

BEPSDC Task Force

May 5, 2020



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#BEPSSDC

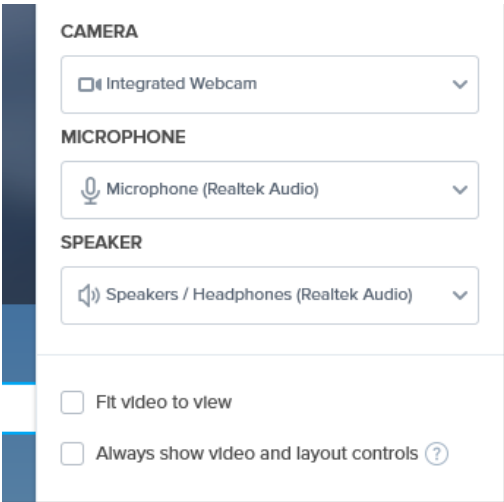
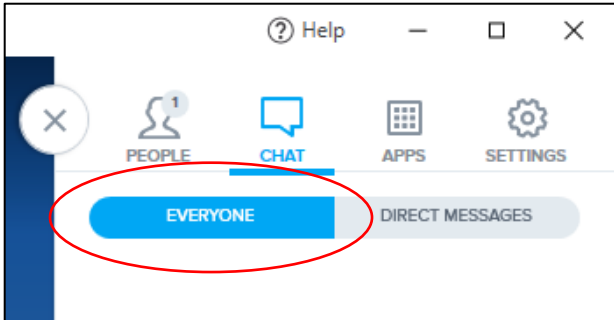
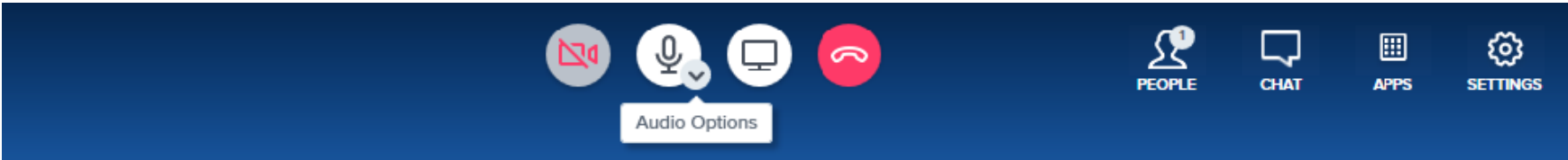
*** DEPARTMENT
OF ENERGY &
ENVIRONMENT
GOVERNMENT OF THE DISTRICT OF COLUMBIA

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

ONLINE MEETING

- The meeting is being recorded and will be posted to our website
- Questions and Comments throughout the meeting:
 - Task Force Members – will stay un-muted but please mute if you are not talking to avoid background noise
 - Non-Task Force Members will be muted on entry - please use the chat box to request to talk
- Attendance
 - Task Force Members - roll call (will also use this for voting)
 - Non-Task Force Member – please use the chat box at this time to register your name, organization and email to “sign in”

ONLINE MEETING



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; and
 - Recommend complementary programs or policies.
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- If topic needs in-depth discussion, anyone can suggest moving to a committee
 - This is an open meeting - everyone is allowed to participate

MEETING SCHEDULE

- January 7 – Property Types, Equivalent Metric
- January 21 – Performance Path, Other Pathways
- February 4 – Penalties and Enforcement, Exemption Criteria/Process
- February 18 – Prescriptive Pathway and Penalty Structure
- March 3 – Sub-Committees, Prescriptive Pathway process, Bike Rack items
- March 31 – Vacancy/Occupancy, Equivalent Metric, 5% Property Type Group Issues, Setting Standard above Local Median, Higher Ed/Hospital Carve-out introduction
- April 14 – Standard Target Pathway, Extended ACP for Deep Retrofits , Bike Rack Review for Rule-making Items
- April 28 - Tradable Allowances, Standard Target, Extended ACP for Deep Retrofits, Penalties Matrix
- **May 5 – Penalties Matrix (cont.), Extended ACP for Deep Retrofits, Bike Rack Review (Historical, Mixed-Use, District Energy, Solar), Portfolios**
- May 12 – Draft Rules Outline, any outstanding rules issues

AGENDA

- Administrative Items
- Voting on Items from Previous Meeting
- Bike Rack Review for Rule Making Items
 - Historical Districts
 - Mixed-Use Properties
 - District Energy Systems
 - Solar Installations
- Penalties (continued)
- Announcements

ITEM 1: STANDARD TARGET PATHWAY

Standard Target Compliance Pathway

Buildings that do not meet the standard must reduce Site EUI by 20% or reduce Source EUI to meet the standard for its property type group.

Offer as an alternative compliance path every cycle.

PORTFOLIO GOALS

- District-wide credit trading system? **Not in first cycle**
- Recommendation from Public Building sub-committee that property type groups 100% owned by “one owner” could use a portfolio goal to satisfy compliance each cycle
- Should BEPS allow a portfolio goal outside the above recommendation (i.e. large building owners)? **As Alternative Compliance Path on a case-by-case basis. Building Owner would have to apply.**

ITEM 2: PROPERTY GROUPS OWNED 100% BY ONE OWNER

In property type groups where one building owner owns all of the properties in that group, the owner would be allowed to use a portfolio goal for the buildings in that group as an alternative compliance path.

ITEM 3: PORTFOLIO GOAL FOR BUILDING OWNERS

DOEE will allow Building Owners to apply to use a portfolio goal as an Alternative Compliance Path on a case-by-case basis. Building Ownership determination for that portfolio would have to be part of the application.

DEEP RETROFIT ASSUMPTIONS

- Affordable Housing will have their own process that takes into account their 15-year financial process
- Extension process will be in place if an owner needs more time for project planning or financial reasons for deep retrofit projects

ITEM 4: DEEP RETROFIT PATHWAY PROPOSAL

Buildings that do not meet the standard at the beginning of the compliance period may submit to DOEE by the end of the first year of the compliance cycle a compliance plan that shows a Deep Energy Retrofit with modeled energy savings greater than **XX%** in return for **2-3** cycles of compliance.

- Design/modeling, permitting, construction, and commissioning of the Deep Energy Retrofit must be completed during the first compliance cycle.
- Savings equal to or greater than the modeled energy savings proposed must be shown by the end of the second compliance cycle otherwise the building will be subject to penalties for both compliance cycles.

ITEM 5: ALTERNATIVE COMPLIANCE PATHS

DOEE will allow Building Owners to propose Alternative Compliance Path on a case-by-case basis. DOEE will publish a criteria of consideration.

We will provide criteria. We'll talk about this more on the May 12.

ITEM 6: HISTORIC DISTRICTS

- **Question on Bike Rack:** Should properties in Historic Districts receive special treatment in the rules?
- **DOEE's Assumption:** Historic restrictions do not mean efficiency work cannot happen, only that it might take longer/cost more to complete.
- Current exemption/extension criteria (hardship) cover this scenario.

ITEM 7: MIXED-USE PROPERTIES

- **Question on Bike Rack:** Should mixed-use properties have their own standard?
- **DOEE's Assumption:** Most mixed-use properties in the District are either; a) benchmarking incorrectly, or b) vacant at this time.
 - For the few true mixed-use properties DOEE can use the National Median (89.3 kBtu/Square Foot) or,
 - Building owners can apply for DOEE to create a blended median based on % square footage of each property type.

ITEM 8: DISTRICT ENERGY SYSTEMS

- **Question on Bike Rack:** Should properties with district energy systems receive special treatment in rules (outside of campuses)?
- **DOEE's Assumption:** Does not think special treatment is required.

ITEM 9: SOLAR INSTALLATIONS

- **Question on Bike Rack:** Should properties be able to comply by installing solar on their buildings?
- **DOEE's Assumption:** Performance path dictates site EUI, which counts solar the same as other fuel.
 - Standard Target pathway, which will use ENERGY STAR Score or source EUI will allow for on-site-solar to count in a way.
 - Working group recommended solar should count as part of the prescriptive path if paired with other efficiency measures like roof replacement.

PREVIOUS POINTS OF AGREEMENT ON PENALTY STRUCTURE (TASK FORCE AND WORKING GROUPS)

Penalty Structure

- Penalties should be adjusted on building size.
- Penalties should be adjusted on a buildings relative performance to it's compliance pathway.
- Penalties should not be adjusted to building's assessed value.

PENALTY STRUCTURE FOR NON-COMPLIANCE

DOEE's Assumptions:

- All penalties will be based on the performance path.
- Failure to comply with prescriptive pathway (or any alternative compliance path) will result in the building defaulting to the performance path.

Options for calculating fines:

- Flat Penalty
- Square Footage Bin Based Penalty
- Per Square Foot Based Penalty
- Flat Penalty Adjusted for Distance from Target
- Flat Penalty Adjusted for Distance from Standard
- Combination of two of the above

KBTU OVER TARGET PENALTY

Penalty is based on building's kBtu consumption over target

- **Example A:**

- 90,000 square foot Multifamily Building
- ENERGY STAR Score of 31 (Standard = 64)
- Site Energy Consumption by 2025 = 8,189,100 kBtu
- Site Energy Consumption target = 7,279,200 kBtu
- Adjusted Non-Compliance Penalty = \$90,990

- **Example B:**

- 200,000 square foot Office Building
- ENERGY STAR Score of 59 (Standard = 68)
- Site Energy Consumption by 2025 = 27,429,222 kBtu
- Site Energy Consumption target = 25,815,739 kBtu
- Non-Compliance Penalty = \$161,348

Please note that fine/penalty monetary levels have been provided for illustration purposes only.

- Penalty amounts based on \$0.1 per kBtu
- Penalty doesn't necessarily track with square footage (large range of consumption at smaller square feet)
- Potentially greater penalty for higher consuming property types

DOEE's PREFERENCE: Square Footage bins + Distance from Target Penalty

Flat Penalty is based on square footage bin and is reduced based on buildings performance

- **Example A:**

- 90,000 square foot Multifamily Building
- ENERGY STAR Score of 31 (Standard = 64)
- Makes 10% reduction by 2025
- Non-Compliance Penalty = \$75,000
- Adjusted Non-Compliance Penalty = \$37,500

- **Example B:**

- 200,000 square foot Office Building
- ENERGY STAR Score of 59 (Standard = 68)
- Makes 15% reduction by 2025
- Non-Compliance Penalty = \$200,000
- Adjusted Non-Compliance Penalty = \$50,000

- “Per Square foot” can be hard to verify.
- Buildings will know their penalty potential from the beginning of the compliance period.
- DOEE can easily adapt this for the standard target pathway.
- **Question for Task Force:** Should we include a penalty floor?

COMPARISON OF PENALTY STRUCTURE OPTIONS

Criteria	Flat Penalty	Square Footage Bin	Per Square Foot	Distance from Target	Distance from Standard	kBtu over Target	SF Bins + Distance from Target
Penalties should be adjusted on building size	✗	✓	✓	✗	✗	~	✓
Penalties should be adjusted on a buildings relative performance to it's compliance pathway	✗	✗	✗	✓	✗	✓	✓
Penalty is equitable for all property types	✓	✓	✓	✓	✓	✗	✓
Penalties should not be adjusted to building's assessed value	✓	✓	✓	✓	✓	✓	✓
Max Penalties should be calculable from the start of the compliance period	✓	✓	✗	✓	✓	✓	✓

NEXT TASK FORCE MEETING

May 12

- Draft outline of rules
- Outstanding rule issues



ANNOUNCEMENTS



SUPPORTING SLIDES

FLAT PENALTY

Please note that fine/penalty monetary levels have been provided for illustration purposes only.

High Flat Penalty

- **Example A:**

- 90,000 square foot Multifamily Building
- ENERGY STAR Score of 31 (Standard = 64)
- Makes 10% reduction by 2025
- Non-Compliance Penalty = \$100,000

- **Example B:**

- 200,000 square foot Office Building
- ENERGY STAR Score of 59 (Standard = 68)
- Makes 15% reduction by 2025
- Non-Compliance Penalty = \$100,000

Flat penalty is completely made up for example purposes. Penalty numbers will be fine-tuned based on cost of compliance estimates.

SQUARE FOOTAGE BIN BASED PENALTY

Please note that fine/penalty monetary levels have been provided for illustration purposes only.

Flat Penalty based on Square Footage Bins

- **Example A:**

- 90,000 square foot Multifamily Building
- ENERGY STAR Score of 31 (Standard = 64)
- Makes 10% reduction by 2025
- Non-Compliance Penalty = \$75,000

- **Example B:**

- 200,000 square foot Office Building
- ENERGY STAR Score of 59 (Standard = 68)
- Makes 15% reduction by 2025
- Non-Compliance Penalty = \$200,000

Examples based on Benchmarking SF Bins:

- 200,000+ SF = \$200,000
- 150,000 – 200,000 SF = \$100,000
- 100,000 – 150,000 SF = \$100,000
- 50,000 – 100,000 SF = \$75,000
- 25,000 – 50,000 SF = \$50,000
- 10,000 – 25,000 SF = \$10,000

PER SQUARE FOOTAGE BASED PENALTY

Please note that fine/penalty monetary levels have been provided for illustration purposes only.

Penalty based on \$ per square foot of building

- **Example A:**

- 90,000 square foot Multifamily Building
- ENERGY STAR Score of 31 (Standard = 64)
- Makes 10% reduction by 2025
- Non-Compliance Penalty = \$90,000

- **Example B:**

- 200,000 square foot Office Building
- ENERGY STAR Score of 59 (Standard = 68)
- Makes 15% reduction by 2025
- Non-Compliance Penalty = \$200,000

Penalty amounts based on \$1 per square foot

FLAT PENALTY ADJUSTED FOR DISTANCE FROM TARGET

Flat Penalty is reduced based on building's performance relative to 20% target

- **Example A:**

- 90,000 square foot Multifamily Building
- ENERGY STAR Score of 31 (Standard = 64)
- Makes 10% reduction by 2025
- Non-Compliance Penalty = \$100,000
- Adjusted Non-Compliance Penalty = \$50,000

- **Example B:**

- 200,000 square foot Office Building
- ENERGY STAR Score of 59 (Standard = 68)
- Makes 15% reduction by 2025
- Non-Compliance Penalty = \$100,000
- Adjusted Non-Compliance Penalty = \$25,000

- Flat penalty is \$100,000
- Penalty amount is reduced based on performance (i.e. - $100,000 * (10\%/20\%) = 50,000$)

Please note that fine/penalty monetary levels have been provided for illustration purposes only.