DC'S BUILDING ENERGY PERFORMANCE STANDARDS

COMPLIANCE & ENFORCEMENT
GUIDEBOOK



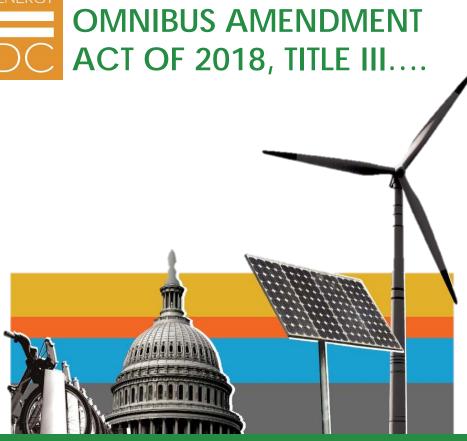








CLEAN ENERGY DC



BENCHMARKING

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

ENERGY PERFORMANCE

Created the **Building Energy** Performance Standards Program to drive energy performance in existing buildings to help meet the energy and climate goals of the Sustainable DC Plan



BUILDING ENERGY PERFORMANCE OVERVIEW



BENCHMARKING

STANDARDS

COMPLIANCE

- Clean and Affordable Energy Amendment Act of 2008
- BenchmarkingRegulations = 20 DCMR3513-3516
- Benchmarking
 Guidance

- CleanEnergy DC
 Omnibus Amendment
 Act of 2018 (Amended)
- 2021 BEPS Establishment Regulations = 20 DCMR 3530
- Guide to the 2021 BEPS
- <u>Building Energy</u>
 <u>Performance Disclosure</u>

- CleanEnergy DC
 Omnibus Amendment
 Act of 2018
 (Amended)
- •BEPS Compliance Regulations = 20 DCMR 3517-3521
- BEPS Schedule of Fines = 16 DCMR 4018
- BEPS Compliance and Enforcement Guidebook



DISCLAIMER



- Nothing in the Guidebook or Presentation shall supersede any District of Columbia (DC) law or regulation, including the following:
 - CleanEnergy DC Omnibus Amendment Act of 2018 (CEDC Act), as amended by the CEDC Technical Omnibus Amendment of 2020, codified at DC Code § 8-1772.22 (establishment of the BEPS Program);
 - BEPS Compliance Regulations to be found at Title 20, Chapter 35, of the District of Columbia Municipal Regulations (DCMR), (which are available for public comment at the same time as this draft); and
 - 2021 BEPS Establishment Regulations found at 20 DCMR 3520



INTRODUCTION

- Guidebook assumes you are familiar with your benchmarking data
- Guidebook assumes the owner has already determined that the building did not meet the BEPS (20 DCMR 3530, <u>Guide to the 2021 BEPS</u>)
- Framework of Guidebook:
 - Chapter 1 Introduction
 - Chapter 2 Compliance Process, Change of Ownership requirements
 - Chapter 3 Principal Compliance Pathways
 - Chapter 4 Alternative Compliance Pathway options
 - Chapter 5 Delay of Compliance process
 - Chapter 6 Enforcement process









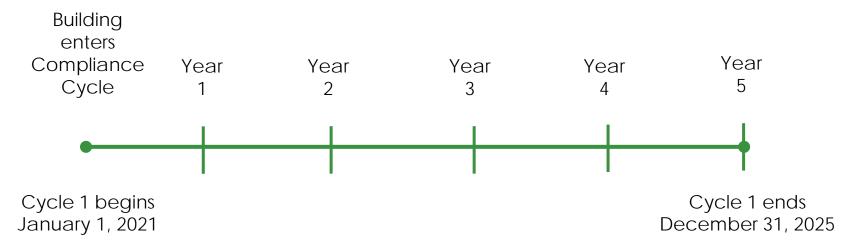






ORIGINAL COMPLIANCE CYCLE

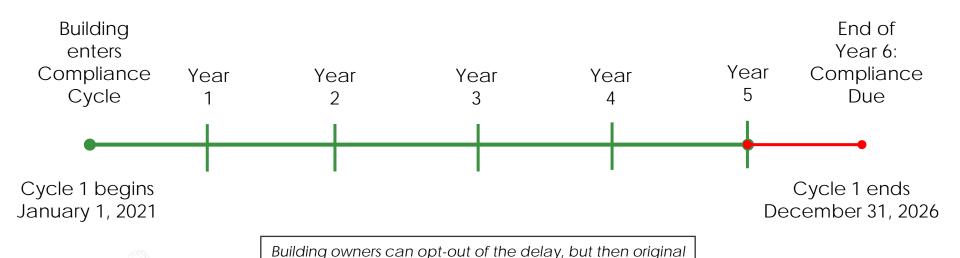
Buildings that do not meet the Standard for a BEPS Period will enter a 5-year Compliance Cycle. The building has until the end of the cycle to complete the energy performance and reporting/verification requirements of an approved Compliance Pathway.





COMPLIANCE CYCLE WITH COVID-19 PHE DELAY

For Cycle 1 only, buildings that do not meet the Standard for a BEPS Period will default to a 6-year Compliance Cycle. The evaluation years and reporting/verification deadline have been adjusted for the delay and are described in each Compliance Pathway.



evaluation years and reporting deadlines would apply.



COMPLIANCE REQUIREMENTS



Energy Performance Requirements

Performance-based Pathways measure improvements in energy performance

Action-based
Pathways use the
completion of specific
actions as the
evaluation

Reporting and Verification Requirements

Submit a document(s)

Complete a form(s)

Annual Benchmarking submission

Postponements

Cannot meet a reporting deadline = Extension (up to 6 months)

Eligible circumstance makes it practically infeasible to meet energy performance by end of Cycle = Delay





ENVIRONMENT, HEALTH & SAFETY



 It is not acceptable for a building owner to implement energy efficiency measures, reduce ventilation, or take any other measures that pose a threat to the health and safety of a building occupant.

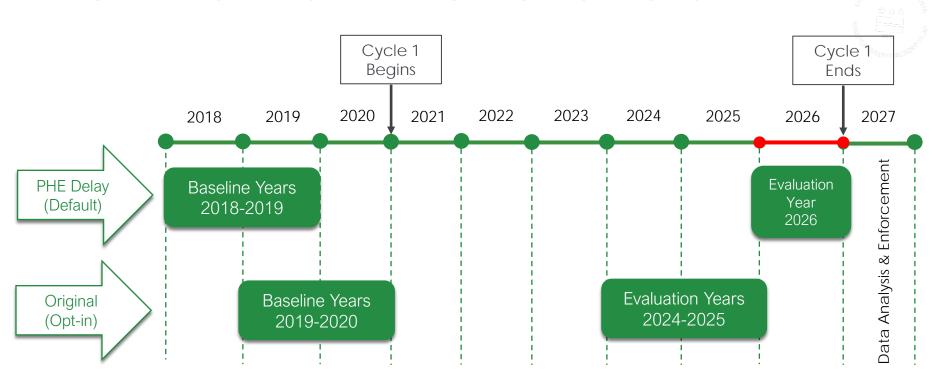






- Building owners will be subject to all applicable new construction DC Building Codes enforced by the Department of Consumer and Regulatory Affairs (DCRA) and the buildings meet requirements of the DC Property Maintenance Codes. Any owners found in violation of these codes will be liable for any fines, penalties, or other enforcement actions taken by DCRA.
- If DOEE becomes aware that a building owner has carried out a measure that harms the health, safety, or indoor environmental quality for occupants of a building, the case will be referred to DCRA for inspection and enforcement, and the building owner may be subject to the maximum alternative compliance penalty amount.

PERFORMANCE-BASED EVALUATION OPTIONS





All buildings are defaulted to the COVID-19 PHE delay with the 2021 Option. Building owners would have to opt-out of the delay to use original evaluation years.

PATHWAY SELECTION & CHANGES



- First requirement of all buildings is Pathway Selection; DOEE approves selection and then Pathway requirements become the enforceable compliance method
- Other forms/submissions might be due with Pathway Selection depending on Pathway requirements
- Owner could apply for a change of Pathway during Cycle, or DOEE could change the Pathway if requirements not being met.

COVID-19 PHE Delay Deadline

April 1, 2023

Original Cycle Deadline

April 1, 2022

DEMOLISHED BUILDINGS



- One exemption from BEPS compliance requirements – if building is demolished immediately before or during the Compliance Cycle
- Submit a Demolition Exemption
 Request to DOEE with evidence
 the building has been demolished.





NEWLY CONSTRUCTED BUILDINGS

- New buildings receiving C of O (2019-2020) before the beginning of the BEPS Period are assumed to not meet the BEPS and enter a Compliance Cycle – alternative compliance pathway option for these buildings
- New buildings on College/University or Hospital Campuses
 - If the Campus met the Standard for BEPS 1, building will not be evaluated until BEPS 2
 - If the Campus did not meet the Standard for BEPS 1, and the new building is not separately metered, the building will be included in BEPS 1 but may request a baseline adjustment
- New buildings receiving C of O during BEPS Period 1 will be evaluated the first time in BEPS Period 2







HISTORIC BUILDINGS



For the vast majority of cases, a building's historic status does not interfere with its ability to meet the energy performance requirements of BEPS.

The District's Office of Planning released the <u>Sustainability</u> <u>Guide for Existing and Historic Properties</u> that demonstrates how most historic buildings can comply with the energy performance requirements and realize substantial energy savings.

DOEE may approve a baseline adjustment (Section 4.4) or a delay (Chapter 5) for these buildings for challenges such as limitations on the type of EEMs allowed or receiving approval from the Historical Preservation Review Board in a timely manner.

CHANGE OF OWNERSHIP

Service of the servic

- When a building is sold at any time during the Cycle, the seller must provide the buyer with information related to the building's BEPS compliance status prior to the transfer or sale.
- The seller must give the buyer the following information:
 - any information, plans, or reports submitted to DOEE as required by the building's approved Pathway,
 - the most recent complete and accurate District Benchmark Results and Compliance Report for the building, and
 - information describing any progress toward meeting the energy performance requirements.
- Buyer and Seller sign a Change of Ownership Disclosure Acknowledgement Letter and provide DOEE a signed copy within 60 days of closing

Public Registry will be available with basic info. Good for buildings on Performance and Standard Target Pathway.

Buyer may request Sale of property Disclosure Report from DOEE.
Good for buildings on Prescriptive or Alternative Compliance Pathway.







PRINCIPAL COMPLIANCE PATHWAYS



Performance Pathway

All property types eligible

Performance-based

Reduce Site EUI 20%

Prescriptive Pathway

All property types eligible

Action-based

Completion of EEMs and Reporting Requirements with savings comparable to Perf. Pathway

Standard Target Pathway

Only available for property types with Standard better than the Nat'l median

Performance-based

Reach the Standard for your property type

INTEGRAL

Eligibility

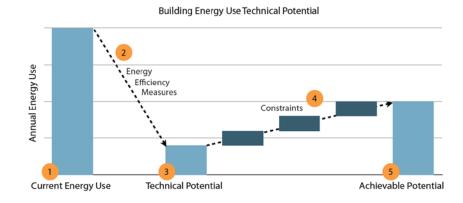
Evaluation

Goal



OPPORTUNITY FOR BUILDINGS TARGETING 36% OR MORE

- Building owners planning deep energy retrofits targeting Site EUI savings higher than 36% in Cycle 1 have an opportunity to secure savings recognition for future Compliance Cycles.
- This opportunity applies to any building following one of the Principal Pathways.
- In the Accelerated Savings
 Recognition option, a type of ACP
 described in Section 4.2.1, building
 owners meet higher energy
 performance targets by the end of
 Cycle 1 in exchange for compliance
 recognition in future Cycles.



PERFORMANCE PATHWAY WITH COVID-19 PHE DELAY



All property types eligible

Performancebased

> Reduce Site EUI 20%

Methods used to reduce energy use left to owner

- 1. Submit Pathway Selection form by April 1, 2023
- 2. Submit Completed Actions Report by April 1, 2027
- 3. Submit CY2026 Benchmarking Report by April 1, 2027

Evaluation	Baselin	e Years	Evaluation Year
COVID-19 PHE delay	CY2018	CY2019	CY2026
Reported Site EUI	100	110	82.5
Evaluated Site EUI	105		82.5
Demonstrated Site EUI Savings			-21%

STANDARD TARGET PATHWAY ELIGIBILITY FOR CYCLE 1

Only for high performing property types

Performancebased

Reach the Standard for your property type

Methods used to reduce energy use left to owner

	The second secon
Adult Education	Other - Entertainment/Public Assembly
Courthouse	Other - Mall
Drinking Water Treatment &	Performing Arts
Distribution	
Enclosed Mall	Prison/Incarceration
Financial Office	Repair Services (Vehicle, Shoe, Locks., etc.)
Food Sales	Residence Hall/Dormitory
Hotel	Restaurant
Hospital	Retail Store
Laboratory	Stadium (Open)
Medical Office	Self-Storage Facility
Movie Theater	Senior Care Community
Multifamily Housing	Strip Mall
Museum	Supermarket/Grocery Store
Office	Wastewater Treatment Plant
Other - Education	Wholesale Club/Super Center

STANDARD TARGET PATHWAY WITH COVID-19 PHE DELAY

Only for high performing property types

Performancebased

Reach the Standard for your property type

Methods used to reduce energy use up to the owner

- 1. Submit Pathway Selection form by April 1, 2023
- 2. Submit Completed Actions Report by April 1, 2027
- 3. Submit CY2026 Benchmarking Report by April 1, 2027

Evaluation	Evaluation Year		
COVID-19 PHE delay	CY2026		
Reported ENERGY STAR Score	72		
2021 Standard for Office	71		

PRESCRIPTIVE PATHWAY WITH COVID-19 PHE DELAY

All property types eligible

Action-based

EEMs installed comparable to reducing Site EUI 20%

Energy Audit is basis for Action Plan Designed to help building owners mitigate risk for a Compliance Cycle — so long as they successfully implement the specific approved measures and meet all reporting and verification requirements of each phase, the building will comply, regardless of its energy performance.

Phase	Action	Deadline
1	Pathway Selection and Energy Audit	April 1, 2023
2	Action Plan	April 1, 2024
3	Implementation	April 1, 2026
4	Evaluation, Monitoring, and Verification	April 1, 2027

PRESCRIPTIVE PATHWAY PHASED SUBMISSIONS



Phase 1

Pathway Selection and Energy Audit

- Pathway Selection Form
- Energy Audit

Phase 2

Action Plan

- Integrated Design Workshop Report
- •O&M Program Submission
- Final EEM Selection Submission with Supporting Documentation

Action Plan Approval

Phase 3

Implementation

- Implementation and Testing Submission with Supporting Documentation
- Attest to Implementation of O&M Program

Phase 4

Evaluation, Monitoring & Verification

- Post-implementation report
- Submit O&M Update for new EEMs Attest to Cont. Implementation
- Report on deferred acceptance testing or Cx done in Phase 4

INTEGRAL

Compliance checked against Approved Action Plan

PRESCRIPTIVE PATHWAY PROJECT TEAM REQUIREMENTS

Professional Title	Requirement	
Energy auditor	 One of the following: Certified Energy Auditor (CEA) Certified Energy Manager (CEM) Building Energy Assessment Professional (BEAP) High-Performance Building Design Professional (HPBD) Multifamily Building Analyst (MFBA) 	
Architect	Licensed in DC	
MEP Engineer	Licensed in DC	
General contractor	Licensed in DC	
Commissioning agent	Minimum Qualifications to be a DCRA Approved Cx Agent	
Retro-commissioning professional	 One of the following: MEP Engineer - Any State Licensing Department Building Operator Certification (BOC) Level II CEM Minimum Qualifications to be a DCRA Approved Cx Agent 	

PRESCRIPTIVE PATHWAY PHASES WITH COVID-19 PHE DELAY

Phase 1 due April 1, 2023

Phase 2 due April 1, 2024 Phase 3 due April 1, 2026 Phase 4 due April 1, 2027

Pathway Selection and Energy Audit

Action Plan

Implementation

Evaluation, Monitoring & Verification

Note: These dates are the deadlines. You can turn in reporting early and accelerate your timeline.

PHASE 1 - ENERGY AUDIT

Requirements:

- ASHRAE Standard 211 Level 2 energy audit
- by an energy auditor with the qualifications listed
- following the DOEE Energy Audit Template



To ensure that buildings consider long-term plans for compliance with future BEPS Periods, DOEE is requiring that the energy audit identify more EEMs than necessary to meet the energy performance requirements.

Results will be used in the Phase 2 Integrated Design Workshop where the EEMs will be narrowed to target 25% in Site EUI savings to make up the final EEM package

PHASE 1 - ENERGY AUDIT MINIMUM REQTS

Timeframe of audit:

- The audit must have been completed between the years 2021 – 2023
- If the audit was completed between the years 2018 – 2020, the building energy use and savings calcs must be updated
- Building owners may submit a request to DOEE to use audits from before 2018

Energy auditor creds or certs:

- CEA from AEE
- CEM from AEE
- BEAP from ASHRAE
- HBDP from ASHRAE
- MFBA from BPI

Baseline identification for energy audit purposes:

- The audit's baseline should be an average of CY 2018-2019 or either of those years by itself.
- The baseline should be measured in Weather-Normalized Site EUI (or Site EUI if the building cannot receive a Weather-Normalized Site EUI)



PHASE 1 - ENERGY AUDIT MINIMUM REQTS



Minimum savings identified:

- If the baseline Site EUI is above the <u>EPA national median</u> Site EUI for that property type, the audit must identify EEMs that total at least 40% savings from the baseline Site EUI.
- For all other buildings, the audit must identify EEMs that total at least 30% savings from the baseline Site EUI.
- If the auditor cannot identify EEMs to satisfy the required minimum percentage, the auditor must include an explanation in the energy audit submission.

Note: The project team must create a final package of EEMs in Phase 2 that achieve at least 25% savings from baseline Site EUI.



PHASE 1 - ENERGY AUDIT MINIMUM REQTS



Investment analysis - calculate these and enter into the Audit Template:

- Measure cost
- Total cost savings
- Simple savings to investment ratio (SIR)
- Simple return on investment (ROI)
- Effective savings to investment ratio (E-SIR) - marginal SIR of proposed EEM over replacement level equipment
- Effective return on investment (E-ROI) - marginal ROI of proposed EEM

Fossil Fuel Burning Equipment:

 Replacing an existing fossil fuel burning system can be included in the energy audit. However, only replacement of components of an existing fossil fuel burning system may be included as part of the final EEM package in Phase 2 (see Section 3.3.5.3).







PHASE 1 REQUIREMENTS



Pathway Selection and Energy Audit

- Pathway Selection Form
- Energy Audit

COVID-19 PHE Delay Deadline

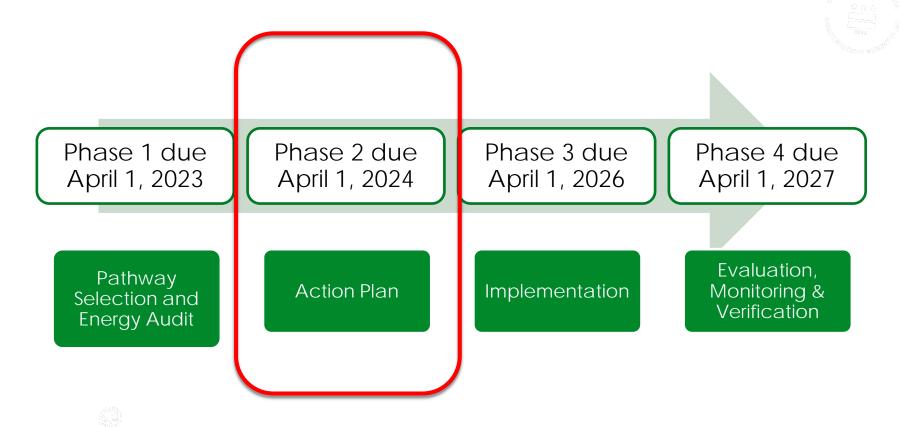
April 1, 2023

Original Cycle Deadline

April 1, 2022



PRESCRIPTIVE PATHWAY PHASES WITH COVID-19 PHE DELAY



INTEGRATED DESIGN WORKSHOP



Project teams could adapt the following guides to fit the needs of the workshop:

- DOEE <u>Integrated Design Charrette Toolkit</u>
- National Renewable Energy Laboratory
 <u>Handbook for Planning and Conducting</u>
 <u>Charrettes for High-Performance Projects</u>
- Enterprise Green Communities <u>Green</u> <u>Charrette Toolkit</u>
- WBDG's <u>Planning and Conducting</u> <u>Integrated Design Charrettes</u>

At the workshop, DOEE suggests the following project team members as a minimum:

- Building owner representative
- Building facilities management representative
- Energy auditor
- Architectural firm representative
- MEP engineering firm representative



INTEGRATED DESIGN WORKSHOP SUMMARY



Provide the following information:

- Notes/minutes of meeting, including the agenda and a list of participants and their role in the project
- 2. Answers to these questions (max. 2 paragraphs per question)
 - a) How does this work fit into existing capital plans and timelines?
 - b) How is the building poised for future BEPS compliance?
 - c) What is the plan if the building does not meet the Standard in Cycle 2?
 - d) Is the Prescriptive Pathway the right compliance method for this building?



OPERATIONS & MAINTENANCE PROGRAM



The action-based nature of the Prescriptive Pathway necessitates regular O&M program planning and reporting so that the building energy systems achieve their intended energy efficiency throughout the service life.

The details of the O&M program will vary based on the existing building systems and which EEMs are chosen as part of the Prescriptive Pathway.

O&M Program Requirements:

- Standard operating procedures that meet the specs in ASHRAE Std. 100-2018, Chapter 6
- Applicable building systems and elements in Annex D
- Implementation requirements in Annex L

Phase 2
Develop and
Submit O&M
Program

Phase 3
Attest to O&M
Program
Implementation

Phase 4
Update for New EEMs
and Attest to Continued
Implementation

RETRO-COMMISSIONING AS A PROPOSED EEM

Assessments

- On-site physical site walk-through required
- Trend analysis of BMS/BAS activity over 4-6 months

Corrective Actions

- Implement energy efficiency actions with paybacks less than 3 years or estimated savings of up to 5%
 Site EUI whole building consumption
- Implement indoor environmental quality actions

Value

- 5 points for one assessment and corrective actions
- 8 points for both assessments and corrective actions

RCx Professional must have one of these credentials:

- Professional Engineer (PE) licensed in any U.S. State
- Building Operator Certification (BOC) Level II
- Certified Energy Manager (CEM)
- Meets minimum qual. for DCRA Approved Commissioning Agent

Reports Due:

- Preliminary RCx Report at end of Phase 2
- Final RCx Report at end of Phase 4





FINAL EEM SELECTION

Targeted Savings:

 The project team must create a package of EEMs that achieve at least 25% savings in Site EUI where each Site EUI % is equal to 1 point.



Optimization of Package

- Occupant/employee and facility management team education and/or training shall be no greater than 2% of total Site EUI savings.
- If Retro-commissioning is included as a proposed EEM, RCx activities shall not comprise more than 5 to 8% of the total Site EUI savings.
- Replacing components of an existing fossil fuel burning system can be proposed as part of the recommend EEMs (ex. valve, pipe, etc.) Site EUI savings from replacement of the entire system with another fossil fuel burning system will not count towards the 25% savings target.



FINAL EEM SELECTION EXAMPLE

Energy Efficiency Measure	Estimated Site EUI Savings	Proposed Documentation
Facility Management staff training	2 % (max)	Invoice for energy efficiency training with attendees listed
Retro-commissioning: both assessments and corrective actions	8 % (max)	Final RCx Report (due Phase 4)
Lighting upgrade with sensors	8 %	DCRA permits, approvals, inspections, commissioning reports; final CDs
Air seal envelope penetrations	2 %	Invoices, attestation from contractor
Upgrade air distribution to VAV system	5 %	DCRA permits, approvals, inspections, commissioning reports; final CDs
Total Estimated Site EUI Savings	25 %	

The building owner will propose a final EEM package (to implement in Phase 3) that includes detailed descriptions, estimated costs, energy savings estimations, schematic design, and proposed methods of documentation to verify implementation of each EEM.

SAMPLE SUPPORTING DOCUMENTATION

	<u>. Ez </u> .
EEM Implementation	O&M-Type EEM Implementation
All required permits and approvals to legally implement each EEM. If EEM did not require permitting, an invoice paying for the implementation or attestation from building owner and contractor that the work was completed	Collateral or curriculum used to perform occupant/employee outreach
All legally required inspections that occurred during and after implementation of each EEM	Invoice for facilities team energy efficiency training with attendees' names listed
All commissioning and/or acceptance testing per District buildings codes Final design and construction documents (if available	Schedule of completed communications plan with number of attendees listed
at this time)	
Final Retro-Commissioning Report	

As part of the final EEM package, a building owner must propose how they will document and verify the implementation of each EEM at the end of Phase 3. The sample list in Table 12 is not comprehensive and other documentation can be proposed.

FINAL EEM PACKAGE SUBMISSION

- Project team information
- Building information
- Proposed final EEM package summary: Provide a brief oneparagraph summary that explains the full final EEM package. This section should provide high level savings estimates for the package.
- Individual EEM descriptions:
 - Overview of EEM
 - Estimated Savings
 - Proposed documentation for verification (Table 12)
- Schematic design of each EEM
- Occupant/employee outreach plan
- Facilities team training plan
- Retro-commissioning: If the building pursues RCx as part of the final EEM package, provide Preliminary Retro-commissioning Report.

Limit each EEM description to no more than 5 pages

Supporting documentation on the efficacy of the EEM is not included in the 5-page limit

Submit through the Portal



ACTION PLAN APPROVAL



After all deliverables from Phase 2 have been submitted, DOEE will review the complete package to ensure that it aligns with all requirements.

DOEE will issue an Action Plan Approval Letter containing:

- Approval of the final EEM package with point values assessed on a 25-point scale based on the total energy savings estimated (used to determine alternative compliance penalty adjustments described in Chapter 6);
- Approval of proposed documentation methods for the Phase 3 Implementation Verification; and
- Approval of proposed documentation methods for O&M program implementation, if audited.

After DOEE has issued the Action Plan Approval Letter, the building owner will have 30 days to appeal by submitting a revised Action Plan through the Portal. If the appeal is rejected, the building owner may proceed using the previously approved Action Plan or complete a Pathway Selection Change request to switch Pathways.



PHASE 2 REQUIREMENTS



Action Plan

- Integrated Design Workshop Report
- O&M Program Submission
- Final EEM Selection Submission with Supporting Documentation

COVID-19 PHE Delay Deadline

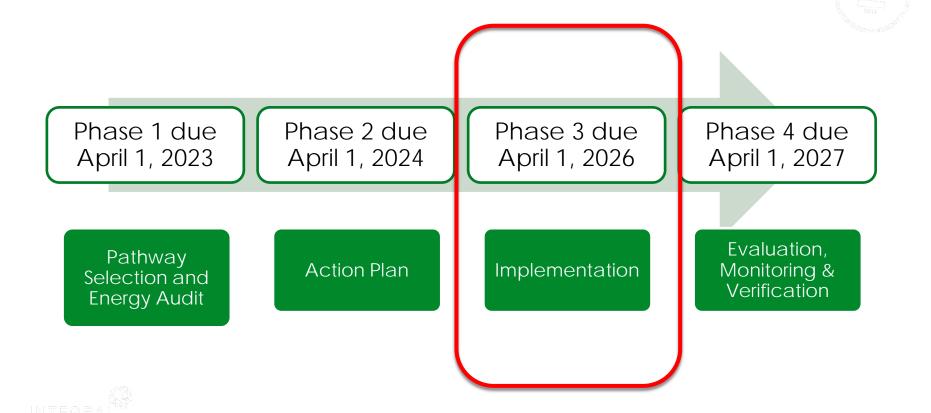
April 1, 2024

Original Cycle Deadline

April 1, 2023



PRESCRIPTIVE PATHWAY PHASES WITH COVID-19 PHE DELAY



IMPLEMENTATION REPORT



- Implementation Verification contains a summary of the implementation, testing, and commissioning work completed during Phase 3.
- If an EEM is not complete due to timing or climatic conditions, the building owner will describe the issue in the report submission, along with the steps needed to complete the EEM in Phase 4.
- Submit supporting documentation to prove the work was completed (Table 12).

Also attest that the O&M Program is being implemented



PHASE 3 REQUIREMENTS

Section of Society

Implementation

- Implementation Verification with Supporting Documentation
- Attest to Implementation of O&M Plan

COVID-19 PHE Delay Deadline

April 1, 2026

Original Cycle Deadline

April 1, 2025



PRESCRIPTIVE PATHWAY PHASES WITH COVID-19 PHE DELAY

Phase 1 due April 1, 2023 Phase 2 due April 1, 2024 Phase 3 due April 1, 2026 Phase 4 due April 1, 2027

Pathway Selection and Energy Audit

Action Plan

Implementation

Evaluation, Monitoring & Verification



EVALUATION, MONITORING, AND VERIFICATION

Section of the sectio

Phase 4 is an evaluation of the building's performance post-EEM implementation. The building owner:

- evaluates the success of each EEM,
- assesses any shortcomings in implementation, and
- makes necessary corrective actions to bring the building up to the expected savings level.

The owner will also complete any remaining actions from project implementation, such as final commissioning of equipment.

If RCx was pursued as an EEM, the building owner will submit a Final Retro-Commissioning Report.

Postimplementation Analysis

Unfinished Phase 3 Verification

Final O&M Program Update and Attestation





PHASE 4 REQUIREMENTS



Evaluation, Monitoring, and Verification

- Post-implementation report
- Submit O&M Program Update for new EEMs
 - Attest to continued implementation
- Report on deferred acceptance testing or commissioning done in Phase 4

COVID-19 PHE Delay Deadline

April 1, 2027

Original Cycle Deadline

April 1, 2026



PRESCRIPTIVE PATHWAY PHASES WITH COVID-19 PHE DELAY

Phase 1 due April 1, 2023 Phase 2 due April 1, 2024 Phase 3 due April 1, 2026

Phase 4 due April 1, 2027

Pathway Selection and Energy Audit

Action Plan

Implementation

Evaluation, Monitoring & Verification

Note: These dates are the deadlines. You can turn in reporting early and accelerate your timeline.







PRESENTATION AND Q&A 2nd PROPOSED BEPS RULEMAKING

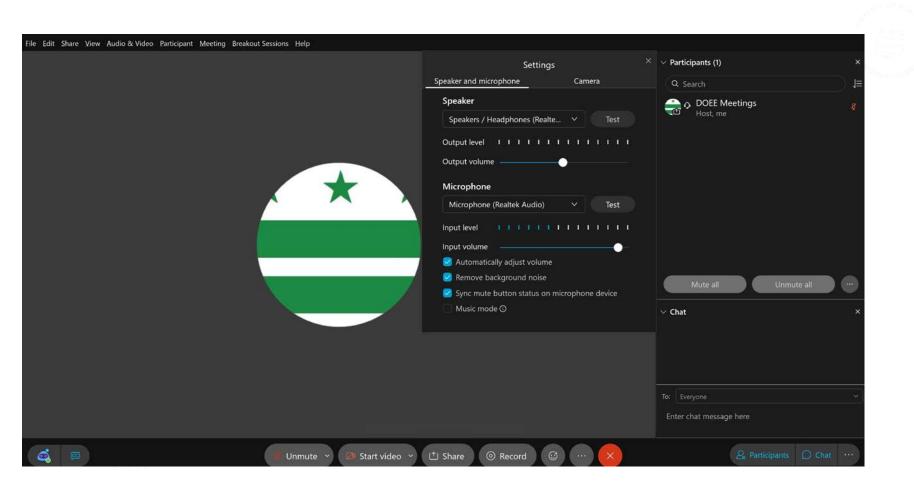
Presented by DOEE August 3, 2021















BEPS RULEMAKING

- 20 to the constant of the cons
- Proposed Rulemaking first posted in DC Register on December 4, 2020 https://www.dcregs.dc.gov/Common/NoticeDetail.aspx?NoticeId=N100436
- Second Proposed posted in DC Register on July 23, 2021 https://www.dcregs.dc.gov/Common/NoticeDetail.aspx?NoticeId=N111051
- 30-day public comment period on Second Proposed
- Comments due by August 23, 2021
- See DC Register posting for instructions on how to submit comments through USPS mail or email at <u>info.beps@dc.gov</u>

Please note - all citations referenced in this presentation in relation to these proposed regulations are subject to change until the regulations are finalized.



BEPS RULEMAKING SECTIONS (DCMR Title 20)



- § 3517 Building Energy Performance Standards (BEPS)
- § 3518 Building Energy Performance Compliance Pathways
- § 3519 Building Energy Performance Reporting and Verification
- § 3520 Building Energy Performance Exemptions and Compliance Delays
- § 3521 Building Energy Performance Standards Alternative Compliance Penalty, Violations, Fines, and Enforcement



KEY DEFINITIONS



- Building Energy Performance Standards or BEPS the level of energy efficiency set forth by DOEE as an ENERGY STAR score or Normalized Source EUI value for each property type, as provided in section 301(b) of the Clean Energy DC Omnibus Amendment (D.C. Official Code § 8-1772.21(b)).
- Building Energy Performance Standards Period or BEPS Period the period of time in which specific BEPS are in effect, which shall run from the date DOEE establishes BEPS until the next DOEE establishment of BEPS.
- Compliance Cycle a period of five (5) years from the date of the
 establishment of BEPS during which, in the absence of a delay of compliance
 granted by DOEE, a building must meet the performance requirements set
 forth in § 3518 and procedural requirements set forth in § 3519.
- Property type the primary function of a building as determined through Portfolio Manager.



SECTION § 3517: BUILDING ENERGY PERFORMANCE STANDARDS



- § 3517.1 Every six (6) years, DOEE shall establish the BEPS. DOEE shall publish notice of the BEPS in the *D.C. Register* before the relevant Compliance Cycle begins.
- § 3517.2 A building owner shall determine whether the building has met the 2021 BEPS as described in 20 DCMR § 3530.
- § 3517.3 A building that does not meet the BEPS shall have a Compliance Cycle of five (5) years from the effective date of the BEPS to meet the performance requirements set forth in § 3518 and the procedural requirements set forth in § 3519.



SECTION § 3517.4-.5: BEPS APPLICABILITY



BEPS 1

beginning January 1, 2021:

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

Follow § 3513 to determine size of building (Energy Performance Benchmarking of Privately-Owned Buildings)

BEPS 2

beginning January 1, 2027:

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



BEPS 3

beginning January 1, 2033:

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



SECTION § 3518.1: BEPS COMPLIANCE PATHWAYS

Performance Pathway § 3518.1(a)

20% decrease in Site
Energy Use Intensity (EUI)
averaged over the last
two (2) years of the
Compliance Cycle, as
compared to the Site EUI
averaged over the two
(2) years preceding the
first year of the
Compliance Cycle

Standard Target
Pathway
§ 3518.1(b)

For Property Types for which the BEPS is above the national median

Increase ENERGY STAR score to the BEPS
- OR -

Decrease Weather Normalized Source Energy Use Intensity (Normalized Source EUI) to the BEPS Prescriptive Pathway § 3518.1(c)

Meeting reporting
milestones across 4
phases and completing
DOEE-approved energy
efficiency measures set
forth in a final action plan
approved by DOEE and
designed to achieve
energy savings
comparable to
Performance Pathway

Reporting Milestones for all three pathways described in Section 3519

SECTION § 3518: OTHER COMPLIANCE PATHWAYS



Alternative § 3518.1(d)

Pathway proposed by the building owner and approved by DOEE

Designed to achieve energy savings comparable to Performance Pathway

2021 Option § 3518.1(e)

Only for BEPS Period Beginning January 1, 2021

Buildings may use EUI average of 2018-2019 baseline compared to 2026

Applicable to the Performance and Standard Target

INTEGRAL



SECTION § 3518.2-.3



- § 3518.2 Throughout a Compliance Cycle, a building owner shall consistently exclude gross floor area and energy consumption of spaces in accordance with the criteria in Portfolio Manager for excluding a space, unless that gross floor area and energy consumption was included in the District Benchmark Results and Compliance Report used to determine whether the building met the BEPS.
- § 3518.3 A building owner shall not, in the process of complying with this chapter, implement a measure that poses a threat to the health and safety of a building occupant or user, including by reducing indoor environmental quality.



SECTION § 3519: REPORTING & VERIFICATION

For BEPS Period beginning in 2021, for buildings that receive a delay under § 3520.7 shall have reporting and verification requirements deadlines set forth in this section shall be extended by one (1) year. (§ 3519.1)

All Pathways

- The building owner shall select a compliance pathway for DOEE review and approval no later than April 1, one (1) year from the start of the Compliance Cycle.
- DOEE will not approve selection of the prescriptive pathway until the energy audit (§ 3519.6) is submitted
- A building that receives a 1-year delay under § 3520.7(g) shall select one of the pathways in § 3518.1(c-e)
- If an owner does not select a compliance pathway or does not receive DOEE approval for a pathway, DOEE shall assign a pathway (§ 3519.3)
- All buildings have been automatically granted a one (1)-year delay for these reporting deadlines due to the COVID-19 PHE



SECTION § 3519: REPORTING & VERIFICATION



- Change a pathway A building owner may change a pathway during a Compliance Cycle for good cause shown by submitting a pathway change application and receiving approval from DOEE. (§ 3519.4)
- Completed Actions reporting For a building following either a performance or standard target pathway, a building owner shall submit a report of completed actions to DOEE through the Online BEPS Portal no later than April 1, five (5) years from the start of the Compliance Cycle. (§ 3519.5)



§ 3519.6: PRESCRIPTIVE PATHWAY REPORTING



Phase 1: by April 1 (1 year from start of Cycle)

Energy Audit

Phase 2: by April 1 (2 years from start of Cycle)

Action Plan

Phase 3: by April 1 (4 years from start of Cycle)

Implementation Report

Phase 4: by April 1 (5 years from start of Cycle)

Evaluation, Monitoring, and Verification Report



And additional documentation as identified by DOEE

SECTION § 3519: PRESCRIPTIVE PATHWAY TEAM



Energy Auditor must be a:

- Certified Energy Auditor,
- Certified Energy Manager, or
- Other licenses or credential posted on DOEE Portal (§ 3519.6(a)(2))

Any Retro-commissioning activities must be performed by:

- A person that meets DCRA minimum quals. for Cx Agent, or
 - Other licenses or credential posted on DOEE Portal (§ 3519.7)



SECTION § 3519: OTHER REPORTING & VERIFICATION

For an ACP, a building owner shall sign an agreement, and complete and submit all documentation in a timeframe required by the agreement.

(§ 3519.8)

A building owner may use a complete and accurate District Benchmark Results and Compliance Report to demonstrate the building has met its target.

(§ 3519.9)

A building owner shall provide any supporting documentation as requested by DOEE to determine compliance.

(§ 3519.10)

A report, a plan, or documentation required for compliance must be complete and accurate.

(§ 3519.11)

SECTION § 3519: PATHWAY DENIAL, REVOCATION, OR DESGINATION



§ 3519.12 DOEE may deny or revoke approval of a pathway and designate a different pathway specified in § 3518.1 if a building owner:

- a) Fails to submit a complete and accurate report, plan, or documentation as required; or
- b) Fails to implement a requirement of a DOEE-approved compliance pathway;
- c) Failed to demonstrate energy savings required by a DOEE-approved pathway for the previous Compliance Cycle.



SECTION § 3519: CHANGE OF OWNERSHIP DISCLOSURE

§ 3519.13 – If ownership of a building that does not meet the BEPS is transferred during the Compliance Cycle, the seller shall provide the buyer of the following information prior to the transfer or sale:

- Any information, plans, or reports submitted to DOEE as required by the building's approved Compliance Pathway.
- The most recent complete and accurate District Benchmark Results and Compliance Report for the building.
- Information describing any progress toward meeting the energy performance requirements.

§ 3519.14 - If ownership of a building covered is transferred during a Compliance Cycle, the buyer shall notify DOEE of the transfer or sale within sixty (60) days after the completion of closing.

SECTION § 3520: DELAY OF COMPLIANCE

- A building owner may apply for an exemption from or delay in compliance with the performance and procedural requirements. (§ 3520.1)
- A building owner seeking an exemption or delay shall submit a request describing the exemption or delay sought and the reason the exemption or delay is being requested. The request shall include documentation that substantiates the basis for the request, such as financial information, deeds, building and construction permits, technical reports, invoices, or other proper documentation. (§ 3520.2)
- DOEE shall grant a delay in compliance for up to three (3) years upon a showing of good cause by the applicant that one or more of the circumstances described in § 3520.7 exist. For qualifying affordable housing buildings, DOEE may grant a delay in compliance of more than three (3) years: (§ 3520.4-6)





SECTION § 3520: DELAY OF COMPLIANCE REASONS

§ 3520.7 For a building owner to demonstrate good cause for granting a delay of compliance, the building owner must provide substantial evidence that one or more of the following circumstances exist, and that the circumstance(s) make meeting the energy performance requirements by the end of the Cycle practically infeasible:

- Financial distress
- Change of ownership during a Cycle
- Building undergoes major renovation
- Building becomes unoccupied
- Pending demolition:
- Change in primary property type

- For the BEPS Period 1, the building was consuming energy during the COVID-19 PHE
- Building is on the DC Inventory of Historic Sites (maintained by OP)or is designated as contributing to a historic district
- Building is implementing an innovative approach to energy efficiency.



SECTION § 3520: COVID-19 PHE DELAY

For the BEPS Period beginning in 2021, an owner of a building subject to compliance under § 3517.4(a), in keeping with § 3520.7(g), shall receive a one (1)-year delay of compliance upon DOEE receipt of the building's 2020 District Benchmark Results and Compliance Report, unless the building owner requests not to receive this delay. A delay of compliance granted pursuant to this subsection shall not preclude DOEE from granting additional delays in compliance under §§ 3520.5 or 3520.6; provided, that, for a building other than a qualifying affordable housing building, all delays may not, in total, exceed three (3) years. (§ 3520.8)



SECTION § 3520: OTHER DELAY OF COMPLIANCE ITEMS



- DOEE may attach additional conditions to a delay of compliance, including adjustments to the building's compliance pathway, or additional reporting and verification requirements to move a building toward compliance. (§ 3520.9)
- A delay approved during one Compliance Cycle does not extend the requirement for a building to meet the BEPS established for the next BEPS Period or the requirements for the next Compliance Cycle. (§ 3520.10)



SECTION § 3521: ALTERNATIVE COMPLIANCE PENALTY

- A building owner that fails to demonstrate complete implementation of a compliance pathway as required by § 3518.1 at the end of a Compliance Cycle shall be assessed an alternative compliance penalty.
 - The maximum penalty for a building shall be <u>ten dollars</u> (\$10) per each square foot of gross floor area of the building calculated by ENERGY STAR™ Portfolio Manager for the District Benchmark Results and Compliance Report submitted by the building owner at the end of the Compliance Cycle or at the end of a delay granted by DOEE pursuant to §§ 3520.5 or 3520.6, whichever is later. The <u>maximum penalty shall be no greater than seven million five hundred thousand dollars</u> (\$7,500,000).
 - A College/University Campus or Hospital Campus shall pay a maximum penalty of no greater than seven million five hundred thousand dollars (\$7,500,000);
- The maximum penalty set in § 3521.1(a) and (b) shall be reduced proportionally to the building or campus performance relative to its pathway target as described in § 3521.2.

SECTION § 3521: PENALTY ADJUSTMENTS

		% FF==\(\frac{1}{2}\)
Pathway	Adjustment Factor	Example
Performance pathway under §§ 3518.1(a) or 3518.1(e)(1)	The penalty shall be adjusted by calculating the percent of Site EUI reduction achieved divided by twenty percent (20%).	Building A achieves a 10% reduction in Site EUI. Its penalty is reduced by fifty percent (50%) (10/20 = 50%).
Prescriptive pathway under § 3518.1(c)	The penalty shall be adjusted by calculating the number of prescriptive pathway points actually earned divided by total needed.	Building C completes measures worth fifteen (15) points but needs twenty-five (25) to meet the energy performance requirements. Its penalty is reduced by sixty percent (60%) (15/25 = 60%).
Alternative compliance pathway under § 3518.1(d)	The penalty shall be adjusted using adjustment factors described in the alternative compliance pathway approval from DOEE and shall be no less stringent than penalties for other pathways as described under § 3519.8.	

INTEGRAL

SECTION § 3521: STANDARD TARGET PATHWAY



Pathway	Adjustment Factor	Example
Standard Target Pathway under §§ 3518.1(b) or 3518.1(e)(2)	The penalty shall be adjusted at two points: 1. A building approved for the Standard Target Pathway would require less than a twenty percent (20%) reduction in Source EUI to meet the BEPS, and will receive an adjustment to its penalty for its initial performance relative to the BEPS.	1. Building B starts ten (10) points away from the BEPS at the beginning of the Compliance Cycle. All buildings of building B's property type could meet the BEPS with at most a twenty percent (20%) reduction in Source EUI if they started the Compliance Cycle at fifteen (15) points away from the BEPS. (1-(10/15) = 33%) 2. Building B gains four (4) points by the end of the Compliance Cycle but needs 10 (10) total to meet the standard. Therefore, adjusted penalty is then reduced again by forty percent (40%). (4/10= 40%)
	2. Savings achieved at the end of the Compliance Cycle divided by savings required to meet BEPS.	3. The final penalty is reduced by sixty percent (60%), and thus is forty percent (40%) of the maximum alternative compliance penalty described in § 3521.1. (1-33%)*(1-40%)) = 40%

- § 3521.3 Notwithstanding § 3521.2, a building owner may be assessed the maximum alternative compliance penalty in accordance with § 3521.1, regardless of the building's performance relative to its pathway target, in addition to any other applicable fines, if the building owner:
 - Knowingly withholds information or submits inaccurate information;
 - Fails to submit a complete and accurate District Benchmark Results and Compliance Report at the end of the Compliance Cycle or at the end of a delay granted by DOEE pursuant to §§ 3520.5 or 3520.6; or
 - Implements a measure that poses a threat to the health and safety, including the reduction of indoor environmental quality, of a building occupant or user pursuant to § 3518.3.
- § 3521.4 A building owner violating a provision in §§ 3517 through 3520 shall be fined according to the schedule set forth in Title 16 (Consumer, Commercial Properties, and Civil Infractions) of the District of Columbia Municipal Regulations.

SECTION § 3599: DEFINITIONS



Added:

- Energy Audit
- High-performing property type
- Limited-equity Cooperative (LEC)
- Operations and maintenance program
- Qualifying affordable housing

Removed:

- Affordable housing
- National median
- Property type
- Source EUI
- Weather-Normalized Source EUL

Edited:

Building Owner









RULEMAKINGS



- BEPS Establishment Rules (20 DCMR 3530)
 - https://www.dcregs.dc.gov/Common/NoticeDetail.aspx?NoticeId=N107118
 - Finalized April 30, 2021 (Effective Jan 1, 2021)

Second Proposed BEPS Compliance Rules

- https://www.dcregs.dc.gov/Common/NoticeDetail.aspx?NoticeId=N111051
- Redline:
 - https://doee.dc.gov/sites/default/files/dc/sites/ddoe/service_content/attachments/20 %20DCMR%20Ch.%2035%20Green%20Building%20Requirements%203517%203521%20359 9_red%20lines.docx
- 30 Day Public Comment Period closing August 23, 2021

Benchmarking Rules

- Proposed (public comment period closed in January):
 https://www.dcregs.dc.gov/Common/NoticeDetail.aspx?NoticeId=N100435
- More information coming soon







