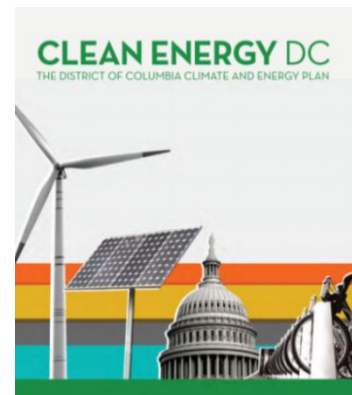
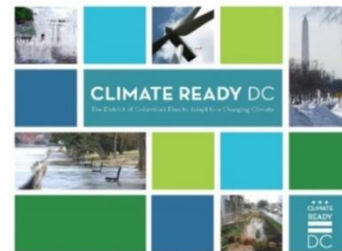
CUT ENERGY USE 50%

50% RENEWABLE ENERGY

NET ZERO NEW BUILDINGS

NET ZERO RETROFITS

CUT GHG EMISSIONS 50%



MAYOR BOWSER: COMMITTED TO ZERO CARBON BY 2050



CLEAN ENERGY DC OMNIBUS AMENDMENT ACT OF 2018, TITLE III....



BENCHMARKING

Lowers minimum building square footage required to benchmark over time;
Creates data verification requirements

ENERGY PERFORMANCE

Improves the performance of existing buildings by implementing a **Building Energy Performance Standard**

BENCHMARKING 101

Clean and Affordable Energy Act of 2008 requires all private and DC-owned buildings to report their calendar year (CY) energy and water use to the DOE for public disclosure by April 1 annually.

Covered Building List

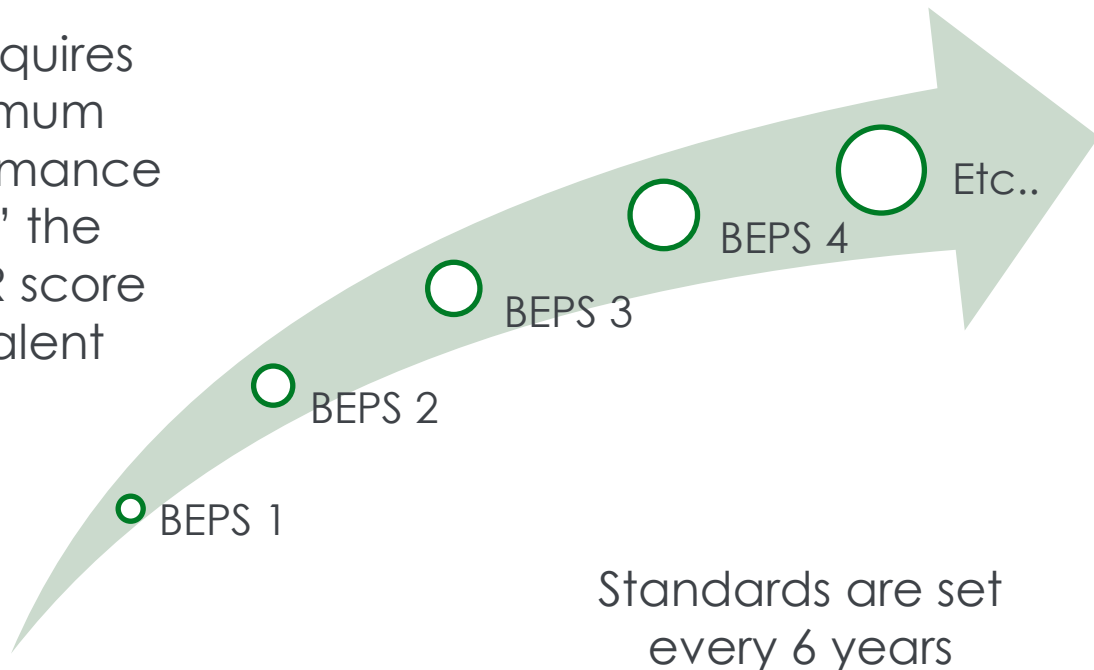
- ❑ CY2009 and on – DC-owned buildings >10,000 sq. ft.
- ❑ CY2013 and on – Private buildings > 50,000 sq. ft.
- ❑ CY2021 and on – Private buildings > 25,000 sq. ft.
- ❑ CY2024 and on – Private buildings > 10,000 sq. ft.

Third Party Data Verification Required

- ❑ Beginning CY2023 and every three (3) years etc.

BUILDING ENERGY PERFORMANCE STANDARD 101

Clean Energy DC Omnibus Amendment Act of 2018 requires an establishment of a minimum threshold for energy performance that will be “no lower than” the local median ENERGY STAR score by property type (or equivalent metric).



BEPS APPLICABILITY

As the benchmarking requirements ratchet down in square footage over time, the buildings will be required to meet the BEPS in the following periods until all buildings 10,000 sq. ft. and over are following the performance standards.

BEPS 1:

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

BEPS 2:

Private buildings >25,000 sq. ft.
and DC-owned >10,000 sq. ft.

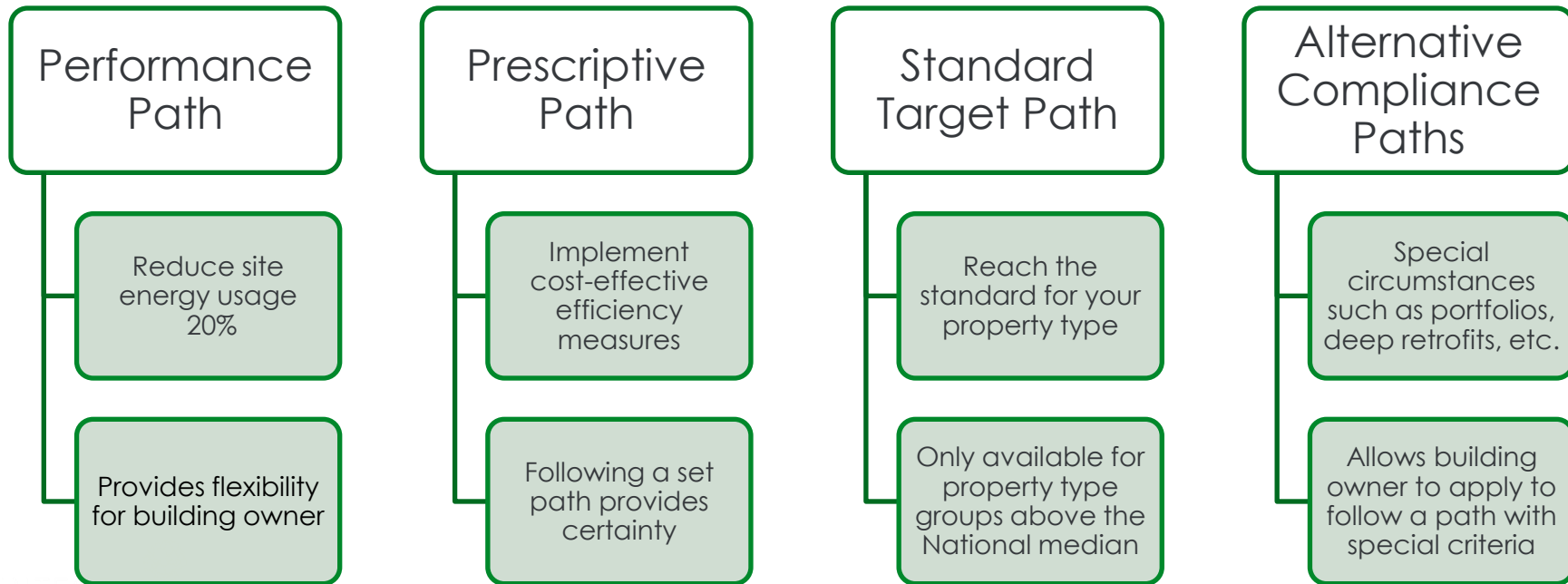
BEPS 3:

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



COMPLIANCE CYCLES & PATHS

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. There will be a variety of paths to choose from to bring their buildings into compliance:



BEPS PROGRAM TIMELINE

- Draft rules should be ready for public comment in September 2020
- Minimum of one round of public comment, open for 60 days (extension due to COVID)
- Technical Guidance and Task Force Report will be available the same time as public comments on the draft rules
- DOEE working with Steven Winter Associates and partners to complete the BEPS Cost/Benefit Study. Check out the [August 4](#) Task Force meeting notes!
- Final rules published in late 2020

BEPS TASK FORCE UPDATE

- BEPS Task Force – meets every other Tuesday – open to the public. Schedule, recordings, slides, and notes are available [online](#)
- In August, the Task Force discussed the alternative compliance paths process and delay of compliance criteria, and had feedback sessions for the BEPS Cost/Benefit Study and DC Green Bank.
- In September, we'll be discussing the recommendations from the higher education/hospitals sub-committee and a draft proposal for the prescriptive path.

BENCHMARKING UPDATE



Free Data Verification for CY2019:

- DOEE is partnering with DCSEU and Baumann Consulting to offer pro-bono data verification of 2019 benchmarking data, available to all covered buildings in the District
- **The data verification application portal is now live!** Please visit dcverifybenchmarking.com and submit a completed application by September 30, 2020 to receive free data verification services.

Benchmarking Rules Update:

- DOEE is close to publishing updated benchmarking rules that clarify the benchmarking reporting requirements, including the new size thresholds and data verification

HIGH-PERFORMANCE BUILDING HUB

Stay up to date:
imt.org/hub

Goal: Develop resources and services that directly address barriers in DC's commercial real estate market that hinder the pursuit of high-performance buildings.

Timeline: Launch Fall 2020

BEPS Resource Highlights:

- BEPS Basics
- Common errors in benchmarking
- How to use your benchmarking data
- Where Code meets BEPS
- Defining BEPS targets in new construction projects

Check out [July 21](#) BEPS Task Force meeting for the Hub feedback session

INTERIM

Pipeline Being Considered for Development

Type	Target Sector	Financing category	DCGB potential commitment	Target launch
Open RFP	Multi-sector	Open – focused on bringing in additional capital and innovation	Flexible	LAUNCHED
MoCo Green Bank Product	Commercial energy efficiency and solar	Guarantee or Loan Loss Reserve	TBD / \$10-250k	Summer 2020
MoCo Green Bank Product	Small commercial	Guarantee and participation	TBD / \$10-\$150k	Summer 2020
Existing Green Bank Product	Commercial, multifamily, affordable housing	Predevelopment Loan	TBD	Fall 2020

Check out [August 18](#) BEPS Task Force meeting for the DCGB feedback session

CONSTRUCTION CODE UPDATE

New Codes adopted May 29, 2020

- Significant changes made to the Energy Conservation Code – Commercial - Updates to 90.1-2013, with local amendments
- Minor updates to the Energy Conservation Code – Residential and Green Construction Code - Updates to 2015 IECC, with local amendments
- Effective immediately for new construction, one year grandfather for existing
- Energy Conservation Code alternative compliance paths expanded to include:
 - Appendix Z – DC's voluntary NZE code for commercial and multifamily
 - Living Building Challenge, Passive House (PHI/PHIUS), LEED + LEED Zero
- <https://dcra.dc.gov/page/dc-construction-codes>

WHAT YOU CAN DO NOW

- Double-check your benchmarking data (2018 and 2019)
- Compare 2019 scores to the 2018 [median](#) for your property type to get a sense of how your building is performing
- Get an on-site energy audit (ASHRAE Level II or higher) to understand building characteristics, equipment, and energy use
- Begin to identify energy efficiency measures
- Engage with building tenants
- Create an internal team to start aligning energy actions
- Start developing a strategic energy management plan

DCSEU Programs Overview



DC
SUSTAINABLE ENERGY
UTILITY

About the DCSEU



The District of Columbia Sustainable Energy Utility (DCSEU) helps DC residents and businesses use less energy and save money. Since 2011, the DCSEU has delivered financial incentives, technical assistance, and information to tens of thousands of District residents and businesses, helping them to save millions of dollars on their energy costs. Our work is building a brighter economic, environmental, and energy future for the District.

What is the Sustainable Energy Utility?

- ▶ Clean & Affordable Energy Act (2008)
- ▶ Ratepayer-funded, privately operated
- ▶ Performance-based contract to DOEE
- ▶ Designed to help District households, businesses, and institutions **save energy** and money through **energy efficiency** and **renewable energy** programs

DCSEU Goals

Electricity
Savings



Gas
Savings



Green
Jobs



Local Economic
Development



Low-Income
Spending



Renewables



DCSEU Programs

Residential

- Efficiency Products
- Solar for Income Qualified
- Tips & Tools

Commercial & Multifamily

- Rebates & Incentives
- Income Qualified Support
- Technical Assistance

Solar

- Solar for All
- Community Renewable Energy Facility (CREF) Project

Workforce Development

- 6-month Green Externships
- Nationally Recognized Certifications
- Job Placement

DCSEU's Commercial & Multifamily Offerings

- ▶ Prescriptive Rebates and Custom Incentives
- ▶ No-Cost Technical Assistance
- ▶ Workforce Development

Prescriptive Rebates

- ▶ Equipment Replacement initiative provides rebates to small-to-medium sized businesses and institutions.
- ▶ The program offers prescriptive incentives for lighting, HVAC, compressed air, refrigeration, food service, and vending equipment.
- ▶ Rebates require written pre-approval and are provided for facility improvements that result in a permanent reduction in electrical and/or natural gas energy usage (persisting for a minimum of five years).
- ▶ The DCSEU provides per-unit rebates size and efficiency based on the type of equipment.
- ▶ Rebates capped at 100% of the participant cost.

Custom Incentives (“Non-prescriptive”)

- ▶ The initiative provides a comprehensive set of energy services to owners of large buildings who are replacing old equipment, renovating an existing building, or beginning a new construction project.
 - *New Construction/Major Renovation*
 - *Market Opportunity – end of life equipment replacement*
 - *Retrofit – before end of life equipment replacement*
 - *Pay for Performance - multi-measure, behavioral, and/or operational changes*

Prescriptive Rebates and Custom Incentive Measures

	Product Category	Prescriptive Rebates	Custom Projects
Lighting	Interior LEDs	●	
	Exterior LEDs	●	
	Controls	●	
Heating and Ventilation	Boiler Projects	●	●
	Hot Water Heaters		●
	Steam Systems		●
	Steam Trap Replacement		●
	Variable Frequency Drives (VFDs)	●	●
	Demand Control Ventilation		●
	Chillers		●
Pay for Performance	Heat Pumps		●
	Recommissioning and Retro-commissioning		●
	Advanced Building Controls		●
Refrigeration and Food Service	Energy Management Information Systems		●
	Walk-in refrigerators and freezers	●	
	ECM Motors for Walk-in coolers and freezers	●	●
Other	Food Service Equipment	●	●
	New Construction Projects		●
	Complex, Multi-measure projects		●
	Renewables		●
	Net Zero Building Projects		●

Pathways to Incentives and Technical Assistance

Self-Service

WHO: Customer completing a project and have chosen a contractor and equipment with a defined timeline

VALUE = defined rebate amounts up to \$50,000

HOW: Prescriptive rebate application or buy directly from Participating Distributor

Custom Service

WHO: Customer considering a project and the equipment is not listed in Prescriptive rebates and/or rebate amount will exceed \$50,000

VALUE = 3rd party review

- Total incentive value is defined per MWh or per MMBtu
- Technical Assistance

HOW: Custom Incentive calculation from DCSEU

Contractor/Direct Service

WHO: Customer facing high energy costs or considering a project but not sure how to proceed

VALUE = 3rd party review, project management, vetted contractor

- Total Rebate value is \$ per MWh or \$ per MMBtu incentive
- Technical Assistance

HOW: DCSEU/Customer cost share; DCSEU pays contractor directly

No-Cost Technical Support



Online Rebate Center

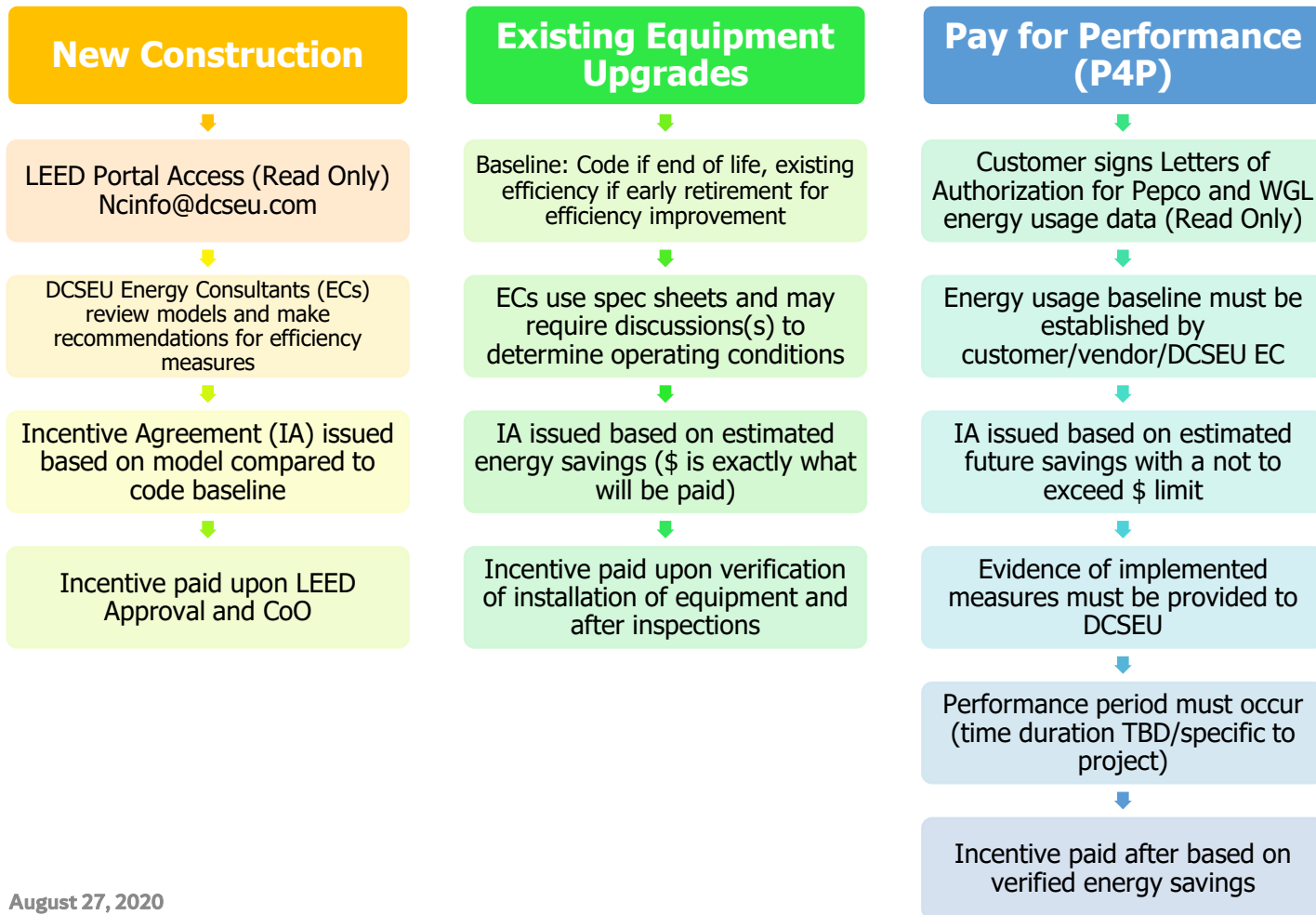
Available Now for Residential Customers

- Online “shopping basket” experience
- [Prescriptive rebate amounts for lighting, HVAC, and other residential equipment](#) are listed for each offering
- [Residential home page](#) includes low/no-cost tips, solar opportunities, and success stories

Coming in FY21 for Commercial & Institutional Customers

- Online “shopping basket” experience for selected equipment
- [Prescriptive rebates and special incentives](#) are still in effect until the ORC page is launched.
- Enhanced rebates available for businesses under 10,000 sq. ft. and income-qualified properties
- *Currently offering 30% higher incentives through September 30th*

Process Flow for Custom C&I Project Types



New Energy Benchmarking & Data Verification Webinars

- ▶ DCSEU is offering two 1-hour webinars that will focus on an overview in energy benchmarking and an introduction to verifying benchmarking data.
 - [Introduction Building Energy Benchmarking](#)
Wed, September 2nd, 2020 12:00 pm -1:00pm ET
 - [Verifying Energy Benchmarking Data](#)
Tue, September 29th, 2020 12:00 pm – 1:00 pm ET
- ▶ For this reporting year only, DOEE and the DCSEU are offering no-cost verification to covered buildings.
- ▶ For more information, go to DCSEU's "Benchmarking in DC" page @ <https://www.dcseu.com/commercial-and-multifamily/benchmarking-in-dc>

Registration open now!



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LEARN MORE!

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- Attend a BEPS Task Force meeting
- Participate in a targeted focus group
- Attend a future education session or webinar
- Submit public comments on the rules
- Tell your friends/coworkers/clients about BEPS
- Join us for the next update on [September 24!](#)