

# BEPSDC Task Force

March 2, 2021

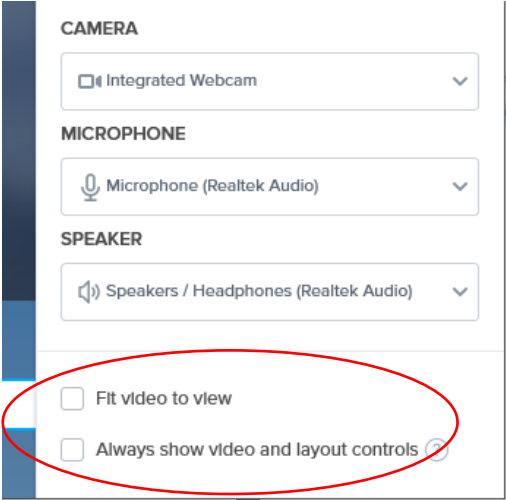
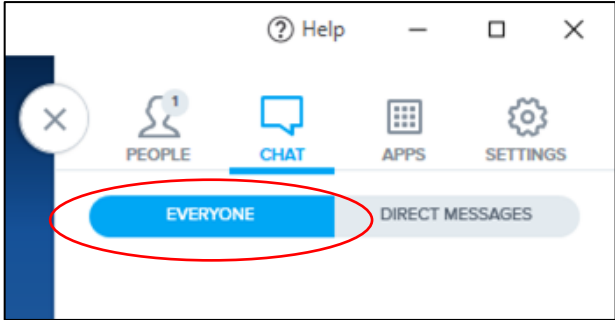
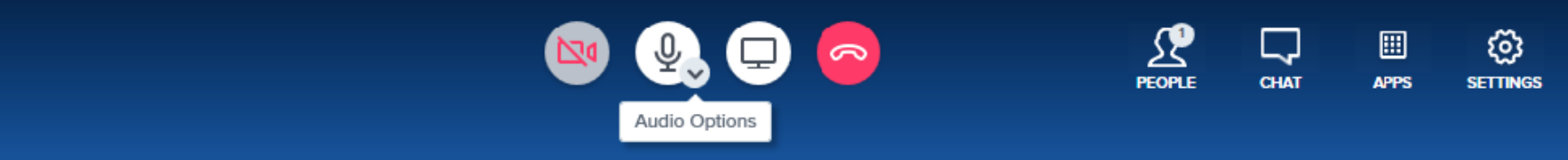


@DOEE\_DC  
#BEPSDC

\*\*\* DEPARTMENT  
OF ENERGY &  
ENVIRONMENT  
GOVERNMENT OF THE DISTRICT OF COLUMBIA

WE ARE  
WASHINGTON  
DC GOVERNMENT OF THE  
DISTRICT OF COLUMBIA  
MURIEL BOWSER, MAYOR

# BLUEJEANS TOUR



INTEGRAL

# ONLINE MEETING ETIQUETTE

- The meeting is being recorded and will be posted to our website
- Questions and Comments throughout the meeting:
  - All attendees will control their own mute function but could be muted by the facilitator due to background noise
  - Task Force Members – can comment at any time
  - Non-Task Force Members - please use the chat box to request to talk
- Attendance
  - Non-Task Force Member – please use the chat box at this time to register your name, organization and email to “sign in”
  - Task Force Members - roll call (will also use this for voting)

# ROLE OF TASK FORCE



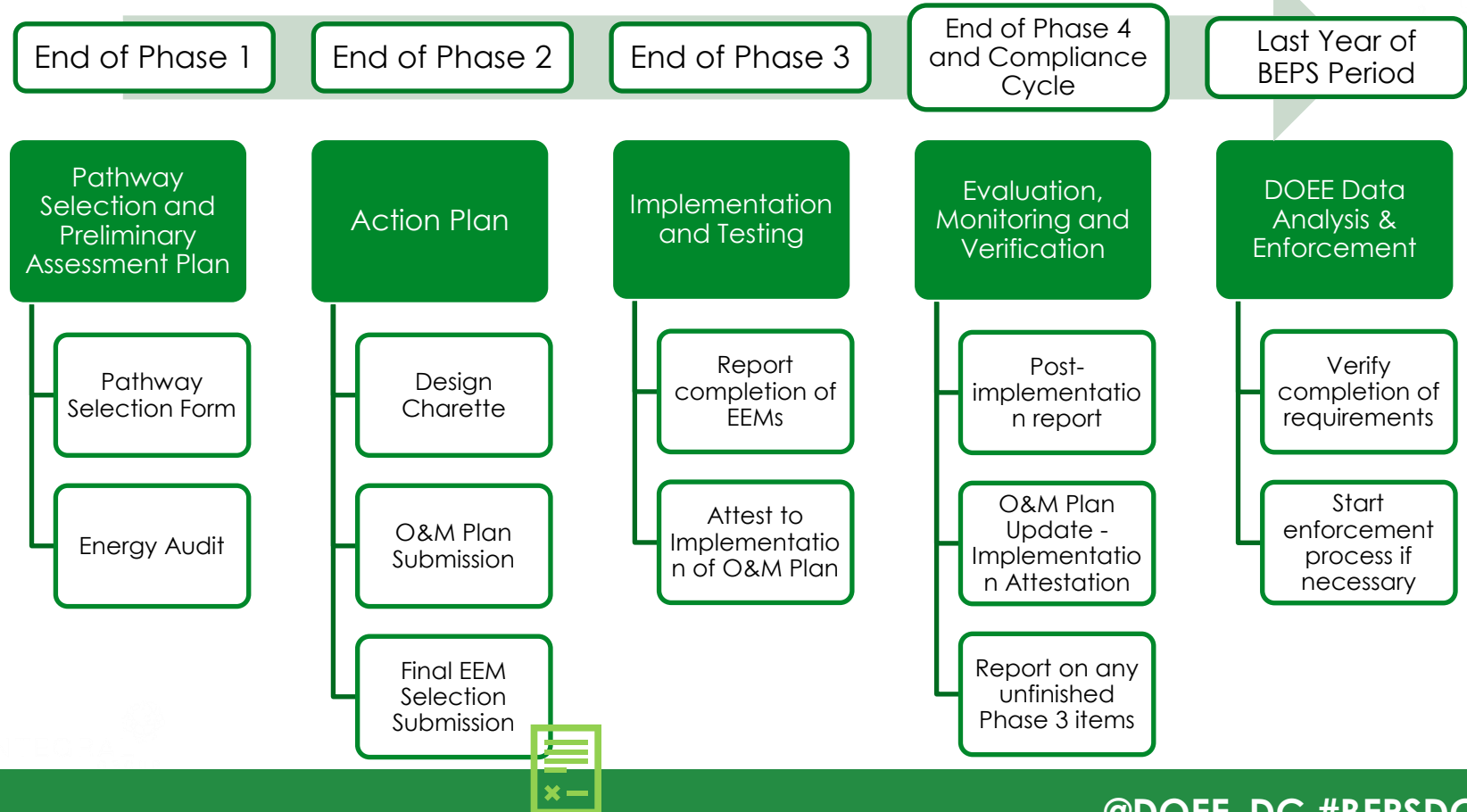
- Advise DOE on creation of an implementation plan for the Building Energy Performance Program;
  - Recommend amendments to proposed regulations issued by DOE;
  - Recommend complementary programs or policies.
- 
- If topic needs in-depth discussion, anyone can suggest moving to a committee
  - This is an open meeting - everyone is allowed to participate

INTERNAL

# AGENDA

- Administrative Items
- Prescriptive Pathway revisited
- Retro-commissioning discussion
- Baseline Adjustments
- Program Updates (PSC FC1148, Construction Code Cycle)
- Announcements

# PRESCRIPTIVE PATHWAY PHASED SUBMISSIONS



# MINIMUM % SAVINGS IDENTIFICATION IN AUDIT

Proposed

- Baseline Identification for Energy Audit purposes
  - the baseline year used to measure energy efficiency gains should be an average of Calendar Year 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) as per the building's District Benchmarking Reports

# MINIMUM % SAVINGS IDENTIFICATION IN AUDIT

Proposed

- Minimum Savings Identified
  - if the baseline Site EUI is above the [EPA national median](#) Site EUI for that building's property type, then the energy audit must identify EEMs that total at least 40% savings from the baseline Site EUI
  - for all other buildings, the energy 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, they must submit a statement with the Energy Audit submission explaining why they could not identify the EEMs

DOEE will be outlining definitions for auditors to use in calculating cost-effectiveness and financial considerations that should help with the % requirements



# TARGETED SAVINGS % FOR FINAL EEM PACKAGE

Proposed

The Project Team must create a final package of EEMs for implementation in Phase 3 that target at least 25% savings in Site EUI.

## FOSSIL FUEL BURNING EQUIPMENT

Replacement of components of an existing fossil fuel burning system can be included in the energy audit, but in the Phase 2 Final EEM package, Site EUI savings from the installation of new or replacement fossil fuel burning equipment/systems will not count towards the 25% savings target.

# DESIGN CHARETTE GUIDANCE

Proposed

Identification of Charette Guidance used:

- DOEE [Integrated Design Charrette Toolkit](#)
- National Renewable Energy Laboratory (NREL) [Handbook for Planning and Conducting Charrettes for High-Performance Projects](#)
- Enterprise Green Communities [Green Charette Toolkit](#)
- Whole Building Design Guide [Integrated Design Charette](#)
- **Other?**

# DESIGN CHARETTE QUESTIONS

Proposed

Questions to be answered (1-2 paragraphs for each) during the charrette and submitted on DOEE form along with agenda and meeting minutes at end of Phase 2:

- How is the building poised for future BEPS compliance?
- Does the building owner have a plan if the building does not meet the BEPS in Cycle 2?
- How does this work fit into existing capital plans and timelines?
- Is Prescriptive Pathway the right compliance method for this building?
- **Other?**

# OPTIMIZATION OF FINAL EEM PACKAGE

Proposed

- Removed larger % targets for individual items
- Occupant and staff training can be no greater than 2% of total Site EUI savings.
- **Retro-commissioning** existing systems, that are not going to be replaced, shall not comprise more than 5% of the total Site EUI savings target\*

- PNNL developed a RCx template, examining ASHRAE Guideline 1.2 and existing city ordinances (Seattle, LA, ATL, NYC)
- Propose forming a **technical sub-committee** to meet over the next 1-2 months to vet information from PNNL and create DC template and requirements:
  - Define “optimal performance” for components of key building systems
  - What building owners/commissioning agents will do to qualify for RCx points: sample systems, identify deficiencies, detail corrective actions, and end conditions
  - Identify reporting requirements: i.e., sampling protocol, % samples, deficiencies identified, corrective actions taken, end use conditions, completion energy and cost savings estimations
  - Should we have two levels with different point values? E.g. Tune-up = 5% vs. Full RCx = 10%

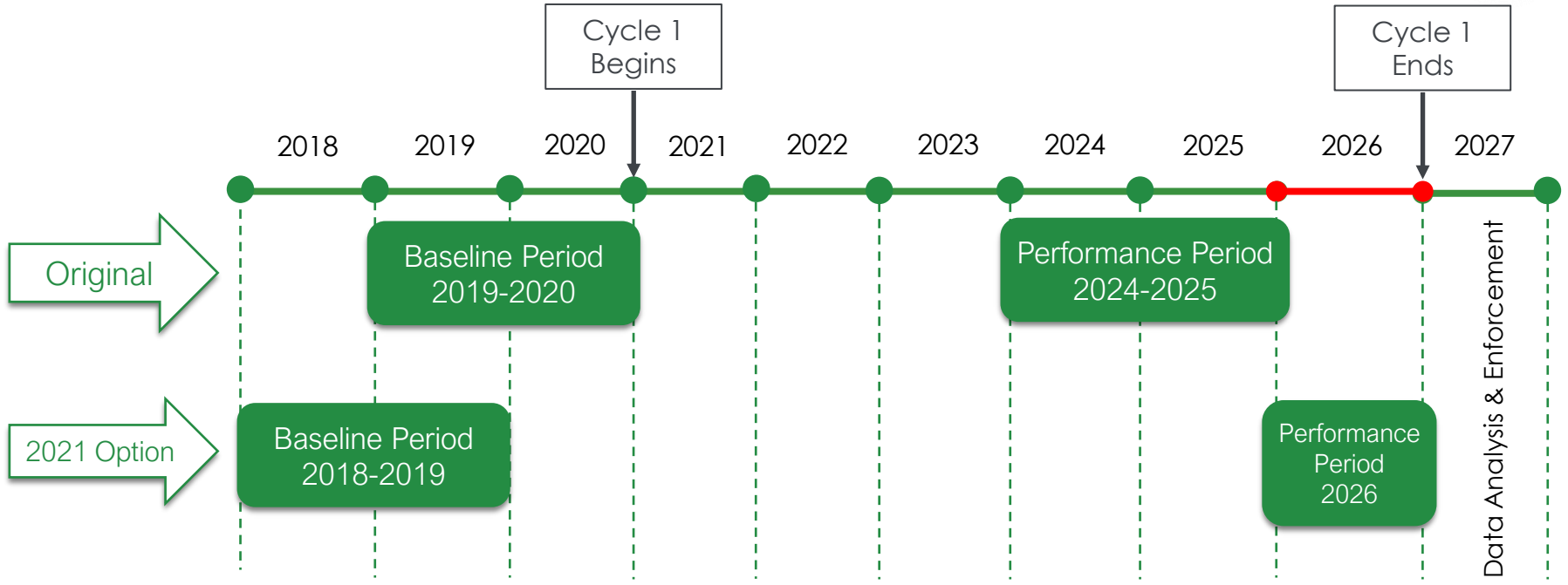
# BASELINE ADJUSTMENTS FOR PERFORMANCE-BASED PATHWAYS

Proposed

- Evaluation of compliance for performance-based pathways are based on two evaluation periods: baseline period & performance period
- Two options for Cycle 1 (must choose one):
  - Original - Baseline is 2019-2020 and Performance is 2024-2025
  - 2021 Pathway Option - Baseline is 2018-2019 and Performance is 2026
- Two types of adjustments:
  - Baseline shifting – changing the year(s) used (Ex. 2018 instead of 2018-2019)
  - Baseline modification – adjust baseline Site EUI based on estimated or measured energy penalty incurred for activities during the cycle.

# EVALUATION PERIOD OPTIONS

Proposed



Choose Original or 2021 Option:  
cannot mix dates

# BASELINE ADJUSTMENT ELIGIBLE CIRCUMSTANCES

Proposed

In special circumstances, the building owner could apply for an adjustment of their baseline:

- **Previously Completed EEMs:** EEMs were implemented during CY2018-2020
- **Low Occupancy in Building:** Buildings that were below the occupancy threshold criteria established (*must be for both years in baseline*).
- **Addition/Demolition to a Building:** Buildings that add or demolish square footage that significantly affects the building's energy consumption.
- **New Construction or Demolition on a Campus:** Campuses that construct or demolish new buildings that significantly increase the campus's energy consumption.



# BASELINE ADJUSTMENT ELIGIBLE CIRCUMSTANCES

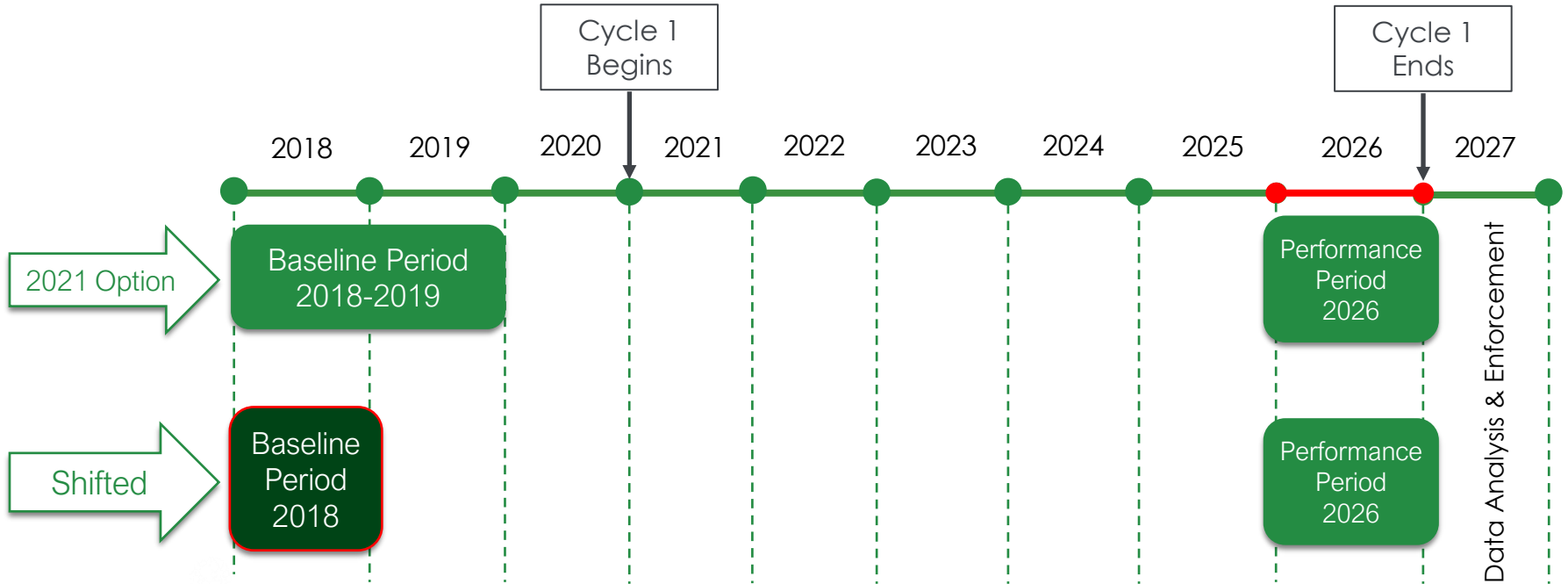
Proposed

- **Historic:** Buildings that demonstrate full compliance with the energy performance requirements presents a significant undue burden given historic building restrictions.
- **New Ventilation:** Buildings that were previously unventilated that have installed or are planning to install new ventilation systems and as a result demonstrate or expect to demonstrate an increase in energy consumption.
- **Low/No Global Warming Potential (GWP) Refrigerants:** Buildings that replace high GWP refrigerants with low/no GWP refrigerants, or are installing new low/no GWP refrigerants, that result in energy efficiency losses.
- **Other circumstances** determined by DOE

# EXAMPLE OF BASELINE SHIFTING FOR 2021 OPTION

Proposed

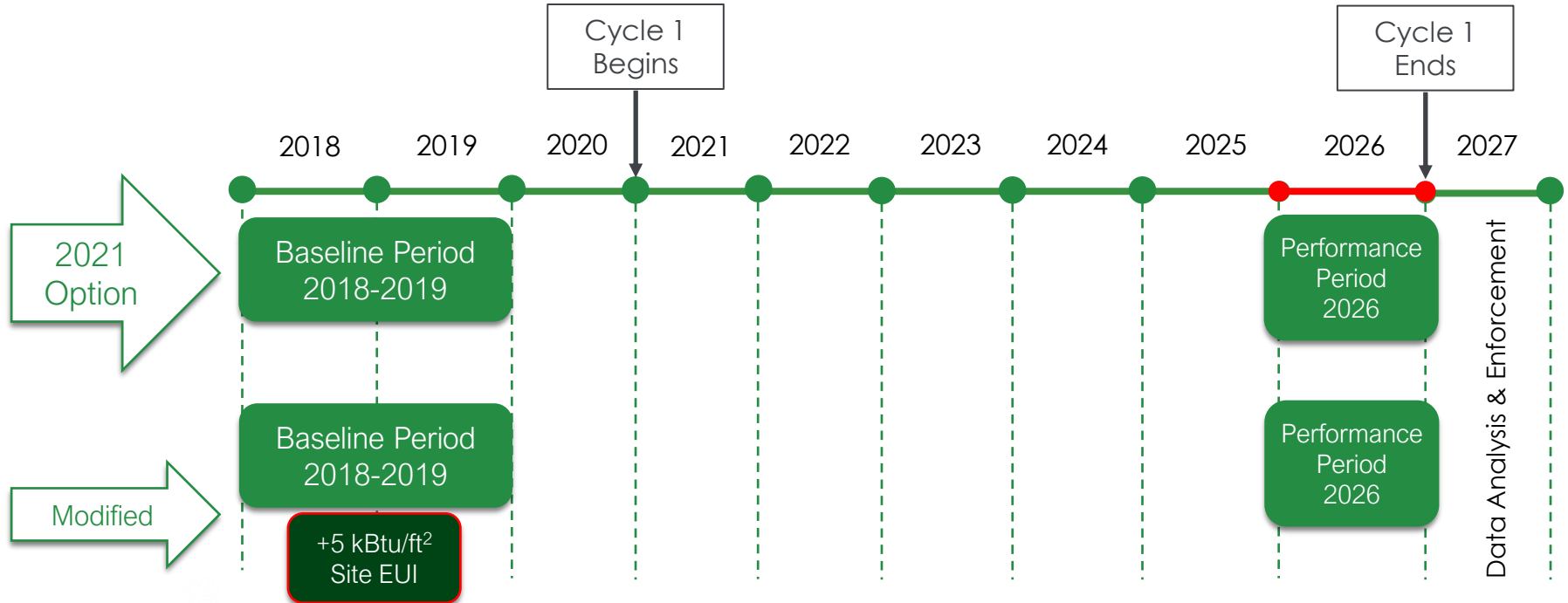
Building implemented an EEM in 2019 that reduced Site EUI. Instead of faulting the building with a more aggressive target, DOEE will shift the baseline back a year to allow the building to count the savings towards compliance.



# EXAMPLE OF BASELINE MODIFICATION

Proposed

Building added increased ventilation that added 5 kBtu/ft<sup>2</sup> to its annual energy consumption. Instead of penalizing for improvements, DOE will modify the unavoidable energy to the baseline period.



# BASELINE ADJUSTMENT QUESTIONS

- Are there any other circumstances that should be explicitly spelled out?
- Are some of these temporary, for first cycle only?
- Are there long-term impacts we need to consider?

- Previously Completed EEMs
- Low Occupancy in Building
- Addition/Demolition to a Building
- New Construction or Demolition on a Campus
- Historic
- New Ventilation
- Low/No Global Warming Potential (GWP) Refrigerants
- Other circumstances

# PUBLIC SERVICE COMMISSION – FC1148 UPDATE

**Formal Case 1148:** investigation into the establishment and implementation of energy efficiency and energy conservation programs targeted towards both affordable multifamily units and master metered multifamily buildings which include low and limited-income residents in the District of Columbia

<https://edocket.dcpssc.org/public/search/casenumber/fc1148>

Resulted in the Pepco Whole Building Deep Retrofit Multifamily Energy Efficiency Program:

<https://www.icastusa.org/home/services/dsm/pepco/>

# PEPCO WHOLE BUILDING DEEP RETROFIT MULTIFAMILY ENERGY EFFICIENCY PROGRAM

- \$11.25M program; funds are from the Exelon-Pepco merger
- Implemented by the International Center for Appropriate & Sustainable Technology (ICAST)
- Launched Jan. 1, 2021 (3-year program)
- Key program elements:
  - Restricted to income-eligible master or individually metered MF bldgs.
  - Serves both in-unit residential and common area/exterior commercial meters
  - Custom incentives based on early retirement of inefficient systems
  - One-stop-shop services incl. audit, develop scope of work, identify local contractors, obtain bids, help w/ access to financing, conduct inspections of contractor work, help owners benchmark their portfolio.

# ALIGNMENT WITH BEPS

- A stated goal of the program: “Provide financial and technical assistance to owners of multifamily buildings that serve primarily low- and limited-income households to help meet BEPS.”
- Same income eligibility definition as in the CEDC Act
- ICAST must achieve average energy savings exceeding 20% per building, across the portfolio of MFAH properties served by the program
- Incentive structure that encourages deeper savings:
  - Less than 20% savings = \$0.36/kWh
  - 20% but less than 30% savings = \$0.56/kWh
  - 30%+ savings = \$0.72/kWh
  - ICAST will target BEPS Cycle 1 non-compliant bldgs.

# 2023 CONSTRUCTION CODE DEVELOPMENT

- Construction Codes Coordinating Board is **commencing a new code development cycle** (goal is 2023 adoption)
- **Proposed changes** to model codes listed here are requested **by March 29, 2021**
- Information on how to participate is available in the DC Register posting: <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.



# 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**

- Funding Clean Energy Projects – March 10, 2021
- Getting Ready for BEPS – April 14, 2021

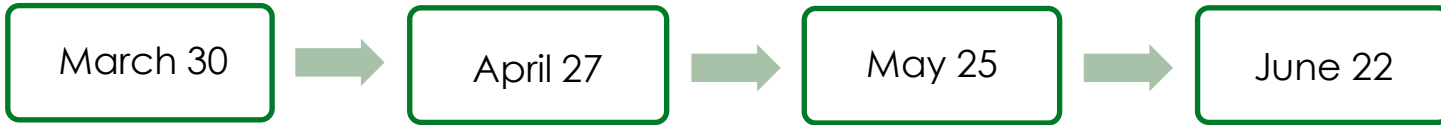


# BEPS RULEMAKING

- Posted in DC Register on December 4, 2020:  
<https://www.dcregs.dc.gov/Common/NoticeDetail.aspx?NoticeId=N100436>
- Extended comment period - due by **March 4, 2021**
- See DC Register posting for instructions on how to submit comments through USPS mail or email at [info.beps@dc.gov](mailto:info.beps@dc.gov)
- Dec. 15 Presentation and Q&A available at:  
<https://doee.dc.gov/node/1436881>



# OVERALL SCHEDULE



## **Tentative** Agenda Items

- Cost/benefit study; intro to WD – March 30?
- Workforce Development discussion – April 27
- Compliance Guidebook presentation
- Public Service Commission updates – as needed
- Complementary program evaluation; Pathway review session

# NEXT MEETING

**March 30 @ 2:30pm**

- Agenda TBD





# ANNOUNCEMENTS

