

# BEPSDC Task Force

June 23, 2020



@DOEE\_DC  
#BEPSDC

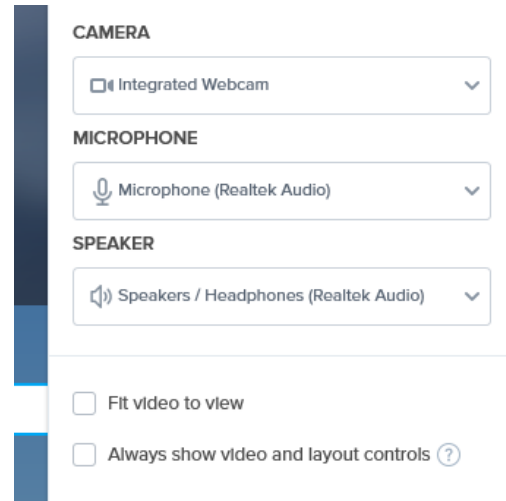
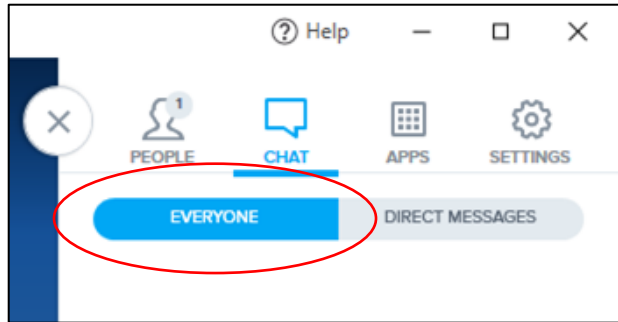
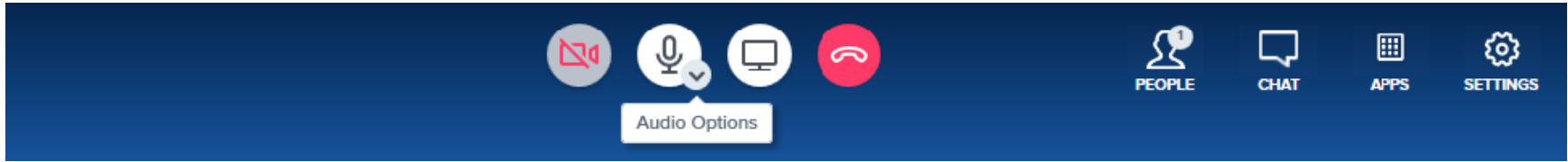
\*\*\* DEPARTMENT  
OF ENERGY &  
ENVIRONMENT  
GOVERNMENT OF THE DISTRICT OF COLUMBIA

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

# 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”

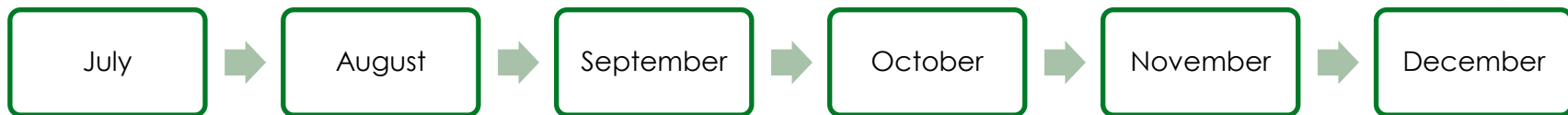
# ONLINE MEETING



# 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.
- 
- If topic needs in-depth discussion, anyone can suggest moving to a committee
  - This is an open meeting - everyone is allowed to participate

# OVERALL SCHEDULE



## **Future Agenda Items for Discussion/Feedback**

- Task Force Report
- Cost/Benefit Study (prescriptive path)
- Guidance Documents (alternative comp/path, campuses, reporting/verification, delay of compliance criteria, etc.)
- Hub/Green Bank/DCSEU feedback sessions
- Disclosure of BEPS data

# AGENDA



- Administrative Items
- Sub-committee update
- Cost-benefit study update
- Draft rules updates
- Solar – Part 1 – Setting the Stage for July 7 Discussion
- Announcements

# UPDATE SUMMARY

- Standards and all guidance documents will be published in the DC Register.
  - No update on timeline of supplemental documents at this time.
- Buildings will be asked to exclude any “excludable” spaces per EPA’s guidelines (small restaurants, retail, etc.)
- DOEE is considering reporting deadlines that align with Benchmarking
- Adjustments for COVID are being integrated into rules
- Standard Target Pathway will be limited to property type groups above the National Median


# EPA'S GUIDANCE ON EXCLUDABLE SPACES

- In general” Cell towers, parking, EV charging, outdoor heated pools, billboards, trash compactors
- For Property Use Spaces there are four rules that must be met:
  1. The Property Use must be less than 10% of the building's Gross Floor Area (GFA)
  2. The Property Use must not be a property type eligible to receive an ENERGY STAR score
  3. The Property Use must be sub-metered so that both the Property Use's energy consumption and GFA can be excluded
  4. The Property Use's energy use patterns must be significantly different than those of the rest of the building (ex: A cell phone tower on a building)
- You can exclude more than one property type, as long as each meet the 4 criteria above, AND their combined total is less than 10% of the building's GFA.



# EFFICIENCY REQUIREMENTS

- Properties that do not meet the BEPS for their property type shall have 5 years to complete one of the following compliance pathways: 1 year will be added to the first cycle as a COVID-adjustment
  - Performance Pathway
    - For first cycle, the baseline will be 2018-2019 compared to 2026.
  - Prescriptive Pathway
  - Standard Target Pathway
    - Only for property type groups where the BEPS is above the Nat'l Median
    - Types below the Nat'l Median: K-12, Worship Facilities, Senior Care Communities
  - Campus Pathway
  - DOEE-Approved Alternative Compliance Pathway



**Guidance Document:**  
DOEE will publish a Reference document of currently approved ACPs (including Single Owner Portfolios, Deep Energy Retrofits) and criteria DOEE will consider

# REPORTING AND VERIFICATION PROCESS

- Building Owners shall have until **Feb 1<sup>st</sup>, the second year of the compliance cycle (Feb 1, 2022 for first cycle)** to inform DOEE which Building Energy Performance Requirement they aim to complete.
- Buildings that do not report shall be defaulted to the performance pathway.
- If a property that elects to use the prescriptive pathway in compliance cycle 1 fails to show **comparable savings to the performance pathway**, they will not be able to select the prescriptive pathway for the next compliance cycle.



**Guidance Document:**  
This reporting process will be laid out in a DOEE Reference Document

**DOEE plans to allow two 3-month extension options for reporting deadlines**

# REPORTING AND VERIFICATION PROCESS (cont.)

- Properties following Performance and Standard Target Pathway will demonstrate compliance through their annual Energy Benchmarking Submission. **DOEE will also ask buildings to file a compliance report to better understand high performing building strategies.**
- Properties following the Prescriptive Pathway will have 4-5 additional Reporting Requirements to demonstrate compliance

## **Guidance Document:**

- **Considering have buildings report a preliminary compliance plans & assessments, action plans, implementation/documentation/testing reports, and evaluation/monitoring/verification reports during the compliance period.**
- Considering continuous monitoring requirements as part of the Prescriptive Pathway.
- The actual approved measures and additional guidance will be laid out in a DOEE Reference Document

# FINES AND PENALTIES

- Fines will be known as “Alternative Compliance Payments”
- Properties will be assessed a base penalty based on their square footage bin.
- The penalty will be adjusted based on a property's performance relative to its' **pathway-specific** target.

## Square Footage Bins:

- 500,000 + SF
- 200,000 – 500,000 SF
- 150,000 – 200,000 SF
- 100,000 – 150,000 SF
- 50,000 – 100,000 SF
- 25,000 – 50,000 SF
- 10,000 – 25,000 SF
- **Campuses**

# ALTERNATIVE COMPLIANCE PAYMENT EXAMPLES

## 200,000 sq. ft. Office Building

- ENERGY STAR Score of 59 (Standard = 68)
- Makes 7% reduction, ending score is a 64
- Baseline Alternative Compliance Payment = \$200,000

## Performance Pathway Payment

- Payment is reduced by relative performance to 20% decrease in energy consumption.
- $(1 - (.07 / .20)) * 200,000 = \text{Adjusted } \$ 130,000$
- Payment Reduction of 35%

## Standard Target Pathway Payment

- Payment is reduced by relative performance to target ES Score increase (9 points).
- $(1 - (5/9)) * 200,000 = \text{Adjusted } \$ 88,888$
- Payment Reduction of 56%

## Prescriptive Pathway Payment

- Payment is reduced by number of prescriptive measures implemented (7 points out of 20).
- $(1 - (7/20)) * 200,000 = \text{Adjusted } \$ 130,000$
- Payment reduction of 35%

## Alternative Compliance Pathway Payment

- Owner's Portfolio of buildings met 7% of a 12% portfolio-wide reduction goal.
- $(1 - (.07 / .12)) * 200,000 = \text{Adjusted } \$ 83,333$
- Payment Reduction of 42%

# SOLAR AND BEPS



- Solar in the District
- Clean Energy DC and Deep Decarbonization
- Benefits to Solar through BEPS

# SOLAR IN THE DISTRICT

- **Net Metered Systems vs CREFs vs Utility Scale**

- *Net-metered systems* are behind the meter and produces energy directly to the building host site. Excess energy not used on site is sold back to the grid.
- *Community Renewable Energy Facility (CREF)* are in front of the meter and directly produces energy to grid regardless of the building host site. Energy may or may not be running to the building host site depending on who is subscribed to the CREF. One CREF will typically have many subscribers in many buildings.
- *Utility Scale Renewable System* are large energy producing systems 10 MW or more. Energy from these systems are typically sold to utilities directly or other customers through Power Purchase Agreements (PPAs). Energy is typically delivered to customers off-site from the system.

- **What is a SREC?**

- Solar Renewable Energy Credits (SRECs) are a market-based instrument that represents the property rights to the environmental, social and other non-power attributes of renewable electricity generation.
- SRECs are issued when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy resource.

# CLEAN ENERGY DC AND DEEP DECARBONIZATION

## Clean Energy DC Plan focuses on 2032 goals of Sustainable DC:

1. Reduce GHG emissions by 50%
2. Reduce Energy Consumption by 50%
3. Increase Renewable Energy by 50%

To the ultimate goal of reducing GHG emissions, the District has adopted two policies: the Building Energy Performance Standard (BEPS) to deal with the demand side(goal 2) and the Renewable Portfolio Standard (RPS) to tackle the supply side (goal 3). This follows the basic principles of **deep decarbonization**, which are:

1. High levels of energy efficiency first,
2. Decarbonization of the electricity supply
3. Electrification of our energy end-use systems

**Without focusing on implementing efficiency first,  
deep decarbonization becomes incredibly costly to implement**



# BENEFITS TO SOLAR THROUGH BEPS

## Calculating the ENERGY STAR Score following EPA's best practices:

- On-site non-combustible renewables will reduce a buildings Source Energy (the main input for the ENERGY STAR Score). *A building with a solar array on their roof will see increasing an their Score if they use that energy on-site (regardless of SREC ownership).*
- EPA's national source-site factor for grid purchased electricity assumes that national on-site non-combustible renewables have no production loses. *Over time as more renewables come on line this will lower the electric source-site factor raising the score of all (or mostly) electric buildings.*

## Meeting Requirements of Compliance Pathways

- Standard Target Pathway allows buildings to use their ENERGY STAR Score to comply. *Adding on-site solar and using the energy on-site will increase a building's Score.*
- Selling SRECS or selling energy from a CREF can help finance efficiency upgrades. *DC has the most lucrative SREC market in the country.*
- Installing solar can be paired easily with major efficiency measures like roof replacement. *Installing solar does not inhibit a buildings ability to install efficiency measures.*

# NEXT MEETING



**July 7, 2:30 – 4:30pm**

- Sub-committee Report out
- Solar Discussion Part 2





# ANNOUNCEMENTS

