

Building Seattle Better

Improving Performance in Existing Buildings

Technical Advisory Group – Meeting #2



2/17/2022

Office of Sustainability & Environment



City of Seattle


Technical Advisory Group: Meeting #2

AGENDA

- Welcome, Ground Rules
- Icebreaker – introduction to collaboration tools
- Policy Pathways
- Envisioning Outcomes
- Break
- Policy Parameters
- Covered Buildings
- Measuring Outcomes
- Wrap Up



TAG Meetings Topic Schedule

TAG Meeting	Draft Topics
Meeting #1 	<ul style="list-style-type: none"> • Introduction, background, context
Meeting #2	<ul style="list-style-type: none"> • Policy pathways and parameters: discussion on ordinance vs rule; zeroing in on TAG focus and priority near-term decisions • Envisioning Outcomes: input on how to define/assess a successful and equitable GHG BPS policy • Covered buildings: recap property type, size, vintage considerations • Measuring outcomes: overview discussion on possible metrics, structures, and key considerations
Meeting #3	<ul style="list-style-type: none"> • Metrics: input on how to structure Seattle carbon-based metric and other relevant metrics • Targets: final performance targets, interim targets, vintage distinctions, property type distinction?, etc.
Meeting #4	<ul style="list-style-type: none"> • Targets cont.: finalize input on targets in relation to compliance intervals • Compliance intervals: how many cycles, timing of cycles, relationship with final and interim targets?
Meeting #5	<ul style="list-style-type: none"> • Compliance intervals cont.: finalize input on compliance intervals • Punchlist items: wrap on any new or unaddressed topics/ideas
Meeting #6	<ul style="list-style-type: none"> • Market perspective: considering TAG input on policy design, what key market shifts are needed to ensure a successful carbon-based BPS? How can the City help support this transition as part of the core policy design and/or other policies and programs? • Closing: Synthesis and summary of TAG process and input.



TAG Meeting Ground Rules

1. Stay mentally and physically present
2. Contribute to meeting goals
3. Let everyone participate
4. Listen with an open mind
5. Think before speaking
6. Stay on point and on time



Icebreaker

- **Mural**
 - Enter sticky note with your name, company, and something interesting about yourself that nobody here may know
- **Menti**
 - What stakeholder group are you in?

Show Mural



Show Menti poll *results*



A low-angle, upward-looking photograph of a city street. In the foreground, a multi-story brick building with many windows is visible. In the background, two tall skyscrapers rise into a blue sky with scattered white clouds. The text "Policy Pathways" is overlaid in the center of the image.

Policy Pathways

Policy Design Framework Informs Policy Pathways and Critical Design Decisions

- ✓ Responsive to Executive Order
- ✓ Coherent, holistic policy
- ✓ Integrates within larger policy ecosystem and market context
- ✓ Clear policy design outcomes/criteria
- ✓ Informed by:
 - Wide range of perspectives and experience
 - Leading edge policy models and adopted policies
 - Seattle-specific analysis



NWEC Seattle BPS Blueprint Recommendations

Policy Element	Recommendations for Seattle BPS
Property Types	<ul style="list-style-type: none">• Commercial• Multifamily• Include “economically distressed” buildings, assuming dedicated technical and financial support
Size	<ul style="list-style-type: none">• ≥20k SF for Seattle BPS• ≥10k to 20k SF for labeling and point-of-sale upgrades• 0 to 10k SF for opt-out incentive programs and technical assistance
Metrics	<p>Combination of metrics for all buildings:</p> <ul style="list-style-type: none">• State BPS EUI (provisionally from state, pending more stringent updates in 2030+)• Seattle GHGI (limited to onsite and district energy emissions)• Seattle maximum coincident and local peak electric demand• Future metrics TBD



NWEC Seattle BPS Blueprint Recommendations, Cont.

Policy Element	Recommendations for Seattle BPS
Targets	<ul style="list-style-type: none">• Final performance standards by building type and vintage category for each performance metric• Interim targets calculated using individual building baselines
Vintage	<ul style="list-style-type: none">• Existing buildings (on trajectory to zero carbon by 2040)• Newer construction (on trajectory to zero carbon by 2030)
BPS Cycles	<ul style="list-style-type: none">• EUI standard, six 5-year cycles from 2025 to 2050 (as part of state BPS unless significant Seattle amendments are required)• GHGI standard, four 5-year cycles from 2025 to 2040• Coincident and local peak demand standard, five 5-year cycles from 2030 to 2050



NWEC Seattle BPS Blueprint Recommendations, Cont.

Policy Element	Recommendations for Seattle BPS
Strategic Decarbonization Plans	<ul style="list-style-type: none">• Require building owners to develop upfront “Strategic Decarbonization Plans” to embed BPS GHGI targets into long-term capital planning and replacement cycles
Adaptive Compliance Management	<ul style="list-style-type: none">• Binding “Building Performance Action Plans” to allow some degree of flexibility for alignment with capital planning timelines



Boston Example of Interim Targets by Building Type

CITY of **BOSTON** | Mayor Michelle Wu

[PAY AND APPLY](#) [PUBLIC NOTICES](#) [FEEDBACK](#) [TRANSLA](#)

[REGULATIONS DEVELOPMENT](#) [ABOUT](#) [EMISSIONS STANDARDS](#) [EMISSIONS FACTORS](#) [RETROFITS](#) [POLICY PROCESS](#) [NEWSLETTER](#) [TEAM](#)

EMISSIONS STANDARDS

Covered buildings will be required to reduce their emissions over time. The following table shows the declining emissions standards that different building types will be required to meet each year. Emissions standards are reported in kilograms of carbon dioxide equivalent per square foot per year (kgCO₂e/SF/yr).

BUILDING USE	2025- 2029	2030 - 2034	2035 - 2039	2040- 2044	2045-2049	2050 -
Assembly	7.8	4.6	3.3	2.1	1.1	0
College / University	10.2	5.3	3.8	2.5	1.2	0
Education	3.9	2.4	1.8	1.2	0.6	0
Food Sales and Service	17.4	10.9	8.0	5.4	2.7	0
Healthcare	15.4	10.0	7.4	4.9	2.4	0



Example of Three-Stage Compliance Intervals

1. **Strategic planning**, as well as early action through support programs and financial incentives.
2. An **interim GHG emissions target** to support achieving the 39% by 2030 overall building sector emissions reduction target.
3. A **final target** which would require more complete **decarbonization** to achieve net-zero emissions.



Key Policy Pathway Decisions

- Year for final performance target?2040, 2045, 2050?
- How many compliance cycles until final target?....3, 4, 5, 6?
- How much to reduce in each cycle?
- Interim targets by building type or individual buildings?

TAG will explore the implications of these types of policy pathway decisions and help provide a deeper understanding of the rationale behind recommendations...



Envisioning Outcomes



But before launching into the weeds of the policy design....

What are the policy pathways and critical design decisions supposed to actually deliver?

Namely, what desired outcomes should help guide the design and gage the performance of a performance-based standard?



Interconnected Outcomes/Criteria from Executive Order

1. Seattle BPS must include ***carbon-based emissions targets***
2. Targets must transition to ***net-zero emissions*** no later than 2050, but as soon as is feasible
3. Initial emission reduction targets must begin ***no later than 2026***
4. ***Equity-focused support services*** must be included for low-resource building owners, particularly alleviating cost impacts on affordable housing and small businesses
5. ***Risk of displacement*** must be minimized
6. Seattle's Black, Indigenous, and people of color (BIPOC) communities must benefit from ***healthier living and working spaces***
7. ***Clean energy career initiatives*** must be provided to maximize the economic benefits and opportunities of the generated economic activity for BIPOC and women



Show Mural



Show Menti poll *results*



A photograph of bare tree branches against a sunset sky with a red and pink glow.

5 minute Break

Policy Parameters

A photograph of a large, multi-story brick building, likely a government or institutional structure, with many windows and an American flag flying from the roof. The text "Policy Parameters" is overlaid in the center of the image.

“Policy is a law, regulation, procedure, administrative action, incentive, or voluntary practice of governments and other institutions. Policy decisions are frequently reflected in resource allocations.”

<https://www.cdc.gov/policy/analysis/process/definition.html>



WA State Clean Buildings Standards Early Adopter Incentives available to commercial *and* multifamily buildings over 50,000 sq.ft.

2026 -2028
WA Clean Buildings
Standards first
compliance cycle

July 1, 2022
Draft Policy to
Mayor's Office

Jan – June 2022

- Focused stakeholder engagement
- Draft policy package development

Jul – Dec 2022 (?)

- Policy package review & revision
- Mayor / Council legislative process

2023

- Rulemaking
- Program development

2024 - 2025

- Program development

2026

- Seattle compliance with initial requirements for largest commercial buildings

2050

- Carbon-neutral buildings

Launch initial Seattle Clean Buildings Accelerator support program

Expand Accelerator support and incentives



2022 Ordinance

Applicability: building size & type
Definitions
Compliance deadlines
Performance category, e.g. energy, emissions
Compliance expectations, e.g. meet target and provide verification
Tenant responsibilities
Reporter / professional qualifications
Enforcement

2023 Rulemaking

Metrics, e.g. % reduction, GHGI
Performance targets – by space type and timing
Compliance reporting process
Alternative compliance pathways
Exemptions & exceptions

Other: Complementary Programs & Policies

Examples: Clean Buildings Accelerator program, Seattle Energy Code, affordable housing funding allocations, financial incentives, small business tenant support/incentives, workforce development



Show Mural





Covered Buildings

Covered Buildings

- $\geq 20,000$ Square Feet
- Non-residential*
- Multifamily

*Excluding industrial





Measuring Outcomes

Show Menti poll *results*



Wrap Up



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- www.seattle.gov/building-performance-standards
- Share comments at cleanbuildings@seattle.gov

