

BEPSDC Task Force

June 9, 2020



@DOEE_DC
#BEPSSDC

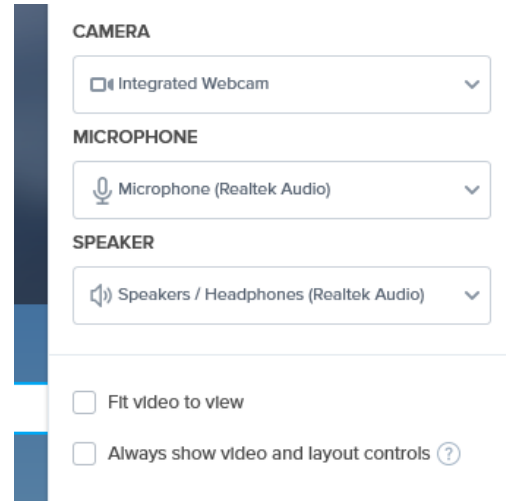
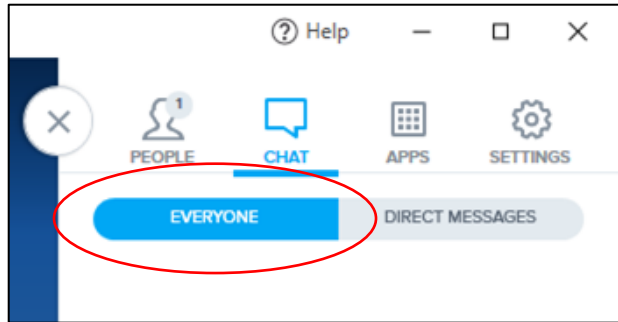
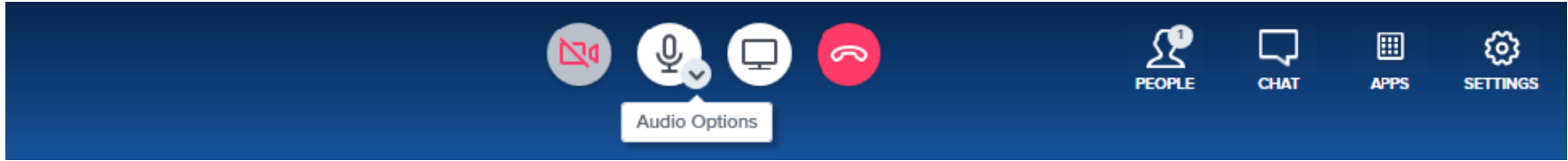
*** DEPARTMENT
OF ENERGY &
ENVIRONMENT
GOVERNMENT OF THE DISTRICT OF COLUMBIA

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

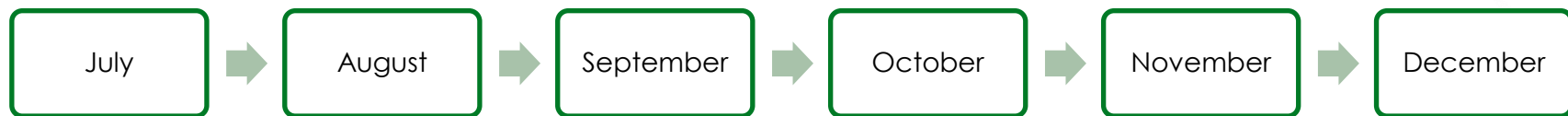


INTEGRAL

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

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
- COVID-related Adjustments
- Solar Considerations
- Campus Update
- GBAC Update
- Announcements



INITIAL STEPS TO ASSIST STAKEHOLDERS FACING COVID PHE-RELATED HARDSHIPS

DOEE recognizes and understands the hardships and challenges faced by our building owners and developers during the coronavirus (COVID-19) Public Health Emergency.

To help our community focus on the immediate recovery response, DOEE is proactively making the following adjustments to the Building Energy Performance Standard (BEPS) program.

As the District's response and recovery efforts continue, DOEE will continue to be a partner and take steps to ensure the best outcome for our community.

SUMMARY OF CHANGES DOEE IS MAKING NOW

- A one-year delay of the compliance deadline, from January 1, 2026 to January 1, 2027 in draft regulations.
- Proposed regulations will be postponed until at least the end of the summer and will have a public comment period of 60 days, rather than 30 days, to allow building owners more time to submit comments.
- DOEE, in partnership with the SEU, will provide free energy data verification per the requirements in the law.
- Calendar year 2020 data will not be factored into the setting of the BEPS standard or in establishing the performance pathway.

BENEFITS AND OUTCOMES

- Delay of compliance deadline allows building owners and developers to focus their attention on COVID-19 response and recovery.
- Building owners and developers know that the rulemaking process for the program will be slowed down so they can focus their attention on the COVID-19 response and recovery efforts.
- Building owners will have the certainty of knowing what the standard is six years, rather than five years, before compliance is required.

BENEFITS AND OUTCOMES (CONT)

- DOEE will be able to target financial and technical resources (Green Bank, Hub) to owners and developers for six years, instead of five years, beginning as early as January when the BEPS standard is set.
- DOEE's data verification assistance will give owners certainty that their property is being accurately reported, thus accurately assessed under the BEPS standards.

SOLAR CONSIDERATIONS



CAMPUS UPDATE



GBAC UPDATE - NEW (2017) DC CODES

<https://www.dcregs.dc.gov/Common/DCR/Issues/IssueDetailPage.aspx?issueID=822>

<https://www.dcregs.dc.gov/Common/DCR/Issues/IssueDetailPage.aspx?issueID=854>

- Subtitle A (Building Code Supplement of 2017) 005690 - 006032
- Subtitle B (Residential Code Supplement of 2017) 006033 - 006068
- Subtitle C (Electrical Code Supplement of 2017)006069 - 006071
- Subtitle D (Fuel Gas Code Supplement of 2017).....006072 - 006077
- Subtitle E (Mechanical Code Supplement of 2017).....006078 - 006147
- Subtitle F (Plumbing Code Supplement of 2017)006148 - 006172
- Subtitle G (Property Maintenance Code Supplement of 2017).....006173 - 006231
- Subtitle H (Fire Code Supplement of 2017).....006232 - 006325
- Subtitle I[CE] (Energy Conservation Code Supplement of 2017 - Commercial Provisions)006326 - 006490**
- Subtitle I[RE] (Energy Conservation Code Supplement of 2017 - Residential Provisions)006326 - 006490
- Subtitle J (Existing Building Code Supplement of 2017)006491 - 006508
- Subtitle K (Green Construction Code Supplement of 2017)..... 006509 - 006586
- Subtitle L (Swimming Pool and Spa Code Supplement of 2017) 006587 - 006590

GBAC UPDATE - PNNL CODE ANALYSIS

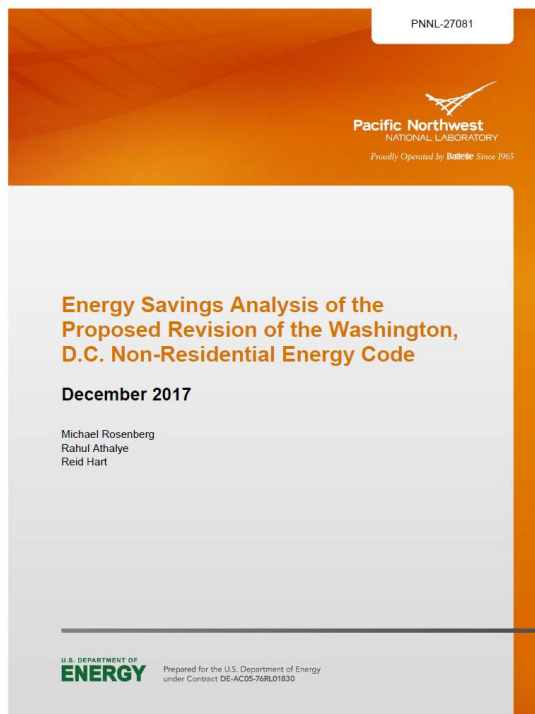


Table 4.1. Annual Savings Projections Office Building Prototype

Building	ECI & EUI		Savings vs. 90.1-2010	
	90.1-2010	D.C. EC-2017	Amount	%
Large Office Building				
Total kWh/ft ² -year	15.65	14.24	1.41	9.0%
Total therms/ft ² -year	0.096	0.075	0.022	22.5%
Total site energy kBtu/ft ² -yr	63.1	56.1	7.0	11.1%
Total source energy kBtu/ft ² -yr	168.1	151.5	16.6	9.9%
Total Energy Cost \$/ft ² -year	\$1.98	\$1.79	\$0.19	9.7%

Table 4.2. Annual Savings Projections Apartment Building Prototype

Building	ECI & EUI		Savings vs. 90.1-2010	
	90.1-2010	D.C. EC-2017	Amount	%
Mid-Rise Apartment Building				
Total kWh/ft ² -year	12.35	10.73	1.62	13.1%
Total therms/ft ² -year	0.077	0.000	0.077	100.0%
Total site energy kBtu/ft ² -yr	49.9	36.6	13.2	26.5%
Total source energy kBtu/ft ² -yr	132.8	108.1	24.7	18.6%
Total Energy Cost \$/ft ² -year	\$1.57	\$1.29	\$0.28	17.6%

Table 4.3 shows the annual energy, energy cost, and carbon emission savings projections combined for Washington, D.C. from implementation of the proposed new energy code. Savings from the Large

GBAC UPDATE - DC ESTIMATED BEPS

Median Energy Star (local is above national)

- Multi-Family: 66
- Com. Office: 69
- Res. Hall/Dorm: 65.5
- Retail/Supermkt: 62
- Medical Office: 63

Median Energy Star (local is below national)

- K-12 Schools: 36
- Hotel: 48
- Non-Refrig.
Warehouse: 31.5
- Worship: 18.5
- Senior Care: 24.5

Custom Req'd.

- Food Service
- Laboratory
- Museum
- Fire/Police
- Public Assembly
- Education
- Healthcare
- Recreation
- Self-storage

**based on 2018 data*

GBAC UPDATE – MULTI-FAMILY EXAMPLE



DC BEPS estimated: 66
Code: ok

Metrics Comparison for Your Design and/or Target

Metric	Design Project	Design Target*	Median Property*
ENERGY STAR score (1-100)	78	75	50
Source EUI (kBtu/ft²)	102.5	105.6	126.2
Site EUI (kBtu/ft²)	36.6	37.7	45.1
Source Energy Use (kBtu)	30,743,998.2	31,681,835.6	37,861,672.6
Site Energy Use (kBtu)	10,979,999.4	11,314,942.6	13,522,027.6
Energy Cost (\$)	396,142.53	408,226.86	487,855.07
Total GHG Emissions (Metric Tons CO2e)	1,112.4	1,146.3	1,369.9

GBAC UPDATE – COMMERCIAL OFFICE EXAMPLE



DC BEPS estimated: 69
Code: FAIL

Metrics Comparison for Your Design and/or Target

Metric	Design Project	Design Target*	Median Property*
ENERGY STAR score (1-100)	65	75	50
Source EUI (kBtu/ft ²)	157.1	134.0	192.9
Site EUI (kBtu/ft ²)	56.1	47.8	68.9
Source Energy Use (kBtu)	23,561,995.4	20,094,003.1	28,928,578.9
Site Energy Use (kBtu)	8,414,998.4	7,176,430.5	10,331,636.6
Energy Cost (\$)	303,600.98	258,915.19	372,750.65
Total GHG Emissions (Metric Tons CO ₂ e)	852.5	727.1	1,046.7

NEXT MEETING



June 23, 2:30 – 4:30pm

- Draft rules follow-up from May 12 meeting





ANNOUNCEMENTS

